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This help lists commands and procedures for using the NetWare Administrator. Use the scroll bar to see more entries.

To learn how to use Help, press <F1> or choose How to Use Help from the Help menu.

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Attributes and Rights

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Change the Attributes of a File or Directory

To change the attributes of a file

1. Select a file.
2. From the Object menu, choose Details.
3. Choose the Attributes page.
4. Select check boxes for attributes that you want to set for this file.
5. Choose OK.

To change the attributes of a directory

1. Select a directory.
2. From the Object menu, choose Details.
3. Choose the Attributes page.
4. Select check boxes for attributes that you want to set for this directory.
5. Choose OK.

Change the IRF of a File or Directory


To change the IRF of a file

1. Select a file.
2. From the Object menu, choose Details.
3. Choose the Trustees of this File page button.
4. In the Inheritance Filter field, select check boxes for rights that you want to allow to be inherited for that file.
Rights that are not checked cannot be inherited.
5. Choose OK.


To change the IRF of a directory

1. Select a directory.
2. From the Object menu, choose Details.
3. Choose the Trustees of this Directory page button.
4. In the Inheritance Filter field, select check boxes for rights that you want to allow to be inherited for that directory.
Rights that are not checked cannot be inherited.
5. Choose OK.

View an Object's Effective Property Rights to Another Object


1. Select the object that you want to see another object's property rights to.
Example: If you want to see the property rights User ANDREW has to Printer LASER, choose LASER in this step.
2. From the Object menu, choose Trustees of this Object.
3. Choose the Effective Rights button.
4. Choose the browser icon. A small square icon with a grid of colored squares (yellow, blue, red, green) and a minus sign.
5. Select the object whose effective property rights to the object selected in Step 1 you want to see.
6. In the Select Object dialog, choose OK.
The effective rights of the selected object to all properties are bolded.
7. To see the effective property rights for a specific property, select the Selected Properties button; then choose a property from the list.
The effective property rights for that individual property are bold.
8. In the Effective Rights dialog, choose Close.
9. Choose Cancel to return to the browser.

View an Object's Effective Rights to another Object


1. Select the object that you want to see another object's effective rights to.
Example: If you want to see the effective rights User ANDREW has to Printer LASER, choose LASER in this step.
2. From the Object menu, choose Trustees of this Object.
3. Choose the Effective Rights button.
4. Choose the browser icon. 
5. Choose the object whose effective rights to the object selected in Step 1 you want to see.
6. In the Select Object dialog, choose OK.
The effective rights of the selected object are shown in bold.
7. In the Effective Rights dialog, choose Close.
8. In the Trustees dialog, choose Cancel to return to the browser.

View an Object's Effective Rights to a Directory or File

To view an object's effective rights to a directory

1. Select a directory.
2. From the Object menu, choose Details.
3. Choose the Trustees of this Directory page button.
4. Choose the Effective Rights button.
5. Choose the browser icon. 
6. Select the object whose effective rights to this directory you want to see.
7. In the Select Object dialog, choose OK.
8. Choose Close.
9. To return to the browser, choose Cancel.

To view an object's effective rights to a file

1. Select a file.
2. From the Object menu, choose Details.
3. Choose the Trustees of this File page button.
4. Choose the Effective Rights button.
5. Choose the browser icon. 
6. Select the object whose effective rights to this file you want to see.
7. In the Select Object dialog, choose OK.
8. Choose Close.
9. To return to the browser, choose Cancel.

Directories and Files

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Change the Owner of a File or Directory

1. Select a file or directory.
2. From the Object menu, choose Details.
3. Choose the Facts page button.
The owner is listed on the Facts page.
4. Choose the browser icon. 
5. Choose the object that you want to be the new owner of this file or directory.
6. When the correct object is displayed in the Selected Object field, choose OK.
The new owner appears in the Owner field
7. Choose OK.

Create a Directory

1. Choose the directory or volume that will be the parent of the directory you want to create.
2. From the Object menu, choose Create.
3. From the list of objects, select Directory.
4. Choose OK.
5. In the Directory name box, type the name for the new directory.
6. (Optional) To define additional information about this directory right now, select Define Additional Properties.
You cannot select this if you select Create Another Directory.
7. (Optional) To create another directory immediately after this one, select Create Another Directory.
You cannot select this if you select Define Additional Properties.
8. Choose Create.
If you selected Define Additional Properties, the directory object dialog appears.
If you selected Create Another Directory, this dialog appears again.

Purge a File

1. Select the directory that contains the file that you want to purge.
If the directory containing the file was also deleted, select any directory.
2. From the Tools menu, choose Salvage.
3. To list all the files that have been deleted in this directory, choose List.
4. Select the file that you want to permanently delete.
If the file was in a directory that was deleted, choose Deleted Directories in the Source Option field. If the file does not appear, check that the Include field includes the file's pattern in its file specification.
5. Choose Purge.
6. At the confirmation box, choose Yes.
6. To return to the browser, choose Close.

Salvage a File

1. Select the directory that contained the file that you want to salvage.
If the directory containing the file was also deleted, select any directory.
2. To list the files that have been deleted from this directory, choose List.
3. From the Object menu, choose Salvage.
4. Select the file that you want to salvage.
If the file was in a directory that was deleted, choose Deleted Directory in the Source Option field. If the file does not appear, check that the Include field includes the file's pattern in its file specification.
5. Choose Salvage.
The file will now appear in regular directory searches and can be used by applications.
6. To return to the browser, choose Close.

View Information about a Directory

1. Select a directory.
2. From the Object menu, choose Details.
3. Choose the page button for the information you want to see about this directory.

View Information about a File

1. Select a file.
2. From the Object menu, choose Details.
3. Choose the page button for the information you want to see about this file.

Logging In

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Login Scripts

[Create or Change a Profile Login Script](#)
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Create or Change a Profile Login Script

1. Select the Profile object.
2. From the Object menu, choose Details.
3. Choose the Login Script page button.
4. Type the login script commands you want.

Note: When you have made all necessary changes to the pages of this dialog, choose OK.

Create or Change a System Login Script

1. Select the Organizational Unit.
2. From the Object menu, choose Details.
3. Choose the Login Script page button.
4. Type the login script commands you want.

Note: When you have made all necessary changes to the pages of this dialog, choose OK.

Create or Change a User Login Script

1. Select the User object.
2. From the Object menu, choose Details.
3. Choose the Login Script page button.
4. Type the login script commands you want.

Objects

To perform a task on an object, choose that object. The object dialog will appear. You can do most tasks in the object dialog. For help while using the object dialog, choose Help.

Add or Delete a Trustee of an Object

Change an Object's IRE

Create an Object

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Include Certain Object Classes in the browser

Rename an Object

Change an Object's IRF

1. Select an object.
2. From the Object menu, choose Trustees of this Object.
3. Choose the Inherited Rights Filter page button.
4. Select check boxes for rights that you want to allow to be inherited.
If the check box by a right is not marked, that right cannot be inherited. To change the Inherited Rights Filter for specific property rights, you must also choose Specific Property and select a property from the Properties list.
5. Choose OK.

Create an Object

1. Select the container that you want the object created under.
2. From the Object menu, choose Create.
3. From the list of objects, select the type of object you want to create.
4. Choose OK.
Choose the Help button in the dialog for more information.

Find Objects Associated with an Object

1. Select the object.
2. From the Object menu, choose Details.
3. Choose the See Also page button.
4. Choose Add . . .
5. Choose the object you want associated with the object you selected in Step 1.
6. Choose OK to close the Select Object dialog.
7. Choose OK.

Partition

[Create a Partition](#)

[Merge Partitions](#)

[Move a Partition](#)

[View or Edit a Replica](#)

Create a Partition

1. From the Tools menu, choose Partition Manager.
2. Select the container object that you want to be the root object of the new partition.
3. Choose Create Partition.

Merge Partitions

1. From the Tools menu, choose Partition Manager.
2. Select the container object that is the root of the partition that you want to merge with its parent.
You must select a container that has a partition icon to the left. The [Root] partition cannot be merged, because it is the top partition.
3. Choose Merge.

View or Edit a Replica

1. From the Tools menu, choose Partition Manager.
2. Select the container that is the root object of the partition whose replicas you want to see.
3. Choose Replicas.

Move a Partition

1. From the Tools menu, choose Partition Manager.
2. Choose Help for help from here.

Passwords

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Allow Users to Change Passwords

Follow these procedures if you want to allow a user in your network to have the right to change his or her password.

1. Select a User object.
2. From the Object menu, choose Details.
3. Choose the Password Restrictions page button.
4. Select the Allow User to Change Password check box.
5. Choose OK.

Create or Change a Password

1. Select the User object.
2. From the Object menu, choose Details.
3. Choose the Password Restrictions page button.
4. Choose Change Password.
5. In the Old Password box, type the old password.
If this is a new user, the Old Password option is disabled.
6. In the New Password box, type the new password.
7. In the Retype Password box, type the new password again.
8. Choose OK.

Set Password Restrictions

1. Select the User object.
2. From the Object menu, choose Details.
3. Choose the Password Restrictions page button.
4. Set the restrictions you want.
Note: For more information, choose the dialog's Help button.
5. Choose OK.

Printing

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[Assign Queues to Printers](#)

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[Create a Print Server](#)

[Create a Printer](#)

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Assign Printers to Print Servers

1. Select a Printer.
2. From the Object menu, choose Details.
3. Choose the Connections page.
4. When you have modified everything you want, choose OK to return to the browser.

Assign Queues to Printers

1. Select a Printer object.
2. From the Object menu, choose Details.
3. Choose the Connections page.
4. When you have modified everything you want, choose OK to return to the browser.

Monitor Print Job Status

1. Select a Printer object.
2. From the Object menu, choose Details.
3. Choose the Printer Status button.

Control a Printer

1. Select a Printer object.
2. From the Object menu, choose Details.
3. Choose the Printer Status button.
4. When you have modified everything you want, choose OK to return to the browser.

Create a Print Queue

1. Select a context from the browser.
2. From the Object menu, choose Create.
3. From the Object class list, choose Queue.
4. Choose OK.
5. When you have modified everything you want, choose OK to return to the browser.

Create a Print Server

1. Select a context from the browser.
2. From the Object menu, choose Create.
3. From the Object class list, choose Print Server.
4. Choose OK.
5. When you have modified everything you want, choose OK to return to the browser.

Create a Printer

1. Select a context from the browser.
2. From the Object menu, choose Create.
3. From the Object class list, choose Printer.
4. Choose OK.
5. When you have modified everything you want, choose OK to return to the browser.

Search

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Security

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View an Intruder's Address

If a user's account is locked because an intruder attempted to access it, you can see the address of the intruder.

1. Select the User object.
2. From the Object menu, choose Details.
3. Choose the Intruder Lockout page button.
The information is in the Intruder Address field.

Prevent a User from Logging In

1. Select the User object.
2. From the Object menu, choose Details.
3. Choose the Login Restrictions page button.
4. Check the Account Disabled box.
5. Choose OK.

The user won't be able to log in again until you reset the Account Disabled box.

Trustees

Add or Delete a Trustee of a File or Directory

Add or Delete a Trustee of an Object

Modify a Trustee's Rights to a File or Directory

Modify the Object Rights of a Trustee

Modify the Property Rights of a Trustee

Add or Delete a Trustee of a File or Directory

To add a trustee to this file or directory

1. Select the directory or file that you want to grant the trustee access to.
2. From the Object menu, choose Details.
3. Choose the Trustees of this <File/Directory> page.
4. Choose Add Trustee.
5. Select an object to be the trustee.
6. Choose OK.
The object that you chose is added as a trustee.
7. Grant rights to the new trustee by selecting the check boxes below the Trustee list.
8. To save all changes, choose OK.

To delete a trustee

1. Select the directory or file whose trustees you want to view.
2. From the Object menu, choose Details.
3. Choose the Trustees of this <Directory/File> page.
4. Select the trustee you want to delete.
5. Choose Delete Trustee.
This trustee no longer has explicit rights to this object.
6. (Optional) If a confirmation box appears, choose Yes.
7. To save all changes, choose OK.

Add or Delete a Trustee of an Object

To add a trustee

1. Select the object that you want to give another object rights to.
2. From the Object menu, choose Trustees of this Object.
3. Choose Add Trustee.
4. Select the object you want to add as a trustee.
5. Choose OK.
The trustee appears in the Trustees list.
6. Select check boxes for the rights you want to grant to that object.
7. Choose OK.

To delete a trustee

1. Select the object for which you want to delete a trustee.
2. From the Object menu, choose Trustees of this Object.
3. Select the trustee you want to delete.
4. Choose Delete Trustee; then choose Yes.
The deleted trustee no longer has explicit rights to this object.

Change a Trustee's Rights to a File or Directory

To change a trustee's rights to a file

1. Select the file for which you want to change a trustee's rights.
2. From the Object menu, choose Details.
3. Choose Trustees of This File.
4. From the Trustees list, select the trustee whose rights you want to change.
5. To grant or revoke rights for this trustee, select the check boxes in the Access Rights field. Boxes that are checked show rights that this trustee has to this file.
6. Choose OK.
The new rights you assigned to the trustee now take effect.

To change a trustee's rights to a directory

1. Select the directory for which you want to change a trustee's rights.
2. From the Object menu, choose Details.
3. Choose Trustees of This Directory.
4. From the Trustees list, select the trustee whose rights you want to change.
5. To grant or revoke rights for this trustee, select the check boxes in the Access Rights field. Boxes that are checked show rights that this trustee has to this directory.
6. Choose OK.
The new rights you assigned to the trustee now take effect.

Modify the Object Rights of a Trustee

1. Select the object for which you want to change the trustee's rights.
2. From the Object menu, choose Trustees of this Object.
3. Select the trustee whose rights you want to change from the Trustees list.
4. To grant or revoke object rights for this trustee, select the check boxes in the Object Rights field.
5. Choose OK.
The new rights you assigned to the trustee now take effect.

Modify the Property Rights of a Trustee

1. Select the object for which you want to change the trustee's rights.
2. From the Object menu, choose Trustees of this Object.
3. From the Trustees list, select the trustee whose rights you want to change.
4. To grant or revoke object rights for this trustee, select the check boxes in the Property Rights field.
To change specific property rights of a trustee, choose the Specific Property button and then select a property from the Properties list.
5. Choose OK.
The new rights you assigned to the trustee now take effect.

Users and Groups

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Limit the Number of Workstations A User Can Log In To

1. Select the User object.
2. From the Object menu, choose Details.
3. Choose the Login Restrictions page button.
4. Select Limit Concurrent Connections.
5. Enter the number of workstations (up to 999) that a user can log in to simultaneously in Maximum Connections.
6. Choose OK.

Add a User to a Group

1. Select the User object.
2. From the Object menu, choose Details.
3. Choose the Group Membership page.
4. Choose Add. . .
5. Select the Group that you want to add this user to.
6. Choose OK to close the Select Object dialog.
7. Choose OK.

Delete a User From a Group

1. Select the User object.
2. From the Object menu, choose Details.
3. Choose the Group Membership page button.
4. Select the Group from which you want to delete this user.
5. Choose Delete.
6. Choose OK.

Set Login Restrictions

1. Select the User object.
2. From the Object menu, choose Details.
3. Choose the Login Restrictions page.
4. To prevent a user from logging in, select Account Disabled.
5. To make the account expire at a certain time, select Account Has Expiration Date.
 - 5a. To change the day the account expires, highlight the month, day, or year, then use the arrows next to the field to change that part of the date.
 - 5b. To change the time the account expires, highlight the hour, minute, or second, then use the arrows next to the field to change that part of the time.
6. To limit the number of workstations a user can log in to simultaneously, select Limit Concurrent Connections; then enter the number in the Maximum Connections box.

Set an Expiration for a User Account

1. Select the User object.
2. From the Object menu, choose Details.
3. Choose the Login Restrictions page button.
4. Select Account Has Expiration Date.
5. To change the day the account expires, highlight the month, day, or year, then use the arrows next to the field to change that part of the date.
6. To change the time the account expires, highlight the hour, minute, or second, then use the arrows next to the field to change that part of the time.
7. Choose OK.

Using Partition Manager

Partition Manager allows you to manage NetWare Directory partitions and replicas. You can divide your Directory tree into partitions and manage various replicas of these partitions.

Upon installation of NetWare, NetWare Directory Services (NDS) creates the [Root] object as your default partition. An object can reside in only one partition, but through distributed operations (creating partitions and replicas of those partitions, the object can be accessed from any point on the network.

To optimize access to different areas of the Directory, each partition can be replicated and stored at many locations. Partition replication improves access to Directory information and provides the Directory with fault tolerance.

If a partition is replicated at several locations, damage to one replica doesn't need to interrupt access to the partition information.

Using the Partition Manager browser

The Partition Manager main window is a browser window. Only container objects and NetWare Server objects are shown.

You can navigate through the browser by choosing containers to move down levels and choosing the Up-arrow to move back up towards the [Root].

Containers that are the root of a partition are red and show the partition icon to the left. NetWare Server objects are blue. Different buttons are active when different objects are selected in the main window.

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Screen regions and buttons

Context shows your current context in the Directory tree.

Replica Being Read shows the name of the replica (the complete name of the server the replica resides on) that Partition Manager is searching for Directory Services information.

Partitions lists partitions in the current context and allows you to view other partitions. Objects that are partition roots are marked with the partition icon.

Create As New Partition divides an existing partition to create a new partition. The selected container object becomes the root of the new partition, and a master replica of the new partition is created on the server where the master replica of its parent partition is located.

Merge Partitions merges a partition with its parent partition, leaving a single partition. All replicas are merged as well. You must select a partition below the [Root] of the tree to choose this option.

Replicas allows you to add, delete, view, or modify the existing replica types for the selected partition.

Server Partitions lists replicas stored on the selected NetWare server. You must select a NetWare Server object before this option is available.

Abort Partition Operation stops the operation you have started (you have either started to create a new partition or merge a partition with its parent partition).

Delete Server deletes a NetWare Server object and all its associated information, including its partitions and replicas. You delete a NetWare Server object only if the server is down.

Move Partition moves a partition to a different context in the tree. You can move a container object only if it is the root of a partition. You can move only partitions that don't have subordinate

partitions.

Close closes this dialog. Any changes you made are saved.

Create a New Partition

A partition can consist of one or more container objects and their associated leaf objects. A partition cannot contain only leaf objects. The container at the top of the partition is called the *root* of the partition.

When you create a new partition, you split the parent partition and end up with two partitions. The new partition becomes a child partition.

For example, if you select an Organizational Unit and choose to create it as a new partition, you are choosing to split the Organizational Unit from its parent partition ([Root], for example, which is always a partition). The Organizational Unit you selected becomes the root of a new partition.

The replicas of the parent partition will remain on the same servers, and information for the new partition will migrate from the parent partition's replicas to the new partition's replicas.

The master replica of the new partition will be stored on the same server as the master replica of the parent partition.

Creating a partition may take some time, since all of the replicas need to be synchronized with the new partition information.

When you create a new partition, the utility you use will inform you that the partition is created successfully, but the actual creation of the partition is still completing on the servers. If you attempt another partition operation while the partition is being created, you will receive a message telling you to wait a few minutes before attempting another partition operation.

To create a new partition

1. To locate the container object that you want to create as a partition, browse the "Partition Manager" screen.

If the container object does not appear in the window, browse the tree by choosing an object to see its subordinates, or by choosing the arrow to move toward the [Root]. Your current context appears in the upper-left corner of the screen.

For information about moving around in the "Partition Manager" screen and selecting objects, choose "Help."

2. Select a container object.
3. Choose "Create as New Partition."
4. To confirm the creation of a new partition, choose "Yes."

The new partition is created when the process is completed on the servers. To see the partition icon that signifies that a container is the root object of a partition, refresh the screen by choosing the Up-arrow and then expanding the parent container.

A master replica of the newly-created partition is stored on the server where the parent partition's master replica resides.

View or Modify Replicas

From the Partition Replicas dialog, you can view existing replicas of the selected partition. You can change the type of any replica, add new replicas to other NetWare servers, or delete replicas.

Procedures

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[Change the Type of an Existing Replica](#)

[Send Updates](#)

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Screen regions and buttons

Partition lists the current partition whose replicas you are viewing. If you are viewing replicas of the [Root] partition, the Partition field will be blank.

Replica Being Read shows the name of the replica (which is the complete name of the server the replica resides on) that Partition Manager is searching for Directory Services information.

Master Replica lists the NetWare Server object where the master replica of this partition is stored.

Server lists the other NetWare servers on which replicas of this partition are stored.

Type lists the replica type of each of the existing replicas of this partition.

Synchronized Up To lists the time stamp of the last time the replica was synchronized with all other replicas of the partition.

Add Replica allows you to add a replica of this partition and store it on a NetWare server that does not already have a replica of this partition.

Delete Replica deletes the selected replica. You cannot delete the replica that is the master replica.

Change Type changes the replica type of the selected replica.

Send Updates sends updated information from the replica you select to all the other replicas of the partition.

Receive Updates allows the replica you select to receive updated information from all the replicas of the partition.

Close saves changes and returns to the list of partitions.

Add a Replica

Right needed: The Supervisor object right to the container object at the root of the partition.

When you create a partition, a master replica is automatically created and stored on the server where the parent partition's master replica resides. You can add additional replicas of the partition, within these guidelines:

- * You can have only one master replica. Additional replicas must be read/write or read-only.
- * You can store only one replica of a partition on a server.

To Add a Replica

1. Choose "Add Replica."
2. From the browser, select the NetWare Server object that you want this replica to be stored on. The partition for which you are creating the replica appears at the top of the screen. The context and server information changes as you move through the Directory tree structure.
3. Choose the replica type you want to create. For most replicas, read/write should be used. Read/write replicas can be written to. They send out information for synchronization when a change has been made. Read-only replicas cannot be written to. However, they are updated when the replicas synchronize.
4. To create the replica, choose "OK."
The new replica is created on the server you selected.

Change the Replica Type

Note: You cannot use this procedure to change the type of the master replica. To specify a new master replica, change the type of an existing read/write replica to master, and the master replica is automatically changed to read/write.

1. Select the replica whose type you want to change.
2. Choose "Change Type."
3. Select a replica type.

For most replicas, read/write should be used. Read/write replicas can be written to. They send out information for synchronization when a change has been made. Read-only replicas cannot be written to. However, they are updated when the replicas synchronize.

4. Choose "OK."
The replica type is changed. You return to the list of replicas of this partition.

Delete a Replica

Right needed: The Supervisor object right to the object at the root of the partition whose replica you want to delete.

When you delete replicas, keep the following guidelines in mind:

- * If a master replica becomes corrupted, change a read/write or read-only replica on another server to the master replica. This automatically changes the old master replica to a read/write replica.
- * For fault tolerance, you should maintain at least one replica of the master partition on different servers.
- * Deleting a replica deletes a copy of part of the Directory database. The database can still be accessed on other servers in the network, and the server that the replica was on still functions in NetWare Directory Services.

To delete a replica

1. Select the replica you want to delete.
2. Choose "Delete Replica."
You cannot delete a master replica. If the replica you want to delete is a master, go to a server with another replica of the master and make it the new master replica. This automatically changes the old master replica to a read/write replica, which you can then delete.
3. Choose "OK."

Merge a Partition

When you merge a partition, the selected partition is combined with its parent partition. You might want to merge two partitions if the Directory information in the two partitions is closely related.

In other words, you merge a partition with its parent partition when you want to delete the partition without deleting the objects in the partition. Consider keeping partitions separate if the partitions are large, because large partitions slow down response time.

You do not delete partitions. You only merge and create partitions to define how the Directory tree is split into parts.

The partition is merged when the process is completed on the servers. Merging a partition with its parent partition might take some time, since the replicas need to be deleted and the parent replicas updated with the merging partition information. The replicas of the partitions are also merged.

A partition with no parent partition will merge with the [Root] partition.

To merge a partition

1. To locate the container object that you want to merge with the parent partition, browse the "Partition Manager" screen.
If the partition does not appear in the window, browse the tree by selecting an object to see its subordinates, or by choosing the arrow to move toward the [Root]. Your current context appears in the upper-left corner of the screen.
For information about moving around in the "Partition Manager" screen and selecting objects, choose the "Help" button.
2. Select the partition you want to merge.
You must select a container object that has the partition icon to its left. [Root] cannot be merged because it is the top partition; it has no parent to merge with.
3. Choose "Merge Partition."
To merge the partition with its parent, choose "Yes."
The partition is merged when the process is completed on the servers. To see that the icon of the partition you merged is gone (which signifies that the merge is complete), you need to refresh the screen by choosing the Up-arrow and then expanding the container again.

View Server Partitions

This dialog displays partitions that have replicas stored on this NetWare server and the type of replica of each partition. Each partition is specified by the complete name of its root object.

This information allows you to see how many of this NetWare server's resources are used by partition replicas, and how far across the network users might need to go to find certain parts of the Directory database.

The data in this dialog cannot be changed. To change replicas, choose "Close" and select a server; then from the Partition Manager dialog, choose "Replicas."

Screen regions and buttons

Partitions on Server shows the complete name of the server that contains replicas of the partitions listed in the Partition field.

Replica Being Read shows the name of the replica (the complete name of the server the replica resides on) that Partition Manager is searching for Directory Services information.

Partition lists the root object of each partition that has a replica on the server specified by the Partitions on Server field.

Type lists the replica type of the replicas of each partition.

Close saves changes and returns to the Partition Manager browser.

Delete a NetWare Server Object

Right needed: The Supervisor object right to the container of the NetWare Server object you want to delete.

Warning

Deleting a NetWare Server object **permanently** removes it from your network. It also permanently removes its data and resources from the network.

Deleting a NetWare Server object may corrupt your NDS database, especially if the Server object provides NDS database services (such as storing partition replicas).

Use Partition Manager to move the replicas on the NetWare server to avoid deleting a NetWare server that stores the only replica of a part of the Directory tree.

You must bring a NetWare server down before you can delete its object. If you delete a NetWare Server object, the only way to get it back is to reinstall the server using the INSTALL.NLM program at the server console, or to re-create the object after bringing the server back up.

Before deleting the NetWare Server object with the Partition Manager tool, consider these alternatives:

- * Change the master replicas stored on this server to read/write replicas and then delete all replicas on the NetWare server. Once all the processes are complete, you can delete the NetWare Server object.
- * Remove NDS from the server with the INSTALL.NLM. This procedure protects your NDS database from losing services.
- * Move the NetWare Server object to another context. (You do not need to delete the NetWare Server object and recreate it in another context.)

To Delete a NetWare Server Object

1. At the server console, bring down the server by typing

DOWN <Enter>

For more information, see "Bringing Down a Server" in Chapter 7 of Supervising the Network.

2. From the MS Windows Program Manager at your workstation, choose the "NetWare Administrator" icon.
3. From the "Tools" menu, choose "Partition Manager."
4. Browse the "Partition Manager" screen to locate the NetWare Server object that you want to delete. If the NetWare Server object does not appear in the window, browse the tree by choosing an object to see its subordinates, or by choosing the arrow to move toward the [Root]. Your current context appears in the upper-left corner of the screen. For information about moving around in the "Partition Manager" screen and selecting objects, choose the "Help" button.
5. Select the NetWare Server object and choose "Delete Server."
The NetWare Server object is deleted from the NDS database.

Abort Partition Operation?

You have either started to create a new partition, merge a partition with its parent partition, or move a partition, and you have chosen to abort the partition operation in progress.

If you choose Yes, the operation you have started is aborted.

If you choose No, the operation you have started continues, and you are returned to the "Partition Management" menu.

Send Updates

Right needed: The Supervisor object right to the object at the root of the partition whose replicas you want to send updates to.

This operation sends updated Directory Services information from the selected replica to all the other replicas of the partition.

Although NetWare Directory Services automatically synchronizes the Directory data of replicas (so that each replica contains recently updated data), you can manually synchronize (update) the directory data of replicas, if necessary.

You should use the DSREPAIR utility to discover if the data in some replicas is out of sync with the master replica. If the data is out of sync, you should manually send updates to those replicas from the master replica. The data in the other replicas will be synchronized.

Choose "Send Updates" if one or more of the other replicas has lost information, or if you updated the selected partition and want to transfer that information to all the other replicas.

Note: This operation may create a lot of network traffic, so it is best to run this operation during a period of light network traffic.

Receive Updates

If you choose this operation, the selected replica will receive updated information from the master replica of the partition. Choose "Yes" if the selected replica has lost information or has not received updated information for an extended period of time.

Although NetWare Directory Services (NDS) automatically synchronizes the Directory data of replicas (so that each replica contains the most recently updated data), you can manually synchronize (update) the directory data of replicas if they get out of sync.

Use the DSREPAIR utility to discover if the data in some replicas is out of sync with the master replica. If the data is out of sync, you should receive updates from the master replica.

You cannot choose "Receive Updates From Other Replicas" from a master replica. The master is assumed to be the most current and accurate copy of the partition. If it's not, assign one of the other replicas to be the master.

If you choose "Receive Updates From Other Replica" from any replica, that replica will receive NDS information from the master.

Note: This operation may create a lot of network traffic, so it is best to run this operation during a period of light network traffic.

Create a New Partition?

You have chosen to create a new partition.

When you create a new partition, you divide an existing partition into two separate partitions. No object in the tree can be part of more than one partition at the same time.

For example, if you select an Organizational Unit from the browser and choose "Create as New Partition," you are choosing to split the Organizational Unit from its parent partition ([Root] for example, which is always a partition).

The selected object becomes the root of the new partition, and a master replica of the new partition is created on the server where the master replica of its parent partition is located.

Creating a new partition may take several minutes, depending on the location of and number of replicas of the parent partition.

To continue and create the object you selected as a new partition, choose "Yes." To cancel the operation and return to the browser, choose "No."

Merge a Partition?

You have chosen to merge a partition with its parent partition. When you merge a partition, the selected partition is merged, or grafted in, with its parent partition. Any replicas of the selected partition will be merged with the parent partition.

When you merge a partition with its parent partition, you are not deleting the container object. No object in the Directory tree can be part of more than one partition at the same time.

Merging a partition with its parent partition may take several minutes, depending on the location and number of replicas of both the selected partition and the parent partition.

To continue and merge the partition you selected with its parent partition, choose "Yes." To cancel the operation and return to the browser, choose "No."

Replica Status/Abort Operation

The "Replica Status" dialog displays the replicas of the selected partition (replicas are defined by the server they reside on), the type of each replica, and the state of each replica.

There are many different states that a replica can be in. For example, it may be in the process of creating or merging. You can choose to abort a partition operation while it's in progress.

Once a partition operation is complete, you cannot abort or undo the operation.

Screen regions and buttons

Partition shows the complete name of the root object of the partition you selected from the browser.

Replica Being Read shows the name of the replica (which is the complete name of the server the replica resides on) that Partition Manager is searching for Directory Services information.

Server lists the name of each replica (which is the complete name of the server the replica resides on) of the partition you selected from the browser.

Type lists the replica type of each replica of the partition you selected from the browser.

State lists the state of each replica.

Close returns you to the Partition Manager browser.

Abort stops any partition operation in process.

Move Partition

Right needed: The Create object right for the container to which you want to move an object.

Note: You can move a container object only if it is the root of a Directory Services partition that has no subordinate partitions. So, moving a container is really moving a partition.

When you move a container object, NetWare Directory Services (NDS) changes all references to the container. Although the object's common name remains unchanged, the context name of the container (and of all its subordinates) changes.

Important: When you move a partition, create an Alias object that points to the partition you're moving. Doing so allows users to continue logging into the network and finding objects in their original Directory location.

If you move a partition and do not create an Alias object in place of the moved partition, users who are unaware of the partition's new location will not easily find objects in the Directory tree, since they will look for them in their original Directory location.

This might also cause client workstations to fail at login if the NAME CONTEXT parameter in the NET.CFG file is set to the original location in the Directory tree.

Because the context of an object changes when you move it, users whose name context in their NET.CFG file references the moved object need to update their NET.CFG so that it references the object's new name.

To automatically update users' NET.CFG file with a new name context after moving an object, use the NCUPDATE utility. For instructions, see "NCUPDATE" in Utilities Reference.

To Move a Partition

1. From the "Partition Manager" browser, select the partition that you want to move.
In Partition Manager, the partition icon appears to the left of the object icon. If the container you want to move is not a partition, select the container and choose "Create as New Partition." Then refresh the screen so that the partition icon appears, and go to the next step.
If there are subordinate partitions in the container you want to move, you can merge those partitions with their parent partition by selecting them one at a time and choosing "Merge Partitions"; then select the container you want to move and continue with the next step.
2. From the "Object" menu, choose "Move Partition."
3. Choose the browser button to the right of the "Destination" box.
Use the browser in the "Directory Context" box to view the Directory tree's containers.
The "Objects" box that appears in the lower left corner shows the containers that you select in the "Directory Context" box.
4. From the "Objects" box, select a container object (an Organization or Organizational Unit) as the place to move the listed objects to; then choose "OK."
5. Select "Create Alias in Place of Moved Container."
To automatically update users' NET.CFG file with a new name context after moving an object, use the NCUPDATE utility. For instructions, see "NCUPDATE" in Utilities Reference.
6. In the "Move" dialog box, choose "OK."
If you chose to create an alias in place of the moved container, NetWare Administrator polls for the creation of the Alias object before it moves the selected partition.
If you don't want the partition you just moved to remain a partition, merge it with its parent partition.
After moving a partition, you need to wait for processes throughout the Directory to be complete before you can perform a partition operation with this object again.

Abort Partition Operation

Right needed: The Supervisor object right to the object at the root of the partition.

If you have begun the process of creating, merging, or moving a partition, or changing a replica type, you can still abort the process since partition operations take time. You can abort a partition operation only before the operation is in its final stages, and only before the replicas of the partition are in their final states.

Use this feature if you begin a partition operation and find that your database will not synchronize. If NetWare Directory Services (NDS) cannot synchronize replica information in your database because it is corrupted, or because a server in your Directory tree is down, you should abort any partition operation in progress.

To Abort a Partition Operation

1. To locate the partition that is executing a partition operation, browse the "Partition Manager" screen.
If the container object does not appear in the window, browse the tree by selecting an object to see its subordinates, or by selecting the Up-arrow to move toward the [Root]. Your current context appears in the upper-left corner of the screen.
For information about moving around in the "Partition Manager" screen and selecting objects, choose the "Help" button.
2. Select the partition that is executing a partition operation and choose "Abort Partition Operation."
As long as at least one of the replicas has not yet completed the operation (as shown in the "State" box), you can still abort the operation.
3. To abort the partition operation, choose "Abort," and then choose "Yes."
The partition operation is aborted, and any replicas that have been merged, created, or moved (depending on the operation you had begun) are returned to their original Directory location.

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Access Control (Trustees)

- [Trustees of Container Objects](#)
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View or Change Trustees of this Object

The Trustees of this Object dialog lists [trustees](#) of this container object and their explicitly granted [rights](#). When you select a trustee from the list, that trustee's rights to this object appear in the Object Rights field.

Note: The Trustees list does not list User objects, or other objects who inherit rights to this object. To check for those objects, choose Effective Rights.

To close the Trustees of this Object dialog and save changes, choose OK.

To close the Trustees of this Object dialog without saving changes, choose Cancel.

Procedures

[Add a Trustee](#)

[Delete a Trustee](#)

[See the Effective Rights of an Object](#)

[View or Change the Inherited Rights Filter](#)

[Change the Object Rights of a Trustee](#)

[Change the Property Rights of a Trustee](#)

Screen regions and buttons

[Trustees](#) lists all trustees of this object.

[Effective rights](#) are the explicit rights that any object has to this object.

[Add trustee](#) adds a new trustee to the Trustees list.

[Delete trustee](#) deletes a trustee from the Trustees list.

[Object Rights](#) lets you view or change a trustee's object rights.

[Property Rights](#) lets you view or change a trustee's [property rights](#).

[Clear](#) resets all rights to selected properties in the list to undefined for the selected trustee.

[Inherited Rights Filter](#) lets you view or change this object's [Inherited Rights Filter](#)

OK saves changes and closes the dialog.

Cancel closes the dialog without saving changes.

Related topics

[Trustees of this Object and Rights to Other Objects](#)

[Trustees of the \[Root\] Object in the Directory Tree](#)

View or Change Trustees of this Object

The Trustees of this Object dialog lists trustees of this object and their explicitly granted rights. When you select a trustee from the list, that trustee's rights to this object appear below the list.

Note: The Trustees list does not list User objects or other objects who inherit rights to this object.

- * To check for those objects, choose Effective Rights.
- * To close the Trustees of this Object dialog and save changes, choose OK.
- * To close the Trustees of this Object dialog without saving changes, choose Cancel.

Procedures

[Add a Trustee to this Object](#)

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Screen regions and buttons

Trustees lists all trustees of this object.

Effective rights are the explicit rights that any object has to this object.

Add trustee adds a new trustee to the Trustees list.

Delete trustee deletes a trustee from the Trustees list.

Object Rights lets you see or change a trustee's object rights.

Property Rights lets you see or change a trustee's property rights.

Clear resets all rights in the list to undefined for the selected trustee.

Inherited Rights Filter lets you view or change this object's Inherited Rights Filter.

OK saves changes and closes the dialog.

Cancel closes the dialog without saving changes.

Related topics

[Trustees of this Object and Rights to Other Objects](#)

[Trustees of the \[Root\] Object in the Directory Tree](#)

Add a Trustee to this Object

To add trustees other than yourself, you need the Read and Write property rights to the Object Trustees (ACL) property of an object.

1. Choose Add Trustee.
2. Select the objects you want to add to the list of trustees for this object.
If you have only the Add Self property right to the ACL property, only your User object will be added as a trustee; the Select Object dialog will not appear.
3. Choose OK.

The objects that you selected are added to the Trustees list. By default, the new trustees are granted the Browse object right and the Read and Compare property rights to all properties of the object.

Note: To grant rights to the trustee to work with this object, select the check boxes below the Trustees list.

Delete a Trustee of this Object

You cannot delete a trustee from the list if

- * It is the only trustee of this object with Supervisor object right
- * The object's Inherited Rights Filter blocks the Supervisor object right

You must first grant another trustee the Supervisor object right, or make sure the Inherited Rights Filter doesn't block the Supervisor object right. This attempts to prevent you from cutting off Supervisor-level access to part of the Directory tree.

Note: You can delete the User object that is the only trustee listed as supervisor for an area. This will effectively cut off Supervisor-level access to that part of the Directory tree. Be careful when deleting User objects that have Supervisor rights.

You need the Read and Write property rights to the Object Trustees (ACL) property of an object to delete trustees.

If you have only the Add Self property right to the ACL property of this object, Delete trustee is only available when your User object is the only object selected from the list of trustees.

To Delete a Trustee of this Object

1. From the Trustees list, select the trustee that you want to delete.
2. Choose Delete trustee.
3. Choose Yes.

The User object that you deleted from the Trustees list can still have rights to this object by inheriting them from container objects above it in the Directory tree that have been granted trustee rights, or by assuming security equivalence (for example, as a member of a Group that is a trustee of this object).

View or Change the Inherited Rights Filter of this Object

You need the Read and Write property rights to the Object Trustees (ACL) property of an object to change its Inherited Rights Filter (IRF).

1. To remove the IRF so that all rights can be inherited, select each of the Object Rights boxes and the All Properties circle in the Property Rights box.

You will notice that left of each of the Object Rights and Property Rights boxes is an arrow pointing down, which means that the right will flow down. If there is a line underneath an arrow, you need to select the box to enable the right to flow down.

2. To change the IRF for all properties that have no IRF in this container object, select All Properties. You can also set an IRF for a specific property. Properties that have an IRF set are checked; others are unchecked.

3. To change the Inherited Rights Filter for certain properties only, select Selected Properties and then the individual property to modify.

Note: Although you can't inherit rights for specific properties, you can filter rights for properties. The IRF filters rights that were set for all properties.

4. Select the check box next to any object right or property right that you want to change.

- * If the boxes are grayed, no Inherited Rights Filter exists for this object or the selected set of property rights. All rights can be inherited by any trustee.

- * If a box is white (not checked), that right is filtered and cannot be inherited by a trustee with a trustee assignment above this level. An arrow with a line beneath it appears to the left of the checkbox to indicate that this right does not flow down.

- * If a box is marked (X), that right is not filtered and can be inherited. An arrow appears to the left of the checkbox to indicate that this right flows down.

Note: You cannot leave the Supervisor object right unmarked unless a trustee of this object has the Supervisor right.

5. Choose OK.

You return to the Trustees of This Object dialog.

[More about the Inherited Rights Filter](#)

View or Change the Inherited Rights Filter of this Object

You need the Read and Write property rights to the Object Trustees (ACL) property of an object to change its Inherited Rights Filter (IRF).

1. To remove the IRF so that all rights can be inherited, select each of the Object Rights boxes and the All Properties circle in the Property Rights box.

You will notice that left of each of the Object Rights and Property Rights boxes is an arrow pointing down, which means that the right flows down. If there is a line underneath an arrow, you need to select the box to enable the right to flow down.

2. To change the Inherited Rights Filter for all properties of this container object that have no IRFs, select All Properties.

You can also set an IRF for a specific property.

3. To change the Inherited Rights Filter for certain properties only, select Selected Properties and then the individual property to modify.

4. Select the check box next to any object right or property right that you want to change.

- * If the boxes are gray, no Inherited Rights Filter exists for this object or the selected set of property rights. All rights can be inherited by any trustee.

- * If a box is white (not checked), that right is filtered and cannot be inherited by a trustee with a trustee assignment above this level.

- * If a box is marked (X), that right is not filtered and can be inherited.

Note: You cannot leave the Supervisor object right unmarked unless a trustee of this object has the Supervisor right.

5. Choose OK.

You return to the Trustees of this Object dialog.


[More about the Inherited Rights Filter](#)

See Another Object's Effective Rights to this Object

For another object that is a trustee of this object

1. From the Trustees list, select one trustee.
2. Choose Effective Rights
The effective rights of the trustee are shown below the Object name field in the Object Rights and Property Rights areas. Effective rights are bold. Rights not available to the trustee are grayed.
3. (Optional) To see effective rights to specific properties, choose Selected Properties and select a property from the list.
4. Choose Close.
You return to the Trustees of this Object dialog.

For another object that is not a trustee of this object

1. Choose Effective Rights
2. Choose the Browser icon. 
3. Select an object and choose OK.
Note: To see an object's effective rights to this object, you must be the manager of the object (have the Read right to this object's ACL property.)
The effective rights of the object you selected are shown below the Object Name field. Effective rights are bold. Rights not available to the trustee are gray.
4. (Optional) To see effective rights to specific properties, choose Selected Properties and select a property from the list.
5. Choose Close.
You return to the Trustees of This Object dialog.

Note: If you make changes to the Trustees of This Object dialog, they will not be reflected in Effective Rights until you have exited the Trustees of this Object dialog with OK. When you return to the Trustees of This Object dialog, any previous changes are reflected in Effective Rights.


[More about Effective Rights](#)

See another Object's Effective Rights to this Object

For another object that is a trustee of this object

1. From the Trustees list, select one trustee.
2. Choose Effective rights.
The effective rights of the trustee are shown below the Object name field in the Object Rights and Property Rights areas. Effective rights are bold. Rights not available to the trustee are gray.
3. (Optional) To see effective rights to specific properties, choose Selected Properties and select a property from the list.
4. Choose Close.
You return to the Trustees of this Object dialog.

For another object that is not a trustee of this object

1. Choose Effective rights.
2. Choose the Browser icon. 
3. Select an object and choose OK.
Note: To see an object's effective rights to this object, you must be the manager of the object (have the Read right to this object's ACL property.)
The effective rights of the object you selected are shown below the Object Name field. Effective rights are bold. Rights not available to the trustee are gray.
4. (Optional) To see effective rights to specific properties, choose Selected Properties and select a property from the list.
5. Choose Close.
You return to the Trustees of this Object dialog.

Note: If you make changes to the Trustees of this Object dialog, they will not be reflected in Effective Rights until you have exited the Trustees of this Object dialog with OK. When you return to the Trustees of this Object dialog, any previous changes are reflected in Effective Rights.

[More about Effective Rights](#)

Change A Trustee's Object Rights to this Object

1. From the Trustees list, select a trustee.

Note: You can select multiple trustees by holding down the <Ctrl> or <Shift> key while making selections. Any rights that you change will affect all selected trustees.

Object Rights marked (X) are granted to the trustee.

2. Select the check box next to any object right that you want to change.

- * If a box is gray, see possible reasons below.
- * If a box is not checked, that right is not granted to the selected trustee.
- * If a box is marked (X), that right is granted to the selected trustee.

Note: If a trustee is the only trustee of this object with the Supervisor object right and the Inherited Rights Filter blocks others from the Supervisor object right, the trustee cannot be deleted. This prevents cutting off supervisor-level access to part of the Directory tree.

3. To reset all object rights to undefined (not granted), choose Clear.

If you clear these rights, and no other rights are granted, the selected trustee is deleted from the list of trustees.

Note: Although rights in the list are granted, they can be inherited if the Inherited Rights Filter does not block them.

4. Choose OK.

You return to the Browser.

If a check box is gray, one of the following conditions exists:

- * No trustee is selected. Select a trustee from the list.
- * Rights are undefined. No rights are granted.
- * Two or more trustees with different rights have been selected. Select only one trustee, or change the check box to change that right for all selected trustees.

Change A Trustee's Object Rights to this Object

1. From the Trustees list, select a trustee.

Note: You can select multiple trustees by holding down the <Ctrl> or <Shift> keys while making selections; any rights that you change will affect all selected trustees.

Object Rights marked (X) are granted to the trustee.

2. Select the check box next to any object right that you want to change.

- * If a box is gray, see possible reasons below.
- * If a box is not checked, that right is not granted to the selected trustee.
- * If a box is marked (X), that right is granted to the selected trustee.

Note: If a trustee is the only trustee of this object with the Supervisor object right and the Inherited Rights Filter blocks others from the Supervisor object right, the trustee cannot be deleted. This prevents cutting off supervisor-level access to part of the Directory tree.

3. To reset all object rights to undefined (not granted), choose Clear.

If you clear these rights, and no other rights are granted, the selected trustee is deleted from the list of trustees.

Note: Although rights in the list are granted, they can be inherited if the Inherited Rights Filter does not block them.

4. Choose OK.

You return to the Browser.

If a check box is gray, one of the following conditions exists:

- * No trustee is selected. Select a trustee from the list.
- * Rights are undefined. No rights are granted.
- * Two or more trustees with different rights have been selected. Select only one trustee, or change the check box to change that right for all selected trustees.

Change A Trustee's Property Rights to this Object

You can define property rights for a trustee in two ways:

- * All Properties defines rights for this trustee that are the same for every property of this object. These rights control all properties unless rights are granted for a specific property as well.
- * Specific Properties defines rights for this trustee for one property of an object. These rights, if assigned, override the All Properties rights of the trustee for only that specific property. Specific property rights cannot be inherited.

Example: If user Joe has the Read and Compare Property rights to a Printer object (which are the default rights that users are assigned to most objects), and if user Joe needs to be able to modify the printer configuration, the supervisor, or a user with supervisor rights, needs to grant User Joe the Read right and the Write right for the Printer Configuration property.

Property rights

Supervisor

Compare

Read

Write

Add (or Delete) Self

Change a Trustee's All Property Rights to this Object

1. From the Trustees list, select a trustee.
Note: You can select multiple trustees by holding down the <Ctrl> or <Shift> key while making selections while making selections.
Property Rights marked (X) denote rights that are granted to the trustee.
2. Choose All Properties.
The properties listed in the Selected Properties list box become gray.
 - * If a box is gray, see possible reasons below.
 - * If a box is not checked, that right is not granted to the selected trustee.
 - * If a box is marked (X), that right is granted to the selected trustee.
3. Select the check box next to any property right that you want to change.
The property rights you choose apply to every property of this object that does not have specific rights defined.
4. To reset all Property rights to undefined, choose Clear.
Note: Although no rights in the list are granted, they can be inherited if the Inherited Rights Filter does not block them.
If you clear these rights, and no other rights are granted, the selected trustee is deleted from the list of trustees.
5. Choose OK.
You return to the Browser.

Note: In most cases, a trustee will be granted the Read right to all properties. This allows the trustee to see the values in all properties of an object.

If a check box is gray, one of the following conditions exists:

- * No trustee is selected. Select a trustee from the list.
- * Rights are undefined. No rights are granted.
- * Two or more trustees with different rights have been selected. Select only one trustee or change the check box to change that right for all selected trustees.

Change a Trustee's Selected Property Rights to this Object

1. From the Trustees list, select a trustee.
Note: You can select multiple trustees by holding down the <Ctrl> or <Shift> key while making selections.
2. Choose Selected Properties.
3. Select a property from the Properties box.
Note: You can select multiple properties by holding down the <Ctrl> or <Shift> key while making selections.
Properties in the list that have rights granted are checked; others are not checked.
The Property Rights box shows rights that are granted to the selected trustee for this property.
4. Select the check box next to a property right that you want to change.
 - * If a box is gray, see possible reasons below.
 - * If a box is not checked, that right is not granted to the selected trustee.
 - * If a box is marked (X), that right is granted to the selected trustee.
5. To reset selected property rights for the selected property to undefined, choose Clear.
Selected rights are not granted to the specific property that you have selected; the All Properties rights of this trustee apply to the selected property.
If you clear these rights and no other rights are granted, the selected trustee is deleted from the list of trustees.
6. Choose OK.
You return to the Browser.

Example: A user has Read rights to all properties of a Directory Map object that points to an application. The user needs to change the location of the application in the Directory Map, so the user is also granted the Supervisor property right to the Path property of the Directory Map.

If a check box is gray, one of the following conditions exists:

- * No property is selected. Select a property from the list.
- * Rights are undefined. No rights are granted.
- * Two or more properties with different rights have been selected. Select only one property, or change the check box to change that right for all selected properties.

Trustees List box

Lists all trustees that have rights granted to this object.

Objects that are not listed in the Trustees list can still have effective rights to this object by

- * Inheritance
- * Being security equal to another object

You see what rights make up a trustee's assignment by selecting that trustee in the list.

Note: You can select multiple trustees by holding down the <Ctrl> or <Shift> key while making changes. Changes you make affect all selected trustees.

You can select the check boxes to change that trustee's rights.

If an object does not have a trustee with the Supervisor object right, it's Inherited Rights Filter cannot block the Supervisor object right.

[More about Effective Rights](#)

[More about the Inherited Rights Filter](#)

Example: Organizational Units SALES and RESEARCH are subordinate to Organization BOSTON. SALES is a trustee of BOSTON and has explicit Browse and Create object rights to BOSTON. Any user in SALES inherits the right to create objects in BOSTON and in any container subordinate to BOSTON, including RESEARCH.

RESEARCH doesn't want anyone to create objects in their part of the Directory tree. RESEARCH adds an Inherited Rights Filter that includes only the Browse right. This means that no one (including SALES) can inherit the Create right in RESEARCH, but SALES still inherits the Browse right.

User ANDREW is a trustee of server CentralStation under RESEARCH and has the Supervisor right. This trustee assignment bypasses the Inherited Rights Filter and gives ANDREW the Create right.

Add Trustee button

Adds a new trustee to the Trustees list for this object. You choose the new trustee is chosen from the Select Object dialog. You can give the trustee specific rights.

You can add as many trustees as you need. You must have at least the Read and Write property rights on the object's Object Trustees (ACL) property to add trustees.

Define trustees as high as possible in the Directory tree. The fewer trustee assignments you use, the easier it is to determine where an object's inherited rights came from.

Example: users in the SEATTLE Organizational Unit need rights to a Profile. Rather than make each user a trustee of the Profile, make SEATTLE a trustee of the Profile. Each user will have the same rights as SEATTLE. (If a user needs more rights to manage the Profile, that user can be listed as a separate trustee of the Profile.)

To Add a Trustee

1. Choose Add Trustee.
The Select Object dialog appears.
2. From the Select Object dialog's browser, select the objects you want to assign as trustees.
3. From the Select Object dialog, choose OK.
Any objects you selected are added to the object's Trustees list.
4. To accept the objects you selected as trustees, choose OK.
You're returned to the browser.

Delete Trustee Button

Deletes a trustee from the Trustees list. You must have at least the Read and Write property rights on the object's Object Trustees (ACL) property to delete its trustees.

Objects that are not listed in the Trustees list can still have effective rights to this object by

- * Inheritance
- * Being security equal to another object

You see what rights make up a trustee's assignment by selecting that trustee in the list.

Note: If a trustee is the only trustee of this object with the Supervisor object right and the Inherited Rights Filter blocks others from the Supervisor object right, the trustee cannot be deleted. This prevents cutting off supervisor-level access to part of the Directory tree.

Object Rights of a Container Object

Object rights determine what a trustee can do to an object. They affect the object as a whole in the Browser. But, with the exception of the Supervisor object right, they do not grant any rights to see or change the properties of the object.

Any object granted the Supervisor object right assumes all property rights as well.

Example: With the Delete object right, a user can remove an object from the Directory database so that it no longer exists.

Object rights of container objects

Supervisor

Browse

Create

Delete

Rename

Object Rights of a Leaf Object

Object rights determine what a trustee can do to an object. They affect the object as a whole in the Browser. But, with the exception of the Supervisor object right, they do not grant any rights to see or change the properties of the object.

Note: The Create object right is not used for leaf objects because you cannot create an object under a leaf object.

Example: With the Delete object right, a user can remove an object from the Directory database so that it no longer exists.

Object rights of leaf objects

Supervisor

Browse

Delete

Rename

Property rights

Property rights determine what a trustee can do with the properties of an object.

There are two ways to assign property rights:

All Properties defines rights for this trustee that are the same for every property of the selected object. These rights control all properties unless rights are granted for a selected property.

Selected Properties defines rights for this trustee for one property of an object. These rights, if assigned, override the All Properties rights of the object for only that selected property. Selected property rights cannot be inherited.

Example: A user has the Read right to all properties of a Directory Map object that points to an application. The user needs to change the location of the application in the Directory Map. Therefore the user is granted the Supervisor property right to the Path property of the Directory Map.

Property rights

Supervisor

Compare

Read

Write

Add (or Delete) Self

Trustees of this File or Directory

Important: If you are viewing the Trustees of the Root Directory page for a Volume object, you are seeing the trustees of the top level of the file system for the selected volume. You can change directory rights here. To change object rights for the Volume object, choose Trustees of this Object from the Object menu.

The Trustees of this File and Trustees of this Directory pages list trustees of this file or directory and their rights. When you select a trustee from the list, that trustee's rights to this file or directory appear.

Note: The Trustees list does not list objects that are trustees of directories above this level that inherit rights to this file or directory. To check for those objects, choose Effective Rights.

- * To close the Trustees of this File [Directory] dialog and save changes, choose OK.
- * To close the Trustees of this File [Directory] dialog without saving changes, choose Cancel.

Procedures

[Add a Trustee](#)

[Delete a Trustee](#)

[View or Change the File and Directory Rights of a Trustee](#)

[See the Effective Rights of a Trustee](#)

[View or Change the Inherited Rights Filter](#)

Screen regions and buttons

[Trustees](#) lists all trustees for the file or directory.

[Add Trustee](#) allows you to add a new trustee.

[Delete Trustee](#) deletes the selected trustee.

[Access rights](#) allows you to see and change a trustee's access rights.

[Effective rights](#) shows the rights that any object can use to access this file or directory.

[Inherited Rights Filter](#) allows you to see and change the Inherited Rights Filter of this file or directory.

OK saves changes and closes the dialog.

Cancel closes the dialog without saving changes.

Related topic

[Trustees of this Object and Rights to Other Objects](#)

Trustees of this File or Directory

The Trustees of this File and Trustees of this Directory pages show trustees of the file or directory you selected. You can

- * See who is a trustee of this file or directory
- * Change a trustee's rights to this file or directory

Note: The Trustees list does not show users who are trustees of directories above this level and inherit rights to this file or directory. To check for those objects, choose Effective Rights.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[Using this Dialog](#)

[Add a Trustee](#)

[Delete a Trustee](#)

[View or Change the File and Directory Rights of a Trustee](#)

[See the Effective Rights of a Trustee](#)

[View or Change the Inherited Rights Filter](#)

Screen regions and buttons

[Trustees](#) lists all trustees for the file or directory.

[Add Trustee](#) allows you to add a new trustee.

[Delete Trustee](#) deletes a trustee.

[Access rights](#) allows you to see and change a trustee's access rights.

[Effective rights](#) shows the rights that any object can use to access this file or directory.

[Inherited Rights Filter](#) allows you to view or change the Inherited Rights Filter of this file or directory.

OK saves changes and closes the dialog.

Cancel closes the dialog without saving changes.

Add a Trustee to a File or Directory

You must have the Access Control right to the file or directory to add a trustee.

1. Choose Add Trustee.
2. From the Select Object dialog, select the objects you want to add to the list of trustees for this file or directory.

You can select multiple trustees by holding down the <Ctrl> key while making selections.

3. Choose OK.

The objects that you selected are added to the Trustees list.

Note: To grant rights to the trustee to work with this file or directory, use the Access Rights check boxes below the Trustees list.

Delete a Trustee of a File or Directory

You must have the Access Control right to the file or directory to delete a trustee.

1. From the Trustees list, select the trustees you want to delete.
2. Choose Delete Trustee.
3. Choose Yes.

Note: The object that you deleted from the Trustees list only has rights to this directory or file by inheriting them from a directory above this directory or file, or by being a member of a group that is a trustee of this directory or file.

View or Change the Inherited Rights Filter of a File or Directory

1. Select the check box next to each access right that you want to change in the Inheritance Filter list.
 - * If the boxes are grayed, no Inherited Rights Filter exists for this file or directory. All rights can be inherited.
 - * If a box is not marked, that right cannot be inherited. An arrow with a line beneath it appears to the left of the checkbox to indicate that this right does not flow down.
 - * If a box is marked (X), that right can be inherited. An arrow appears to the left of the checkbox to indicate that this right flows down.
2. Choose OK.
You return to the Browser.

Related topic

[More about the Inherited Rights Filter](#)

View or Change a Trustee's File or Directory Rights

1. From the Trustees list, select a trustee.
Note: You can select multiple trustees by holding down the <Ctrl> or <Shift> key while making selections.
Access rights marked (X) have been granted to the trustee.
2. Select the box next to any access right that you want to change.
3. Choose OK.

If any check boxes are gray, one of the following conditions exists:

- * No trustee is selected. Select a trustee from the list.
- * Rights are undefined. No rights are granted.
- * Two or more trustees with different rights have been selected. Select only one trustee, or change the check box to change that right for all selected trustees.

See an Object's Effective Rights to This File or Directory

You can see an object's effective rights to this file or directory only if:

- * You have the Access Control right on the file or directory
- * The file or directory is on a volume that uses NetWare 4

For an object that is a trustee of this directory or file

1. From the Trustees list, select a trustee.
2. Choose Effective Rights.
3. The effective rights of the trustee that you selected are shown below the Trustees list. Effective rights are bold. Rights not available to the trustee are gray.
4. Choose Close.
You return to the Trustees of this File [Directory] dialog.

Note: If you make changes to the Trustees of this File [Directory] dialog, they will not be effective until you return to the Browser. When you return to the Trustees of this File [Directory] dialog, any previous changes are reflected in Effective Rights.

For an object that is not a trustee of this directory or file

1. Choose Effective Rights.
2. Choose the Browser icon. *
3. Select an object.
Note: To see a user's effective rights, you must have at least the Write property right to that user's Object Trustees (ACL) property.
The effective rights of the object that you selected are shown below the Trustees list. Effective rights are bold. Rights not available to the trustee are gray.
4. Choose Close.
You return to the Trustees of this File [Directory] dialog.

Related topic

[More about Effective Rights](#)

Trustees List Box for Files and Directories

Lists all objects that have rights granted to this file or directory.

Objects that are not on the Trustees list can still have effective rights to this file or directory by:

- * Inheritance
- * Equivalence to another object (such as a Group) that is a trustee
- * Membership in a group that is a trustee

Related topic

[More about the Inherited Rights Filter](#)

[More about Effective Rights](#)

Add Trustee Button

You must have the Access Control right to a file or directory to add trustees.

Adds a new trustee to the Trustees list for this file or directory. The new trustee is given specific rights that override the Inherited Rights Filter.

You can add as many trustees as you need.

Note: Define trustees as close to the root directory as possible. The fewer trustee assignments you use, the easier it is to determine where someone's inherited rights come from.

Example: users in the SEATTLE Organizational Unit need rights to the REPORTS directory. Rather than make each user a trustee of REPORTS, make SEATTLE a trustee of it. Each user will have the same rights as SEATTLE. (If a user needs more rights to work in REPORTS, that user can be listed as a separate trustee of the directory.)

To grant a set of rights to a group of users who don't share a common container, create a Group object and give it a trustee assignment. The users assigned to the Group object are security equivalent to (have the same rights as) the Group object.

Delete a File or Directory Trustee Button

You must have the Access Control right to a file or directory to delete its trustees.

Deletes a trustee from the Trustees list.

This object can still have rights to an object that does not appear in the Assigned Object list by

- * Inheriting them from objects higher in the Directory tree
- * Security equivalence (for User objects only)
- * Membership in a group that is a trustee of this object

Note: To determine if you have Access Control rights, select the file or directory and choose Details from the Object menu. Choose Trustees of this File and then Effective Rights. Select your user object to see your effective rights to the file or directory.

File and Directory Rights

File and Directory rights determine what a trustee can do with a file or directory. Each right can be assigned separately to each trustee.

Supervisor

Read

Write

Create

Erase

Modify

File Scan

Access Control

Rights to Other Objects

The Rights to Other Objects dialog shows

- * Objects that this object is a trustee of
- * Rights this object has to those objects

When you select an object from the Assigned Objects list, the rights included in the trustee assignment to that object appear below the list box.

Note: The Assigned Objects list only lists objects for which an explicit trustee assignment exists for the object you selected. It does not list all objects that the object inherits rights to. To see all of this object's rights to other objects, choose Effective Rights.

- * To close the Rights to Other Objects dialog and save changes, choose OK.
- * To close the Rights to Other Objects dialog without saving changes, choose Cancel.

Procedures

[Add a Trustee Assignment](#)

[Delete a Trustee Assignment](#)

[See the Effective Rights to Any Object](#)

[Change the Object Rights to an Object](#)

[Change the Property Rights to an Object](#)

Screen regions and buttons

[Assigned Objects](#) lists all objects that this object has a trustee assignment to.

[Effective rights](#) are the actual rights that this object has to any object. You can also use this button to view the effective rights of other objects on the current object.

[Add Assignment](#) grants this object a new trustee assignment to another object.

[Delete Assignment](#) deletes a trustee assignment to another object from the Assigned Objects list.

[Object Rights](#) let you see and change the object rights to the object selected in the Assigned Objects list.

[Property Rights](#) let you see and change the [property rights](#) to the object selected in the Assigned Objects list.

[Clear](#) resets all rights in the list to undefined (gray) for the selected object. Checked boxes show rights that are granted; Unchecked boxes show rights that are not granted.

OK saves changes and closes the dialog.

Cancel closes the dialog without saving changes.

Related Topics

[Trustees of this Object and Rights to Other Objects](#)

[Trustees of the \[Root\] Object in the Directory Tree](#)

Set the Search Context for the Rights to Other Objects Dialog

Use this Search Context dialog to limit the part of the Directory tree for which this object's trustee assignments are shown.

Every object under the container that you select is searched to find this object's rights to other objects (trustee assignments). The smaller the section of the Directory tree you select, the quicker the dialog will appear.

If you select Search Entire Subtree, this object's trustee assignments will be shown for all objects in the Directory tree which you have rights to browse.

Add a Trustee Assignment

You must have at least the Write property right to the Object Trustees (ACL) property of the object that you want to add to the Assigned Objects list.

1. Choose Add Assignment..

2. Select which objects you want to grant trustee assignments.

Example: To allow User JOHN to use a Profile during login, view the Rights to Other Objects for User JOHN, and add Profile to the Assigned Objects list. Then grant the Browse object right and Read All Properties right. JOHN can now use the Profile.

3. Choose OK.

The objects that you selected are added to the Assigned Objects list.

To grant rights to the newly assigned object, select the check boxes below the Assigned Objects list.

Delete a Trustee Assignment

You need the Write property right to the Object Trustees (ACL) property of the object that you want to remove from the Assigned Objects list. (If the icon next to the object has an X through it and the name is grayed, you do not have rights to delete the assignment.)

1. From the Assigned Objects list, select the object that you want to delete.
2. Choose Delete assignment.
3. Choose Yes.

Any trustee assignments that this object had on the object that you deleted from the Assigned Objects list are deleted. However, this object may still have rights to the object you deleted from the Assigned Objects list by inheriting rights from other objects.

For example, if this object is a member of a group that has a trustee assignment to the object you deleted from the Assigned Objects list, this object inherits those group rights.

You must not delete a trustee assignment to an object if

- * It is the only trustee of this object with Supervisor object right
- * The object's Inherited Rights Filter blocks the Supervisor object right

You should first grant another trustee the Supervisor object right, or make sure the Inherited Rights Filter doesn't block the Supervisor object right. This attempts to prevent you from cutting off Supervisor-level access to part of the Directory tree.

See this Object's Effective Rights to another Object

To an object that is listed in the Assigned Objects list box

1. Select one object from the Assigned Objects list.
2. Choose Effective rights.
This object's effective rights to the object you selected appear below the Object Name field. Effective rights are bold. Rights not available to this object are gray.
Choose a property from the Properties list to see effective rights to specific properties.
3. Choose Close.
You return to the Rights to Other Objects dialog.

To an object that is not listed in the Assigned Objects list box

1. Choose Effective rights.
2. Choose the Browser icon.*
3. Select an object.
4. Choose OK.
This object's effective rights to the object you selected appear below the Object Name field. Effective rights are bold. Rights not available to this object are gray.
Choose a property from the Properties list to see effective rights to specific properties.
5. Choose Close.
You return to the Rights to Other Objects dialog.

Note: If you make changes to the Rights to Other Objects dialog, they are not reflected in Effective Rights until you have exited the Rights to Other Objects dialog with OK. When you return to the Rights to Other Objects dialog, any previous changes are reflected in Effective Rights.

[More about Effective Rights](#)

Change this Object's Rights to an Object

1. From the Assigned Objects list, select an object.

Note: You can select multiple objects by holding down the <Ctrl> or <Shift> key while making selections. If an object is gray, you do not have rights to change its trustee assignment.

Object Rights marked (X) are granted to the objects.

2. Select the check box next to any object right that you want to change.

Note: If a trustee is the only trustee of this object with the Supervisor object right and the Inherited Rights Filter blocks others from the Supervisor object right, you should not remove its assignment. This prevents cutting off supervisor-level access to part of the Directory tree.

3. To reset all object rights to undefined, choose Clear.

If you clear these rights, and no other rights are granted, the selected trustee's icon is marked with an X and the object is no longer considered a trustee.

Note: Although no rights in the list are granted, they can be inherited if the Inherited Rights Filter of the object does not block them.

4. Choose OK.

You return to the Browser.

If any check boxes are gray, one of the following conditions exists:

- * No object is selected. Select an object from the list
- * Rights are undefined. These rights are not granted to this object
- * Two or more objects have been selected, and this object has different rights to each. Select only one object.

Change this Object's Property Rights to an Object

You can define property rights to an object in two ways:

All Properties defines rights to the assigned object that are the same for every property of the object. These rights control all properties unless rights are granted for a specific property as well.

Selected Properties defines rights to the assigned object for one property of an object. These rights, if granted, override the All Properties rights to the object for only that specific property.

Example: All the properties of a Printer object are Read only, but this object needs to update the Cartridges property. To allow this object to update the Cartridges property, select Selected Properties; then grant the Write right for the Cartridge property.

Property Rights

Supervisor

Compare

Read

Write

Add (or Delete) Self

Change All Property Rights to an Object

1. From the Assigned Objects list, select an object.
Note: You can select multiple objects by holding down the <Ctrl> or <Shift> key while making selections while making selections.
Property Rights marked (X) are rights that the object selected in the Browser is granted to the object in the Assigned objects list.
2. Choose All Properties.
The properties listed in the Properties list box are gray. The rights you choose apply to all properties that do not have specific rights defined (see Change Specific Property Rights).
3. Select the check box next to any property right that you want to change.
These rights apply to every property of this object that does not have specific rights defined.
4. To reset All Property rights to undefined, choose Clear.
Rights can still be inherited if the Inherited Rights Filter of the object does not block them.
If you clear these rights, and no other rights are granted, the selected trustee is deleted from the list of trustees.
5. Choose OK.
You return to the Browser.

Note: In most cases, this object will have the All Property Read right to the assigned object. This allows this object to see the values in all properties of the assigned object.

If any check boxes are gray, one of the following conditions exists:

- * No assigned object is selected. Select an object from the list.
- * Rights are undefined. No rights are granted.
- * Two or more objects have been selected, and this object has different rights granted for each. Select only one object or change the check box to change that right for the trustee assignment to all selected objects.

Change Selected Property Rights to an Object

1. From the Assigned Object list, select an object.
Note: You can select multiple objects by holding down the <Ctrl> or <Shift> key while making selections.
2. Choose Selected Properties.
3. From the Properties list, select a property.
Note: You can select multiple properties by holding down the <Ctrl> or <Shift> key while making selections.
The list box shows all possible properties. Properties in the list that have rights granted are checked; others are unchecked. If you select a property that is not a part of the assigned object, the rights shown have no meaning.
The Property Rights box shows rights granted to the assigned object for this property.
4. Select the check box next to any property right that you want to change.
5. To reset selected property rights for the selected property to undefined, choose Clear.
Rights will not be granted to the selected property. All property rights to the assigned object will apply to the selected property.
If you clear these rights, and no other rights are granted, the selected trustee is deleted from the list of trustees.
6. Choose OK.
You return to the Browser.

Example: A user has Read rights to all properties of a Directory Map object that points to an application. The user needs to change the location of the application in the Directory Map, and is granted the Supervisor property right to the Path property of the Directory Map.

If any check boxes are gray, one of the following conditions exists:

- * No property is selected. Select a property from the list.
- * Rights are undefined. No rights are granted.
- * Two or more properties with different rights have been selected. Select only one property or change the check box to change that right for all selected properties.

Assigned Objects List Box

Lists all objects that this object has a trustee assignment to. If an object is gray, this object does not have rights to change the trustee assignment.

This object can still have effective rights to objects that are not listed in the Assigned Objects list. These rights come from

- * Inheritance
- * Equivalence to another object that is a trustee of this object
- * Membership in a Group that is a trustee of this object

To see what rights make up this object's trustee assignment to the assigned object, select that object in the list. You can change the check boxes to change the rights to that object.

[More about Effective Rights](#)

[More about The Inherited Rights Filter](#)

Add Assignment Button

Grants a new trustee assignment to an object and adds that object to the Assigned Objects list.

You must have at least the Write property right to the Object Trustees (ACL) property of any object that you want to add to the Assigned Objects list. You can add as many trustee assignments as you need.

Define trustee assignments as high as possible in the [Directory tree](#). The fewer trustee assignments you use, the easier it is to determine where an object's inherited rights come from.

Example: Users in the SEATTLE Organizational Unit need rights to the printer. Rather than make each user a trustee of the printer, make SEATTLE a trustee of the printer. Each user now has the same rights as SEATTLE. If a user needs more rights to manage the printer, that user can be listed as a separate trustee of the printer.

To grant a set of rights to a group of users who don't share a common container, create a Group object and give it a trustee assignment. The users assigned to the Group object are security equivalent to (have the same rights as) the Group object.

Delete Assignment Button

Deletes an object from the Assigned Objects list. You must have at least the Write property right to the Object Trustees (ACL) property of any object that you want to remove from the Assigned Objects list. (If the icon next to the object has an X through it and the name of the object is grayed, you do not have rights to delete this object.)

You should not delete a trustee from the list if

- * It is the only trustee of this object with Supervisor object right
- * The object's Inherited Rights Filter blocks the Supervisor object right

You must first grant another trustee the Supervisor object right, or make sure the Inherited Rights Filter doesn't block the Supervisor object right. This attempts to prevent you from cutting off Supervisor-level access to part of the Directory tree.

This object can still have rights to an object that does not appear in the Assigned Object list by

- * Inheriting them from objects higher in the Directory tree
- * Security equivalence (for User objects only)
- * Membership in a group that is a trustee of this object

Object Rights to an Object in the Assigned Objects List

Object rights determine what a trustee can do to an object. They do not grant any rights to see or change the properties of the object.

When you select an object in the Assigned Objects list, this object's rights to the object that you selected are shown as checked in the list of object rights.

Example: With the Delete object right, a user can remove an object from the Directory tree so that it no longer exists.

Object rights to container objects

Browse

Create

Delete

Rename

Supervisor

Object rights to leaf objects

Browse

Delete

Rename

Supervisor

Property Rights to an Object

Property rights determine what a trustee can do with the properties of an object.

Example: With the Write right for all properties, a user can add or change the values of any property.

When you select an object in the Assigned Objects list, this object's property rights are shown as checked in the list of property rights.

There are two ways to assign property rights

All Properties defines rights for this object to the assigned object that are the same for every property of the object. These rights control all properties unless rights are granted for a specific property as well.

Selected Properties defines this object's rights to the assigned object for one property of the object. These rights, if assigned, override the all property rights to the object for only that specific property.

Example: A user has the Read right to all properties of a Directory Map object that points to an application. The user needs to change the location of the application in the Directory Map, and is granted the Supervisor property right to the Path property of the Directory Map.

Property rights

Supervisor

Compare

Read

Write

Add (or Delete) Self

Manage a Bindery Object

This object was created in the Directory tree by an upgrade or migration utility. It can't be converted to a standard NetWare Directory Services object.

You can delete this object from the Directory tree.

You can't view or change information about this object. To manage this object, refer to the utility that created it.

If this object was upgraded from a previous version of NetWare, you may be able to manage this object using utilities from that version of NetWare if you set the bindery services context to include this object.

View or Change a User Object

The Identification page describes this User object. On this page, you can store information such as

- * Additional names for this User object
- * Where the User object is located

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Enter a Title for This User](#)

[Enter a Fax or Telephone Number for This User](#)

[Enter a Description of This User](#)

Screen regions and buttons

Login Name shows the name the user enters to log in to the network.



... opens a dialog where you can [enter more values](#) for a field.

Given Name shows the user's first name. For example, for John Jacob's given name is John.

Last Name shows the user's last name.

Full Name displays or allows you to enter the user's full name.

Generational Qualifier is like Jr., Sr., II, III., etc. For example, Billy Bob Jr, or James Earl III.

Middle Initial shows the user's middle initial, if one exists.

Other name lists other identification information for this user. (Maximum length of each is 60 characters.)

Title shows the position or function of the user. (Maximum length of each is 60 characters.)

Description describes the function of this user performs. (Up to 30 lines of 37 characters each can be entered.)

Location shows the user's physical location (such as a mail stop).

Department shows the user's department or division.

Telephone lists the user's telephone numbers.

Fax Number lists the telephone numbers of fax machines available to the user.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Using Other Names for a User

The Other Name field can contain identification information that helps you search for and identify specific users.

Example: You frequently need to search for employees who have been hired after a certain date. To facilitate the search, include the employee's date of hire in the Other Name field.

View or Change Security Equivalences

The Security Equal To page shows objects that this User object is security equal to. This means that any rights granted to the objects listed on this page are also granted to this User object. On this page, you can

- * See which objects this User object is security equal to
- * Add or delete objects from the list of security equal objects

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

How to Use the Object Dialog

Add an Object to the List of Security Equals

Delete an Object from the List of Security Equals

See which Objects This User is Security Equivalent to That Are Not Listed

Screen regions and buttons

Security Equals shows all objects that this User object is security equal to.

Add lets you add the selected object to the list of security equal objects.

Delete lets you delete the selected object from the list of security equals objects.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Add an Object to the List of Security Equals To

Rights needed: Write or Supervisor right to the Security Equals property of a User object (even your own)

Add an object to the Security Equal To list to

- * Grant that object effective rights to other objects in the list
- * Gain temporary access to another user's file

To Add an Object to The Security Equal To List

1. From the Security Equals page, choose Add.
2. Select each object that you want this user to be security equal to.
3. Choose OK.

Any object you selected is added to this user's Security Equal To list and all effective rights for every object in the Security Equal To list are added to the effective rights of this User object.

Some objects are automatically placed in this list because of other actions that you perform.

Example: When you add a user to the membership list of a Group object, the name of that Group is automatically placed in the Security Equal To list of that user.

Delete an Object from the Security Equal To List

1. From the Security Equal To list, select an object.
2. Choose Delete.

The object is deleted from the list of security equal objects.

Note: This user no longer automatically has the same effective rights as the object that was deleted. The user might still have the same rights, but they must come from the user's own trustee assignments or from a security equivalent object that was not deleted.

Note: Every object is security equal to all of the objects in its complete name (that is, all of the objects directly above it to the root of the Directory tree). However, none of these objects appear in the Security Equal To list of the object. These security equals cannot be changed.

See Which Objects This User Is Security Equal to That Are Not Listed

Every object is security equal to all the objects in its complete name (that is, all of the objects directly above it to the root of the Directory tree). For example, user JIM in WRITERS.PUBLICATIONS.ACME is security equal to all three of the containers above him. This means that if the container WRITERS has the supervisor object right to SALES, so does Jim.

However, these objects are not listed in the Security Equal To list.

To see a User object's complete name, complete the following steps

1. From the Security Equals page, choose Add.
2. From the Select Object dialog box, select the User object.
The context of the User object appears at the top of the Select Object dialog. The User object is security equal to every Container object listed.

Security Equal To list

This lists objects that this User object is security equal to.

Every object is security equal to all the objects in its complete name (that is, all of the objects directly above it to the root of the Directory tree). For example, user JIM in WRITERS.PUBLICATIONS.ACME is security equal to all three of the containers above him. This means that if the container WRITERS has the supervisor object right to SALES, so does Jim.

The Security Equal To list can contain objects of different types. A User object might be security equal to

- * A Group object as part of a group
- * A server for access to a certain print queue
- * Another User object

Some objects are added to the Security Equal To list automatically when you perform other actions.

Example: When you add a User object to the membership list of a Group object, the name of that Group object is automatically put in the Security Equal To list of that User object.

Set a User's Network Address Restrictions

The Network Address Restrictions page determines which workstations a user can log in from. On this page, you can

- * Specify addresses the user can log in from
- * Add or delete addresses from the list

If no addresses are listed, there are no restrictions and the user can log in from any workstation.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Add a Network Address](#)

[Delete a Network Address](#)

Screen regions and buttons

Network Protocol lists the protocol you selected for the new address. Complete the fields with values appropriate for the protocol you use.

Add lets you add another network address to the list. If you leave the protocol fields filled with F's or 255's, this user can log in from any address using that protocol.

Delete removes the network address from the list.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Set Login Restrictions

The Login Restrictions page allows you to restrict how this user can use the network. On this page, you can

- * Disable this user's account
- * Set a date for this user's account to expire
- * Limit the number of workstations that the user can log in from simultaneously

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Disable This User's Account](#)

[Set an Expiration Date for This User's Account](#)

[See when This User Last Logged In](#)

[Limit This User's Concurrent Connections \(Logins\)](#)

Screen regions and buttons

Account Disabled prevents the user from logging in.

Account Has Expiration Date allows you to set an expiration date for this account.

Expiration Date and Time sets the date and time this user's account expires.

Limit Concurrent Connections allows you to limit the number of workstations that the user can log in from simultaneously.

Maximum Connections defines the maximum number of workstations that this user can log in to simultaneously.

Last Login shows the date and time the user last logged in.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Disable this User's Account

Select the Account Disabled check box.

This user cannot log in until the check box has been cleared.

Note: Other conditions can cause the user's account to be disabled, such as when the account expires, when an intruder is detected, or when the user's account balance drops below the allowable credit limit.

Set an Expiration Date for this User's Account

1. Select the Account Has Expiration Date check box.
You can't modify the other fields until you select this check box.
2. Use the arrows next to the date and time sections of the Expiration Date and Time fields to set the date and time that this user's account expires.
At this date and time, the user is logged out, and the account is locked. The user can't log in again until a network administrator unlocks the account and resets the expiration date.

To remove the expiration date from a user's account, select the Account Has Expiration check box.

Limit This User's Concurrent Connections (Logins)

1. Select the Limit Concurrent Connections check box.
The Maximum Connections field can not be modified until you select this check box.
2. In the Maximum Connections field, enter the maximum number of workstations that you want this user to be able to log in from at the same time.
3. Choose OK.
The information is not saved to NetWare Directory Services until you choose OK.

To allow unlimited concurrent connections to this user, select the Limit Concurrent Connections check box and choose OK.

See When This User Last Logged In

To see when this user last logged, look at the Last Login field.

This field cannot be modified; it is for information only.

Set Password Restrictions

The Password Restrictions page controls how passwords for this user are handled. On this page, you can specify

- * Whether the user can change his or her own password
- * How many grace logins are allowed after the user's password expires

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Change This User's Password](#)

[Require a Password for This User](#)

[Limit This User's Grace Logins](#)

[Set a Minimum Password Length](#)

[Force Periodic Password Changes](#)

Screen regions and buttons

Allow User to Change Password lets this user change his or her own password.

Require a Password requires a user to enter a password.

Minimum Password Length specifies the minimum number of characters required for the password.

Force Periodic Password Changes requires that passwords be changed at regular intervals.

Days Between Forced Changes specifies the number of days a password can be used.

Date Password Expires displays the password expiration.

Require Unique Passwords prevents the user from using the same password again.

Limit Grace Logins allows you to limit the number of times an expired password can be used.

Grace Logins Allowed specifies the number of times an expired password can be used.

Remaining Grace Logins shows how many grace logins are left.

Change Password changes this user's password. If the Login Disabled box on the Login Restrictions page is activated, the user's account is disabled and the Change Password button is disabled.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Change a Password

Note: If the Login Disabled field on the Login Restrictions page is activated, the user's account is disabled and the Change Password button is disabled.

Make sure a password exists for objects like User objects and Print Server objects. Security could be compromised if someone gains unauthorized access as a User or Print Server object and takes advantage of their security equivalences.

The following are suggestions for passwords that improve network security:

- * Don't use common dictionary words
- * Don't use the names of family members or pets
- * Don't use birthdays
- * Use combinations of words
- * Combine alpha and numeric characters in the password

To change a password

1. In the Old Password field, type the old password.
2. In the New Password field, type the new password.
The password is not case sensitive.
3. In the Retype New Password field, type the new password again.

Screen regions and buttons

Old Password is where you enter the current password.

New Password is where you enter the new password.

Retype New Password is where you enter the new password a second time.

OK changes the password.

Cancel closes this dialog without changing the password.

Require a Password for this User

Select the Require a Password check box.

All of the password restriction options below the check box turn from gray to black. A password must now be entered by this user when logging in.

Set this User's Grace Logins

The Require a Password and Force Periodic Password Changes check boxes must be selected to perform this task.

1. Select the Limit Grace Logins check box.
2. In the Grace Logins Allowed field, enter the number of grace logins.
Use a number from zero to 50.

One grace login is used each time that the user logs in using a password that has expired without entering a new password.

The user's account is locked if all grace logins are used without changing the expired password.

The number of unused grace logins is shown in the Remaining Grace Logins field.

You cannot change this field.

Set a Minimum Password Length for This User

The Require a Password check box must be selected to perform this task.

1. In the Minimum Password Length field, enter a value.

You can enter values from 0 to 999 in the Minimum Password Length field. If you enter a value above 11, users cannot log in from Macintosh workstations.

To improve network security, set minimum password length to no less than 5.

2. Choose OK.

Force Periodic Password Changes for this User

The Require a Password check box must be selected to perform this task.

1. Select the Force Periodic Password Changes check box.
2. In the Days Between Forced Changes field, enter the number of days that each new password should last.

After this many days, a new password must be entered or the account is disabled after grace logins are used.

If you have previously selected the Force Periodic Password Changes check box, the Expiration Date and Time field shows when the current password must be changed.

3. (Optional) If you want to require that the new password be unique, select the Require Unique Password check box.

This user's previous passwords are saved and cannot be used again. This can improve network security.

Set a User's Login Time Restrictions

The Login Time Restrictions page allows you to limit the times when this user can be logged in.

You can restrict a user's login time in half-hour segments.

- * White cells indicate times that this user can be logged in.
- * Dark cells indicate times that this user can't be logged in.

The default is no restrictions (all white cells).

Important: If users are logged in and reach a restricted time, the system will give them a five-minute warning that they need to log out. If users are still logged in after five minutes, the system will log them out, and any unsaved information will be lost.

Note: NetWare Directory Services (NDS) uses a time standard based on Greenwich Mean Time (GMT) which adjusts for time zone differences. However, login restrictions do not account for time zone differences.

Example 1: If login time restrictions are set in California while on Pacific daylight time, they will be off by one hour when California moves back to Pacific standard time. For example, if you originally denied users network access from 5 a.m. to 8 a.m., they can log in when they arrive for work at 8 a.m. When California returns to Pacific standard time, NetWare server time is adjusted back one hour, but login time restrictions are not adjusted. This means that users will not be able to log in until 9 a.m., even though the Login Time Restrictions screen is set to allow users to log in at 8 a.m.

Suggestion: To compensate for time differences within a time zone, set login time restrictions with a buffer of one hour before and after normal login time restrictions. The problem in the example above could be solved by setting the login time restrictions from 7 a.m. to 6 p.m.

Example 2: If you originally denied network access to Jean in Toronto (Canada) from 5 a.m. to 8 a.m., and Jean travels to London (UK), her login time restrictions will be off by five hours. While Jean could be logged in to the network from 8 a.m. to 5 p.m. in Toronto, her authorized access time in London will be 3 a.m. to noon.

Suggestion: For NetWare users who travel, avoid using login time restrictions.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Restrict Login Times Using a Mouse](#)

[Restrict Login Times Using the Keyboard](#)

Screen regions and buttons

Login Time Restrictions shows the times the user can log in.

Reset resets the grid to the default (no login restrictions).

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Restrict Login Times Using a Mouse

1. Move the mouse pointer to the cell that represents the beginning of the time period you want to restrict.
The day and time that the pointer is on is displayed above the Reset button.
2. Click the left mouse button and drag the pointer to select the times you want to restrict.
You can select rectangular regions only. You may need to repeat these steps several times to select the times that you want to restrict.
Dark cells represent times this user can't log in. If you select an area that is already restricted, it becomes unrestricted.
3. Release the mouse button.

Restrict Login Times Using the Keyboard

1. Hold down the <Shift> key and press <Tab> until the cursor appears in the grid.
2. Use the arrow keys to move the cursor to the cell that represents the beginning of the time period that you want to restrict.
3. While holding down the <Shift> key, use the arrow keys to select the times that you want to restrict. You can select rectangular regions only. You may need to repeat these steps several times to select the times that you want to restrict.
Dark cells represent the times the user can't log in. If you select an area that is already restricted, it becomes unrestricted.
4. Release the <Shift> key.

Create or Change a User's Login Script

The Login Script page lists commands that are executed when this user logs in to the network. For example, you can set commands to

- * Map drives
- * Assign printers to this user

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Copy a Login Script from another Location](#)

[Edit the Login Script](#)

[Select a Profile Object for This User](#)

Screen regions and buttons

Edit holds login script commands.

Profile accepts the complete name of a Profile object. The login script in this Profile object is executed before this user's login script.

- * lets you select a Profile object.
- OK saves changes in all pages of this dialog.
Cancel closes this dialog without saving changes in any page.

Related topics

[Login Script Commands](#)

Select a Profile Script to be Used by This User

Each User object can list one Profile object with its login script.

If a Profile object is listed, the login script in the Profile object is executed before the user's login script. This allows several users to share common login commands that are not included in the container system login script.

To select a Profile object for this User:

1. In a user's object dialog, select the Login Script page.
2. Select the browser icon to the right of the Profile field below the user's login script commands.
The Select Object dialog appears.
3. Select the Profile object whose script you want to be executed when this user logs in.
The Profile object can be anywhere in the Directory tree.
4. Choose OK.
The Profile object is listed in the Profile field of the user's Login Script page.
Only one Profile can be specified for each user.

Copy a Login Script from Another Location

This procedure allows you to use commands entered in another login script, or in an MS Windows text editor, in this login script without typing them again.

1. While editing any login script with NetWare Administrator, or any MS Windows text editor, such as Notepad, use the mouse or hold down the <Shift> key and use the arrow keys to select the area of text that you want to copy into this login script.
2. When the text you want is selected, hold down the <Ctrl> key and press the <Insert> key.
3. Return to the Login Script page where you want to insert the commands that you selected in Step 1.
4. Place the cursor within the login script where you want the commands inserted.
5. Hold down the <Shift> key and press the <Insert> key.
The text that you selected is copied into the login script.
6. Make any other changes to the commands, as if you had typed them in at this point.
7. Choose OK.
The login script is saved to NetWare Directory Services when you choose OK.

Edit a Login Script

1. Place the cursor in the login script at the point where you want to make changes to the login script commands.
2. Use the arrow keys, the <Delete> key, and the <Insert> key to move and erase text.
3. Type new text wherever it is needed.
Existing text will move to make room for it.
4. Choose OK.
Changes are saved to NetWare Directory Services when you choose OK.

View or Reset Intruder Lockout

The Intruder Lockout page displays the status of a user's account after it has been locked.

Note: An account is locked when someone enters the wrong password too many times consecutively. (The limit for incorrect login attempts is set from the Intruder Detection page of the user's container object.)

This page shows

- * The number of incorrect login attempts
 - * When a user's account was locked
 - * The network address of the workstation used when a person exceeded the allowed login attempts
- If a user can't log in, check the information on this page. If the Account Locked field isn't checked, the login problem is caused by something else.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedure

[How to Use the Object Dialog](#)

[Unlock This User's Account](#)

[View When and Why This User's Account was Locked](#)

Screen regions and buttons

Account Locked indicates whether the account is locked because an incorrect password was used too many times.

Incorrect Login Count shows the number of incorrect passwords entered.

Account Reset Time shows the time when the account will be reactivated if this account is locked. If it is not locked, this field shows when the Incorrect Login Count is reset.

Last Intruder Address shows the network address of the workstation from which the last wrong password was entered.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Unlock this User's Account

To unlock the user's account, select the Account Locked check box.

The user can now log in normally.

Note: The account lock resets automatically after the time specified in the Intruder Lockout Reset Interval, which you can set in the object dialog for the container above this object.

View When and Why This User's Account Was Locked

1. See the Incorrect Login Count field.
This is the number of times that someone entered the wrong password for this user before being locked out.
2. See the Account Reset Time field.
This is the time of day when the account is unlocked. It is calculated from the Intruder Lockout Reset Interval that you set for the container of this object.
3. See the Last Intruder Address field.
This is the network node address of the workstation that the person who last entered the incorrect passwords when trying to log in as this user.

List the Group Memberships of a User

The Group Membership page shows the groups that this user is a member of.

You can change the groups a user is a member of in the

- * Group Membership page of the User object dialog
- * Members page of the Group object dialog

Changes to Group memberships that you make in either dialog appear automatically in both dialogs.

You need appropriate property rights in both dialogs to view or change Group memberships.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedure

How to Use the Object Dialog

Add this User as a Member of a Group

Delete this User as a Member of a Group

Screen regions and buttons

Memberships shows the groups that this user is a member of.

Add lets you select a Group object that you want this user to be a member of.

Delete removes this user from the Groups listed in the Memberships list box.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Add This User as a Member of a Group

Right needed: The Supervisor object right to the Group object

1. Choose Add.
2. Select the Group object that you want to make this user a member of.
3. Choose OK.

The Group object is added to the list of groups that this user is a member of. This user has the same rights that are assigned to the Group object.

Note: The Group object is automatically listed in the Security Equal To list of each User object that you add to the membership list.

Delete This User as a Member of a Group

1. From the Memberships list, select a Group object.
2. Choose Delete.

The Group object is deleted from the list of groups that this user belongs to.

Note: When you delete a Group object from the Group Memberships list of a user, the Group object is automatically removed from the Security Equal To list of the user.

Set a User's Account Balance

Use the Account Balance page to manage the credit on a user's account. On this page, you can

- * See how much credit this user has
- * Allow unlimited credit for this user

To install or remove accounting, or to change the rate charged for particular services, go to the [NetWare Server](#) object dialog and choose Accounting.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedure

[How to Use the Object Dialog](#)

[Set This User's Account Balance](#)

[Set a Lower Limit on This User's Credit Balance](#)

Screen regions and buttons

Account Balance shows the credit that this user has remaining.

Allow Unlimited Credit allows this user unlimited use of network services. Account Balance is ignored.

Low Balance Limit shows the balance at which this user is denied access to network services.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Set This User's Account Balance

1. In the Account Balance field, enter a value.
This balance is depleted each time this user uses a network resource for which an accounting charge has been established. However, this balance only affects the user's account if the Allow Unlimited Credit field is not selected.
2. In the Low Balance Limit field, enter a value. (Default: 0)
If the Allow Unlimited Credit field is not selected, the user's account is locked when the account balance drops below the value in the Low Balance Limit field.
3. Choose OK.
The change is recorded when you choose OK.

Set a Lower Limit on This User's Credit Balance

1. Select again the Allow Unlimited Credit check box, if it is already selected.
If this check box is selected, the Account Balance and Low Balance Limit fields have no effect.
2. In the Low Balance Limit field, enter a value.
The user's account is locked when the account balance drops below the Low Balance Limit. The account balance is depleted each time this user uses a network resource for which an accounting charge has been established.

View Environment Information about a User Object

Use the Environment page to see other properties of this user object. On this page, you can

- * View property information not included in other pages of this dialog, such as the Bindery property and the Network Address
- * See which properties did not migrate when this user was upgraded to NetWare 4

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedure

[How to Use the Object Dialog](#)

[Set This User's Language](#)

[See Which Workstations This User is Logged in From](#)

[Set This User's Default Server](#)

[Set Up a Home Directory for This User](#)

Screen regions and buttons

Language determines the language that messages are displayed in.

Network Address lists the addresses of the network workstations that the user is currently logged in from.

Default Server displays or allows you to specify the NetWare server that you will receive messages from when a message is sent using the SEND utility. Normally you would set the default server to be the same as the server specified in the Preferred Server field in your NET.CFG. The Default Server field is also the name of the server that your workstation is going to authenticate to (make a connection to) when you log in to NetWare Directory Services.

Home Directory shows the volume object and directory path of this user's home directory. You can change this directory, but you cannot create a new directory from here.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Set This User's Language

1. In the Language field, enter a language.
This is the language in which all NetWare utilities and prompts appear when this user is logged in and runs a NetWare utility.
The language that you choose must be installed on the network.
2. (Optional) To add other languages, select the more button to the right of the Language text box.
2. Choose OK.
Your entry is recorded when you choose OK.

See Which Workstations This User is Logged in From

See the Network Addresses field.

The network addresses of all workstations that this user is currently logged in from are listed. If you have a Computer object in NetWare Directory Services for each workstation, you can see each workstation's address to determine where the user is logged in.

This field can not be modified.

Set This User's Default Server

Default Server is the NetWare server that you will receive messages from when a message is sent using the SEND utility. Normally you would set your default server to be the same as the server specified in the Preferred Server field in your NET.CFG.

The Default Server field is also the name of the server that your workstation is going to authenticate to (make a connection to) when you log in to NetWare Directory Services.

Note: If you specify a NetWare 2 or 3 server (a bindery server) as your default server, users on that server must use the /B (bindery) option with the SEND utility for you to receive a message.

To Set This User's Default Server

1. Choose the browser button to the right of the Default Server field.
2. From the Select Object dialog, select a NetWare server.
3. Choose OK.

The NetWare server that you select is inserted into the Default Server field.

Set Up a Home Directory for This User

Note: You can't create new directories in this context. You can either create the directory (path) prior to assigning the user to the directory, or do it after making the assignment.

1. Choose the browser button to the right of the Home Directory field.
2. From the Select Object dialog where this user's home directory should be located, select a volume and path.
3. Choose OK.
The path that you selected is inserted into the Home Directory field.

View or Change a Computer Object

The Identification page describes the Computer object. On this page, you can

- * Keep a record of the department and person responsible (owner) for the Computer object
- * Record information such as the computer's serial number and location

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedure

[How to Use the Object Dialog](#)

[Enter a Description for This Computer](#)

[Enter a Serial Number for This Computer](#)

[Enter Another Name for This Computer](#)

[Specify One or More Servers for This Computer](#)

Screen regions and buttons

Name displays the name of this Computer object.

Other Names lists other names of this Computer object (such as names previously used for this computer).

Owner shows the name of the person who uses the computer represented by this Computer object.

Description contains information that helps identify the computer.

Serial number shows the computer's serial number.

Location shows the physical location of the computer.

Department shows the group the computer belongs to.

Organization shows the organization that the computer belongs to.

Server shows the NetWare server most commonly used by the computer.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Specify One or More Servers for This Computer

1. Choose the browser button to the right of the field.
2. From the Select Object dialog, select one or more NetWare Server objects.
3. Choose OK.

The NetWare servers you selected are listed as servers that this computer regularly accesses to retrieve data about logins and NetWare Directory Services.

View or Change a Country Object



The Identification page describes a Country object. On this page, you can

- * Enter the full name of this Country object
- * Record a information about your organization in this country

Procedures

[How to Use the Object Dialog](#)

[Enter a Description for This Country](#)

Screen regions and buttons

Name displays the two-letter country code for this country.

Description displays or allows you to enter information such as the full name of the country and a description of your organization in that country.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Enter a Description for This Country

The Description field of a Country object can be used to record any pertinent information about the object. The name of the Country object is a two-letter country code. You should include the complete name of the country in the Description field. Placing the complete name in the Description field decreases confusion.

To enter a description for this Country

1. Choose the Description field.
2. Type the information you want recorded for this object.
3. Choose OK.

The information is saved to NetWare Directory Services when you choose OK.

View or Change a Group Object



The Identification page describes this Group object. On this page, you can store information such as

- * Other names this Group object is known by
- * The person responsible for this Group object

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedure

[How to Use the Object Dialog](#)

[Enter a Description for This Group](#)

[Add another Name for This Group](#)

[Enter an Owner for This Group](#)

Screen regions and buttons

Name displays the name of this Group object.

Other name specifies other identification information for the group.

Owner specifies the person who is responsible for this group.

Description contains information that helps identify this group.

Location shows where the group is located.

Department displays the department this group reports to.

Organization shows the organization that this group reports to.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Enter an Owner for This Group

The Owner field displays or allows you to enter the name of the person who is responsible for maintaining this group of users.

1. Choose the Owner field.
2. Type the name of the person that you want recorded as the owner of this Group object.
3. (Optional) To add other users to the list of owners, select the more button to the right of the Owner field and select other users.
4. Choose OK.

The information is saved to NetWare Directory Services when you choose OK.

View or Change the Members of a Group Object

The Members page lists the users who are members of this Group object.

This Group object appears in the Group Membership page of each user listed on this page.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Add a Member to This Group](#)

[Delete a Member from This Group](#)

Screen regions and buttons

Group Members lists the complete context of each User object that is a member of this group.

Add lets you select User objects to add as members of this group.

Delete removes the selected users from the Group Members list.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Add a Member to This Group

Rights needed: Write property right to the Membership property of the Group object

Write property right to the Object Trustees (ACL) property of the Group object

The Supervisor object right fulfills these requirements.

1. Choose Add.
2. Select users you want to add to the list of members.
3. Choose OK.

The user is added to the membership list. This user has the same rights that are assigned to the Group object.

Note: The Group object is automatically listed in the Security Equal To list of each user that you add to the membership list.

Delete a Member From This Group

1. From the Group Members list, select a user.
2. Choose Delete.

The user is deleted from the list of members.

Note: When you delete a user from the membership list of a Group, the Group is automatically removed from the Security Equal To list of the user.

View or Change an Organizational Role Object

The Identification page describes this Organizational Role object. On this page, you can

- * Specify which users currently occupy the role named by this object
- * Record information about the occupants of this position, such as their telephone and fax numbers

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedure

[How to Use the Object Dialog](#)

[Enter a Description for This Organizational Role](#)

[Add Another Name for This Organizational Role](#)

[Add a Fax or Phone Number for This Organizational Role](#)

Screen regions and buttons

Name displays the complete name of this Organizational Role.

Other Name lists other names that this Organizational Role is known by.

Occupant shows the users that currently occupy this role.

Description describes this Organizational Role.

Location describes the location of this occupant (such as room number or office).

Department shows the department or division that the occupant belongs to.

Telephone lists the occupant's telephone numbers.

Fax Number lists fax numbers of this occupant.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

View or Change an Organizational Unit Object



The Identification page describes this Organizational Unit object. For example, you can

- * Record other names this Organizational Unit is known by
- * Add a description of the Organizational Unit

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedure

[How to Use the Object Dialog](#)

[Enter a Description for This Organizational Unit](#)

[Enter Another Name for This Organizational Unit](#)

Screen regions and buttons

Name displays the complete name of this Organizational Unit.

Other Name shows other identification information for this Organizational Unit.

Description describes this Organizational Unit.

Location gives the location of this Organizational Unit.

Telephone lists telephone numbers of people in this Organizational Unit.

Fax Number stores the fax numbers of people responsible for this Organizational Unit.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

View or Change Intruder Detection

The Intruder Detection page allows you to set tolerance limits and intruder protection for this container object. If a specified number of incorrect login attempts are detected, NetWare assumes that an intruder is trying to log in.

On this page, you can decide

- * The number of consecutive, invalid logins that are accepted before activating intruder detection
- * Whether to lock a user's account after detecting an intruder

These limits apply to all User objects in this container.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedure

[How to Use the Object Dialog](#)

[Detect Intruders for Users in This Container](#)

[Lock a User's Account When an Intruder Is Detected](#)

[Set How Many Incorrect Login Attempts Are Allowed](#)

Screen regions and buttons

Detect Intruders allows you to track intruder login attempts and lock a user's account.

Incorrect Login Attempts sets the number of incorrect login attempts allowed for all User objects in this container.

Intruder Attempt Reset Interval allows you to set the length of time you want to record incorrect login attempts before resetting the counter back to zero. You set the time in the Days, Hours, and Minutes fields located directly beneath this field.

Lock Account After Detection locks the user's account when the specified number of incorrect login attempts occurs in the time designated in the Days, Hours, and Minutes fields.

Intruder Lockout Reset Interval allows you to set how long a user's account remains locked after an intruder is detected (the incorrect login attempts number is exceeded). You set the time in the Days, Hours, and Minutes fields located directly beneath this field.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Detect Intruders for Users in This Container

1. Select the Detect Intruders check box.
You can't modify this page until this check box is selected. All users who log in to this context now have the Intruder Detection feature, meaning that if too many incorrect login attempts are made, the account can be locked.
2. Set the number of incorrect login attempts allowed and the length of time to track the number of incorrect login attempts.
Example: Set the length of time for 30 minutes and the value in the Incorrect Login Attempts field to 5. If the Lock Account After Detection box is checked, the account is locked if more than five incorrect login attempts are made within 30 minutes. The account remains locked for the duration specified in the Intruder Lockout Reset Interval time fields.
3. Choose OK.
The changes are recorded when you choose OK.

Lock a User's Account When an Intruder Is Detected

1. Select the Lock Account After Detection check box.
You must select the Detect Intruders check box before you can select this check box.
If too many incorrect login attempts are made for any user in this container, the user's account is locked.
2. Set the Intruder Lockout Reset Interval for the length of time that you want the user's account to remain locked.
3. Choose OK.
The changes are not recorded until you choose OK.

Set How Many Incorrect Login Attempts Are Allowed

1. Select the Detect Intruders check box.
All users who log in to this context now have the Intruder Detection feature, meaning that if too many incorrect login attempts are made, the account can be locked.
2. In the Number of Incorrect Login Attempts field, enter a number.
The default value is seven. You can allow up to 999 incorrect login attempts.
3. Choose OK.
The changes are recorded when you choose OK.

View or Change an Organization Object

The Identification page describes this Organization object.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedure

[How to Use the Object Dialog](#)

[Enter a Description for This Organization](#)

[Enter another Name for This Organization](#)

Screen regions and buttons

Name displays the name of this Organization.

Other Name lists other names of this object.

Description describes this Organization.

Location specifies the location of this Organization.

Telephone lists telephone numbers of people in this Organization.

Fax Number stores the Fax numbers of people in this Organization.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

View or Change a Profile Object

A Profile object contains a login script that several users who are not in the same container can use in order to execute a common set of commands. (Objects in the same container do not need to use a Profile object because the container login script executes for all objects within a container.)

The Identification page describes the Profile object. On this page, you can

- * List other names that this Profile object is called
- * View or change the description of this Profile object
- * View or change the organization where this Profile object resides

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedure

[How to Use the Object Dialog](#)

[Enter a Description for This Profile](#)

[Enter another Name for This Profile](#)

Screen regions and buttons

Name displays the name of this Profile.

[Other Name](#) lists additional information for this Profile.

Description describes how this Profile is used.

Location specifies the location of the department or users of this Profile.

Department shows the department or Group that uses this Profile.

Organization shows the organization that uses this Profile.

OK saves changes in all pages of this dialog.


Cancel closes this dialog without saving changes in any page.

Related topics

[The \[Root\] Object](#)

Profile Object - Other Names

These names are for your use only and do not appear anywhere but in this dialog. Use the Other Name field to list names that you can use to search for the Profile.

To add or remove names from the list, choose the More button. 

View or Change an Alias Object



The only information stored in an Alias object is the name of the object that the Alias object refers to.

You can't change information about an Alias object after it has been created. You must delete the Alias object and create it again if you need to make any changes.

View or Change a Directory Map Object



The Identification page describes the Directory Map object. On this page, you can

- * View or change the description of what this Directory Map is used for
- * View or change the volume and path that this Directory Map points to

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[How to Use a Directory Map with the MAP Command](#)

[Change the Path of this Directory Map Object](#)

Screen regions and buttons

Name displays the name of this Directory Map.

[Other Name](#) lists additional identification information for this Directory Map.

[Path](#) shows the complete path that this Directory Map refers to.

Description describes how this Directory Map is used.

Location shows the physical location of the volume referred to in the Path field.

Department shows the department that uses this Directory Map.

Organization shows the organization that uses this Directory Map.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Related topic

[The \[Root\] Object](#)

How to Use a Directory Map with the MAP Command

You can map a Directory Map object to an application instead of mapping to a specific volume and path on the network where an application is located.

When the application is moved to a new location on the network, the network administrator only has to change the volume and path in the Directory Map object. Users can still reference the Directory Map and find the application. No login scripts need to be changed.

A Directory Map object can be used with the MAP command in

- * Container login scripts
- * Profile login scripts
- * User login scripts

If the user is not in the same context as the Directory Map, use the complete name of the Directory Map in the MAP command.

Example: To reference a Directory Map for a word processing application in the login script, type the following command: `MAP s16:=.WordPerfMap.Accounting.Novell`


Change the Path of This Directory Map Object



1. Choose the browser button to the right of the Path text box. *
Use the browser button to search the Directory tree for the directory you want this Directory Map object to point to.
2. Select a directory; then choose OK.
The volume and path fields will both be filled in.
5. Choose OK.
The path of this Directory Map object is updated.

Directory Map - Other Names

These names are for your convenience and do not appear in the browser. You can use these other names to search for this Directory Map.

To add or remove names from the list, choose the More button. 

Directory Map Path



The Path dialog shows the location of the directory path of this Directory Map.

Procedures

[Change the Path of this Directory Map Object](#)

Screen regions and buttons

Volume shows the volume that this Directory Map points to. This field is required.

Path shows the path that this Directory Map points to. This field is required.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

View or Change a NetWare Server

The Identification page describes the NetWare Server object you selected. On this page, you can

- * View or change the description of what this NetWare server is used for.
- * View the version of NetWare that this NetWare server uses.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedure

[How to Use the Object Dialog](#)

[See What Operating System This Server Is Using](#)

[See the Network Addresses Used by This Server](#)

[Enter a Description for This NetWare Server](#)

[Enter another Name for This NetWare Server](#)

[Enter a Location for This NetWare Server](#)

Screen regions and buttons

Name shows the name of this NetWare server.

[Other Name](#) lists other ways of referring to this NetWare server.

Description describes this NetWare server.

Location specifies the physical location of this NetWare server.

Department shows the department or group that use this NetWare server.

Organization shows the organization that uses this NetWare server.

Net Address shows the network address of this NetWare server.

Status specifies whether this NetWare server is up or down.

Version shows the version of NetWare that is installed on this NetWare server.

[Accounting](#) installs or removes the accounting function from this NetWare server.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Related topic

[The \[Root\] Object](#)

See What Operating System This Server Is Using

The Version field on the Identification page shows which version of the NetWare network operating system this server is running.

You cannot change this field. NetWare Directory Services determines the value of this field by examining the server when the object was created.

See the Network Addresses Used by This Server

To see the network addresses used by this server, scroll through the Net Address field on the Identification page.

NetWare Directory Services can only access the server on network addresses that are included in this list.

Using different network addresses allows this server to function as a router between different networking systems, such as TCP/IP and IPX/SPX. The protocol being used is listed before each address.

You cannot change these addresses; they are determined from the network routers.

View or Change an AFP Server

The Identification page describes the AFP server you selected. On this page, you can

- * View or change the description of what this AFP server is used for.
- * View the version of AppleTalk that this AFP server uses.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedure

[How to Use the Object Dialog](#)

[Enter a Serial Number for This AFP Server](#)

[See the Number of Connections Allowed on This AFP Server](#)

[Enter a Description for This AFP Server](#)

[Enter Another Name for This AFP Server](#)

Screen regions and buttons

Name shows the name of this AFP Server.

[Other Name](#) lists additional identification information for this AFP server.

Description describes this AFP server.

Location specifies the physical location of this AFP server.

Department shows the department that uses this AFP server.

Organization shows the organization that uses this AFP server.

Version shows the version of the Apple Operating System that is installed on this AFP server.

Serial # shows the serial number of the NetWare product that the AFP server is using.

Connections shows the number of connections allowed by NetWare on this AFP server.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Related topic

[The \[Root\] Object](#)


See the Number of Connections Allowed on This AFP Server

The Connections field on the Identification page of the object dialog shows the number of connections allowed on this AFP server.

You cannot modify this field; the number of connections is determined by the software running on the AFP server.

NetWare, AFP, or Messaging Server Object - Other Names

This field shows all names by which this Server object is known. These names are for your information only and don't appear in the browser. You can use these other names to search for the Server object.

To add or remove names from the list, choose the More button. 

Accounting for NetWare Servers

To activate accounting on a server on which accounting is not active, choose Accounting.

To remove accounting on a server on which accounting is active, choose Accounting.

Accounting lets you define charge rates for five services:

- * Disk block reads
- * Disk block writes
- * Time connected to the server
- * Amount of disk storage used
- * Requests for services

Charge rates for each service can be set separately.

When accounting is active, any service that a user uses is charged to that user's account. If the user's account balance is depleted, the user can't log in to the network.

View or Change the List of Supported Services of a Server

The Supported Services page lists services provided by the NetWare server you selected. On this page, you can

- * View which services this server supports (such as print services or bindery services)
- * Track available services
- * Add or delete from the list of services.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Add a New Service](#)

[Delete an Existing Service](#)

Screen regions and buttons

Supported Services lists all services available on this server. Since the server doesn't automatically update this property, this list has no operational effect on the network.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Add a Supported Service

1. Choose Add (located below the Services box).
2. Enter the name of the service.
3. Choose OK.

The new service is added to the list.

Delete A Supported Service

1. From the list in the Services box, select a service.
2. Choose Delete.

The selected service is deleted from the list.

View or Change the List of Resources of a Server

The Resources page describes resources available on this server, such as volumes or printers. On this page, you can

- * View which resources this server provides
- * Add or delete a resource

This list has no operational effect on the network, but can be used by a network supervisor to track and record information about this server.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Add a New Resource](#)

[Delete an Existing Resource](#)

Screen regions and buttons

Resources lists the complete name of all objects that are resources supported by this server.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Add a Resource

1. Choose Add (located below the Resources box).
2. Choose the object that you want to add as a resource.

Because this list is for your information only, you can add any object to the list.

Note: You can use the <CTRL> and <Shift> keys to select multiple objects. For example, press the <CTRL> key while selecting objects with the left mouse button.

3. Choose OK.
The new object is listed as a resource.

Delete A Resource

1. From the Resources list box, select a resource.
2. Choose Delete.
The resource is deleted from the list.

View or Change the List of Users for a Server

The Users page lists users of this resource. This list is created and maintained by the network supervisor. For example, you can

- * View users who access this resource
- * Add or delete a user of this resource

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Add a New User](#)

[Delete an Existing User](#)

Screen regions and buttons

Users lists all User objects that have accounts on this server. This list has no operational effect on the network, but can be used by a supervisor to record information about this network resource.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Add a User to a Messaging Server

Rights needed: Write property right to the Messaging server

The Supervisor object right to the Messaging server fulfills this right.

1. Choose Add (located below the Users list box).
2. Select any users that you want to add to the Messaging Server.
3. Choose OK.
The new object is displayed.

Delete a User

Rights needed: The Write property right to the User property of the Messaging server

The Supervisor object right to the Messaging server fulfills this requirement.

1. From the Users list box, select a user.
2. Choose Delete.

The user is deleted from the list.

View the Server Error Log

The server error log records all errors that occur during this server's operations. The errors remain in the error log until it is cleared.

The types of errors in the error log can include

- * Directory Services is unable to communicate with a server that is represented by a Server object in your tree
- * A file cannot be migrated
- * An NLM requested memory but none was available
- * A section of a mirrored hard disk becomes inoperable

Many errors are automatically fixed by NetWare. Study this error log to see where problems are occurring, and check or modify your network so that future problems do not become more serious.

Procedures

[How to Use the Object Dialog](#)

[Clear the Server Error Log](#)

Clear the Server Error Log

The server error log is displayed in the edit window as soon as you select the Error Log page. It is a record of activity on the server. Because the error log is created by the server from its own operations, you cannot change the server error log; however, you can clear it.

To clear the Error Log, choose Clear Error Log.

The error log is erased and a new log is begun when the server encounters the next error. Since the error log can get very large, you should periodically clear the server error log to free up disk space.

Note: You can use the Copy (<Ctrl><Insert>) and Paste (<Shift><Insert>) functions of MS Windows to copy any portion of the error log to another MS Windows application before clearing it.

Accounting for Blocks Read

The Blocks Read page lists rates charged by accounting services for blocks read on this NetWare server. For each block a user reads from the hard disk, the user is charged the corresponding rate shown on this page. Charge rates can be set for specific days and hours.

On this page, you can

- * View times when each charge rate is in effect
- * Change the formula used to calculate any charge rate

You can't generate reports from the object dialog. You must use the AUDITCON menu utility to generate an accounting report.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Add a Charge Rate](#)

[Delete a Charge Rate](#)

[Change a Charge Rate](#)

[Find What Rate Is Charged on a Certain Day and Time](#)

[Change What Rate Is Charged on a Certain Day and Time](#)

Screen regions and buttons

[Day and Time Grid](#)

[Reset](#)

[Time and Charge Rate Fields](#)

[Charge Rates List Box](#)

[Add Charge Rate](#)

[Delete Charge Rate](#)

Related topics

[Determining Charge Rate Multipliers and Divisors](#)

[What to Charge For](#)

[How Charge Rates Affect a User's Account Balance](#)

Accounting for Blocks Written

The Blocks Written page lists rates charged for blocks written on this server. For each block the user writes to the hard disk, the user is charged the corresponding rate shown on this page. Charge rates can be set for specific days and hours.

On this page, you can

- * View times when each charge rate is in effect
- * Change the formula used to calculate any charge rate

No reports can be generated.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Add a Charge Rate](#)

[Delete a Charge Rate](#)

[Change a Charge Rate](#)

[Find What Rate Is Charged on a Certain Day and Time](#)

[Change What Rate Is Charged on a Certain Day and Time](#)

Screen regions and buttons

[Day and Time Grid](#)

[Reset](#)

[Time and Charge Rate Fields](#)

[Charge Rates List Box](#)

[Add Charge Rate](#)

[Delete Charge Rate](#)

Related topics

[Determining Charge Rate Multipliers and Divisors](#)

[What to Charge For](#)

[How Charge Rates Affect a User's Account Balance](#)

Accounting for Connect Time

The Connect Time page lists rates charged for connecting to this NetWare Server. For each minute that a user is connected to this NetWare server, the user is charged the corresponding rate shown on this page. Charge rates can be set for specific days and hours.

On this page, you can

- * View times when each charge rate is in effect
- * Change the formula used to calculate any charge rate

No reports can be generated.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Add a Charge Rate](#)

[Delete a Charge Rate](#)

[Change a Charge Rate](#)

[Find the Charge Rate for a Certain Day and Time](#)

[Change the Charge Rate for a Certain Day and Time](#)

Screen regions and buttons

[Day and Time Grid](#)

[Reset](#)

[Time and Charge Rate Text](#)

[Charge Rates List Box](#)

[Add Charge Rate](#)

[Delete Charge Rate](#)

Related topics

[Determining Charge Rate Multipliers and Divisors](#)

[What to Charge For](#)

[How Charge Rates Affect a User's Account Balance](#)

Accounting for Disk Storage

The Disk Storage page lists rates charged by accounting services for storing data on this server. For each block on the hard disk occupied by a file or directory the user owns, the user is charged the corresponding rate shown on this page. Charge rates can be set for specific days and hours.

On this page, you can

- * View times when each charge rate is in effect
- * Change the formula used to calculate any charge rate

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Add a Charge Rate](#)

[Delete a Charge Rate](#)

[Change a Charge Rate](#)

[Find the Charge Rate for a Certain Day and Time](#)

[Change the Charge Rate for a Certain Day and Time](#)

Screen regions and buttons

[Day and Time Grid](#)

[Reset](#)

[Time and Charge Rate Text](#)

[Charge Rates List Box](#)

[Add Charge Rate](#)

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Related topics

[Determining Charge Rate Multipliers and Divisors](#)

[What to Charge For](#)

[How Charge Rates Affect a User's Account Balance](#)

Accounting for Service Requests

The Service Requests page lists rates charged for requesting services on this NetWare server. Each time a user requests a service, the user is charged the corresponding rate shown on this page. Service requests are anything that requires communication with the server (authenticating, printing, etc.). Charge rates can be set for specific days and hours.

On this page, you can

- * View times when each charge rate is in effect
- * Change the formula used to calculate any charge rate

Each time a workstation requests a service, that user is charged the corresponding rate shown on this page.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

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Related topics

[Determine Charge Rate Multipliers and Divisors](#)

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Add a Charge Rate

You can have up to 20 different charge rates for each of the 5 accounting categories on this NetWare Server. If you enter a new charge rate, but do not specify in the day and time grid when it is in effect, it is not saved in the list of charge rates when you close the object dialog.

Before you begin, you must determine the multiplier and divisor used to compute charges.

To add a charge rate

1. Choose Add Charge Rate.
2. In the Multiplier field, enter a value.
3. In the Divisor field, enter a value.
4. Choose OK.

Delete a Charge Rate

1. From the box in the middle of the page that lists all charge rates, select a charge rate.
2. Change the day and time grid so that the charge you're deleting does not appear in the grid.
You can't delete a charge rate if it still appears in the day and time grid.
3. Choose Delete Charge Rate.
The selected charge rate is deleted from the list

Change a Charge Rate

To change a charge rate, you must delete it and re-enter it with new values. You must also update all days and times that use the rate.

To change a charge rate

1. From the list of charge rates in the middle of the page, select the charge rate that you want to change.
2. Change the day and time grid so that the charge rate you are changing does not appear in the grid.
You can't change a charge rate if it still appears in the day and time grid.
3. Choose Delete Charge Rate.
The charge rate is deleted from the list.
4. Choose Add Charge Rate.
5. Enter values for the new charge rate.
Note: You must determine the multiplier and divisor for the new rate.
6. Choose OK to return to the page showing all charge rates.
7. In the Charge rate box, select the new charge rate.
8. Block out the days and times that the charge rate should apply to.

Find the Charge Rate for a Certain Day and Time

If you use a mouse

Put the pointer on the cell that represents the day and time for which you want to know the charge rate.
The charge rate is shown in the Charge Rate field.

If you use a keyboard

Hold the <Shift> key down while pressing the <Tab> key until the cursor appears in the day and time grid.
Then use the arrow keys to move the cursor to the day and time for which you want to know the effective charge rate.

The day and time that you are pointing to are shown below the day and time grid in the Time field.
The charge rate is shown in the Charge Rate field.

Change the Charge Rate for a Certain Day and Time

If you use a mouse

1. Select the charge rate that you want to make effective.
2. Select the cell representing the day and time that you want that charge rate to apply. (The Time field located under the grid changes as you move the pointer around.)
The cell changes to the color representing the selected charge rate. You can click and drag to cover a larger area of the grid.

If you use a keyboard

1. Select the charge rate that you want to use from the list of charge rates by using the <Tab> key and the arrow keys.
2. Use the <Tab> key to move to the day and time grid. Then use the arrow keys to move the cursor in the grid to the cell representing the day and time you want the charge rate to apply. (The Time field located under the grid changes as you move the cursor around.)
3. Select the cell by pressing the <Spacebar>.
The cell changes to the color representing the selected charge rate.
4. Repeat this process for each cell that you want the selected charge rate to apply to.

Day and Time Grid

Use the day and time grid to specify when charge rates are effective.

In the day and time grid

- * Each cell represents one half hour of one day of the week
- * Each row of cells is one 24-hour day

The Time field indicates the day and time that you are pointing to.

You can have 20 charge rates for each of the five accounting categories. You can specify a different charge rate for each half hour of each day of the week.

Example: To set a charge rate for blocks read during work hours, first choose Add Charge Rate and specify a multiplier and divisor. Then select all cells from Monday at 8 a.m. to Friday at 5 p.m. and fill it with one charge rate (shown by that charge rate's color).

Note: If you enter a new charge rate, but do not use it in the day and time grid, it will not be saved in the list of charge rates.

Reset Button

To correct any mistakes you make in the day and time grid, choose Reset. The grid will clear so you can select new blocks of time with the mouse or cursor.

Note: The Reset button does not undo a deletion of a charge rate after you choose Delete Charge Rate.

Time and Charge Rate Fields

Two fields are under the day and time grid to help you assign charge rates:

- * Time shows the day and time of day represented by the cell you are pointing to
- * Charge Rate shows the charge rate in effect for that day and time

Watch these fields when you work in the grid to make sure you are assigning charge rates for the correct days and hours.

Charge Rates List Box

This box lists all charge rates that can be assigned to this resource on this server. Each charge rate is made up of a multiplier and a divisor.

You can have 20 charge rates for each of the five accounting categories.

A color is assigned to each charge rate and is used to indicate the days and times the charge rate is in effect.

Note: If you enter a new charge rate, but do not use it in the day and time grid, it is not saved in the list of charge rates when you close the object dialog.

Add Charge Rate

1. Choose Add Charge Rate.
2. Enter a multiplier and divisor for the new charge rate.

The new charge rate is added to the list of charge rates.

You can have 20 charge rates for each of the five accounting categories.

Note: If you enter a new charge rate, but do not use it in the day and time grid, it will not be saved in the list of charge rates when you close the object dialog.

Delete Charge Rate

This button deletes the selected charge rate from the list of charge rates.

You can delete only charge rates that are not used in the day and time grid. To delete a charge rate that is still in use, you must change the charge rate for those days and times.

Once you delete a charge rate, it can't be undone. You must re-enter the deleted values using Add Charge Rate.

Determine Charge Rates

A user's account is defined in cents. We recommend that you use cents or an equivalent value.

There are two ways to determine charge rates:

If you know how much to charge per resource unit

If you know how much you want to charge for the entire resource

Determine a Charge Rate

You can set a charge rate for the amount you want. For example, perhaps you want to charge 1 cent for each block read.

Note: A user's balance is defined in *cents*.

1. Convert the amount you want to charge into a fraction.

If the amount is a whole cent amount, like 2 cents, then change the amount into a fraction by putting that whole cent amount over 1. For example, $2/1$ would mean that for every block read, charge two cents.

In this example, the multiplier, or top number, is 2; the divisor, or bottom number, is 1.

If the amount is a fraction, like 1.75 cents, then multiply it by 10 enough times to get rid of the decimal (this is the value for the multiplier field). Then put a 10 underneath the multiplier (this is the value for the divisor field).

For example, 1.75 times 10 equals 17.5, with one 10 underneath. So our first fraction is $17.5/10$.

Since the multiplier, or top number, is still a fraction, repeat the process: 17.5 times 10 equals 175, with another 10 underneath. So the new fraction is 175 over 10 times 10, or $175/100$. This means that for every 175 blocks read, charge 100 cents.

In this example, the multiplier, or top number, is 175; the divisor, or bottom number, is 100.

2. Enter the top number of the fraction as the multiplier.
3. Enter the bottom number of the fraction as the divisor.

Charge for a Resource

You can charge for an entire resource used. For example, assume you want to charge \$50 per week for disk storage to cover operating costs, and there are usually 100,000 4K blocks used on your 500Mb hard drive.

1. Enter the total amount charged as the multiplier.
This is 5000 in our example, or \$50 in cents.
2. Enter the total amount of the resource used as the divisor.
This is 100,000 in our example or the total amount of the disk space to charge for.

The charge-rate equation comes out to 1/20 of one cent for each 4K block stored. So, if a user had 1Mb of word processing and spreadsheet files stored on the hard disk, the user would be charged 12.5 cents per week.

To Charge for Disk Storage

Note: There are two methods that you can use to set this up, single cell for the week or a daily charge each day of the week.

The day and time grid on the Disk Storage page allows charge rates to be set only in a single column of the grid; you can not span different time periods of the day.

To Charge The User Weekly

1. Choose the Disk Storage page.
2. Choose one cell, (say Saturday 4am).
3. Choose Add Charge Rate.
4. Enter 1 in the Multiplier field.
5. Enter 20 in the Divisor field.
6. Choose OK.
7. Apply this charge rate to the cell you selected.
8. Click OK.

Every Saturday morning at 4:00 a.m. the system will check the users' directories and determine how much disk space they are using. In our example, if the user is using 1 MB of disk space, the user will be charged 12.5 cents. If the user's account balance was 1000 prior to the rate charge, the new account balance will be 987.

To Charge The User Daily

1. Choose a vertical block of time crossing 7 days. (Sunday through Saturday at 4 a.m.)
2. Choose Add Charge Rate.
3. Enter 1 in the Multiplier field.
4. Enter 140 in the Divisor field ($7 * 20 = 140$).
5. Choose OK.
6. Apply this charge rate to the cells you selected.
7. Choose OK.

Everyday at 4:00 am the system will check the users' directories and determine the amount of disk space they are using. In our example, if the user is using 1 MB of disk space, the user will be charged approximately 1.8 cents ($1.78 * 7 = 12.5$). If the user's account balance was 1000 prior to the rate charge, the new balance will be 998.

What to Charge For

As a general rule, charge users for server resources that are scarce or that you want to limit use of. For example,

- * If disk storage space is scarce, charge for disk storage space so that users do not keep old files on the hard disk.
- * If network traffic is heavy, charge for service requests so that users limit their overall use.
- * If you run out of NetWare connections regularly, charge for connect time so that users log in only when they really need the network.

You can charge for more than one resource. If no charge rates are entered in the day and time grid for a resource, then users are not charged for that resource.

How Charge Rates Affect a User's Account Balance

Each user can have an account balance that determines the amount of network resources that the user can use. If you check the Allow Unlimited Credit check box in the user's object dialog Account Balance page, then accounting and charge rates have no effect.

If a user does have an account limit and uses a service for which an accounting charge rate has been specified, the amount of that service is deducted from the user's account balance.

When the user's credit limit is reached or the account balance is zero, the user can not log in to the network until the account balance is changed by the network administrator.

Example: User GINA pays \$50 to use the network, so her account balance is set to 5000. You charge 2 cents for each block read and 1 cent for each minute of connect time. Each time GINA reads a block of information from a volume attached to that NetWare Server, her account balance is reduced by 2 cents. Each minute that GINA is attached to that NetWare Server, her account balance is reduced by 1 cent. After several weeks, GINA's account balance is zero. She is logged out and can't log in again until the network supervisor updates her account balance.

View or Change a Volume Object



Volume is a leaf object. However, directories and files (the file system of the physical volume) are shown under it, just like leaf objects are shown under container objects.

A Volume object provides a place in the NetWare Directory Services database to record and view information about a physical volume that was installed on a NetWare Server.

By pointing a Volume object to a physical volume, you can see the directories and files on the volume.

The Identification page describes this Volume object. For example, you can

- * View the name of the physical volume
- * View or change the department that this volume is used in.

Important: OK and Cancel affect the entire Object dialog, not just this page. Do not choose OK until you've entered all changes you need to this page and other pages. If you choose Cancel, you will lose all changes in every page of this dialog.

Procedure

[How to Use the Object Dialog](#)

[List the Files on This Volume](#)

[See the Physical Name of This Volume](#)

[See Which Server This Volume Is Attached To](#)

[Enter Another Name for this Volume](#)

[Enter a Location for This Volume](#)

Screen regions and buttons

Name shows the context name of this Volume object.

Host Server shows the name of the NetWare server on which this volume is physically located. This field can't be changed.

Version shows the version of the NetWare operating system running on the host server.

Host Volume shows the physical volume name. This field can't be changed.

Other name lists other identification information for this object.

Location shows the physical location of the NetWare server that contains this Volume object.

Department shows the department that uses this volume.

Organization shows the organization that uses this volume.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Related topics

[The \[Root\] Object](#)

[Trustees and Trustee Paths](#)

[The Root Directory of a Volume - Assigning Rights](#)

List the Files on This Volume

In NetWare Administrator, you can manage files and directories on a NetWare volume. Files and directories are displayed below the Volume object as a continuation of the Directory structure, even though they are actually a part of a file system and not the NetWare Directory Services database.

You can select and expand a Volume object, if you have these rights:

- * Browse object right to the Volume object
- * Read property right to the Host Server and Host Volume properties of the Volume object (These are granted to every object by default when the Volume object is created.)
- * File Scan directory right to the [Root] directory of the volume

You must have rights to the ACL property to change object or property rights, and you must have the Access Control directory right to change rights to the [Root] directory.

Note: Supervisor rights to the file system on the volume are granted through the NetWare Server object on which this volume is installed.

See the Physical Name of this Volume

The physical name of the volume that this Volume object refers to is shown in the Host Volume field on the Identification page of the Volume object dialog. The physical volume name is also referred to as the host resource name.

Volume SYS: must exist for every NetWare server, but other volumes on the server can have any name that follows volume naming conventions. A physical volume name is assigned when a volume is installed.

The physical volume name cannot be changed by NetWare Directory Services. You can use INSTALL.NLM to change the physical volume name, but INSTALL.NLM does not change the old Volume object's name.

See Which Server this Volume is Attached To

The physical NetWare server that this volume is attached to is shown in the Host Server field of the Identification page of the object dialog for this volume. The Host server was specified when the Volume object was created and cannot be changed.


The Host server provides NetWare Directory Services an address to find the volume on the network.

For more information about the Host server, you can view the object dialog for the NetWare Server object representing it.

Volume Object - Other Names

This field shows all names by which this Volume object is known. These names are for your convenience only and do not appear in the browser.

Use the Other Name field to record information that you want to use to search for this volume.

To add or delete names, choose the More button. 

View Statistics About a Volume Object



The Statistics page describes how the Volume object you selected is used. On this page, you can

- * View how space on this volume is used
- * See which name spaces and features are installed on this volume

You can't change the information on this page.

A Volume object provides a place in the Directory database to record and view information about a physical volume that was installed on a NetWare server.

By creating a Volume object and pointing it to a physical volume, you can see the directories and files on the volume from within NetWare Administrator and other utilities.

Volume is a leaf object. However, directories and files are shown under it like leaf objects are shown under container objects.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you will lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[See How Much Disk Space Is Available](#)

[See How Many Directory Entries Are Available](#)

[See the Block Size Used on This Volume](#)

[See if This Volume is Removeable or Not](#)

[See How Much Space is Used by Deleted Files](#)

[See How Much Space is Saved by Compression](#)

[See How Many Files Have Been Migrated](#)

[See Which Name Spaces Are Installed on this Volume](#)

[See Which Features Are Installed on this Volume](#)

[List the Files on This Volume](#)

Screen regions and buttons

Block size shows the block size used by files on this volume.

[Non-]removeable volume indicates if this is a permanent or removeable volume.

Disk Space shows the percentage of the volume used.

Directory Entries shows how many directory entries are used.

Deleted Files shows the number and size of files that have been deleted but not purged from the volume.

Migrated Files shows the number and size of files that have been migrated to a secondary storage device.

Compressed Files shows the number and size of files that have been compressed.

Name Spaces lists which name spaces are loaded on this volume.

Installable Features lists features installed on this volume, such as compression or auditing.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Block Size

This field indicates the block size used by this volume. The block size was determined when the volume was installed. Block size can't be changed without re-installing the volume.

Space on a volume is allocated to files in blocks. The minimum amount of disk space that a file can use is one disk block. Subsequent space allocations are also a multiple of the block size.

Considerations when determining block size

- * The minimum amount of disk space that a file can use is one disk block.
- * A smaller block size saves disk space, but make access to larger files less efficient.
- * A larger block size makes access to very large files much quicker, but will waste disk space for small files.
- * Block suballocation allows several files to share one disk block.

See *Concepts* for more information.

[Non-]Removeable Volume Flag

This flag is set automatically when a volume is installed.

Non-removeable volumes include hard drives.

Removeable volumes come on cartridges or optical disks that can be taken out of the drive.

Disk Space Chart

This chart shows how much of this volume is in use. The total size of the volume and the remaining free space are shown numerically below the graphic representation.

Colored areas indicate the space that is used. The percentage used space is shown at the right of the chart.

You can't change this information here. To change the amount of space used, you must create or delete files, add or remove name spaces, or perform similar actions.

Screen regions and buttons

Total shows the total size of the volume in bytes.

Available shows the amount of space available on the volume in bytes. (This is indicated by white areas.)

Directory Entries Chart

This chart shows how many directory entries are used on this volume. The total number of directory entries and the entries that are still available are shown numerically below the chart.

Note: You can't change this information. The number of directory entries available on each volume is determined by the block size used on the volume, which must be set when the volume is installed. Each directory entry uses 128 bytes, and a maximum of 65,536 disk blocks can be used for directory entries. So, the maximum number of directory entries on a volume is the block size (in KB) times 524,288.

Screen regions and buttons

Total shows the total number of directory entries that can be on the volume.

Available shows the number of directory entries still available on the volume. It is indicated by white areas.

Migrated Files

This box shows how many files on this volume have been migrated to a secondary storage device, and how much disk space was saved by migrating them.

Note: If this box is grayed, you do not have the Data Migration feature installed on this volume.

Screen regions and buttons

Count shows the number of files on this volume that are currently migrated to a secondary storage device.

Actual size shows the total size of all files that have been migrated to a secondary storage device. To bring all migrated files back to the volume, you would need this much disk space. This number can be larger than your entire volume because the secondary storage device can be larger than the volume.

Compressed Files

This box shows how many files on this volume have been compressed, and how much disk space was saved by compressing them.

Note: If this box is grayed, you do not have the Compression feature installed on this volume.

Screen regions and buttons

Count shows the number of files on this volume that have been compressed.

Uncompressed Size shows the space that all files in the Count field would use if they were not compressed.

Compressed Size shows the space that all of the files in the Count field are actually using while they are compressed.

Average Compression shows the average amount of space saved by compressing a file, as a percentage of its original size. The formula used to calculate this for each file is uncompressed size minus compressed size, divided by uncompressed size.

Name Spaces Box

This box lists name spaces that are installed on this physical volume.

Name spaces can be added to the volume at any time by the network supervisor using the LOAD command at the server console prompt. Each name space uses another directory entry for every file or directory on the volume.

See *Concepts* for more information.

Installed Features Box

This lists features installed on the volume. A feature must be installed on a volume for the files on that volume to use it.

Some features can be installed or removed at the server console. Other features must be chosen when the volume is installed and can't be changed.

Possible features are

- * Block Suballocation: Allows disk blocks to be shared by several files to prevent wasted disk space
- * Compression: Compresses files that have not been used recently
- * Data Migration: Moves files that have not been used recently to a secondary storage device until they are requested
- * Auditing: Allows a network auditor to track file and NetWare Directory Services transactions
- * Read Only: Indicates that this volume can be read but not written to (such as a CD-ROM drive)

Deleted Files

This lists the space used on this volume by files that have been deleted but are still stored on the volume. NetWare saves all deleted files for a time in case they need to be salvaged and reused after they have been deleted.

You can set (at the server console) the amount of time the system waits before purging deleted files (permanently erasing them), or you can have them purged immediately after they are deleted. If a volume is full, the oldest deleted files are purged first to make space for current files to be stored.

Screen regions and buttons

Count shows how many deleted files are stored on this volume. All deleted files referred to in this number are listed as un purgeable or purgeable in the two fields below.

Unpurgeable Size indicates the total size of all deleted files that can't be purged yet. This refers to the Minimum Delay to Purge Files parameter in the NetWare server console. Files that have been deleted less than that amount of time can't be purged.

Purgeable size indicates the total size of all deleted files that can be purged. These files have been deleted at least the Minimum Delay to Purge Files time, but they have not been purged yet.

View or Change Dates and Times Related to a Volume

The Dates and Times page describes the way this Volume object has been used. On this page, you can

- * View the owner of this volume
- * View the last user to archive the volume
- * View the date of creation or archive for this volume

A Volume object provides a place in the Directory database to record and view information about a physical volume that was installed on a NetWare Server.

By creating a Volume object and pointing it to a physical volume, you can see the directories and files on the volume from within NetWare Administrator and other utilities.

Volume is a leaf object. Directories and files (the file system of the physical volume) are shown under it like leaf objects are shown under container objects.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[List the Files on This Volume](#)

[Change the Owner](#)

[Change the Archived Last Date or Time](#)

[Change the Archived Last By](#)

Screen regions and buttons

Created On shows the date and time that this volume was installed.

Owner shows the User object that installed this volume.

Modified last on shows the date and time when the information on this screen was last updated. You cannot change this information.

Archived Last On shows the date and time when this Volume was partially or completely backed up. This field is set when the Archive attribute of the Volume's [Root] directory is reset by a backup application.

Archived Last By shows the User object that was operating the backup application when this volume was most recently backed up (all or part). This field is set when the Archive attribute of the Volume's [Root] directory is reset by a backup application.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Related topics

[The \[Root\] Object](#)

[Trustees and Trustee Paths](#)

[The \[Root\] Directory of a Volume - Assigning Rights](#)

Change the Owner of a Volume

1. Select the Owner field.
2. Enter the name of the user who owns this volume. You can choose a user object by choosing the icon to the right of the field. *
3. Choose OK.

Change the Last Archived Date and Time of a Volume

1. Select the section of the Last Archived date or time field that you want to change.
2. Choose the arrow to the right of the field that you selected.
 - 2a. Advance the date or time using the Up-arrow button.
 - 2b. Turn back the date or time using the Down-arrow button.
3. Choose OK.

Change Who Archived a Volume

1. Select the Archived Last By field.
2. Enter the name of the user who last archived (backed up) this volume. You can choose a user object by choosing the icon to the right of the field. *
3. Choose OK.

View or Change User Space Limits on a Volume



This volume is located on a NetWare 2 or 3 server, or is being viewed on a different Directory tree through bindery services. The User Space Limits page describes all users' space limitations on this Volume object. On this page, you can

- * View a user's space restrictions
- * Change a user's space restriction for this volume

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[List the Files on This Volume](#)

[See a User's Space Restrictions on This Volume](#)

[Change a User's Space Restrictions on This Volume](#)

Screen regions and buttons

[User list](#) shows all users who are using space on this volume, and details about their usage.

Display Number of Files and Directories shows how many files and directories this user owns on this volume.

[Modify button](#) opens a dialog for the selected user that lets you change or remove the users' space limits for this volume.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Related topics

[The \[Root\] Object](#)

[Trustees and Trustee Paths](#)

[The \[Root\] Directory of a Volume - Assigning Rights](#)

View or Change User Space Limits on a Volume



The User Space Limits page describes all users' space limitations on this Volume object. On this page, you can

- * Select which area of the Directory tree you want to see users from
- * View a user's space restrictions
- * Change a user's space restriction for this volume

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes you need to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[List Files on This Volume](#)

[Select Which Section of the Directory Tree You See Users From](#)

[See a User's Space Restrictions on this Volume](#)

[Change a User's Space Restrictions on this Volume](#)

Screen regions and buttons

Search Context tells which container to begin searching for users to list here. Listing users from only part of the Directory tree is much faster.

Search Entire Subtree determines whether everything below the Context is searched for users, or only those leaf objects directly below the container object are searched.

User's Name shows all users who are using space on this volume.

Limit shows the space limits that the user has on this volume.

Space in Use shows the amount of space (in Kilobytes) that this user is occupying on this volume by storing files and directories.

Space Available shows the amount of space (in Kilobytes) that this user can occupy by storing files and directories.

Modify opens a dialog for the selected user that lets you change or remove its space limits for this volume.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Related topics

[The \[Root\] Object](#)

[Trustees and Trustee Paths](#)

[The \[Root\] Directory of a Volume - Assigning Rights](#)

Select Which Section of the Directory Tree You See Users From

Use this dialog to limit the section of the Directory tree in which users are searched for.

The smaller the section of the Directory tree you select, the more quickly the dialog appears.

To select a section of the Directory tree

1. Select the browser button to the right of the Search Context field.

2. Select a container object.

This page lists the space limitations for all users under this container.

3. Select the Search Entire Subtree check box.

If you do not select this check box, only leaf objects directly below the container that you selected are included in the list of users. This is faster if you know exactly where the user that you want is located.

See a User's Space Limits

1. Select the user whose space limits you want to view.
2. Look in the Limit field to see how much space this user is allowed on this volume.
Each file or directory the user owns on the volume occupies a portion of the user's allotted space. Access is denied if the user tries to create new files or increase the size of existing files after the space limits are exceeded.

Change a User's Space Limits

1. Select the user whose space restrictions you want to change.
2. Choose Modify.
The User field shows the name of the user.
The Volume Space Used by User field shows the amount of space (in thousands of bytes) taken by this user.
3. (Optional) To remove the user's space restrictions, select the Limit Volume Space check box so that it is empty.
When the Limit Volume Space check box is empty, the user can use any free space on the Volume.
4. (Optional) To change the user's space limits:
 - 4a. Make certain that the Limit Volume Space check box is selected.
 - 4b. Enter a value in the Volume Space Limit field.
This value is in KB. If you enter 5000, the user can use a maximum of 5,000,000 bytes, or 5 megabytes of volume space.
Each file or directory that user owns occupies a portion of the user's allotted space.
Access is denied if the user tries to create new files or increase the size of existing files after the space limit is exceeded.
5. To return to the User Space Limits page, choose OK.

Volume User Space Limits - Modify Button

The Modify button opens a dialog that lets you change a user's volume space restriction. You can also remove the space restriction for the user.

The dialog that appears shows the user you selected and lets you enter a new value for the space restriction, or check a box to indicate that this user has no space restriction.

View a Directory Name



The Identification page describes the directory you selected. On this page, you can

- * View the name of the directory
- * View which name spaces are available on the volume in which this directory is located

Note: Use the Rename option on the Object menu to rename this directory.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[See What Name Spaces Are Used on this Volume](#)

[See What This Directory Is Called in Each Available Name Space](#)

Description of name space formats

DOS is used by IBM PC and compatibles, including MSWindows.

Macintosh is used by all Apple Macintosh computers.

FTAM is a standard file system used by many mainframe and minicomputers.

NFS (Network Filing System) is used by Unix and RISC workstations.

OS/2 is used by the IBM OS/2 Operating System on IBM PC and compatibles for OS/2 High Performance File System. Files and directories can have long names and properties similar to those used by NetWare Directory Services objects.

Related topics

[Trustees and Trustee Paths](#)

[The \[Root\] Directory of a Volume - Assigning Rights](#)

View or Change a File or Directory Name

This file or directory is located in a volume that is on a server running NetWare earlier than 3.11. This volume does not support name spaces for different file formats. The Identification page describes the file or directory.

On this page, you can

- * View the name of a file or directory
- * Rename a file or directory

Important: OK and Cancel affect the entire Object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Rename a File or Directory](#)

Related topics

[Trustees and Trustee Paths](#)

[The \[Root\] Directory of a Volume - Assigning Rights](#)

Rename a File or Directory

1. Select the New Name field.
2. Enter a new name for the file or directory.
3. Choose OK.

Directory Facts

The Facts page shows statistical information about this directory. On this page, you can

- * View the date and time this directory was created
- * Change the owner of the directory

Important: OK and Cancel affect the entire Object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Restrict the Size of a Directory](#)

[Change the Owner of the Directory](#)

[Change the Date or Time the Directory Was Last Modified](#)

[Change the Date or Time the Directory Was Last Archived](#)

[Change Who Last Archived the Directory](#)

Screen regions and buttons

KB Available to Directory shows the number of kilobytes available to the directory.

Restrict Size shows whether the directory is restricted in size.

Limit shows the directory's maximum number of 4K blocks (if directory size is restricted).

Created shows when the directory was first created.

Owner shows the owner of this directory.

Last Modified shows the last time the directory was modified.

Last Archived shows the last time the directory was archived. This field and the Archiver field are set when the Archive attribute of this directory is reset by a backup application.

Archiver shows who last archived the directory.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Related topics

[Trustees and Trustee Paths](#)

[The \[Root\] Directory of a Volume - Assigning Rights](#)

Restrict the Size of a Directory

1. Select the Restrict Size check box.
2. Select the Limit field.
3. Enter the number of 16 KB blocks this directory is limited to.
Any value up to the number of free blocks on the volume can be entered.
4. Choose OK.

Change the Owner of a Directory

1. Select the browser button to the right of the Owner field.
2. Select a user that should be the owner of this directory.
3. Choose OK.

Change the Last Modified Date or Time of a Directory

1. Select the section of the Modified date or time field that you want to change.
2. Choose the arrow to the right of the field that you selected.
 - 2a. Advance the date or time using the Up-arrow.
 - 2b. Turn back the date or time using the Down-arrow.
3. Choose OK.

Change the Last Archived Date or Time of a Directory

1. Select the section of the Last Archived date or time field that you want to change.
2. Choose the arrow to the right of the field that you selected.
 - 2a. Advance the date or time using the Up-arrow.
 - 2b. Turn back the date or time using the Down-arrow.
3. Choose OK.

Change Who Last Archived a Directory

1. Select the browser button to the right of the Archiver field.
2. Select the user that last archived (backed up) this directory.
3. Choose OK.

Directory Attributes - NetWare 2 and 3 Directories



The Attributes page shows attribute information about this directory or volume. On this page, you can

- * See which attributes are assigned to this directory
- * Change attributes of this directory

If you select a volume, the attributes are for the [Root] directory of that volume. Any attribute that is checked is in effect for this directory.

Important: OK and Cancel affect the entire Object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

- [How to Use the Object Dialog](#)
- [Change the Directory Attributes](#)

Screen regions and buttons

- [Directory Attributes](#) shows the attributes of this directory.

Directory Attributes



The Attributes page shows attribute information about this directory or volume. On this page, you can

- * See which attributes are assigned to this directory
- * Change attributes of this directory

If you selected a volume, the attributes are for the [Root] directory of that volume. Any attribute that is checked is in effect for this directory.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)
[Change the Directory Attributes](#)

Screen regions and buttons

[Directory Attributes](#) shows the attributes of this directory.

Change the Directory Attributes

Directory attributes describe how users can use a directory and how NetWare treats a directory. You can set the attributes to suit your working environment.

To change directory attributes

1. Select the check box for the attribute you want to change.
2. Choose OK.

Directory Attributes List

Directory attributes

Delete Inhibit

Hidden

Purge

Rename Inhibit

System

Don't Migrate

Immediate Compress

Don't Compress

Directory Attributes List - v2.x and v3.x directories

Directory Attributes

Delete Inhibit

Hidden

Purge

Rename Inhibit

System

View a Filename



The Identification page describes this file. On this page, you can

- * View the name of the file
- * View which name spaces are available on the volume where this file is located

Note: Use the Rename option on the Object menu to rename this file.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[See What Name Spaces Are Used on this Volume](#)

[See What this File is Called in Each Available Name Space](#)

Description of name space formats

DOS is used by IBM PC and compatibles, including MSWindows.

Macintosh is used by all Apple Macintosh computers.

FTAM is used by many mainframe and minicomputers.

NFS (Network Filing System) is used by Unix and RISC workstations.

OS/2 is used by the IBM OS/2 Operating System on IBM PC and compatibles for OS/2 High Performance File System. Files and directories can have long names and properties similar to those used by NetWare Directory Services objects.

Related topics

[Trustees and Trustee Paths](#)

File Facts



The Facts page shows statistical information about this file.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Change the Owner of a File](#)

[Change the Date or Time a File Was Last Modified](#)

[Change the Date or Time a File Was Last Archived](#)

[Change Who Last Archived a File](#)

[Change the Search Mode for a File](#)

Screen regions and buttons

Size shows the space used by this file in bytes.

Created shows when the file was first created.

Owner shows the owner of this file.

Last Modified Date and Time shows when the file was last modified.

Modifier shows who last modified the file.

Last Accessed Date and Time shows when the file was last accessed.

Last Archived Date and Time shows when the this file was last archived. This field is set whenever the Archive attribute of this file is reset by a backup application.

Archiver field shows who last archived the file. This field is set whenever the archive attribute of this file is reset by a backup.

[Search Mode](#) shows how this file is treated by using the Search feature. This field only appears if you are viewing information for an executable (.EXE) file.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Search Mode

Search modes determine how NetWare looks for files, such as data files or auxiliary program files. Search modes can be defined for any file, but only application files (files with an .EXE or .COM extension in DOS) really use them.

A NET.CFG file can contain a search mode that applies to all files unless a different search mode is specified for a particular file

When an application requests a file, it can include a path with the filename, or just the filename. It can also specify that the file is to be read, but not written to. This is called a Read Only open.

Note: The Search Mode field only appears on Facts if you are viewing information for an executable (.EXE) file.

Screen regions and buttons

Shell Default uses the search mode defined in the user's NET.CFG file. (Equivalent to value 0 in the text utilities.)

Search on All Opens with No Path looks for the file first in the default directory, and then in each search drive. (Equivalent to value 5 in the text utilities.)

Do Not Search looks for the file only in the path included with the filename and in the default directory. Search drives are not checked. (Equivalent to value 2 in the text utilities.)

Search on Read Only with No Path looks for the file first in the default directory, and then, if the file is to be opened for Read Only, in each search drive. (Equivalent to value 7 in the text utilities.)

Search on All Opens looks for the file first in the path specified with the file, then in the default directory, and then in each search drive. (Equivalent to value 1 in the text utilities.)

Search on All Read Only Opens looks for the file first in the path included with the filename, then in the default directory, and then, if the file is to be opened for Read Only, in each search drive. (Equivalent to value 3 in the text utilities.)

Change the Owner of a File

Note: You must have the supervisor right to the file in order to change the owner.

1. Select the Owner field.
2. Choose the browser icon to the right of the Owner field and select the user that should own this file.
3. Choose OK.

Change the Last Modified Date of a File

1. Select the section of the Last Modified date or time field that you want to change.
2. Choose the arrow to the right of the field that you selected.
 - 2a. Advance the date or time using the Up-arrow.
 - 2b. Turn back the date or time using the Down-arrow.
3. Choose OK.

Change the Last Archived Date and Time of a File

1. Select the section of the Last Archived date or time field that you want to change.
2. Choose the arrow to the right of the field that you selected.
 - 2a. Advance the date or time using the Up-arrow.
 - 2b. Turn back the date or time using the Down-arrow.
3. Choose OK.

Change Who Last Archived a File

1. Select the Archiver field.
2. Enter the name of the user that last archived this file. Or, you can select a User object by choosing the icon to the right of the Archiver field.
3. Choose OK.

Change the Search Mode of a File

Note: The Search Mode field only appears on Facts if you are viewing information for an executable (.EXE) file.

1. Select the Down-arrow on the right side of the Search Mode field.
A drop box appears listing options.
2. Select a search mode option.
The option you selected is displayed.

File Attributes for NetWare v2.x and v3.x Files



The Attributes page shows attribute information about this file. On this page, you can

- * See which attributes are assigned to this file
- * Change attributes of this file

Any attribute that is checked is in effect for this file.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Change the File Attributes](#)

Screen regions and buttons

[File Attributes](#) shows the attributes of this file.

File Attributes



The Attributes page shows attribute information about this file. On this page, you can

- * See which attributes are assigned to this file
- * Change attributes of this file

Any attribute that is checked is in effect for this file.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Change the File Attributes](#)

Screen regions and buttons

[File Attributes](#) shows the attributes of this file.

[File Status](#) shows the flags that NetWare has set for this file. You can't modify the file status.

Change the File Attributes

File attributes describe how users can use a file and how NetWare treats a file. You can set the attributes to suit your working environment.

To change the file attributes

1. Choose the attribute you want to change.
If the attribute was checked, it will be cleared. If the attribute was clear, it will be checked. Any attribute that is checked is in effect for this file.
2. Choose OK.

File Attributes List

File attributes

Archive Needed

Execute Only

Read Only

Shareable

Hidden

System

Transactional

Purge [Immediate]

Read Audit

Write Audit

Copy Inhibit

Delete Inhibit

Rename Inhibit

Don't Migrate

Immediate Compress

Don't Compress

File Status

File status flags are like file attributes, but you cannot set them. They are set automatically to indicate the current state of the file.

File status flags

Can't Compress

File Compressed

File Migrated

File Attributes List - v2.x and v3.x files

File attributes

Archive Needed
Execute Only
Read Only
Shareable
Hidden
System
Transactional
Purge [Immediate]
Read Audit
Write Audit
Copy Inhibit
Delete Inhibit
Rename Inhibit

View or Change a Distribution List Object



The Identification page describes this [Distribution List object](#) On this page, you can

- * Enter the full name of this Distribution List
- * Specify the person responsible for this Distribution List

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedure

[How to Use the Object Dialog](#)

[Enter a Full Name for This Distribution List](#)

[Enter an Owner for This Distribution List](#)

[Enter a Description for This Distribution List](#)

Screen regions and buttons

Name displays the complete name of this Distribution List.

Full Name displays another name (a common name) this Distribution List is known by.

Owner displays the person who is responsible for administrating this Distribution List.

Description displays information that helps identify this Distribution List.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

View or Change an External Entity Object

The Identification page describes this [External Entity object](#). On this page, you can

- * Specify the External Name of this External Entity
- * Enter a description of this External Entity

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedure

[How to Use the Object Dialog](#)

[Add an External Name for This External Entity](#)

[Enter a Description for This External Entity](#)

Screen regions and buttons

Name displays the [complete name](#) of this External Entity.

External Name displays the name this External Entity is known by in its native messaging environment.

Description displays information that helps identify this External Entity.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

View or Change a Message Routing Group Object

The Identification page describes this [Message Routing Group object](#). On this page, you can

- * Add another name this Message Routing Group is known by
- * Specify users who are administrators of this Message Routing Group

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedure

[How to Use the Object Dialog](#)

[Enter a Description for This Message Routing Group](#)

[Add Another Name for This Message Routing Group](#)

[Add a Postmaster General to This Message Routing Group](#)

Screen regions and buttons

Name displays the [complete name](#) of this Message Routing Group.

Other Name displays other names this Message Routing Group is known by.

[Postmaster General](#) displays the users who can administer this Message Routing Group.

Description displays information that helps identify this Message Routing Group.

Location displays where this Message Routing Group is located.

Department displays the department this Message Routing Group reports to.

Organization displays the organization that this Message Routing Group reports to.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

View or Change a Messaging Server Object

The Identification page describes this [Messaging server object](#). On this page, you can

- * View the name of the NetWare server that this Messaging server resides on
- * View the location of this Messaging server in the MHS Database
- * View or change the description of what this Messaging server is used for

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedure

[How to Use the Object Dialog](#)

[Add Another Name for This Messaging Server](#)

[Enter a Description for This Messaging Server](#)

[Enter a Location for This Messaging Server](#)

[Enter a Department for This Messaging Server](#)

[Enter an Organization for This Messaging Server](#)

Screen regions and buttons

Name displays the [complete name](#) of this Messaging server.

NetWare Server displays the path to the NetWare server where this Messaging server resides.

MHS Database Location displays the location where the MHS Database directory was installed and currently resides.

[Other name](#) displays other names that refer to this Messaging server.

Description displays information that helps identify this Messaging server.

Location displays the physical location of this Messaging server.

Department displays the department that uses this Messaging server.

Organization displays the organization that uses this Messaging server.

Status displays the current status of your Messaging server. If you have a messaging application installed, the Status field displays Up, which means the Messaging server is able to handle messages. If you have no messaging application installed, the Status field displays Down.

Version displays the version of NetWare MHS Services installed on this Messaging server.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Enter an External Name for This External Entity

The purpose of the External Name text box is to record the name this object is known by in its native messaging environment. This name is the object's common Email name, not a complete name like the one displayed in the Name text box

The External Name property is unique to an External Entity object.

To enter an External Name

1. Select the External Name text box.
2. Type the name that this object is known by in its native messaging environment. The information scrolls to the right if you continue to type once you've reached the right margin of the text box. You can enter up to 256 characters.
3. Choose OK.

The information is saved to NetWare Directory Services when you choose OK.

View or Change the Messaging Servers

The Messaging Servers page displays the Messaging servers that are members of the selected Message Routing Group. The Messaging servers in a Message Routing Group can send and receive messages directly among each other.

On this page, you can add or delete Messaging servers.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedure

[How to Use the Object Dialog](#)

[Add a New Messaging Server](#)

[Delete an Existing Messaging Server](#)

Screen regions and buttons

Add lets you add Messaging servers to the selected Message Routing Group.

Delete removes from the Message Routing Group the Messaging server that you select.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

View or Change the Message Routing Groups

The Message Routing Groups page displays the Message Routing Groups that the selected Messaging server belongs to. On this page, you can

- * Add a Message Routing Group that the selected Messaging server belongs to.
- * Delete a Message Routing Group that the selected Messaging server currently belongs to.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedure

[How to Use the Object Dialog](#)

[Add a New Message Routing Group](#)

[Delete an Existing Message Routing Group](#)

Screen regions and buttons

Add lets you add Message Routing Groups that the selected Messaging server belongs to.

Delete removes Message Routing Groups that the selected Messaging server currently belongs to.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

View or Change the List of Supported Gateways

The Supported Gateways page displays the protocols that are supported by the selected Messaging server. On this page, you can add or delete Supported Gateways.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedure

[How to Use the Object Dialog](#)

[Add a New Supported Gateway](#)

[Delete an Existing Supported Gateway](#)

Screen regions and buttons

Add lets you add a Supported Gateway to this Messaging server.

Delete removes from the Messaging server the Supported Gateway that you select.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Add a Message Routing Group to this Messaging Server

1. From the Message Routing Groups page, choose Add.
2. Select the Message Routing Groups you want to add to the Messaging server.
3. Choose OK.

Any Message Routing Group you selected is added to the Messaging server's Message Routing Groups list.

Note: The Messaging server object is automatically placed in the Messaging servers list of each Message Routing Group that you add.

Delete a Message Routing Group from this Messaging Server

1. From the Message Routing Groups list, select a Message Routing Group.
2. Choose Delete.

The Message Routing Group is deleted from the list.

Add a Supported Gateway to this Messaging Server

1. From the Supported Gateways page, choose Add.
2. In the Name text box, type the name of the Supported Gateway.
3. In the Protocol text box, type the name of the messaging protocol; or, select the list box to the right of the Protocol text box and then select the appropriate messaging protocol from the list.
The Supported Gateway provides messaging connectivity between the messaging protocol you select and your MHS services.
4. Choose OK.
A Supported Gateway is added to the Supported Gateways list.
5. (Optional) To add another Supported Gateway, repeat this procedure.

Delete a Supported Gateway from this Messaging Server

1. From the Supported Gateways list, select a Supported Gateway.
2. Choose Delete.

The Supported Gateway is deleted from the list. The selected Messaging server can no longer send mail to or receive mail from an entity that is using the messaging protocol of the deleted Supported Gateway.

View or Change the List of Postmasters

The Postmasters page displays the postmasters of this Messaging server. Postmasters have the right to manage the Messaging server they reside on. For example, they can add or delete users (whose mailboxes reside on the Messaging server) from the Messaging server. On this page, you can

- * View the current postmasters of this Messaging server
- * Add or delete postmasters

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedure

[How to Use the Object Dialog](#)

[Add a New Postmaster](#)

[Delete an Existing Postmaster](#)

Screen regions and buttons

Postmasters lists the complete name of each object that has rights to manage this Messaging server.

Add lets you add a Postmaster to this Messaging server.

Delete removes (from this Messaging server) the Postmaster you select.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

View or Change the List of Users

The Users page displays the list of users whose mailboxes reside on this Messaging server. On this page, you can add or delete users.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedure

[How to Use the Object Dialog](#)

[Add a New User](#)

[Delete an Existing User](#)

Screen regions and buttons

Add lets you add a user to this Messaging server.

Delete removes from this Messaging server the user that you select.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Add a Postmaster to this Messaging Server

Rights needed: the write property right to the Postmaster property of the Messaging server. If you have the Supervisor object right to the Messaging server, this requirement is filled.

1. From the Postmasters page, choose Add
2. Select each object that you want to add as a postmaster on this Messaging server.
3. Choose OK.

Any object you selected is added as a postmaster on this Messaging server and appears on the Messaging server's Postmasters list.

Delete a Postmaster from this Messaging Server

Rights needed: The delete object right to the Messaging server.

If you have the Supervisor object right to the Messaging server, this requirement is filled.

1. From the Postmasters list, select a postmaster .
2. Choose Delete.

The postmaster you selected is deleted from the list.

View or Change an Object's Foreign Email Address and Aliases

The Foreign Email Address page allows you to view or change address information about this object. On this page, you can

- * View the [foreign Email address](#) and [foreign Email aliases](#) of the object
- * Set or clear a foreign Email address
- * Add or delete foreign Email aliases

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedure

[How to Use the Object Dialog](#)

[Set a Foreign Email Address](#)

[Add a Foreign Email Alias](#)

[Delete a Foreign Email Alias](#)

Screen regions and buttons

Foreign Email Address specifies a NetWare Directory Services object's mailbox that resides in a foreign Email system. For example, an NDS user can choose to have Email delivered to a UNIX machine which supports SMTP messaging protocol. This user's SMTP address in the UNIX machine--the SMTP native name--is the user's foreign Email address. An NDS object can have only one foreign Email address.

Set lets you add a foreign Email address for this object.

Clear deletes the Foreign Email address in the Foreign Email Address text box.

Foreign Email Aliases specifies an object's aliases as known in a foreign messaging system. For example, an MHS user (a user whose mailbox is in an MHS messaging server) can have an X400 alias--with an X400 native name--so that X400 users can use this alias to send mail to the MHS user. An object can have several Foreign Email Aliases, one for each type of foreign Email system.

Add lets you add a Foreign Email Alias.

Delete removes the Foreign Email Aliases that you select.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Set a Foreign Email Address

1. In the Foreign Email Address text box, choose Set.
2. In the Name text box, type the name of the foreign address.
Use the native naming conventions for whatever messaging protocol the selected object uses to receive mail.
3. In the type text box, type the name of the messaging protocol that the selected object uses to receive mail; or, select the drop-down arrow button to the right of the Type text box, and then select the appropriate messaging protocol from the list.
4. Choose OK.
A foreign Email address is added to the Foreign Email Address text box.

Add a Foreign Email Alias

1. In the Foreign Email Aliases text box, choose Add.
2. In the Name text box, type the name of a foreign address.
Use the native naming conventions for whatever messaging protocols the selected object uses to receive mail.
3. In the type text box, type the name of the messaging protocol that the selected object uses to receive mail; or, select the drop-down arrow button to the right of the Type text box and then select the appropriate messaging protocol from the list.
4. Choose OK.
A Foreign Email Alias is added to the Foreign Email Address text box.
5. (Optional) To add another Foreign Email Alias for this object, repeat this procedure.

Delete a Foreign Email Alias

1. From the Foreign Email Aliases list, select a Foreign Email Alias.
2. Choose Delete.

The Foreign Email Alias is deleted from the list. This object can no longer receive mail from a sender who is using the messaging protocol of the deleted alias.

Add a Messaging Server

1. From the Messaging Servers page, choose Add.
2. Select any Messaging servers that you want to add to the Message Routing Group.
3. Choose OK.

Any Messaging server you selected is added to the Message Routing Group and appears in the Messaging Servers list.

Note: The Messaging server object is automatically placed in the Message Routing Groups list of each Messaging server that you add.

Delete a Messaging Server

1. From the Messaging Servers list, select a Messaging server.
2. Choose Delete.
The Messaging server is deleted from the list.

Enter a Full Name for this Distribution List Object

The Full Name text box can record any common name that you think is useful for this Distribution List object. You can add only one alternative name for this object. You can use this name to search for this object.

To enter a full name for this object

1. Select the Full Name text box.
2. Type the full (common) name you want recorded as a property of this object.
3. Choose OK.
The information is saved to NetWare Directory Services when you choose OK.

View or Change the Members of a Distribution List Object

The Members page lists all of the members of the Distribution List. When the Distribution List is used as a recipient in a message, each object in this list receives a copy of the message. Objects may be added to or deleted from the list using this dialog.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Add a Member to This Distribution List](#)

[Delete a Member from This Distribution List](#)

Screen regions and buttons

List Members lists the complete name of each object that is a member of this Distribution List.

Add lets you select objects to add as members of this Distribution List.

Delete removes (from this Distribution List) the objects you select.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Add a Member to this Distribution List Object

Rights needed: The write property to the Members property of the Distribution List.

If you have the Supervisor object right to the Distribution List, this requirement is filled.

1. From the List Members Page, choose Add.
2. Select each object that you want to add as a member of this Distribution List.
3. Choose OK.
Any object you selected is added as a member of this Distribution List and appears on the List Members list.

Delete a Member from this Distribution List Object

Rights needed: The Delete object right to the Distribution List.

If you have the Supervisor object right to the Distribution List, this requirement is filled.

1. From the List Members list, select an object.
2. Choose Delete.

The object you selected is deleted from the list.

View Mailbox Information about an Object

Use the Mailbox page to see [Mailbox Location](#) and [Mailbox ID](#) for Organization, Organizational Role, Organizational Unit, Group, and User objects.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedure

[Set a Mailbox Location](#)

[Set a Mailbox ID](#)

Screen regions and buttons

Mailbox Location specifies the Messaging server where this object's mailbox resides.

Mailbox ID displays a unique name that allows this object's mailbox to be located in the messaging database.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Set a Mailbox Location for this Object

The Mailbox Location text box can record the name of the Messaging server where this object's mailbox is physically located.

Mailbox Location is a property of Organization, Organizational Role, Organizational Unit, Distribution List, Group, and User objects in NetWare Directory Services.

To set a mailbox location

1. Choose the browser button to the right of the Mailbox Location text box.
2. Select the Messaging server on which this object's mailbox resides.
3. Choose OK.

The complete name of Messaging server object you selected from the browser appears in the Mailbox Location text box.

The information is saved to NetWare Directory Services when you choose OK.

Set a Mailbox ID for this Object

After the Mailbox Location text box is filled in, the Mailbox ID text box automatically displays the ID of this object. The assigned Mailbox ID is the name of the directory in which all of the object's inbound mail is placed.

This means you don't have to manually set a Mailbox ID. It's done for you when you choose a Mailbox Location.

However, you can change the default name of the Mailbox ID. You would want to change the ID if, for example, you rename an object.

You can enter from 1 to 8 characters each, using the alphabet letters (lower and uppercase), numbers (0-9), the hyphen (-), the dollar sign (\$), and the pound sign (#).

Mailbox ID is a property of Organization, Organizational Role, Organizational Unit, Distribution List, Group, and User objects in NetWare Directory Services.

To set a mailbox ID

1. Select the Mailbox ID text box.
2. Type the common name of this object, up to eight characters.
3. Choose OK.

The information is saved to NetWare Directory Services when you choose OK.

Enter a Postmaster General

A Postmaster General is a user who has the Supervisor object right to the Message Routing Group that he or she resides in. Postmaster Generals can add a messaging server to, or remove a messaging server from, the Message Routing Group.

1. Select the browser button to the right of the Postmaster General field.
2. Choose Add.
3. Select each object that you want to add as a Postmaster General of this Message Routing Group.
3. Choose OK.
Any object you selected is added as a Postmaster General of this Message Routing Group.
4. To save all changes, choose OK.

Create a User Object *

A User object represents a user on the network. One User object must exist for every user who will log in to the network.

To create a user

You must follow the user naming conventions.

1. Type the user's name in the Login Name field.
The user uses this name to log in to the network. This name also appears in the Directory tree.
2. Type the user's surname in the Last Name field.
 - * (Optional) To complete the fields of this new User object with the default information entered in the User_Template object for this container, choose Use User Template.
 - * (Optional) To define additional information about this User object immediately after creating it, choose Define Additional Properties.
You cannot choose this if you choose Create Another User.
 - * (Optional) To create another user immediately after this one, choose Create Another User.
You cannot choose this if you choose Define Additional Properties.
 - * (Optional) To automatically create a home directory for this user, choose Create Home Directory.
If you choose this option, you must also define a path and directory name for the user's home directory.
If you choose this option, this user is granted all rights to this directory.
3. Define a directory for this user's home directory.
 - 3a. Choose the browser icon * to the right of the Path field to select a volume (root directory) or other sub directory that will hold this user's home directory.
 - 3b. Type a directory name in the Home Directory field.
The user's login name is generally used as the directory name.
4. Choose Create.
If you chose Define Additional Properties, the User object dialog appears.
If you chose Create Another User, the Create User Object dialog appears again.
If you chose Create Home Directory, a directory is created on the selected volume.

Screen regions and buttons

Login name is the name of this User object in the Directory tree and the name the user enters to log in to the network.

Last name shows the user's last name or other identification information that you store in this field.

Use User Template applies default values to properties for this user.

Define Additional Properties lets you define more information about this User object immediately after creating it, such as a password or login script commands.

Create another User repeats this dialog.

Create Home Directory creates the home directory described in Path and Home Directory and makes the user a trustee of the directory.

Path lets you choose a path on a volume where you want to create the home directory for this user. A path such as \USERS or \HOME is often used to hold all users' home directories. This field is only used if Create Home Directory is selected.

Home Directory is the name of the directory that is created for this user, and to which this user is granted rights, if Create Home Directory is selected.

Create creates the new User object.

Cancel returns you to the browser without creating a User object.

Create a User Template Object

The User Template object contains user defaults. With the User Template object, you can define your own default property values for new users. Whenever you create a new user, NetWare Administrator will automatically copy the information from the User Template object to the new user.

There are three ways you can create the User Template:

- * Create a User object and name it User_Template.
- * Select Define User Defaults when creating an Organizational Unit object.
- * Choose User Template from the Object menu after creating an Organizational Unit object.

NetWare Administrator first looks for the User Template object in the context of the new user. If it doesn't find it there, it checks in succeeding parent objects until it finds one or encounters the [Root].

You cannot apply user defaults to existing users. If you change the user defaults, the changes apply only to the users created after that; they do not apply to users that were previously created using user defaults.

You can use defaults to complete general user information, then make changes to any specific fields in the User object dialog.

Procedures

[View or Change the User Defaults of a Container](#)

View or Change the User Defaults of a Container

Note: You cannot apply user defaults to existing users. If you change the user defaults, the changes apply only to the users created after that; they do not apply to users that were previously created using user defaults.

1. Select the Organizational Unit object that will contain the new users you want to apply defaults to.
2. From the Object menu, choose User Template.
If Define User Defaults was chosen when this Organizational Unit was created, you can edit the existing user defaults. If Define User Defaults was not chosen, the program creates a new object called User_Template, which you can edit.
3. Enter or change information in the appropriate pages.
4. Choose OK.

Related topics

[Using User Defaults When Creating a User Object](#)

[Using the Pages of the Object Dialog](#)

Login Name of a User

The login name is the name that the user enters to log in to the network (this name appears in the Directory tree). Your organization may decide to standardize how new login names are entered.

Login Name Restrictions

- * The login name must be unique in the container of the Directory tree where the user is located. In other words, if users Debra Jones and David Jones are in the same Organizational Unit, only one of them can use the login name djones. However, if they are in different containers, they can use the same login name.
- * The login name can be up to 64 characters long.
- * Any special characters can be used, unless this user needs to log in from a NetWare 2 or 3 workstation, in which case you should avoid special characters (see below).

Note: If you have workstations using different code pages, you should only use characters that appear in the code page of all systems on the network. For example, a name entered when creating an object in code page 937 (Japanese) will contain unreadable characters when viewed in code page 850 (international). See your DOS or OS/2 manual for more information about code pages.

- * Names are displayed in uppercase and lowercase letters as they were first entered, but they are not case-sensitive. So DJones and DJONES are considered to be identical names.
- * Spaces and underscores can be used, and they will be displayed as they were first entered, but they are considered to be the same. So Dave_Jones and Dave Jones are the same.

Note: If you use spaces in an object name, you must always enclose the object name in quotation marks when entering it on the command line or in login scripts. For this reason, you may want to avoid spaces in login names.

Login Name Restrictions for Bindery Services

When creating users who will log in as bindery users, the names of User objects must match bindery naming rules, or the user will not be able to log in.

- * Spaces in object names are replaced by underscores in Bindery Services.
- * Object names longer than 47 characters are cut off after the 47th character.
- * The following characters cannot be used in an object name that must be accessed using Bindery Services:

/	Slash
\	Backslash
:	Colon
,	Comma
*	Asterisk
?	Question mark

Object Naming Conventions

Although you can use almost anything for an object name, it will simplify network management and reduce users' problems if you use simple, relatively short object names.

The rules below apply to most objects, including User, Volume, Organization, and Organizational Unit objects. Special rules apply to Country objects, which can only have a two-character name, and to NetWare Server objects. More information is also provided elsewhere for User object names (Login Names).

Object Name Restrictions

- * The name must be unique in the branch (container) of the Directory tree where the object is located. In other words, if users Debra Jones and David Jones are in the same Organizational Unit, only one of them can use the object name djones. However, if they are in different containers, they can use the same object name.
- * The object name can be up to 64 characters long.
- * Any special characters can be used, unless this object needs to be accessed from a NetWare 2 or 3 workstation, in which case you should avoid special characters.

Note: A few special characters like plus (+), equals (=), and period(.) must be preceded in the object name by a backslash. Avoid these characters if possible.

If you have workstations using different code pages, you should only use characters that appear in the code page of all systems on the network. For example, a name entered when creating an object in code page 937 (Japanese) will contain unreadable characters when viewed in code page 850 (international). See your DOS or OS/2 manual for more information about code pages.

- * Object names are displayed with uppercase and lowercase letters as they were first entered, but they are not case-sensitive. So ManagerProfile and MANAGERPROFILE are considered identical names.
- * Spaces and underscores can both be used, and they will be displayed as they were first entered, but they are considered to be the same. So Manager_Profile and Manager Profile are the same.

Note: If you use spaces in an object name, you must always enclose the object name in quotation marks when entering it on the command line or in login scripts. For this reason, you may want to avoid spaces in object names.

Object Name Restrictions for Bindery Services

When creating objects that will be accessed from a NetWare 2 or 3 workstation through Bindery Services, the names of objects must match bindery naming rules, or the NetWare 2 or 3 workstation cannot see them.

- * Spaces in object names are replaced by underscores
- * Object names longer than 47 characters are cut off after the 47th character
- * The following characters cannot be used in an object name:

/	Slash
\	Backslash
:	Colon
,	Comma
*	Asterisk
?	Question mark

NetWare Server Object Naming Conventions

The general object naming rules allow more flexibility than those for naming a NetWare Server object.

NetWare Server Name Restrictions

- * The Directory Services (DS) server name must match the name that the server advertises to the network through Service Advertising Protocol (SAP). Since SAP requires unique names, every server name must be unique within the entire DS tree as well as the network. There cannot be two objects named TEST in the same network. This applies to NetWare 2, 3, and 4 servers.
- * You can't create server objects for NetWare 4 servers that comprise part of the DS tree. The install NLM (NetWare Loadable Module) creates these objects when you install a NetWare 4 server.
- * From NetWare Administrator, you can create Server objects which refer to NetWare 2 and 3 (bindery) servers. You can also create Server objects to refer to NetWare 4 servers that are part of a different DS tree. These servers will be treated as bindery servers. NetWare Administrator will prevent you from creating Server objects which refer to servers that are not running, or are running but are part of the DS tree in which you're working. If the server is not part the DS tree in which you're working, you can create multiple objects which refer to it.
- * From NetWare Administrator, you can't rename a NetWare Server object, even if you have the Supervisor object right to it.
- * Naming rules for servers

Server Naming Rules

These rules are provided as information only. Every NetWare Server object must be named by an existing physical server that was created with INSTALL.NLM at the server console.

You cannot rename a NetWare Server object.

The physical name of a NetWare server

- * Must be 2 to 47 characters long
- * Can contain letters A-Z, numbers 0-9, hyphens, periods, and underscores
- * Cannot use a period as the first character

Physical Volume Naming Rules

Whenever you install a new server in your Directory Services (DS) tree, the install program creates Volume objects for all volumes on the server being installed. Unlike servers, the DS Volume object name does not have to match a volume name on a server, and there can be more than one DS volume object referring to the same volume.

However, you may decide to follow the same convention as the install program when it creates volumes for servers: server name, underscore, volume name.

For example: SERVER2_SYS

A Volume object that points to a physical volume contains the physical volume name as a property, though the Volume object can be named anything that follows the object naming conventions.

The physical name of a NetWare volume

- * Must be 2 to 15 characters long
- * Can contain letters A-Z, numbers 0-9, hyphens, periods, and underscores
- * Cannot use a period as the first character
- * Cannot contain spaces, colons, asterisks, question marks, or backslashes

Create a Volume Object *

A Volume object provides a place in the Directory database to record and view information about a physical volume that was installed on a NetWare Server.

NetWare 4 volumes are created when NetWare Servers are installed. You can create other Volume objects that refer to the same physical volume as an existing Volume object. You can also create Volume objects for non-NetWare 4 volumes, if you have created NetWare Server objects for the servers on which they reside.

By creating a Volume object and pointing it to a physical volume, you can see the directories and files on the volume from within NetWare Administrator and other utilities. The Volume object is a reference from NetWare Directory Services to a physical volume. Information about both appears when you view details of a Volume object.

There are no subordinate Directory Services (DS) objects under Volume objects. However, NetWare Administrator browser shows directories and files as if they were part of the DS tree. The browser treats directories as containers and files as leaves.

A Volume object is a leaf object.

To create a new Volume object

1. In the Volume Name text box, type a name for this Volume object.
We recommend that you use the server name, followed by an underscore, followed by the volume name. For example: DOCSERVER_SYS. The only requirement is that you follow the object naming conventions.
 2. Select the browser icon * to the left of the Host server text box.
 3. Select the NetWare Server on which the volume resides.
The NetWare Server object must already exist. If it doesn't, you will need to go back to the browser, create the Server object, then restart this process.
 4. In the Physical Volume Name text box, enter the volume's physical name.
You can type the name or choose one from the drop box. The drop box lists the physical volumes that have been loaded on the NetWare server selected in Step 4.
- * (Optional) To define additional information about this Volume object, choose Define Additional Properties.
You cannot choose this if you choose Create Another Volume.
- * (Optional) To create another Volume immediately after this one, choose Create Another Volume.
You cannot select this if you choose Define Additional Properties.
5. Choose Create.
If you chose Define Additional Properties, the Volume Object dialog appears.
If you chose Create Another Volume, this dialog appears again.

Screen regions and buttons

Volume Name is the name of the Volume object as it will appear in the browser.

Host Server is the name of the NetWare server on which the physical volume resides. The

Physical Volume Name is the name of the volume loaded on the server (e.g.: SYS:).

Define Additional Properties allows you to define more information about this Volume immediately after creating it.

Create Another Volume repeats this dialog rather than returning to the browser.

Create creates the new Volume object.

Cancel returns you to the browser without creating a Volume.

Create a Volume Object - Naming a Volume Object

The name of the Volume object for NetWare Directory Services can include

- * The name of the area where this volume is used
- * The server it resides in
- * Its physical name

The Volume object name is not the same thing as the physical volume name, although you can use the same name for both.

Example: The name of the physical volume is SYS:. You create the new Volume object under the MARKETING Organizational Unit. To describe its location, you name the Volume object MARKETING_SYS.

Create a NetWare Server Object *

A NetWare Server object allows NetWare Directory Services a way to refer to a physical server. Information is stored in the NetWare Server object's properties about the physical location of the server, what services it provides, and how those resources are used and accounted for.

For NetWare 4 servers that are part of this DS tree, you must use INSTALL.NLM on each NetWare server to create the first NetWare Server object for each physical server. There can be only one NetWare Server object for each NetWare 4 server that you have installed as part of the DS tree.

You can create a NetWare Server object that points to a NetWare 3 or NetWare 2 (bindery) server, or a NetWare 4 server that is part of another DS tree, if the server is running. You can create more than one reference to a bindery server, as long as the references are in different contexts.

A NetWare Server is a leaf object.

To create a new NetWare Server object under the selected container

1. In the NetWare Server Name text box, type a name for this NetWare Server object.
The server name must match the name of the server it is referring to. See NetWare Server object naming conventions.
 - * (Optional) To define additional information about this NetWare Server immediately after creating it, choose Define Additional Properties.
You cannot choose this if you chose Create another NetWare Server.
 - * (Optional) To create another NetWare Server object immediately after this one, choose Create Another NetWare Server.
You cannot choose this if you chose Define Additional Properties.
2. Choose Create.
If you chose Define Additional Properties, the NetWare Server object dialog appears.
If you chose Create another NetWare Server, this dialog appears again.

Screen regions and buttons

Server Name shows the name of the NetWare Server object.

Define Additional Properties allows you to define more information about this NetWare Server object, such as which services it provides.

Create Another NetWare Server repeats this Create a NetWare Server Object dialog.

Create creates the new NetWare Server object.

Cancel returns you to the browser without creating a NetWare Server object.

Create an AFP Server Object *

AFP Server is a leaf object.

To create a new AFP Server object

1. In the AFP Server Name text box, type a name for this AFP Server object.
You must follow the object naming conventions.
 - * (Optional) To define additional information about this AFP Server object right now, choose Define Additional Properties.
You cannot choose this if you chose Create another AFP Server.
 - * (Optional) To create another AFP Server immediately after this one, choose Create Another Server.
You cannot choose this if you chose Define Additional Properties.
2. Choose Create.
If you chose Define Additional Properties, the AFP Server object dialog appears.
If you chose Create Another AFP Server, this dialog appears again.

Screen regions and buttons

Server Name shows the name of the AFP Server object.

Define Additional Properties lets you define more information about this AFP Server object.

Create Another AFP Server repeats this dialog.

Create creates the new AFP Server object.

Cancel returns you to the browser without creating an AFP Server object.

Create a Computer Object *

Computer is a leaf object.

To create a new Computer object

1. In the Computer Name text box, type a name for this Computer object.
You must follow the object naming conventions.
 - * (Optional) To define additional information about the Computer object, choose Define Additional Properties.
You cannot choose this if you chose Create Another Computer.
 - * (Optional) To create another Computer object immediately after this one, choose Create Another Computer.
You cannot choose this if you chose Define Additional Properties.
2. Choose Create.
If you chose Define Additional Properties, the Computer object dialog appears.
If you chose Create Another Computer, this dialog appears again.

Screen regions and buttons

Computer Name displays the name for this Computer object.

Define Additional Properties lets you define more information about this Computer object.

Create Another Computer repeats this dialog.

Create creates the new Computer object.

Cancel returns you to the browser without creating a Computer object.

Create a Country Object *

A Country object

- * Designates the countries where your network resides
- * Organizes other NetWare Directory Services objects within the Country object

A Country object is a container object. You can create a Country object only under the [Root] object. Country can contain Organization and Organizational Unit objects.

To create a new Country object

1. In the Country Name text box, type the two-letter ISO country code for this Country.
(Optional) Use the Description field of the object dialog to enter the country's full name.
 - * (Optional) To define additional information about this Country object, choose Define Additional Properties.
You cannot choose this if you choose Create another Country.
 - * (Optional) To create another Country object immediately after this one, select Create Another Country.
You cannot choose this if you choose Define Additional Properties.
2. Choose Create.
If you chose Define Additional Properties, the Country object dialog appears.
If you chose Create Another Country, this dialog appears again.

Screen regions and buttons

Country name displays the two-letter ISO country code that designates the country. The full name of the country can be entered in other properties of the object using the object dialog.

Define Additional Properties allows you to define more information about this Country object immediately after creating it.

Create another Country repeats this dialog.

Create creates the new Country object.

Cancel returns you to the browser without creating a Country object.

Two-Letter Country Codes

Country objects can only use two characters as an object name. You should use the appropriate two-letter ISO country code below. Use the Description field of the object dialog to enter the country's full name.

Common ISO country codes are

Argentina - **AR**
Australia - **AU**
Austria - **AT**
Belgium - **BE**
Brazil - **BR**
Canada - **CA**
China - **CN**
Denmark - **DK**
Finland - **FI**
France - **FR**
Germany - **DD**
Greece - **GR**
Hong Kong - **HK**
Ireland - **IE**
Israel - **IL**
Italy - **IT**
Mexico - **MX**
Netherlands - **NL**
Norway - **NO**
Portugal - **PT**
Puerto Rico - **PR**
Singapore - **SG**
South Africa - **ZA**
Spain - **ES**
Sweden - **SE**
Switzerland - **CH**
Taiwan - **TW**
United Kingdom - **GB**
United States - **US**
Venezuela - **VE**

Create a Group Object *

A Group object is a list of users located anywhere in the Directory tree. Group is a leaf object.

You can grant rights to a Group object, rather than granting rights to individual members of a group. These rights transfer automatically by security equivalence to the members of the Group. Groups cannot have other groups as members.

Two other classes of objects are similar to groups: Organizational Role, and Distribution List.

Organizational Role has the same behavior as a group in that its occupants have security equivalence to the Organizational Role, but it was designed to have a small number of occupants. Groups are intended to have any number of members.

Distribution List is a NetWare MHS object, and is different than groups in that the members of a Distribution List don't have security equivalence to the Distribution List. In addition, Distribution Lists may have other Distribution Lists as members.

To create a new Group object

1. In the Group Name text box, type a name for this Group object.
You must follow the object naming conventions.
 - * (Optional) To define additional information about this Group immediately after the Group object is created, choose Define Additional Properties.
You cannot choose this if you choose Create Another Group.
 - * (Optional) To create another Group object immediately after this one, choose Create Another Group.
You cannot choose this if you choose Define Additional Properties.
2. Choose Create.
If you chose Define Additional Properties, the Group object dialog appears.
If you chose Create Another Group, this dialog appears again.

Screen regions and buttons

Group Name displays the name of the Group object.

Define Additional Properties lets you define more information about this Group object immediately after creating it.

Create Another Group repeats this dialog.

Create creates the new Group object.

Cancel returns you to the browser without creating a Group object.

Create an Organizational Role Object *

An Organizational Role object defines a position that can be filled by various people, such as Team Leader or Printing Manager.

You can grant rights to an Organizational Role object, rather than granting rights to the specific occupant of the position. These rights transfer automatically to the users listed as Occupants because the users are security equals to the Organizational Role. If the person acting in a role changes, the trustee assignments do not have to be changed; only the occupant field of the Organizational Role object needs to be changed.

An Organizational Role object is a leaf object.

To create a new Organizational Role object

1. In the Organizational Role Name text box, type a name for this Organizational Role object.
You must follow the object naming conventions.
 - * (Optional) To define additional information about this Organizational Role object, choose Define Additional Properties.
You cannot choose this if you choose Create Another Organizational Role.
 - * (Optional) To create another Organizational Role object immediately after this one, choose Create Another Organizational Role.
You cannot choose this if you choose Define Additional Properties.
2. Choose Create.
If you chose Define Additional Properties, the Organizational Role object dialog appears.
If you chose Create Another Organizational Role, this dialog appears again.

Screen regions and buttons

Organizational Role Name allows you to record the title or position of this role (such as Team Leader).

Define Additional Properties allows you to define more information about this Organizational Role object.

Create Another Organizational Role repeats this dialog.

Create creates the new Organizational Role object.

Cancel returns you to the browser without creating an Organizational Role object.

Create an Organizational Unit Object *

Organizational Unit is a container object and can be created only under an Organization or another Organizational Unit.

Use an Organizational Unit to

- * Designate an object as a logical container, such as a department within a company
- * Set user defaults for users created in this container or subordinate containers.

To create a new Organizational Unit object

1. In the Organizational Unit name text box, type a name for this Organizational Unit.

You must follow the object naming conventions.

* (Optional) To define additional information about this Organizational Unit object, choose Define Additional Properties.

You cannot choose this if you choose Create Another Organizational Unit.

* (Optional) To create another Organizational Unit object immediately after this one, choose Create Another Organizational Unit.

You cannot choose this if you choose Define Additional Properties.

* (Optional) To define user defaults for users that will be created later in this Organizational Unit, choose Define User Defaults.

2. Choose Create.

If you chose Define Additional Properties, the Organizational Unit object dialog appears.

If you chose Create Another Organizational Unit, this dialog appears again.

If you chose Define User Template, the object dialog for a new User_Template object appears. Enter default information in the pages of this dialog. If a user template exists in the parent container, you will be asked if you want to copy that information into this user template. You can then change it as needed.

Screen regions and buttons

Organizational Unit name is where you enter a name for this Organizational Unit object.

Define Additional Properties allows you to define more information about this Organizational Unit object immediately after creating it.

Create Another Organizational Unit repeats this dialog.

Define User Defaults allows you to enter default information for users that you create later in this Organizational Unit. A new object, USER_TEMPLATE, is created, and you enter default information in the fields of its object dialog.

Create creates the new Organizational Unit object.

Cancel returns you to the browser without creating an Organizational Unit object.

Create an Organization Object *

Organization is a container object and can be created only under the [Root] object or a Country object. An Organization object cannot contain another Organization object.

Use an Organization object to organize other objects into entities such as a company or division of a company.

When you install the first NetWare 4 server in the tree, the server install program will prompt you for the name of your Organization.

To create a new Organization object

1. In the Organization Name text box, type a name for this Organization.

You must follow the object naming conventions.

* (Optional) To define additional information about this Organization object, choose Define Additional Properties.

You cannot choose this if you choose Create Another Organization.

* (Optional) To create another Organization object immediately after this one, choose Create Another Organization.

You cannot choose this if you choose Define Additional Properties.

* (Optional) To define user defaults for users that will be created later in this Organization object, choose Define User Template.

2. Choose Create.

If you chose Define Additional Properties, the Organization object dialog appears.

If you chose Create Another Organization, this dialog appears again.

If you chose Define User Template, the object dialog for a new User_Template object appears. Enter default information in the pages of this dialog. If a user template exists in the parent container, you will be asked if you want to copy that information into this user template. You can modify it as needed.

Screen regions and buttons

Organization Name is where you enter a name for this Organization object.

Define Additional Properties allows you to define more information about this Organization object immediately after creating it.

Create Another Organization repeats this dialog.

Define User Template allows you to enter default information for users that you create later in this Organization object. Create creates the new Organization.

Cancel returns you to the browser without creating a Organization object.

Create a Directory Map Object *

A Directory Map object is a [leaf object](#) that represents a particular directory in the file system. You can use Directory Map objects in login scripts to map to directories that contain applications or other frequently used files.

For example, if you have a directory that contains DOS 5, you will probably map a search drive to that directory in any login scripts you create. If you should later upgrade to DOS 6 and rename the directory, you would have to change the mapping in every login script where that mapping appears.

By using a Directory Map object, you could avoid having to make changes to every login script. First, you could create a Directory Map object called CURRENT_DOS that points to the DOS directory (SYS:PUBLIC\IBM_PC\MSDOS\5). Then, using the MAP command in users' login scripts, you could map a search drive to the Directory Map object, rather than to a specific directory:

```
MAP INS S2:=.CURRENT_DOS.SALES.NOVELL_US
```

When users log in, they have a search drive mapped to the CURRENT_DOS Directory Map object, which points to the directory containing DOS 5.

If DOS 5 is ever renamed (to DOS 6 for example) or moved to a different directory, only the Directory Map must be changed to reflect the new path or name; all login scripts can remain the same.

To create a new Directory Map

1. In the Directory Map Name text box, type a name for this Directory Map object.
Use a name that shows what this Directory Map object is used for, such as what application it points to. For example: SPREADSHEET_PATH). The volume and path are entered after the object is created.
You must follow the [object naming conventions](#).
2. Choose the browser button to the right of the Volume field and the volume and path that this Directory Map object will point to.
 - * (Optional) To define additional information about this Directory Map object, choose Define Additional Properties.
You cannot choose this if you choose Create Another Directory Map.
 - * (Optional) To create another Directory Map object immediately after this one, choose Create Another Directory Map.
You cannot choose this if you choose Define Additional Properties.
3. Choose Create.
If you chose Define Additional Properties, the Directory Map Object dialog appears.
If you chose Create Another Directory Map, this dialog appears again.

Screen regions and buttons

Directory Map Name shows the name of the Directory Map object.

Volume specifies the volume that this Directory Map object refers to.

Path specifies the path on the selected volume that this Directory Map object refers to.

[Define Additional Properties](#) lets you define more information about this Directory Map object immediately after creating it.

Create Another Directory Map repeats this dialog.

Create creates the new Directory Map object.

Cancel returns you to the browser without creating a Directory Map object.

Create an Alias Object *

An Alias object refers to another object in the Directory tree and makes it appear as if the object that it names actually exists in the Directory tree where the Alias is created.

The purpose of an Alias object is to allow users to work with the object the alias points to without having to change to the object's context.

Although an object appears both where it was first created and where an Alias object referring to it was created, only one copy of the object really exists, and changes made to either object affect what appears in both locations.

Rights to the Aliased object will always be inherited from an object's true parent container, and not from the parent container of an Alias that points to it.

Alias is a leaf object. The object that the Alias refers to, however, can be a container, so an Alias can appear to contain other objects.

Example: You want the users in the CENTRAL Organizational Unit to have access to a Volume object contained by the SEATTLE Organizational Unit without having to change their context to SEATTLE's part of the Directory tree. So, you create an Alias object in CENTRAL that refers to the Volume under SEATTLE. (The Volume is the Aliased object.)

Now all users in CENTRAL can see and use the volume in SEATTLE without changing their context to that of SEATTLE. Any changes made by users in CENTRAL still occur on the Volume object in SEATTLE's area of the Directory tree.

To create a new Alias object

1. In the Alias Name text box, type a name for this Alias object.
You must follow the object naming conventions.
2. Choose the Aliased Object text box.
3. Choose the browser icon. *
4. Select an object.
(Optional) To create another Alias object immediately after this one, choose Create Another Alias.
You cannot choose Define Additional Properties for an Alias object. The Alias object consists only of an Alias name and the name of the object that the Alias object points to.
5. Choose Create.
If you chose Create Another Alias, this dialog appears again.

Screen regions and buttons

Alias Name is the name of the Alias object.

Aliased object is the name of the object that the Alias object refers to. This object appears where the Alias object is created. The Aliased object can be anywhere in the Directory tree. It can be a leaf or a container object.

Create Another Alias repeats this dialog.

Create creates the new Alias object.

Cancel returns you to the browser without creating an Alias object.

Create Alias Object - Naming an Alias

This is the name of the Alias object that will appear in the browser. After you create the Alias object, you will be able to recognize it by the mask icon that appears next to the object icon in the browser.

Create Alias Object - Setting an Aliased Object Name

This is the name of the object that the Alias object refers to. It can be a container or a leaf object, depending on whether you want to see an entire branch of the Directory tree at this location, or just one object.

Create a Profile Object *

A Profile object stores a login script that is used by a group of users that need to share common login script commands.

If a Profile object is listed in the Login Script page of a User object, it is executed after the login script of the user's container object, but before the user's individual login script. Users should be careful not to overwrite drive mappings from the Profile login script with their individual login script mappings.

Note: A user must have Read rights to the Profile object's login script property for the script to execute.

Profile is a leaf object.

To create a new Profile object

1. In the Profile Name text box, type a name for this Profile object.
You must follow the object naming conventions.
 - * (Optional) To define additional information about this Profile object right now, choose Define Additional Properties.
You cannot choose this if you choose Create Another Profile.
 - * (Optional) To create another Profile object immediately after this one, choose Create Another Profile.
You cannot choose this if you choose Define Additional Properties.
2. Choose Create.
If you chose Define Additional Properties, the Profile object dialog appears.
If you chose Create Another Profile, this dialog appears again.

Screen regions and buttons

Profile Name is the name of the Profile object.

Define Additional Properties lets you define more information about this Profile immediately after creating it

Create Another Profile repeats this dialog.

Create creates the new Profile object.

Cancel returns you to the browser without creating a Profile object.

Create a Directory *

Directories are not NetWare Directory Services (NDS) objects. They are part of the file system, which is integrated with NDS in the NetWare Administrator utility. You can create a directory when you select a Volume or another directory.

To create a new directory

1. In the Name text box, type a name for the directory.
You must follow the [object naming conventions](#).
 - * (Optional) To define additional information about this directory right now, choose Define Additional Properties.
You cannot choose this if you choose Create Another Directory.
 - * (Optional) To create another directory immediately after this one, choose Create Another Directory.
You cannot choose this if you choose Define Additional Properties.
2. Choose Create.
If you chose Define Additional Properties, the Directory dialog appears.
If you chose Create Another Directory, this dialog appears again.

Screen regions and buttons

Directory Name is the name of the directory.

[Define Additional Properties](#) lets you define more information about this directory immediately after creating it.

Create Another Directory repeats this dialog.

Create creates the new directory.

Cancel returns you to the browser without creating a directory.

Create a File



Use NetWare Administrator to see information about files that already exist. You must use another application, such as a word processor, to create new files.

Create a Message Routing Group Object

A Message Routing Group object represents a cluster of messaging servers located anywhere in the Directory tree. Servers in a Message Routing Group should not be connected to each other through remote links.

You can assign messaging servers to the Message Routing Group. All messaging servers connected to the same Message Routing Group may send messages directly among themselves.

A Message Routing Group object is a leaf object.

To create a new Message Routing Group object

1. In the Message Routing Group Name text box, type a name for this Message Routing Group.
You must follow the object naming conventions.
2. Select the browser icon to the right of the Postmaster General text box.
3. Assign a Postmaster General to the Message Routing Group by selecting a user from the browser.
 - * (Optional) To define additional information about this Message Routing Group, choose Define Additional Properties.
You cannot choose this if you choose Create Another Message Routing Group.
 - * (Optional) To create another Message Routing Group object immediately after this one, choose Create Another Message Routing Group.
You cannot choose this if you choose Define Additional Properties.
4. Choose Create.
If you chose Define Additional Properties, the Message Routing Group object dialog appears.
If you chose Create Another Message Routing Group, this dialog appears again.

Screen regions and buttons

Message Routing Group Name displays the name of the Message Routing Group (which you type in the text box).

Postmaster General displays the User object that is the owner and administrator of the Message Routing Group. (The User object is selected from the browser.) The Postmaster General has rights to modify the Message Routing Group object and its attributes.

Define Additional Properties lets you define more information about the Message Routing Group object (such as Location, Department, and Organization).

Create Another Message Routing Group repeats this dialog.

Create creates the new Message Routing Group object.

Cancel returns you to the browser without creating a Message Routing Group object.

Create an External Entity Object

An External Entity object represents an object that is not part of your NetWare Directory Services (NDS) tree, such as an internet address, or an NDS object that resides in another tree. This object is needed to accommodate foreign E-mail users who E-mail users in NDS may want to communicate with. An External Entity object is a leaf object.

To create a new External Entity object

1. In the External Entity Name text box, type a name for this External Entity object.
You must follow the object naming conventions.
 - * (Optional) To define additional information about this External Entity object, choose Define Additional Properties.
You cannot choose this if you choose Create Another External Entity.
 - * (Optional) To create another External Entity object immediately after this one, choose Create Another External Entity.
You cannot choose this if you choose Define Additional Properties.
2. Choose Create.
If you chose Define Additional Properties, the External Entity object dialog appears.
If you chose Create Another External Entity, this dialog appears again.

Screen regions and buttons

External Entity Name displays the name of the External Entity object (which you type in the text box).

Define Additional Properties lets you define more information about the External Entity object (such as Location, Department, and Organization) immediately after creating it.

Create Another External Entity repeats this dialog.

Create creates the new External Entity object.

Cancel returns you to the browser without creating an External Entity object.

Create a Distribution List Object



A Distribution List object represents a collection of objects that have mailboxes. You can assign objects (Organizational Unit, Group, or User objects for example) to a Distribution List and conveniently send the same message to many different recipients by sending it to the Distribution List.

A Distribution List can have other Distribution Lists as members. Members of Distribution Lists do not have security equivalence to the Distribution List.

A Distribution List object is a leaf object.

To create a new Distribution List object

1. In the Distribution List Name text box, type a name for this Distribution List object.
You must follow the object naming conventions.
2. Select the browser icon to the right of the Mailbox Location text box.
3. Assign a mailbox location to the Distribution List by selecting a messaging server from the browser.
* (Optional) To define additional information about this Distribution List object, choose Define Additional Properties.
You cannot choose this if you choose Create Another Distribution List.
- * (Optional) To create another Distribution List object immediately after this one, choose Create Another Distribution List.
You cannot choose this if you choose Define Additional Properties.
4. Choose Create.
If you chose Define Additional Properties, the Distribution List object dialog appears.
If you chose Create Another Distribution List, this dialog appears again.

Screen regions and buttons

Distribution List Name displays the name of the Distribution List object (which you type in the text box).

Mailbox Location displays the path to the messaging server where the Distribution List's mailbox resides.

Define Additional Properties lets you define more information about the Distribution List object.

Create another Distribution List repeats this dialog.

Create creates the new Distribution List object.

Cancel returns you to the browser without creating a Distribution List object.

Using NetWare Administrator

NetWare Administrator is similar to a file manager, except that it allows you to manage objects in the Directory database in addition to managing files.

The browser is the main work area in NetWare Administrator. It displays the name of each object and its corresponding icon.

To work with an object, select it; then, choose the task you want. There are several ways to complete tasks. You can

Use Menu Options

Double-Click on an Object

Click the Right Mouse Button

Drag and Drop Objects

Procedures

Change the Directory Context

Create a New Object

Move Objects

Move or Copy Files

Include Certain Object Classes in the browser

Open Multiple browser Windows

Use Menu Options

View the Current Directory Context

Screen regions and buttons

Menu Options lets you choose tasks from pull-down menus.

browser displays objects in the Directory database in a tree structure that allows you to see their relationships to each other.

Hint Bar explains menu options as you select them.

browser icons

Object icons show what class of object is displayed.

Container objects



Country

Organization

Organizational Unit

Leaf objects



Alias



AFP Server



Bindery



Computer



Directory Map



Distribution List



External Entity



Group



Message Routing Group



Messaging Server



NetWare Server



Organizational Role



Printer



Print Server



Profile



Queue



User



Unknown in NDS



Unknown in NetWare Administrator



Volume

Double-Click on an Object

When you double-click on an object (or press <Enter> after an object is selected), NetWare Administrator performs the most logical action for that object at that place. The action depends on the object you choose.

For example, when you double-click on

- * A container object, the browser lists the objects contained in that object.
- * A leaf object, the browser opens an object dialog, unless the leaf object is a Volume object.
- * A Volume object, the browser lists directories and files in the root directory of that volume.

Example: If you double-click on Organizational Unit SALES, SALES opens and shows the objects it contains. If you double-click on User object JORDAN, you see the object dialog for JORDAN. If you double-click on Volume MARKETING, you see the root directory of that volume.

Use Menu Options

Menus list all tasks you can perform. To use most menu options, select the object you want to work with, then choose the task from a pull-down menu.

Example: To create a Server object under Organizational Unit SALES, select SALES; then, choose Create from the Object menu.

If a menu option is grayed, that option is not available (either because you do not have rights to perform the action, or the object you selected doesn't allow that option).

Some menu options have ellipses, indicating that a dialog appears when that option is chosen.

The Hint Bar at the top of the screen explains each menu option when you select it.

Menus

Object

View

Options

Tools

Window

Help

Object Menu Options

Create

Opens a dialog that allows you to select which class of object you want to create under the container you selected. You can use this option to create directories on a Volume as well.

If you selected a leaf object or do not have rights to create an object under this container, the Create option is grayed. You can use this option to create directories on a Volume as well.

Details

Opens a dialog that allows you to see information about the object, file, or directory. The type of information you can view or change varies according to the object you select. The same dialog opens if you double-click on a leaf object.

Rights to Other Objects

Opens a dialog that shows what rights the selected object has to other objects. When you choose this option, you are prompted to specify the portion of the Directory tree you want to search.

To see who has rights to this object, use the Trustees of this Object option.

Trustees of this Object

Opens a dialog that shows which objects have rights to the object you selected. You can also set the object's Inherited Rights Filter or see other objects' effective rights to this object.

Use the Rights to Other Objects option to see which objects this object has rights to.

Move

Allows you to move the selected leaf objects or files to another location. You can select multiple leaf objects or files, and select a destination in the dialog that appears when this menu item is chosen.

Copy

Allows you to make a copy of a file. You can select multiple files. You select a destination in the dialog that appears after this menu item is chosen.

Rename

Opens a dialog that allows you to rename any object, file, or directory. If you rename an object, you can choose to save the object's old name in the Other Names property for future reference.

Delete

Deletes the selected object. Once you have deleted an object, you cannot recover it. A container can be deleted only if it is empty except for the USER_TEMPLATE object. You cannot delete the USER_TEMPLATE object; it is deleted when its container is deleted.

User Template

Provides a pattern for User objects created under the selected container. You can change the pattern and apply it to new User objects.

Search

Allows you to search a branch of the Directory tree for objects matching a pattern that you specify.

Print

Allows you to print the objects currently listed in the browser.

Print Setup

Allows you to select and configure your printer and print jobs.

Exit

Closes NetWare Administrator.

View Menu Options

Set Context

Opens a dialog which allows you to change which part of the Directory tree you are viewing.

Include

Opens a dialog which allows you to limit by name or by object class the objects you see in the browser, or limit by name the files and directories you see when you view a Volume object's files and directories. Use this option if you have a large number of items to display.

For example, you could select to see all User, Group, and Printer objects whose names include S and R, and select to see files and directories whose names include P, T, and S.

Sort by Object Class

Opens a dialog which allows you to set the order in which the classes of objects appear in the browser.

For example, if you want to see User objects listed first, Volumes objects second, Group objects third, and so on, move User objects to the top, Volume objects second, and so on, in the Sort dialog.

Expand

Opens the container object you have selected. The container remains selected.

Collapse

Closes the container you have selected. The container remains selected.

Options Menu

The options in the Options menu are preferences that you select.

Your selections on this menu apply every time you open NetWare Administrator until you deselect the options. When you select an option, a check mark appears next to the option. It disappears when you deselect the option.

Save Settings on Exit

Saves your current settings, including sort preferences, browser filters, and the context of your active browser screens.

Show Hints

Sets NetWare Administrator so that a one-line description of each menu displays at the top of the screen as you scroll through each menu.

Confirm on Delete

Sets NetWare Administrator so that a confirmation box appears when you delete an object, file, or directory. You cannot recover deleted objects, so set this to confirm deletions in order to avoid accidentally deleting an object.

Get Alias Trustees

When this option is selected, administrators can use the Trustees of this Object dialog to manage the trustees of an Alias object, as opposed to the object the alias points to.

Get Aliased Object Trustees

When this option is selected, administrators can use the Trustees of this Object dialog to manage the trustees of the object pointed to by an alias, as opposed to the Alias object itself. This should be your default setting.

Tools Menu

Partition Manager

Starts the Partition Manager.

Browse

Opens another browser window with the selected object as the first object in the new window.

Salvage

The Salvage option allows you to recover previously deleted files, or permanently delete them to save disk space.

Remote Console

Opens a DOS box that allows you to activate the Remote Console utility.

Window Menu

Cascade

Arranges all browser windows in overlapping style (so the title bar of each window can be seen).

Tile

Arranges all browser windows in tile style, like a checkerboard. Each window is smaller, but none overlap.

Arrange Icons

Arranges all icons in a group.

Close all

Closes all browser windows. To open a window to view the Directory tree again, you must choose browser from the Tools menu.

Help Menu

New Features

Lists and explains the new features available in this version of NetWare Administrator.

Contents

Lists all topics available in Help. These topics link to procedures and descriptions of all parts of NetWare Administrator.

Glossary

Lists all glossary terms used in online help.

Error Messages

Shows a description of error messages that can appear in NetWare Administrator.

About NetWare Administrator

Gives version and copyright information for NetWare Administrator.

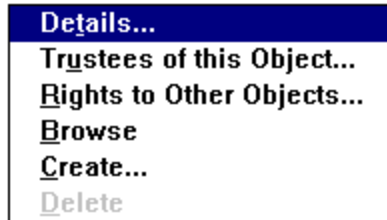
Right-Click on an Object

When you put the pointer on an object and click the right mouse button, a menu appears next to the object. The menu lists options for all tasks you can complete with that object. You can choose the option for the task you want to complete.

If a task is grayed, you cannot perform that task on that object either because of the object type, or because you do not have rights.

To close the menu without selecting anything, click the left mouse button.

Example: You need to work with organizational unit SALES. Select SALES; then click the right mouse button. A menu appears listing all the tasks you can do with SALES at that point.



Details

Opens an object dialog for the selected object. (This functions the same as choosing Details from the Object menu.)

Trustees of this Object

Opens the Trustees dialog for the selected object, where all objects that have a trustee assignment to the selected object are listed. Trustees rights and the Inherited Rights Filter can be changed from this dialog. (This functions the same as choosing Trustees of this Object from the Object menu.)

Rights to Other Objects

After you specify which part of the Directory tree to look at, a window opens that shows what the selected object has rights to. There is a delay when you choose this option while all objects in the selected part of the Directory tree are searched for trustee assignments that include the selected object.

To see who has rights to this object, use the Trustees of this Object option.

Browse

Only valid when a container object is selected. This option opens a new browser window with the selected container as the first object and lists all objects within that container.

Create...

Only valid when a container object, Volume object, or directory is selected. This option opens a dialog that lets you create a new object or directory below the selected point. (This functions the same as choosing Create from the Object menu.)

Delete

Only valid when a leaf object, file, or empty container or directory is selected. This option Deletes the selected object after displaying a confirmation box (if selected in options). (This functions the same as choosing Delete from the Object menu.)

Drag and Drop Operations

Adding a Trustee of This Object

If you drag one object and drop it onto another object, the Trustees of This Object dialog opens. If you have rights to add trustees to the object you landed on, the object that you dragged becomes a trustee of the object you dropped it on.

Making This Object a Trustee of Other Objects

If you hold down the <Shift> key while you drag one object and drop it onto another object, the Rights to Other Objects dialog opens. If you have rights to add trustees to the object that you dragged, the object that you landed on is added as a trustee to the object you dragged.

Moving Leaf Objects

Leaf objects can be moved to a new location in the Directory tree by dragging and dropping the object while holding the <Ctrl> key. (You can also select the object and choose Move in the Object menu.)

Moving or Copying Files and Directories

If you drag one file or directory onto another directory or volume, you move or copy that file or directory to the place where you dropped it.

You must have rights to create a file or directory where you land.

You can drag and drop files or directories to other directories on the same volume, or to directories in other volumes in the Directory tree. You can land on the Volume object to copy or move something to the root directory of that Volume, even if the Volume object is not open to display directories.

Rename an Object

When you rename an object, the new name appears in the browser and in any context in which it is referenced. (NetWare Directory Services automatically changes all references to the renamed object.)

Renaming a leaf object changes only the object's common name, which is the name that is displayed in the Directory tree. It does not change the object's context (the object will reside in the same container as before.) However, renaming a container object changes the object's common name, its context, and the context of all the objects in the container.

To rename an object

1. In the New Name field, type the object's new name.
2. (Optional) To store the old name in the Other Name field, select the Save Old Name check box.
Note: You might want to save the old name so that users who don't know the object's new name can search on the old name. If the Save Old Name box is not checked, the old name is deleted.
3. If you are renaming a container, select Create Alias in Place of Renamed Container.
Important: If you rename a container object and do not select the Create Alias in Place of Renamed Container check box, users who are unaware of the object's new name will not easily find the object in the Directory tree, since they will look for it by its original name.
Also, users whose name context in their NET.CFG file references the renamed container might be unable to log in.
4. Choose OK.
The object is renamed. If you selected the Save Old Name check box, the old name is stored in the Other Name field of the Identification page.
5. If you renamed a container object, you should use the NCUPDATE utility to update the name context of users in the renamed container. For instructions, see NCUPDATE in *Utilities Reference*.

Screen regions and buttons

New Name allows you to enter the object's new name.

Save Old Name stores the previous name (if checked).

Create Alias in Place of Renamed Container

OK saves changes and closes the dialog.

Cancel closes the dialog without changing the name.

Search Option

Search allows you to search for any object in the container that you choose, and it allows you to narrow your search to specific object properties.

If NetWare Administrator locates the objects you specify, a new browser window opens that lists the objects that were found. From this browser, you can work with the objects that are displayed.

To search for an object

1. In the Start From field, specify the container you want to start your search from.
To search the container specified in the Start From field, do not select Search Entire Subtree.
To search all containers in and below the object in the Start From field, select Search Entire Subtree.
2. To select an object class or a meta class (device, server, top), select the drop-down arrow to the right of the Search For field.
Notice that there are extra object classes listed here. If you skip to Step 6, Search lists all objects of the selected object class. If you narrow the scope of your search by completing Steps 3 through 5, Search lists objects of the selected class only if their properties match those you select below.
3. (Optional) To specify which property value to search on, choose the drop-down arrow to the right of the Property field.
If you choose None, then all objects of the class selected above are listed.
4. (Optional) In the field directly below the Property field, choose how you want to narrow the search for the selected property.
You can choose Equal To, Greater Than, Less Than, or other choices, depending on what filters are available for the property you selected.
For example, if you have selected to search for a User object, and selected the Remaining Grace Logins property, you can select the Equal To filter.
5. (Optional) Enter a value in the field to the right of the value that you selected in Step 4.
If you selected Present or Not Present in Step 4, you can leave this field blank.
For example, if you have selected to search for a User object, and selected the Remaining Grace Logins property and the Equal To filter, you must specify in this field a number (for example, 5) and Search will display all users in the containers searched that have that number of Remaining Grace Logins.
6. Choose OK.
Objects that match your selections are displayed in a new browser window. You can now work with these objects from the new browser.

Screen regions and buttons

Start From allows you to enter the context (or the container) in the Directory tree you want to start the search from.

Search Entire Subtree allows you to specify that the search start at your current container and then continue all the way down the tree. If you don't select this option, the search is limited to the current container, or the one specified in the Start From field.

Search For allows you to select the object or object class you want to search for.

Property allows you to select the object property you want to search selected objects for. When you select a property, you can also choose in the field below how you want to narrow the search for the selected property. Depending on what comparisons you choose, you may need to enter information in the field to the right, which allows you to specify additional information to filter your search.

OK saves changes and begins the search.

Cancel closes the dialog without searching or saving the changes.

Save opens the Save As dialog, which allows you to save the search options you selected for later use.

Open brings up a dialog that allows you to select a search option file that you saved previously. You can then use the search options as they are, or edit them to do a new search. You can also retrieve a search option file that you saved previously by dragging the file from MS Windows' File Manager and dropping directly on top of the Search dialog.

Search Object Classes

In addition to the standard object classes used to create objects, several other object classes are listed in the search dialog to help find objects. For example,

- * Device lists all Computer and Printer objects.
- * Locality lists object classes that might be used by third-party products.
- * Organizational Person lists all users.
- * Partition is used only by the Partition Manager. It indicates which containers are at the top of a separate partition.
- * Person lists all users.
- * Resource lists all Printer Queue and Volume objects.
- * Server lists all NetWare Server, Print Server, and AFP Server objects.
- * Top lists every object in the container that you are searching.

Save As

This dialog allows you to save your search information as files. If you regularly search for the same information, you should save the information as a file and use it, instead of entering the information each time.

Example: If you are regularly searching for users whose passwords expire in the next week, you can type in the information once and save the search query. Each time you do the search use the same file, changing the date and time value.

Screen regions and buttons

File Name allows you to enter a new filename to save the search information. If it is an existing file, you can use the current name, or type in a new name. A filename can contain up to eight characters and an extension of up to three characters.

Drives allows you select the drive where you want to store the file.

Directories allows you to select the directory where you want to store the file.

Save File As Type allows you to select the file type to be used to store the information. Quick Search Templates type stores the information for quick and uncomplicated searches.

Read Only allows you to lock the file so others can use the file, but not change it.

OK saves changes and closes the dialog.

Cancel closes the dialog without saving the changes.

Open

This dialog allows you to open and use search information saved as files. If you regularly search for the same information, save the information as a file and use it again later, instead of entering the information each time.

Example: If you regularly search for users whose passwords expire in the next week, you can type in the information once and save the search query. Each time you do the search use the same file, changing the date and time value

Screen regions and buttons

File Name is where you select the filename of the search information.

Drives allows you select the drive where you stored the file.

Directories allows you to select the directory where you stored the file.

List Files of Type allows you to select the file type you used to store the information.

Read Only shows you whether the file has been locked so others can use it, but not make changes to it.

OK saves changes and closes the dialog.

Cancel closes the dialog without saving the changes.

View the Current Directory Context

To view the current directory context, choose Set Context from the View menu. This opens a dialog that shows the object in the Directory tree that is the root object of the active browser window.

You can also change the context in this dialog.

Choose Cancel to return to the browser without changing your context.

Create an Object

1. Select the container that you want the object created in.
For example, to create an object that is subordinate to SALES, choose SALES.
You can also select a Volume object or a directory in a volume to create a new subdirectory.
2. From the Object menu, choose Create.
If the Create option is grayed, you do not have sufficient rights, or you selected a leaf object.
3. From the Class of New Object list box, choose the class of object you want to create.
If the class of object you want to create isn't listed, you can't create it in the container you selected.
For example, a Country object cannot contain a User object.
4. Choose OK.
5. Enter the information required to create the new object.
Note: Although the object appears in the browser if you define only the fields shown in the Create dialog, you can choose Define Additional Properties to add information.
6. Choose Create.

Move Objects

Right needed: The Create object right for the container to which you move an object

Important: To move container objects, you must use Partition Manager. You can launch Partition Manager from the Tools menu.

To move leaf objects

1. In the browser, select one or more leaf objects.
You can select multiple objects by holding down the <Shift> or <Ctrl> keys while selecting objects.
2. From the Object menu, choose Move.
3. Choose the browser button to the right of the Destination field.
Use the browser in the Directory Context box to view the Directory tree's containers. The Objects box that appears in the lower-left corner shows the containers that you select in the browser.
4. From the Objects box, select a container object (an Organization or Organizational Unit) as the place to move the listed objects to.
5. Choose OK.
The Destination box now lists the name of the destination container you've just chosen.
6. In the Move dialog box, choose OK.
The selected objects are moved to the selected destination container.

Note: If one of the objects that you selected to move cannot be moved, the Move dialog reappears. Objects that have been successfully moved are no longer in the list box. The first object listed is the one that could not be moved. You can deselect that object (Ctrl + right click) and choose OK to try again.

Move or Copy Files

1. From a volume in the browser, select one or more files.
You can select multiple files by holding down the <Shift> or <Ctrl> keys while selecting files.
2. From the Object menu, choose Move or Copy.
The Copy or Move Object dialog appears.
A button at the top of the dialog indicates whether you are moving or copying the selected files. You can change this button.
The From box shows all the files that you selected in the browser. If you change your mind about any file in the list, you can deselect it and it will not be included in the operation.
3. Choose the browser button to the right of the Copy Selected Objects To field.
Note: If you are using the drag-and drop feature to copy files, this field is already filled in.
4. Select a directory from a volume using the Select Object dialog that appears.
This is the destination directory. You must have the Create directory right to this directory to complete the Move or Copy operation. To move or copy to the root directory, select a Volume object.
5. Choose OK.
The selected files are copied or moved to the selected directory.
Note: If one of the files that you selected cannot be moved or copied, the Move dialog reappears. Files that have been successfully moved are no longer in the list box. The first file listed is the one that could not be moved. You can deselect that file and choose OK to try again.

Creating an Object Using the New Object Dialog

Use the New Object dialog to create new objects in the Directory tree. You must have the Create object right on a container to create objects in that container.

You can also create directories on a volume. You must have the Create directory right to do this.

Procedure

Create a new object

Screen regions and buttons

Parent Object shows the container object that will contain the new object.

Class of New Object lists classes of objects that you can create in this container. You can only select one object class each time you create an object.

Context shows the place in the Directory tree where you are creating this object.

OK opens the Create dialog for the object class that you selected.

Cancel closes this dialog without creating an object.

Set a New Context

Opens a dialog that lets you set the context of the browser to any location in the Directory tree.

If you don't want to see the entire Directory tree, you can set the context to the object that you want to be the root of the browser.

You can also see a NetWare 2 or 3 server's file system as a separate browser, even if no object exists for that server. To do so, you must type *servername/volume*: in the New Context field.

Example: If you want to see only objects under Engineering.Acme.US, you can set the context to that object (Engineering).

To set a new context

1. In the New Context field, enter the new context, or, choose the browser button to the right of the New Context field and select a container as the new context.

To make the top of the tree the new context, enter [Root].

Example: Enter a container object's complete name, ie: **WP.Sales.Novell**

2. Choose OK.

The browser now displays objects starting from the context you entered.

Screen regions and buttons

Current Context shows the context you are in.

New Context allows you to enter a new context.

OK sets the new context that you entered.

Cancel closes this dialog without changing your context.

Server Login

This dialog appears when you attempt to set your context to a NetWare 2 or 3 server. Because the server you entered does not use NetWare Directory Services, you must have a separate account on that server.

To log in to a NetWare 2 or 3 server

1. In the Name field, enter the username for an account on the server you are attempting to log in to.
2. In the Password field, enter the password for the username you just entered.
3. Choose OK.

If you entered a valid username and password for the server shown, you are logged in, and NetWare Administrator proceeds with your request.

Set Confirmation

Use this dialog to set whether you see a confirmation box when you delete an object, file, or directory. Your selection remains in effect every time you start NetWare Administrator until you change this dialog.

Leave the confirmation on unless you are very comfortable with the operation of NetWare Administrator and will be making many deletions where the confirmation might become a nuisance.

You cannot undo a delete object operation.

Defaults

Confirm on Delete: On

Screen regions and buttons

Confirm on Delete determines whether you see a confirmation box when you delete an object. You cannot recover deleted objects, so you should set this to confirm object deletions.

OK closes the dialog and makes the settings effective for this and future sessions of NetWare Administrator.

Cancel closes the dialog without making the changes effective.

Including Certain Objects in the browser

Use the Include dialog to define by name and by object class what you want displayed in the browser.

Example 1: To see all objects starting with f in the active browser window, select all object types in the Object Types list, and type f* in the Directory Services Object Name field. Collapse and then expand the container to see the new list.

Example 2: To see only User objects in the active browser window, select User in the Object Types list.

Also use the Include dialog to define by name which directories and files you want displayed. If you select Volume objects to be displayed, you see the directories and files on those volumes.

Example 1: To see volumes with files that have .EXE extensions in the active browser window, select Volume in the Object Types list, and type *.exe in the DOS File Name field.

Example 2: To see volumes with directories and files that have P and R in their names, select Volume in the Object Types list, and type P*R* in the DOS File Name field.

To choose which objects to display in the browser

1. From the Include Object Classes list, select all object classes that you want displayed in the browser. You can select multiple objects in the list by holding down the <Shift> or <Ctrl> keys while selecting objects. The <Shift> key allows you to select multiple objects listed next to each other; The <Ctrl> key allows you select multiple objects not next to each other in the list.
2. (Optional) Enter data in the Directory Services Object Name Filter field.
3. (Optional) Enter data in the DOS File Name Filter field.
4. (Optional) Select the Save as Default button.
5. Choose OK.

The objects that were selected in the list are the only object classes that are displayed in the browser only after you collapse and then expand the container.

Screen regions and buttons

Included Object Classes lists the classes you can select for display.

Directory Services Object Name Filter allows you use wildcard characters to view objects whose names include a certain letter or group of letters.

DOS File Name filter allows you to use wildcard characters to view files whose names include a certain letter or group of letters or that end with a certain extension.

Save As Default allows you to save the options you have set for the next time you use NWADMIN.

Restore Default allows you to return to the previous default settings and use them as your current default settings.

OK closes the dialog and sets the browser to display only the selected objects the next time you expand a container or Volume object in the browser.

Cancel closes the dialog without saving the changes.

Sorting Objects in the browser

Use the Sort Object by Class dialog to select the order in which you want objects to display in the browser.

Example: To list User objects listed first in the browser, Group objects second, Volume objects third, and Printer objects fourth, select an object and use the arrow buttons (icons) to move the objects up or down in the list.

Screen regions and buttons

Class Sort Order lists the classes you can select to set the order in which object classes appear in the browser.

Save As Default allows you to save the options you have set for the next time you use NWADMIN.

Restore Default allows you to return to the previous default settings and use them as your current default settings.

OK closes the dialog and sets the browser to display objects in the order you set when you expand a container in the browser.

Cancel closes the dialog without saving the changes.

Open Multiple Browser Windows

If you want to drag and drop objects from one window to another, or view different areas in a large Directory tree at the same time, you can open multiple browser windows.

To open a new browser window

1. Select the container object that you want to be the first object in the new browser window.
2. From the Tools menu, choose browser.
Another browser window is opened, displaying the context of the object you selected.
Note: To have a browser window start at the very top of the Directory tree, set the context of a browser to [Root].
3. (Optional) Select Tile from the Window menu to view all open browsers.

Salvage Option

The Salvage option allows you to recover previously deleted files, or permanently delete them to save disk space.

Procedures

Salvage One or More Files

Permanently Delete All Deleted Files in a Directory

Permanently Delete One or More Files

Change Which Files Are Listed in the File List Box

Change How the Files in the File List Box Are Sorted

Change Which Directory's Files Are Listed

Screen regions and buttons

Include allows you to select which files to display.

List displays files specified in the Include field.

Sort Options defines how files are sorted.

Source shows which directory the files listed are located in.

File List box shows all deleted files in the directory with the pattern chosen in the Include field.

Salvage recovers the selected files.

Purge permanently deletes files.

Close closes the Salvage dialog and returns you to the browser.

Permanently Delete All Deleted Files in a Directory

Note: If you are purging from Deleted Directories as your Source option, a DELETED.SAV directory must exist in the root directory of this volume; it must be flagged as Hidden.

1. Choose Purge.

You do not have to choose List first.

If you selected any files in the File List box, the Include field applies and only the selected files are purged.

You must be the owner of or have at least the Erase file right to any file that you want to Purge.

2. Choose Yes.

A count of the files found is displayed. This number decreases to zero as they are purged. All deleted files in the directory are now permanently deleted. Purged files cannot be recovered later.

3. Choose Close

Permanently Delete One or More Files

Note: If you are purging from Deleted Directories as your Source Option, a DELETED.SAV directory must exist in the root directory of this volume, and it must be flagged as Hidden.

1. From the File List box, select the file or files that you want to purge.
You can select multiple files by holding the <CTRL> or <Shift> keys while you make your selections with the mouse.
If the files you want are not shown, change the source or select another directory before choosing Salvage. You must be the owner of or have at least the Erase file right to any file that you want to purge.
2. Choose Purge.
A count of the files found is displayed, and decreases to zero as they are purged. All deleted files in the directory are now permanently deleted. Purged files cannot be recovered later.
3. Choose Close.

Salvage One or More Files

Note: If you are salvaging from Deleted Directories as your Source option, a DELETED.SAV directory must exist in the root directory of this volume; it must be flagged as Hidden.

1. From the File List box, select the file or files you want to salvage.
If the files you want are not shown, change the source or select another directory before choosing Salvage.
You must have the Create right on a file to salvage it.
If you are salvaging a file from a deleted directory, you must have the Supervisor right to the root directory of the volume.
2. Choose Salvage.
The files disappear from the File List box. They now appear in regular file listings (DIR, NDIR, or the browser).
3. Choose Close.

Change Which Files Are Listed

1. Select the Include field.
2. Enter a file pattern that describes the files that you want shown in the File List box.
Example: Type *.* to display all files. Type *.DAT to display all data files.

3. Choose List.

Listing the files for a large directory can take several minutes. You can change the source directory, or purge files without first listing them.

The files matching the file specification that you entered are displayed in the File List box. These files can be permanently deleted or salvaged.

Change How Files Are Sorted

1. Choose the arrow next to the Sort Options field.
2. Choose the sort option that describes how you want the files in the File List box displayed.
You can only select one sort option at a time. The left-to-right order of the columns does not change.

Example: If you want all files organized according to when they were deleted, choose Deletion Date as the sort option. The first file listed is the one most recently deleted, and the last file listed is the one that has been deleted for the longest time.

Change Which Directory's Files Are Listed

1. Choose the arrow next to the Source list.
2. Choose a source directory.
 - 2a. To display files from the directory you selected before choosing Salvage, choose Get From Current Directory.
You must have the Create right to a file to salvage it.
 - 2b. To display files from directories that have been deleted on this volume, choose Get From Deleted Directories. A DELETED.SAV directory must exist in the root directory of this volume.
You must have the Supervisor right to the root directory of the volume to salvage files from a deleted directory.

Note: If you have selected deleted directories as your source and you are working on a SYS: volume, it can take a long time to list the files. Consider limiting the list using the Include field. You can select a source directory, and enter a value in the Include field before choosing List.

Salvage - Include Field

The Include field defines which files are shown in the File List box.

To determine which files are displayed, type a pattern in the Include field and choose List. The list of files changes to show those files.

Example: Type *.* to display all files. Type *.DAT to display all data files.

You can enter information in the Include field and choose a source directory before listing files. This can save time searching the directory for deleted files. You do not have to choose List before purging all files in this directory.

Salvage - List button

Choose List to indicate that you have finished entering changes in the Include field. The File List box is updated according to what you entered.

You can enter information in the Include field and choose a source directory before listing files. This can save time. You do not have to choose List before purging all files in this directory.

Note: If you have selected deleted directories as your source and you are working on a SYS: volume, it can take a long time to list the files. Consider limiting the list with the Include field.

Salvage - Sort Options

The Sort Options field allows you to specify how files in the File List box are organized.

Organize files to more easily find the files you are looking for. The Sort option changes which files are listed from last to first; it does not change the left-to-right order of the fields. (However, you can click on the title of each column and drag it to another column.)

For example, if you select Sort by Deletion Date from the Sort Options drop-down list, the files are listed from last to first deleted.

Sort Options

Sort by Deletion Date sorts numerically by the date that the file was deleted.

Sort by Deletor sorts alphabetically by name of user who deleted the file.

Sort by File Name sorts alphabetically by filename.

Sort by File Size sorts numerically by how large the file is.

Sort by File Type sorts alphabetically by the file's three-letter extension. (for example .EXE or .DAT).

Files without extensions (including those used by non-DOS name spaces such as Macintosh) are listed first in alphabetical order.

Salvage - Source

The Source field determines the source directory to use.

Note: If you have selected deleted directories as your source and you are working on a SYS: volume, it can take a long time to list the files. You should consider limiting the list using the Include field.

Source options

Get From Current Directory lists deleted files from the directory that you selected. You need the Create right to a file to salvage it from the current directory.

Get From Deleted Directories lists deleted files from directories that have been deleted. You need the Supervisor right to the root directory of the volume to salvage files from a deleted directory. A DELETED.SAV directory must exist in the root directory of this volume.

Salvage - File List Box

The File List box shows all files in the selected directory that have been deleted and can be salvaged or purged.

You can change which files are shown using the Include field and Source field. You can change how the list of files is organized with the Sort Options field. You can select all three fields before listing the files; which can save time if the directory is large. You also do not have to list the files before purging all files in the directory; just choose Purge.

Screen regions

File Name displays the name of the file.

Deleted Date displays the date that the file was deleted.

Deleted Time displays the time that the file was deleted.

File Size displays the size of the file in bytes.

Deletor Name displays the name of the user who deleted the file.

Last Update Date displays the date that the file was last written to.

Last Update Time displays the time that the file was last written to.

Last Updater Name displays the name of the user who last wrote to this file.

Creation Date displays the date that the file was first created in this location.

Creation Time displays the time that the file was first created in this location.

Owner Name displays the name of the user who created the file.

Archive Date displays the date that the file was last backed up.

Archive Time displays the time that the file was last backed up.

Archiver Name displays the name of the user who last backed up this file.

Last Access Date displays the date that the file was last read.

Salvage - Salvage button

Choose Salvage to salvage all selected files. You must have the Create right to a file in order to salvage it.

Files that are salvaged can be used as if they had never been deleted.

Files that have been permanently deleted (purged) cannot be salvaged or reused.

Salvage - Purge button

Choose Purge to permanently delete all selected files. You must be the owner of the file, or have at least the Erase right, in order to purge it.

Caution: If you have not chosen List yet, or if no files are selected, all deleted files in the directory that you selected are permanently deleted, not just the files described by the pattern in the Include field. A confirmation dialog appears before files are purged.

Permanently deleting files can speed up your system and free disk space, but permanently deleted files cannot be recovered for use later.

Salvage - File Already Exists

A file already exists in this directory with the same name as the file that you are trying to salvage. You must enter a new name for the file that you want to salvage.

1. In the Filename text box, enter a new filename.
2. Choose OK.

The file is salvaged and given the new name you entered in this dialog.
If you choose Cancel, this file is not salvaged.

Print the Objects in the Browser

You can print the objects listed in the browser as a one item per line list, in a two column format, or as a file that you can manipulate or print later.

Screen regions and buttons

Printer lists the printer you are currently connected to.

Print in Two columns allows you to choose the format of the printed objects--as a list with each object on a separate line, or in two columns.

Print to File allows you to save the objects listed in the browser to a file.

Print Quality allows you to choose the dots per inch for the print job.

OK sends the print job to the printer.

Cancel closes this dialog without making any changes.

Setup allows you to select how the information prints on the page, the paper size and source, and the printer.

Print Setup

This dialog allows you to choose a printer for the print job, choose the way the information appears on the page, and choose the paper size and source.

Screen regions and buttons

Printer allows you to choose the printer to print to.

Orientation allows you to choose the layout of the information on the page.

Paper allows you to choose the paper size and source for the print job.

OK saves all changes and returns you to the browser.

Cancel closes this dialog without making any changes.

Options allows you to choose to print to the printer or to an encapsulated postscript file, change the margins, set the scaling, or send a banner.

Continue or Cancel Object Operation

The objects that were not found may have been deleted, moved, or renamed by another user working in the same tree you're in. You probably need to collapse and expand the browser so that NetWare Administrator can refresh the browser and display the objects that actually exist in the tree.

Screen regions and buttons

Continue completes the object operation you began with the objects that were successfully found by NetWare Administrator. This button is disabled and appears gray if none of the objects you selected are valid.

Cancel stops the object operation you began and returns you to the browser.

Copy List to Clipboard copies the list of objects that you had selected (but which NetWare Administrator could not find) to the clipboard. You might want to copy the list of invalid objects to a document while you research why the objects are missing or deleted.

Print List launches the printer dialog where you can print the list of objects that you had selected (but which NetWare Administrator could not find).

New Features

These are the new features in this version of NetWare Administrator.

NetWare MHS Services

You can now use NetWare MHS Services to send and receive electronic mail. To provide messaging services, NetWare uses a Messaging Server, a Message Routing Group, a Distribution List, and an External Entity. For more information on NetWare MHS, see the MHS Manual.

Move Container Object (Move Partition)

Prior to NetWare 4.10, you could not move a container object. You can now move a container object, as long as it is the root object of a partition and has no subordinate partitions. You can move a partition using either Partition Manager (which you launch from within the NetWare Administrator graphical utility) or the NETADMIN text utility.

Rename Container

Prior to NetWare 4.10, you could not rename a container object. You can now rename a container object from the NetWare Administrator browser.

Snap-In SDK

You can now enhance NetWare Administrator by writing your own snap-in modules to help you manage NDS objects.

Setting Up NetWare Print Services

Network printing differs from stand-alone printing in that it requires storage, intermediate processing, and transmission between processing locations. To provide these functions, NetWare Print Services require you to create three printing objects: a Print Server, a Printer, and a Print Queue.

After you create the printing objects, Printer objects must be assigned to Print Server objects, and Print Queue objects must be assigned to Printer objects.

To create basic NetWare Print Services

1. Select the context or Organizational Unit where you want to create printing objects.
2. Create a Print Queue object.
Novell recommends that you choose the volume that usually has the most free disk space when creating the Print Queue object.
3. Create a Printer object.
From the Create Printer window, type in the name you want to assign to the printer and select Define Additional Properties.
4. Select the Assignments page.
5. Add the Print Queue object that you created in Step 2 to the Assignments page for the Printer object. This assigns the print queue to the printer.
6. Select the Configuration page and make any necessary changes.
Note: The default printer configuration is a parallel printer cabled to a NetWare server's LPT1 port using polled mode.
7. Choose OK to return to the browser.
8. Create a Print Server object.
From the Create Printer Server window, type in the name you want to assign to the print server and select Define Additional Properties.
9. Select the Assignments page of the Print Server object dialog.
10. Add the Printer object that you created in Step 3 to the Assignments page for the Print Server object. This assigns the Printer object to the Print Server object. Each print server can support up to 255 printers.
11. Choose OK to return to the browser.
12. Load the print server software (PSERVER.NLM) at the NetWare server console.
13. Load the correct network port driver. Load NPRINTER.EXE for printers cabled to workstations and NPRINTER.NLM for printers cabled to NetWare servers.
Users can now send print jobs to the printer or print queue.

Load Print Server Software



In order for NetWare print services to function, you must load a print server module (PSERVER.NLM) on your NetWare server corresponding to the Print Server object already created.

You cannot load multiple copies of PSERVER.NLM on the same NetWare server. PSERVER.NLM supports up to 255 printers.

To load a print server module

1. Go to the NetWare server console. You may use the Remote Console option under the Tools menu of NetWare Administrator.
You cannot load PSERVER.NLM from within NetWare Administrator except by using the Remote Console option.
2. At the NetWare server console prompt, type LOAD PSERVER.
A text-based browser appears.
3. Do one of the following:
 - 3a. Press <Ins> and select the container object where the Print Server object is defined; then select the Print Server object.
Example: Choose PS-SALES in the SALES container.
 - 3b. To avoid browsing for the print server, type
LOAD PSERVER .<PrintServerName>.<context>
at the NetWare server console.
Example: To load print server PS-SALES in the Organizational Unit SALES of Organization NOVELL, type **LOAD PSERVER .PS-SALES.SALES.NOVELL** at the NetWare server console.
5. Load NPRINTER.EXE or NPRINTER.NLM for each network printer.
Note: Only printers cabled to the NetWare server that loads PSERVER.NLM can be configured to have their NetWare port driver (NPRINTER.NLM) loaded automatically when the print server loads. This can be done from the Communications page of the Printer Configuration dialog. (This Auto Load option is the default.)

Load Network Printer Software

NetWare print services require you to load a network port driver for each printer. The port driver sends data through the appropriate port to the printer that services the print job.

How the printer is connected to the network determines where you load the port driver. Network printers can be cabled in the following ways:

- * Directly to the network cabling
- * To a DOS workstation (Load NPRINT.EXE on a DOS or Windows Workstation)
- * To an OS/2 workstation (Load NPRINT.EXE on an OS/2 Workstation)
- * To a NetWare server not running PSERVER.NLM (Load NPRINT.NLM at the NetWare Server Console)
- * To a NetWare server running PSERVER.NLM (NPRINT.NLM can be loaded automatically or manually. Specify which option you want at the Communications page of the Printer Configuration dialog. (The default is Auto Load.)

Load NPRINTER.NLM

1. Go to the NetWare server console by using the Remote Console option under the Tools menu, or physically go to the physical server.
Note: You cannot load the NPRINTER.NLM from within NetWare Administrator except by using the Remote Console option.

2. At the NetWare server console prompt, type

LOAD NPRINTER <PrintServerName> <PrinterNumber>

Replace *PrintServerName* with the advertising name (not the complete object name) of the print server. The print server's advertising name is on the Identification page of the Print Server object dialog.

Replace *PrinterNumber* with the logical printer number. The print server's logical printer number is next to the printer name on the Assignments page of the Print Server object dialog

Example: To load printer P1, which is assigned to print server PS-SALES with logical number 0, type

LOAD NPRINTER P1 PS-SALES 0

Note: NPRINTER.NLM can be loaded automatically if the NetWare server is running PSERVER.NLM. To configure NPRINTER.NLM to load automatically, use the Communication page of the Printer Configuration dialog.

Load Port Driver on a DOS or Windows Workstation

The NetWare port driver (NPRINTER.EXE) for a DOS or Windows workstation is a terminate-and-stay-resident (TSR) program.

NPRINTER.EXE allows a single workstation to support up to seven printers. NPRINTER.EXE must be loaded one time for each printer; it can be loaded either from a menu or from the command line.

On a Windows workstation

You must load NPRINTER.EXE before loading Windows 3.0 or 3.1 on the same workstation. You must also do one of the two following tasks:

- * Configure the printer to use polled mode instead of a specific interrupt number.
- * Configure the printer to use a specific interrupt by placing the following lines in the Windows SYSTEM.INI file under the heading [386Enh]

```
LPT1AutoAssign=0  
LPT1irq=-1
```

If the port is different from *LPT1*, specify the port that the printer is cabled to (for example, LPT2, COM1, COM2).

To load NPRINTER on a DOS workstation using the menu option

1. At the DOS prompt, type
NPRINTER
2. (Optional) Press <F4> to switch to Directory Services mode and then press <Ins> to browse for a printer. You can then skip to step 4.
3. Choose a print server.
A list of printers assigned to this print server appears.
4. Choose a printer.
If you choose a printer of type Other/Unknown instead of a manual load parallel or serial type printer, you must now specify whether the printer is cabled to a parallel or serial port, the port number, the interrupt, and so forth.

To load NPRINTER on a DOS workstation using the command line option

At the DOS prompt, type **NPRINTER PrinterName** and specify the full name that includes the Directory tree.

Example: To load printer P1 in the Organizational Unit SALES of Organization Novell, type
NPRINTER .CN=P1.SALES.NOVELL

Place the line in AUTOEXEC.BAT file for automatic execution each time the workstation boots. NPRINTER.EXE cannot be loaded directly from a login script.

To unload NPRINTER.EXE on a DOS or Windows workstation

1. Unload Windows if it is running.
2. At the DOS prompt, type **NPRINTER /U**
The most recently loaded NetWare port driver unloads.
You can unload only one port driver at a time.

Load Port Driver on an OS/2 Workstation

The NetWare port driver for an OS/2 workstation is available as an icon in the Novell icon created when you install the NetWare Client for OS/2.

Before running the port driver (NPRINTER.EXE), you need to define an OS/2 printer to correspond with each NetWare printer that will be receiving print jobs from an OS/2 queue.

NPRINTER.EXE can run any printer configured as Manual Load or type Other/Unknown.

To load a port driver on an OS/2 workstation, use the following procedure.

1. Choose the Novell icon from your desktop.
When you install the NetWare Client for OS/2, NPRINTER.EXE is available as an icon named Network Printer.
2. Choose the Network Printer icon from the Novell Icon View window on your desktop. Then select the Printers menu from the NPRINTER window.
The Load and Unload options are listed.
If the Load option is dimmed on this menu, you have already loaded the maximum number of OS/2 printers allowed (7). You must unload one before you can load another one.
If the Unload option is dimmed, no port drivers are currently loaded.
3. Choose Load from the Printers menu.
The Load Printers dialog box appears with a list of port drivers already defined for existing printers. If there are no configured printers on the list, you must define a printer. The following steps describe how to define and add a new printer.
 - 3a. Choose Define from the Load Printers menu.
A list of OS/2 printers currently defined on this workstation appears in the Define Printers dialog box.
 - 3b. Choose the Add button to define the OS/2 printer you want NPRINTER to load on this workstation.
The Add/Edit Printer dialog appears.
 - 3c. Type a printer name in the Description field.
You must fill in this field.
Novell recommends that you use the same name for this OS/2 printer as you assigned to the corresponding NetWare printer. (NetWare printers are defined and configured in NetWare Administrator or PCONSOLE.)
 - 3d. Double-click a print server from the Print Server Name list.
A list of NetWare printers now appears in the Printer Name box. These printers are active NetWare printers assigned to the selected print server. They were created with either PCONSOLE or NetWare Administrator.
Make sure the NetWare printers are defined as remote connection type. For example, on a parallel printer, the connection type should be Manual Load. Otherwise, the printers do not appear on the list.
 - 3e. Choose the desired printer by highlighting the name.
This specifies the NetWare printer for NPRINTER to later load.
 - 3f. (Optional) If you want NPRINTER to load the printer when NPRINTER is loaded, mark the box for Load on startup.
 - 3g. Using the arrow box to the right of the Default OS/2 print queue, select an OS/2 print queue.
NPRINTER requires that an OS/2 print queue exist on the workstation.
 - 3h. Choose OK.
This OS/2 printer now appears in the Define Printers dialog box with any other printers currently defined on this workstation.
 - 3i. (Optional) Repeat the appropriate steps above for each additional printer NPRINTER loads on this workstation.
You can have up to seven port drivers loaded concurrently.

4. Highlight the printer to be loaded and select Load.
Note: You cannot capture a port that NPRINTERR is loaded on. This will intercept jobs that NPRINTERR is sending to the port. You can either capture a different port or print directly to the port NPRINTERR is loaded on. (The job will be queued by OS/2.)
5. (Optional) To unload any or all port drivers, select Unload from the Printers menu. Highlight the printers you want to unload and select Unload, or unload them all by selecting Unload All.

Create a Print Server Object



A Print Server object represents a print server on the network. Print servers direct print jobs from print queues to the appropriate printers.

NetWare Print Services require a Print Server object along with a Printer object and Print Queue object in order for network users to share printers.

To create a Print Server object under the selected container

1. Type a name for this Print Server object in the Name text box.
This is both the name of the Print Server object as it appears in the Directory tree and as it is loaded at the NetWare server console. You must follow the object naming conventions.
2. (Optional) To define additional information about this print server right now, select Define Additional Properties.
You cannot select this if you select Create Another Print Server.
3. (Optional) To create another Print Server object immediately after this one, select Create Another Print Server.
You cannot select this if you select Define Additional Properties.
4. Choose Create.
If you selected Define Additional Properties, the Print Server object dialog appears.
If you selected Create Another Print Server, this dialog appears again.

Screen regions and buttons

Print Server Name shows the name of the Print Server as it appears in the Directory tree and as it is loaded at the NetWare server console.

Define Additional Properties lets you define more information about this Print Server (such as which printers it services and which users can access it) immediately after creating it.

Create Another Print Server repeats this dialog rather than returning to the browser.

Create creates the new Print Server object.

Cancel returns to the browser without creating a Print Server object.

Related topic

[Setting Up NetWare Print Services](#)

Create a Printer Object



A Printer object represents a physical printer on the network.

NetWare Print Services requires a Printer object along with a Print Server object and Print Queue object in order for network users to share printers.

To create a Printer object under the selected container

1. Type a name for this Printer object in the Name text box.
This is the name of the Printer object as it appears in the Directory tree. You must follow the object naming conventions.
2. (Optional) To define additional information about this printer right now, select Define Additional Properties.
You cannot select this if you select Create Another Printer.
3. (Optional) To create another Printer object immediately after this one, select Create Another Printer.
You cannot select this if you select Define Additional Properties.
4. Choose Create.
If you selected Define Additional Properties, the Printer object dialog appears.
If you selected Create Another Printer, this dialog appears again.

Screen regions and buttons

Printer Name shows the name of the Printer object as it appears in the Directory tree.

Define Additional Properties lets you define more information about this printer (such as which queues service it and which users have access to it) immediately after creating it.

Create Another Printer repeats this dialog rather than returning to the browser.

Create creates the new Printer object.

Cancel returns to the browser without creating a Printer object.

Related topic

[Setting Up NetWare Print Services](#)

Create a Print Queue Object

A Print Queue object represents a network print queue, a subdirectory that stores print jobs.

NetWare Print Services requires a Print Queue object along with a Printer object and Print Server object in order for network users to share printers.

To create a Print Queue object under the selected container

1. Type a name for this Print Queue object in the Name text box.
This is the name of the Print Queue object as it appears in the Directory tree. You must follow the object naming conventions.
2. Type a name for the print queue volume in the Volume text box, or choose the browser button to browse for a print queue volume.
Novell recommends that you choose the volume that usually has the most free disk space.
3. (Optional) To define additional information about this Print Queue object right now, select Define Additional Properties.
You cannot select this if you select Create Another Print Queue.
4. (Optional) To create another Print Queue object immediately after this one, select Create Another Print Queue.
You cannot select this if you select Define Additional Properties.
5. Choose Create.
If you selected Define Additional Properties, the Print Queue object dialog appears.
If you selected Create Another Print Queue, this dialog appears again.

Screen regions and buttons

Directory Services Queue allows you to create both a Print Queue object in your Directory tree and a physical directory for that print queue on a server.

Reference a Bindery Queue allows you to create a Print Queue object for a print queue that already exists outside your Directory tree. This queue is a previously defined directory on a NetWare 2 or NetWare 3 server or a NetWare 4 server in another Directory tree. Creating a Print Queue object for this queue allows you to manage printing outside your current Directory tree.

Print Queue Name shows the name of the print queue as it appears in the Directory tree.

Print Queue Volume shows the name of the volume on which this print queue's print jobs are stored.

Define Additional Properties lets you define more information about this print queue (such as which printers it services and which users can access it) immediately after creating it.

Create Another Print Queue repeats this dialog rather than returning to the browser.

Create creates the new Print Queue object.

Cancel returns to the browser without creating a Print Queue object.

Related topic

[Setting Up NetWare Print Services](#)

View or Change a Printer Object

The Identification page describes this Printer object. The fields in this page are only for your information and future reference. Most may be left blank if you wish. On this page, you can use this page to store information such as

- * Where the printer is located
- * Additional names for the printer

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you have entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Setting Up NetWare Print Services](#)

[See the Status of This Printer](#)

[Enter a Description for This Printer](#)

[Enter Another Name for This Printer](#)

Screen regions and buttons

Other Name lists identification information associated with this printer that helps you search for and identify specific printers.

Description describes the function the printer performs (such as print Sales documents).

Network Address lists the 16-digit (8-byte) number associated with the NetWare server or workstation that this printer is cabled to.

Location specifies the printer's physical location (such as a person's office).

Department shows the department or division that generally uses the printer.

Organization lists the organization that can use the printer.

Printer Status allows you to see information such as which print form the printer is using and how the printer is servicing print jobs.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

View the Status of This Printer

You must be an operator or user of a print server that services this printer to be able to see its status.

1. From the printer Identification page, choose Printer Status.
A dialog appears which shows the various status elements for printers.
2. To make any changes to this printer's status (such as changing forms or sending a form feed), use the buttons.
You must be an operator to change the printer's status.
Changes you make at the Printer Status page take effect immediately.

Screen regions and buttons

Status shows the current status of this printer. Possible printer statuses include the following:

- Not connected
- Waiting for form.
- Out of paper
- Printing
- Paused
- Stopped
- Offline
- Private
- Waiting for job
- Ready to go down

Mounted Form shows the number of the form currently mounted in the printer. Only print jobs that specify this printer form number can be printed until a new printer form is mounted with the Mount Form button.

Service Mode shows which service mode is being used by this printer and its associated print queue. The service mode determines how jobs within a print queue are organized for the most efficient use of the printer.

Current Job Information includes all of the information about the print job that is currently being printed on this printer. Most of this information can be changed only by going to the print queue and selecting this print job from the list of jobs.

Print Queue indicates the print queue submitting this print job.

Description indicates the banner name. By default, the banner name with CAPTURE is the port and with NPRINT it is the filename.

Job Number is the print job ID.

Form shows which printer form this print job is using. This print job cannot be printed unless this form matches the Mounted Form field above Current Job Information.

Copies Requested indicates the number of copies of this print job requested by the user.

Copies Complete indicates how many of those copies requested have been printed.

Size of 1 Copy indicates the size of each copy of this print job. This is like the File Size field when you see the details of a print job within the print queue.

Bytes Printed indicates the total number of bytes in one copy of a print job that have been printed.

Percent Complete indicates how much of this print job is complete, which is determined both by the size of one copy and the number of copies requested for this print job.

Abort Job allows you to cancel this print job and immediately stop printing.

Pause changes the status of this printer to Paused. If no jobs are printing and Pause is used, the

status is changed to Stopped. Only a print server operator can perform this action.

Start can change the status of this printer from Paused to Printing, Stopped to Printing, or Stopped to Waiting for Job.

Mount Form allows you to specify a new printer form that you have mounted on this printer. When you use this button, the Mounted Form field changes to reflect the newly mounted form. Only print jobs that specify the new form can be printed.

Eject Page sends a command to this printer to eject the page that is being printed. This is like a Form Feed command.

Printer Assignments Page

The Assignments page controls which Print Queues objects are assigned to this Printer object. On this page, you can

- * Add or delete print queue assignments
- * Specify a default print queue for print jobs sent to a printer, such as with CAPTURE or NPRINT.

Important: OK and Cancel affect the entire Object dialog, not just this page. Do not choose OK until you have entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

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[Add a Print Queue to the List of Queues Assigned to This Printer](#)

[Delete a Print Queue from the List of Queues Assigned to This Printer](#)

[Change a Print Queue's Priority](#)

[Change Which Print Queue is the Default Print Queue](#)

Screen regions and buttons

Print Server names the Print Server object that provides print jobs to this printer.

Print Queues lists the print queues and the service priority for each print queue serviced by this printer.

Add lets you add a print queue to the list of print queues assigned to this printer.

Delete lets you delete the highlighted print queue from the list of Print Queue objects. If you delete a print queue, all of its jobs are lost.

Priority allows you to define whether the print server sends print jobs from one print queue to the printer before or after print jobs in other print queues assigned to this printer. Highest priority = 1.

Default Print Queue shows which of the print queues in the Print Queues list is used when print jobs are being sent to a printer. These print jobs are stored in the default queue for that printer.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Add a Print Queue to the List of Queues Assigned to This Printer

1. Select Add.
2. Select the print queue that you want to add to the list.
3. Choose OK.

You return to the Assignments page, and the new Print Queue object is displayed.

The print server assigned to this printer can now take print jobs from the print queue that you added and send them to this printer.

Delete a Print Queue from the List of Queues Assigned to This Printer

1. Select a print queue from the Print Queues list box.
2. Select Delete.
The print queue is deleted from the list. Print jobs sent to that print queue are not printed.
3. Choose OK.

Change a Print Queue's Priority

A print queue's priority determines whether the print server sends print jobs from this print queue to the printer before or after print jobs in other print queues assigned to this printer.

1. Select a print queue from the Print Queues list box.
The priority of the selected print queue is shown in the Priority field.
2. Enter the new priority for the selected print queue in the Priority field.
You can select a number from 1 to 10, inclusive. Print queues with lower priority numbers are serviced before print queues with higher numbers.
3. Choose OK.
The priority is changed and you return to the browser.

Change Which Print Queue is the Default Print Queue

The default print queue is used for print jobs that specify a printer (for example, with the CAPTURE command). The default queue for a given printer is where the jobs will be stored.

1. Choose the arrow to the right of the Default Print Queue field.
The Print Queues list box appears.
2. Select a Print Queue object from the list.
The selected print queue appears in the Default Print Queue field.

Printer Notification Page

The Notification page controls the objects that are notified when the printer requires servicing (for example, when it is out of paper or jammed). You can

- * Add or delete User or container objects that receive printer error messages
- * Specify how soon and how frequently printer error messages arrive
- * Specify that the print job owner receive the printer status messages

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you have entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

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[Add to the List of Users Notified about This Printer](#)

[Delete from the List of Users Notified about This Printer](#)

[Change the Delays Used between Notifying Users about This Printer](#)

Screen regions and buttons

Notify shows objects that are notified about this printer.

First shows how long (in minutes) after an event that a notice is sent to the object in the Notify field.

Next shows how long (in minutes) after the first notification of an event that subsequent notices are sent to the object in the Notify field.

Add lets you add an object to the Notification list.

Delete lets you delete the selected object from the Notification list.

Notification Settings allows you to change notification intervals.

Notify Print Job Owner enters the print job owner as an object in the Notification list, so that the object that sends the print job receives notifications.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Add to the List of Users Notified about Printer Status

1. Choose Add.
2. Choose the object that you want to add to the list.
3. Choose OK.

You return to the Notification page, and the new object is added to the list. All of the objects listed are notified of changes in printer status.

Delete from the List of Users Notified about Printer Status

1. Select an object from the Notification list.

2. Choose Delete.

The object is deleted from the list. It is no longer be notified of changes in printer status. Note that if you delete the (Print job owner) entry, you can add it to the list by selecting the Notify Print Job Owner check box.

3. Choose OK.

Change the Delays Used between Notifying Users about Printer Status

1. Select the object from the Notification list box for which you want to change the delays for notification of changes in printer status.
The notification settings for the selected object appear in the Notification Settings fields.
2. Enter new numbers into the First and Next fields as needed.
The numbers represent the time in minutes that the print server waits to notify the selected object of an event related to this printer. First and Next represent a first and subsequent notifications of the event, if the printer status remains unchanged.
3. Choose OK.
You return to the browser.

Printer Features Page

The Features page stores printer information such as

- * Printer languages supported
- * Amount of memory
- * Supported typefaces

You can access this information through searches. For example, you can search for PostScript printers with at least 4 MB (4096 KB) of memory and the Futura font.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you have entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Add a Page Description Language for This Printer](#)

[Add to the List of Supported Typefaces for This Printer](#)

Screen regions and buttons

Page Description Language shows the printer languages supported by the printer. To add a language, choose the button to the right of the Page Description Language field and then choose Add for each language the printer supports.

Memory in KB shows the amount of RAM installed in the printer.

Supported Type Faces shows the fonts that the printer can use. You must enter the correct typefaces; they are not read from the printer.

Supported Cartridges lists the font cartridges that the printer can use. You must enter the correct cartridges; they are not read from the printer.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Add a Printer Language for This Printer

A printer language is a protocol or type of printing that this printer can receive (for example, PCL, PCL 5, or PostScript).

Enter the printer languages that this printer supports so that users can search for printers that support the language they need.

1. Enter a description of the main language used by this printer in the Page Description Language field.
2. To enter other printer languages for this printer, choose the button to the right of the Page Description Language field.
3. Add other descriptions in the Add Value dialog which appears.
4. Choose OK.
You return to the Features page of the Printer object dialog.

Add to the List of Supported Typefaces for This Printer

A typeface is a collection of fonts in different stroke weights and sizes that this printer can produce (for example, Helvetica and Times Roman).

Enter the typefaces that this printer supports so that users can search for printers that support a typeface they need.

1. Enter the first typeface (the default) used by this printer in the Supported Type Faces field.
2. To enter other typefaces (most network printers have many), choose the button to the right of the Supported Type Faces field.
3. Add other descriptions in the dialog that appears.
4. Choose OK.

You return to the Features page of the Printer object dialog.

Printer Configuration Page

The printer Configuration page allows you to store or define information about the hardware configuration of this printer and how it is used in the network. On this page, you can define information such as

- * Printer type: Serial, Parallel, AIO, UNIX, AppleTalk, XNP (eXtended NetWare Printer protocol), or Other/Unknown printers
- * Communication parameters that vary according to the printer type (This does not apply to printers with type Other/Unknown or XNP.)
- * Frequency at which the print server checks for print jobs for this printer

Note: The default values are for a parallel printer that is cabled to the LPT1 port of a NetWare server running PSERVER.NLM.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you have entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Setting Up NetWare Print Services](#)

[Change the Printer Type](#)

[Change the Service Mode for Forms Used by This Printer](#)

Screen regions and buttons

Printer Type shows the communication method used by this printer (for example, parallel or serial). Printers that attach to an OS/2 workstation or directly to the network, require type Other/Unknown.

Communication Parameters allows you to see the values defined for the selected printer type. Different dialogs are used depending on which printer type is selected. The dialog appears automatically whenever you change the printer type.

Banner Type shows whether the printer produces banner pages in text or PostScript mode.

Service Interval shows how often the print server checks the print queue for print jobs going to this printer. The default is every 5 seconds. Values from 1 to 255 are allowed.

Buffer Size in KB shows how large any piece of data sent to this printer can be. The default is 3 KB (3,072 bytes). Values from 3 to 20 are allowed.

Starting Form shows the number of the printer form that this printer services when the NetWare port driver is loaded. Printer forms are defined in the Organization or Organizational Unit object above this printer. Any form number defined there can be used here (values from 0 to 255 are possible).

Network Address Restrictions shows the network addresses that this printer can use. The Set button is used to add an IPX network address to this field.

Service Mode for Forms determines how the print server services print jobs in a print queue according to printer form.

When a print job requests a printer form other than the form currently mounted in the printer, the print server does not service the job until the new form is mounted in the printer.

The following service mode options determine how often the print server requires you to change printer forms:

Change Forms as Needed. The priority of each print queue and the order of print jobs in the print queue determine which print job to service next. You may have to change forms often.

Minimize Form Changes Within Print Queues. The print server requires you to mount a new form for a print job before servicing print jobs with the currently mounted form in a print queue with a lower priority.

Minimize Form Changes Across Print Queues. The print server services all print jobs requiring the currently mounted form before requesting a form change. Print jobs in lower priority print queues that require the mounted form are serviced before print jobs in a high priority print queue that require a different form.

Service Only Currently Mounted Form. The printer never requests a form change. If no print job requiring the current form is available, nothing is printed.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Change Printer Type

1. Choose the down arrow to the right of the Printer Type field.
2. Choose the correct printer type from the communication protocols listed.
For printers that attach to an OS/2 workstation or directly to the network, select type Other/Unknown.
(For example, HP III si or 4, Compaq PageMarq 20, GENICOM 7170, or Talaris 1794 Printstation.)
A dialog appears where you must check the communication values for the selected printer type.
(Other/Unknown and XNP do not have a dialog; they are configured elsewhere.)
3. Make any changes in the communication parameters dialog for this printer type.
4. Choose OK.
You return to the printer Configuration page.

Change the Service Mode for Forms Used by This Printer

The service mode determines how the print server services print jobs within a print queue according to printer form. A printer form is defined in the container object that contains the print server and print queue.

You can designate a printer form in a print job configuration to prevent your printer from printing a job on the wrong paper. When the print server detects a job in the print queue and that job requests a form other than the form currently mounted in the intended printer, the printer is paused and you are notified that a new form must be mounted before the print job can be serviced.

Printer forms do not in themselves specify any action for the printer to take. They simply prevent a job from printing until you change to the type of paper you want to print on and then tell the printer (using PCONSOLE, PSC, or NetWare Administrator) to resume printing. You can also mount printer forms at the NetWare server console in the print server console.

The service mode options determine how often the print server require you to change printer forms.

To select a service mode for this printer

1. Choose the arrow to the right of the Service Mode for Forms field.
2. Choose a service mode from the list that appears.
3. Choose OK.

You return to the browser.

Service mode options include the following:

Change Forms as Needed sends all print jobs to the printer in the order that they arrive, without considering whether the printer form currently in use is the same as the printer form needed by the next print job. You may have to change printer forms often.

Minimize Form Changes Across Print Queues indicates that the print server services print jobs that use the mounted form in print queues with lower priorities before it requires you to mount a new form for a print job in a higher priority print queue.

Minimize Form Changes Within Print Queues indicates that the print server requires you to mount a new form for a print job before servicing print jobs that use the mounted form in a print queue with a lower priority.

Service Only Currently Mounted Forms holds any print jobs that specify a printer form other than the one currently in use on this printer. In this mode, the printer never requests a form change. If no print job requiring the current form is available, nothing is printed.

AIO Printer Communication

This printer uses asynchronous input/output. Use this type for printers cabled to a special network board. These boards allow a workstation or NetWare server to support more than seven printers.

To modify this printer type

1. Make the changes to the fields so that the correct values are specified.
2. Choose OK.

Screen regions and buttons

Port indicates the number of the port where you want the printer to connect. The value must be a number ranging from 0 through 255.

Hardware Type refers to what specific hardware is being addressed. The allowable range is 0 through 255. Novell Labs has designated the following AIO hardware types:

- 0 Reserved
- 1 Comx
- 2 IBM Artic
- 3 Gateway Communications WNIM+
- 4-99 Reserved
- 100 Unused
- 101 AVM ISDN Controller-B1
- 102 Newport Systems ANIC
- 103 Newport Systems WNIC
- 104 Hayes Microcomputer Products ESP
- 105 DIGIXI Digiboard PC/Xe, PC/Xi and MC/Xi series
- 106 DIGICX Digiboard C/X multichannel cluster controllers
- 107 DIGIXM Digiboard PC/Xm and PC/Xem
- 108 DOGIEP Digiboard EPC/X system
- 109 Network Products Corporation NPCC
- 110 Unused

Board Number indicates the number coded into the AIO board this printer is using. The allowable range is 0 through 255.

Connection Type describes how this printer is connected to the network or a computer on the network. The options are Manual Load and Auto Load (the default).

All AIO printers can have their NetWare port driver manually loaded (or in an AUTOEXEC file) whether they are located at a NetWare server or a workstation.

You must select Manual Load for printers cabled to workstations or NetWare servers that do not load PSERVER.NLM. You have the option of selecting Manual Load for printers cabled to the NetWare server that loads PSERVER.NLM.

Network-attached printers are not cabled to parallel or serial printer ports. They contain their own network boards (for example, the HP111si and the Qume1700) and port drivers.

Line Control defines the parameters for serial printer communication.

Baud rate specifies the speed at which data is transferred over a serial interface. The most common baud rates for printers are 9600, 1200, and 300 baud. Consult your printer documentation to determine the correct baud rate.

Data bits specify the character length in bits (the number of bits used to represent a character in a character set). The standard ASCII character set has 128 characters of letters, numbers, and punctuation. It requires 7 bits for transmission. An extended character set has 256 characters with 128 characters from the standard character set and an additional 128 characters of line drawings and foreign characters. It requires a character length of 8 bits. The use of 5 data bits allows 1 or

1.5 stop bits. The use of 6, 7, or 8 data bits allows 1 or 2 stop bits.

Stop bits are special signals in asynchronous communications that indicate the minimum length of time after each character before the start bit for the next character is sent. This time is needed by the receiving circuitry to prepare to receive each new character. Most printers today are fast enough that Stop bits is set to one. Slower printers like teletypes require more than one stop bit. The use of 1.5 stop bits requires a character length of 5 data bits. To select 1.5 stop bits, first set data bits to 5.

Parity (parity checking) is a method of checking for errors in data transmission. Serial printers are commonly configured for no parity, but can be reconfigured if desired. Parity checking degrades speed by about 10% but may be desirable in some environments such as printers connected by very long cables. If you select None (the default), parity checking is not be used. If you select Even or Odd, parity checking is enabled and set to Even parity or Odd parity, respectively.

When parity checking is used, errors are reported at the printer. However, parity checking does not provide absolute assurance that no errors occur. If more than one bit changes, parity checking may or may not detect the error.

XON/XOFF is a flow control method used to prevent the sending system from transmitting data faster than the receiving system can accept the information. It is an alternate method for hardware handshaking; which uses the Clear to Send signal between the port and the printer. When Use XON/XOFF is set to Yes, the NetWare port driver expects the printer to send an XOFF character (<Ctrl>+<S>) whenever transmission should be suspended (usually indicating that the printer's memory buffer is full), and an XON character (<Ctrl>+<Q>) when transmission can be resumed. When Use XON/XOFF is set to No (the default), the NetWare port driver expects the printer to signal its ability to receive data by the state of the Clear to Send signal on the serial connection.

For details of serial pin configuration, see the Print Services manual. To avoid troubleshooting the printer or cable pin configuration, select Yes to enable the XON/XOFF protocol.

UNIX Printer Communication

The NetWare-to-UNIX print service enables native NetWare users to send print jobs to printers on your UNIX network, and users on UNIX workstations to send print jobs to printers on your native NetWare network.

In order to use this option, you must have the print driver LPR_GWY.NLM loaded on your NetWare server and be using the NetWare 4.1 version of PSERVER and PCONSOLE or NetWare Administrator. If this driver is loaded, you can set up NetWare-to-UNIX printing by entering the following information.

To modify this printer type

1. Make the changes to the fields so that the correct values are specified.
2. Choose OK.

Screen regions and buttons

Host Name indicates the name of the host of this printer within UNIX.

Printer Name indicates the name of this printer within UNIX.

AppleTalk Printer Communication

This printer is cabled to an AppleTalk network. (For more information, see *Print Services*.)

To modify this printer type

1. Make the changes to the fields so that the correct values are specified.
2. Choose OK.

Screen regions and buttons

Name specifies the name of this printer as it is known in the Macintosh system.

Type specifies which type of printer this is. Macintosh compatible printers are listed in the drop box.

Zone refers to the AppleTalk zone that the printer resides in. The zone is a name that is assigned to a group of computers and printers.

Print Error Messages indicates whether this printer prints error messages on a banner page.

Hide Printer shows whether or not this printer is hidden from the view of AppleTalk users. You should hide the printer to prevent Macintosh users from submitting their print jobs directly to the printer and possibly conflicting with NetWare print jobs.

Serial Printer Communication

This printer is cabled to a serial port of a workstation or NetWare server.

To modify this printer type

1. Make the changes to the fields so that the correct values are specified.
2. Choose OK.

Screen regions and buttons

Port specifies which hardware serial port this printer is using. Possible values that can be selected from the drop-down list are COM1, COM2, COM3, and COM4.

Interrupts are signals to a processor that temporarily suspend (interrupt) the current sequence of instructions to perform others. This is one method to control communications between the processor and a printer port. Another method is for the processor to poll the port at regular intervals.

If a port is set to use an interrupt, that interrupt generally must not be used by any other hardware. Interrupt numbers are repeated for different ports in the lists above only to show a common first choice for each. Some ports may not exist in the workstation, or may not have active interrupts, being accessed instead by some polling method.

The default printer configuration setting in NetWare 4 is polled mode, which does not use interrupts. For most situations, polled mode provides satisfactory performance and avoids the possibility of interrupt conflicts.

If you decide to use interrupts, this field indicates the number of the interrupt used by the port. Consult the documentation for your parallel or serial ports to find out which interrupt to use.

NetWare print services supports the use of interrupts 3, 4, 5, 7, 10, and 11. These interrupts correspond to the IRQ (Interrupt ReQuest) levels.

Serial printer ports generally use the following interrupts:

COM1: Interrupt 4
COM2: Interrupt 3
COM3: Interrupt 3
COM4: Interrupt 3

Connection type describes how this printer is connected to the network or a computer on the network. The options are Manual Load and Auto Load (the default).

All serial printers can have their NetWare port driver manually loaded (or in an AUTOEXEC file) whether they are located at a NetWare server or a workstation.

NPRINTER.NLM can be automatically loaded (using the Auto Load option).

You must select Manual Load for printers cabled to workstations or NetWare servers that do not load PSERVER.NLM. You have the option of selecting Manual Load or Auto Load for printers cabled to the NetWare server that loads PSERVER.NLM. Auto Load is the default.

Network-attached printers are not cabled to parallel or serial printer ports. They contain their own network boards (for example, the HP111si and the Qume1700) and internal equivalent of a port driver. (NPRINTER.EXE and NPRINTER.NLM are port drivers.)

Line Control defines the parameters for serial printer communication.

Baud rate specifies the speed at which data is transferred over a serial interface. The most common baud rates for printers are 9600, 1200, and 300 baud. Consult your printer documentation to determine the correct baud rate.

Data bits specify the character length in bits (the number of bits used to represent a character in a character set). The standard ASCII character set has 128 characters of letters, numbers, and punctuation. It requires 7 bits for transmission. An extended character set has 256 characters with 128 characters from the standard character set and an additional 128 characters of line drawings and foreign characters. It requires a character length of 8 bits. The use of 5 data bits allows 1 or 1.5 stop bits. The use of 6, 7, or 8 data bits allows 1 or 2 stop bits.

Stop bits are special signals in asynchronous communications that indicate the minimum length of time after each character before the start bit for the next character is sent. This time is needed by the receiving circuitry to prepare to receive each new character. Most printers today are fast enough that Stop bits is set to one. Slower printers like teletypes require more than one stop bit. The use of 1.5 stop bits requires a character length of 5 data bits. To select 1.5 stop bits, first set data bits to 5.

Parity (parity checking) is a method of checking for errors in data transmission. Serial printers are commonly configured for no parity, but can be reconfigured if desired. Parity checking degrades speed by about 10% but may be desirable in some environments such as printers connected by very long cables.

If you select None (the default), parity checking is not be used.

If you select Even or Odd, parity checking is enabled and set to Even parity or Odd parity, respectively.

When parity checking is used, errors are reported at the printer. However, parity checking does not provide absolute assurance that no errors occur. If more than one bit changes, parity checking may or may not detect the error.

XON/XOFF is a flow control method used to prevent the sending system from transmitting data faster than the receiving system can accept the information. It is an alternate method for hardware handshaking; which uses the Clear to Send signal between the port and the printer. When Use XON/XOFF is set to Yes, the NetWare port driver expects the printer to send an XOFF character (<Ctrl>+<S>) whenever transmission should be suspended (usually indicating that the printer's memory buffer is full), and an XON character (<Ctrl>+<Q>) when transmission can be resumed. When Use XON/XOFF is set to No (the default), the NetWare port driver expects the printer to signal its ability to receive data by the state of the Clear to Send signal on the serial connection.

For details of serial pin configuration, see the Print Services manual. To avoid troubleshooting the printer or cable pin configuration, select Yes to enable the XON/XOFF protocol.

Parallel Printer Communication

This printer is cabled to a parallel port of a workstation or NetWare server.

To modify this printer type

1. Make the changes to the fields so that the correct values are specified.
2. Choose OK.

Screen regions and buttons

Port specifies which hardware parallel port this printer is using. Possible values that can be selected from the drop-down list are LPT1, LPT2, and LPT3.

Interrupts are signals to a processor that temporarily suspend (interrupt) the current sequence of instructions to perform others. This is one method to control communications between the processor and a printer port. Another method is for the processor to poll the port at regular intervals.

If a port is set to use an interrupt, that interrupt generally must not be used by any other hardware. Interrupt numbers are repeated for different ports in the lists above only to show a common first choice for each. Some ports may not exist in the workstation, or may not have active interrupts, being accessed instead by some polling method.

The default printer configuration setting in NetWare 4 is polled mode, which does not use interrupts. For most situations, polled mode provides satisfactory performance and avoids the possibility of interrupt conflicts.

If you decide to use interrupts, this field indicates the number of the interrupt used by the port. Consult the documentation for your parallel or serial ports to find out which interrupt to use.

NetWare print services supports the use of interrupts 3, 4, 5, 7, 10, and 11. These interrupts correspond to the IRQ (Interrupt ReQuest) levels.

Parallel printer ports generally use the following interrupts:

LPT1: Interrupt 7
LPT2: Interrupt 5
LPT3: Interrupt 5

Connection type describes how this printer is connected to the network or a computer on the network. The options are Manual Load and Auto Load (the default).

All parallel printers can have their NetWare port driver manually loaded (or in an AUTOEXEC file) whether they are located at a NetWare server or a workstation.

NPRINTER.NLM can be automatically loaded (using the Auto Load option).

You must select Manual Load for printers cabled to workstations or NetWare servers that do not load PSERVER.NLM. You have the option of selecting Manual Load or Auto Load for printers cabled to the NetWare server on which PSERVER.NLM is loaded. The default is Auto Load.

Network-attached printers are not cabled to parallel or serial printer ports. They contain their own network boards (for example, the HP111si and the Qume1700) and the internal equivalent of a port driver. (NPRINTER.EXE and NPRINTER.NLM are port drivers.)

Interrupts for a Printer

Interrupts are signals to a processor that temporarily suspend (interrupts) the current sequence of instructions to perform others. This is one method to control communications between the processor and a printer port. Another method is for the processor to poll the port at regular intervals.

If a port is set to use an interrupt, that interrupt generally must not be used by any other hardware. Interrupt numbers are repeated for different ports in the lists above only to show a common first choice for each. Some ports may not exist in the workstation, or may not have active interrupts, being accessed instead by some polling method.

The default printer configuration setting in NetWare 4 is polled mode, which does not use interrupts. For most situations, polled mode provides satisfactory performance and avoids the possibility of interrupt conflicts.

If you decide to use interrupts, this field indicates the number of the interrupt used by the port. Consult the documentation for your parallel or serial ports to find out which interrupt to use.

NetWare print services supports the use of interrupts 3, 4, 5, 7, 10, and 11. These interrupts correspond to the IRQ (Interrupt ReQuest) levels.

Parallel printer ports generally use the following interrupts:

- LPT1: interrupt 7
- LPT2: interrupt 5
- LPT3: interrupt 5
- COM1: interrupt 4
- COM2: interrupt 3
- COM3: interrupt 3
- COM4: interrupt 3

Screen regions and buttons

Use Interrupts indicates to use a specific interrupt, rather than polled mode.

Interrupt allows you to select an interrupt number if Use Interrupts is selected.

Polled indicates to use polled mode. In polled mode, the PC uses the timer interrupt instead of a specific interrupt number to gauge signals to the printer.

Connection Type of a Printer

Connection Type specifies how the port driver (NPRINTER.EXE/NLM) is loaded.

Only printers cabled to the NetWare server that loads the print server (PSERVER.NLM) can have the port driver (NPRINTER.NLM) loaded automatically (Auto Load option).

Each NPRINTER.NLM loaded on a NetWare server displays a status screen on the NetWare server console.

Screen regions and buttons

The default is Auto Load.

Manual Load indicates that the port driver is manually loaded. You can select this option for a printer cabled to any PC on your network. If the printer is cabled to a workstation, you must load NPRINTER.EXE from the command line or AUTOEXEC.BAT file. If the printer is cabled to a NetWare server, you must load NPRINTER.NLM from the NetWare server console or AUTOEXEC.NCF file.

Auto Load indicates that the port driver is automatically loaded. (This is the default.) You can select this option only for printers cabled to a NetWare Server running PSERVER.NLM. With this option, NPRINTER.NLM is automatically loaded by PSERVER.NLM when you load PSERVER.NLM.

Line Control for a Printer

Line control defines the parameters for serial printer communication.

Screen regions and buttons

Baud Rate specifies the speed at which data is transferred over a serial interface. The most common baud rates for printers are 9600, 1200, and 300 baud. Consult your printer documentation to determine the correct baud rate.

Data Bits specify the character length in bits (the number of bits used to represent a character in a character set). The standard ASCII character set has 128 characters of letters, numbers, and punctuation. It requires 7 bits for transmission. An extended character set has 256 characters with 128 characters from the standard character set and an additional 128 characters of line drawings and foreign characters. It requires a character length of 8 bits. The use of 5 data bits allows 1 or 1.5 stop bits. The use of 6, 7, or 8 data bits allows 1 or 2 stop bits.

Stop Bits are special signals in asynchronous communications that indicate the minimum length of time after each character before the start bit for the next character is sent. This time is needed by the receiving circuitry to prepare to receive each new character. Most printers today are fast enough that Stop bits is set to one. Slower printers like teletypes require more than one stop bit. The use of 1.5 stop bits requires a character length of 5 data bits. To select 1.5 stop bits, first set data bits to 5.

Parity (parity checking) is a method of checking for errors in data transmission. Serial printers are commonly configured for no parity, but can be reconfigured if desired. Parity checking degrades speed by about 10% but may be desirable in some environments such as printers connected by very long cables. If you select None (the default), parity checking is not be used. If you select Even or Odd, parity checking is enabled and set to Even parity or Odd parity, respectively.

When parity checking is used, errors are reported at the printer. However, parity checking does not provide absolute assurance that no errors occur. If more than one bit changes, parity checking may or may not detect the error.

Use XON/XOFF is a flow control method used to prevent the sending system from transmitting data faster than the receiving system can accept the information. It is an alternate method for hardware handshaking; which uses the Clear to Send signal between the port and the printer. When Use XON/XOFF is set to Yes, the NetWare port driver expects the printer to send an XOFF character (<Ctrl>+<S>) whenever transmission should be suspended (usually indicating that the printer's memory buffer is full), and an XON character (<Ctrl>+<Q>) when transmission can be resumed. When Use XON/XOFF is set to No (the default), the NetWare port driver expects the printer to signal its ability to receive data by the state of the Clear to Send signal on the serial connection.

For details of serial pin configuration, see the *Print Services* manual. To avoid troubleshooting the printer or cable pin configuration, select Yes to enable the XON/XOFF protocol.

Printer Status

This dialog shows the status of this printer. You must be an operator or user of a print server that services this printer to be able to see its status.

To change the status of this printer

Use the buttons to make any changes to this printer's status (such as changing printer forms or sending a Form Feed).

You must be an operator to change the printer's status.

Screen regions and buttons

Status shows the current status of this printer. Possible printer statuses include the following:

- Not connected
- Waiting for form.
- Out of paper
- Printing
- Paused
- Stopped
- Offline
- Private
- Waiting for job
- Ready to go down

Mounted Form shows the number of the form currently mounted in the printer. Only print jobs that specify this printer form number can be printed until a new printer form is mounted with the Mount Form button.

Service Mode shows which service mode is being used by this printer and its associated print queue. The service mode determines how jobs within a print queue are serviced for the most efficient use of the printer and printer forms.

Current Job Information includes all the information about the print job currently being printed on this printer. Some of this information can be changed only by going to the print queue and selecting this print job from the list of jobs.

Print Queue indicates the print queue submitting this print job.

Description indicates the banner name of this print job. If NPRINT is used, it is the filename. If CAPTURE is used, it is the port that was captured.

Job Number is the Job ID

Form shows which printer form this print job is using. This print job cannot be printed unless this Form matches the Mounted Form field above Current Job Information.

Copies Requested indicates the number of copies of this print job requested by the user who submitted it.

Copies Complete indicates how many of those copies have been printed.

Size of 1 Copy indicates the size of each copy of this print job. This is like the File Size field when you see the details of a print job within the print queue.

Bytes Printed indicates the total number of bytes sent to the printer for this print job.

Percent Complete indicates how many bytes of one copy of this print job have been printed.

Abort Job allows you to cancel this print job. Printing is not stopped.

Pause changes the status of this print job. Status can be changed from Printing to Paused, or from

Waiting for Job to Stopped. Only a print queue operator can perform this action.

Start changes the status of this print job. Status can be changed from Paused to Printing, Stopped to Printing, or Stopped to Waiting for Job.

Mount Form allows you to specify a new printer form that you have mounted on this printer. When you use this button, the Mounted Form field changes to reflect the newly mounted form. Only print jobs that specified the new form can be printed.

Eject Page sends a command to this printer to eject the page that is being printed. This is like a Form Feed command.

Mount a Printer Form *

This dialog allows you to control the printer forms used by this printer.

You can designate a printer form in a print job configuration to prevent your printer from printing a job on the wrong paper. When the print server detects a job in the print queue and that job requests a form other than the form currently mounted in the intended printer, the printer is paused and you are notified that a new form must be mounted before the print job can be serviced.

Printer forms do not in themselves specify any action for the printer to take. They simply prevent a job from printing until you change to the type of paper you want to print on and then tell the printer (using PCONSOLE, PSC, or NetWare Administrator) to resume printing. You can also mount printer forms at the NetWare server console in the print server console.

To mount a printer form

1. Choose the name of the printer form you want.
2. Choose OK.
Cancel returns you to the Printer Status dialog without modifying the printer form.

View or Change a Print Server Object

The Identification page describes this Print Server object. The fields in this page are for your information and reference only. Most may be left blank if you wish. On this page, you can store information such as

- * Additional names for the print server
- * Where the print server is located

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you have entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

To change the object's name, select the object and choose Rename from the Object menu.

Procedures

- [How to Use the Object Dialog](#)
- [Setting Up NetWare Print Services](#)
- [Enter a Description for This Print Server](#)
- [Enter Another Name for This Print Server](#)
- [Change the Password of This Print Server](#)
- [Down This Print Server](#)

Screen regions and buttons

Name is the name of this Print Server object.

Advertising Name shows the name the print server uses in network communications.

Other Name lists identification information associated with this print server that helps you search for and identify it among other print servers. (Optional)

Network Address lists the 8 digit IPX internal network address of the NetWare server that runs this print server (PSERVER.NLM), followed by additional address information.

Description describes the function the print server performs (such as routing print jobs for a particular group). (Optional)

Location shows the print server's physical location (such as a room number). (Optional)

Department shows the department or division that generally uses the print server. (Optional)

Organization shows the organization that is using the print server. (Optional)

Version shows the version of PSERVER.NLM being used with this Print Server object to control Print Services.

Status shows the status of the print server (Running, Going Down, or Down).

Unload allows you to take down an active print server.

Change Password allows you to set a password to secure the Print Server object. You can also remove a password with this option.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Print Server Assignments Page *

The Assignments page controls the printers assigned to this Print Server object. On this page, you can add or delete printer assignments.

At least one Printer object must be assigned to a print server in order for NetWare Print Services to function properly.

Important: OK and Cancel affect the entire Object dialog, not just this page. Do not choose OK until you have entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Add a Printer to the List of Printers Serviced by This Print Server](#)

[Delete a Printer from the List of Printers Services by This Print Server](#)

Screen regions and buttons

Printer shows the name of a Printer object that is serviced by this print server.

Number shows the number of each Printer object in the list of printers serviced by this print server.

Add lets you add a printer to the list of Printer objects assigned to be serviced by this print server.

Delete removes the selected printer from the list of Printer objects serviced by this print server.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Change the Printer Number

This dialog allows you to modify the logical printer number. A logical number is assigned to each printer when it is created. You may want to change this number to match existing batch files, for example.

NPRINTER.NLM requires and NPRINTER.EXE allows you to load a port driver by specifying the print server name and logical printer number.

After changing the printer number, you must unload and reload the print server for the changes to take effect.

Unload Print Server *

You must be an operator of this print server to unload the print server software.

To unload a print server

1. Select one of the two options for unloading PSERVER.NLM (see below).
You can cancel current print jobs and unload PSERVER.NLM now, or finish the print jobs that are in progress before unloading. You normally should allow current print jobs to finish (choose the second option).
2. Choose OK.
The PSERVER.NLM software is unloaded and you return to the object dialog. No print jobs serviced by this print server are printed until PSERVER.NLM is reloaded.

Screen regions and buttons

Unload Print Server Immediately stops printing right now and unloads PSERVER.NLM. Other print jobs serviced by this print server are not printed until PSERVER.NLM is reloaded.

Unload Print Server After Current Jobs finishes the current print jobs in print queues serviced by this print server. The PSERVER.NLM is then unloaded and no new print jobs are started until PSERVER.NLM is reloaded.

OK unloads PSERVER.NLM as you have specified and returns to the object dialog.

Cancel closes this dialog without unloading PSERVER.NLM and returns to the object dialog.

Add a Printer to the List of Printers Serviced by This Print Server

1. Choose the Add button below the Printers list box.
2. Choose the printer that you want to add to the list.
3. Choose OK.

You return to the Assignments page, and the new Printer object is displayed.

You must unload and reload the print server before the printer you added can receive print jobs from print queues serviced by this print server. However, you must also list a print queue in this printer's Assignments page.

Delete a Printer from the List of Printers Serviced by This Print Server

1. Select a printer from the Printers list box.
2. Choose Delete.
The printer is deleted from the list. Print jobs sent to a print queue serviced by this print server can no longer be sent to the deleted printer.
3. Choose OK.

After deleting the printer, you must unload and reload the print server for the changes to take effect.

View or Change the List of Print Server Operators

Operators of a [print server](#) are allowed to manage the print server and [printers](#) serviced by this server. This includes downing the print server, seeing its status, and controlling the printers it services.

Use the Operators page to record operators of this print server. For example, you can

- * See which objects are listed as operators
- * Add or delete objects from the list of operators

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you have entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Add an Operator](#)

[Delete an Operator](#)

Screen regions and buttons

Operators lists objects that are operators of this print server.

OK saves the changes specified in all pages of the object dialog and returns you to the browser.

Cancel closes the dialog box without saving the changes entered in any page.

Add a Print Server Operator

1. Choose Add
2. Select objects that you want to add as operators.
3. Choose OK.

The objects you selected are listed as operators. These objects can manage this print server and the printers it services.

Delete a Print Server Operator

1. Select an operator from the Operators list.
2. Choose Delete.
The operator is removed from the list.
3. Choose OK.

View or Change the List of Users for a Print Server

Objects that are listed as users of this [print server](#) are allowed by Queue Management Services to see the status of this print server.

The Users page lists users of this print server. This list is created and maintained by the network supervisor. For example, you can

- * View users who access this print server
- * Add or delete a user of this print server

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you have entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Add a User](#)

[Delete a User](#)

Screen regions and buttons

Users lists all objects that are users of this print server and allowed to see its status.

OK returns to the browser and saves any changes you have made.

Cancel returns you to the browser without saving any changes you have made.

Add a Print Server User

1. Choose the Add button below the Users list box.
2. Choose the object that you want to add to the list.
3. Choose OK.
You return to the Users page, and the new object is displayed.

Delete a Print Server User

1. Select a user from the Users list box.
2. Choose Delete.
The user is removed from the list.
3. Choose OK.

View or Change a Print Queue Object *

The Identification page describes this [Print Queue](#) object. The fields in this page are for your information and reference only. Most may be left blank if you wish. On this page, you can store information such as

- * Additional names for this print queue
- * Where this print queue is located

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you have entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

To change the object's name, select the object and choose Rename from the Object menu.

Procedures

[How to Use the Object Dialog](#)

[Setting up NetWare Print Services](#)

[Enter a Description for This Computer](#)

[Enter another Name for This Computer](#)

Screen regions and buttons

Name shows the name of this Print Queue object.

Volume shows the name of the NetWare volume that contains the directory where this print queue stores print jobs in progress.

Other Name lists other names of this Print Queue object (such as a name the queue was previously known by). (Optional)

Description describes the function the print queue performs (such as print jobs for a particular group). (Optional)

Location shows the print queue's physical location (such as a room number). (Optional)

Department shows the department or division that generally uses the print server. (Optional)

Organization lists the organization that can use the print queue. (Optional)

Operator Flags

Allow Users To Submit Print Jobs If set to No, prevents users from submitting print jobs to the print queue until you reset it to Yes.

Allow Service By Current Print Servers If set to No, prevents servers from servicing print jobs in the print queue until you reset it to Yes.

Allow New Print Servers To Attach If set to No, prevents servers from attaching to the print queue until you reset it to Yes.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Print Jobs in This Print Queue *

This dialog lists the print jobs that are currently in this print queue. Information about each print job is shown in the table. Use the arrows in the scroll bar to expand your view of the table's contents.

You must be an operator of this print queue to change the status of a print job that you did not submit.

Screen regions and buttons

Print Queue shows the name of the Print Queue object for which you are viewing print jobs that have been submitted.

Print Jobs shows the number of print jobs currently in this print queue.

Seq (sequence) shows the order in which each job is sent to the printer.

Job Name shows the name of the print job submitted to the print queue. By default, if CAPTURE is used, this is the port the job that was sent to; if NPRINT is used, this is the filename.

Description shows a description of the print job that was submitted.

Form shows which of the available printer forms is to be used for this print job.

Status shows the status of the print job: Ready, Held, Paused, or Printing.

Job ID shows the ID of the print job assigned by NetWare.

Job Details shows the code for each print job that the print queue used to identify the print job.

Hold Job allows you to hold the job in the print queue without printing, if you have rights to do so.

Resume activates a print job on hold so that it can be printed.

Delete allows you to delete a print job from the print queue if you have rights to do so.

OK saves changes in this dialog and returns to the Print Queue Identification page.

Cancel closes this dialog without saving changes and returns to the Print Queue Identification page.

Details of a Print Job in This Print Queue *

This dialog shows the details of one of the print jobs that is currently in this print queue.

You must be an operator of this print queue to change a print job that you did not submit. If you are an operator, or you submitted the print job that you are viewing, you can change any of the fields that are not dimmed.

Procedures

Setting Up NetWare Print Services

Screen regions and buttons

Print Job shows the job ID of this print job.

File Size shows the file size, in bytes, of this print job.

Client shows the name of the user who submitted this print job.

Description shows a description that was entered for this print job.

Status shows the status of this print job. The possible statuses are as follows:

- Print job is being serviced.
- Print job has operator hold.
- Print job is ready and waiting for the print server.
- Print job is being added to the print queue.
- Print job will be serviced at the target date and time.

User Hold indicates that the print job has been put on hold by the user who submitted the print job.

Operator Hold indicates that the print job has been put on hold by the queue operator.

Service Sequence shows this print job's position in line to be printed.

Number of Copies shows how many copies of this print job the print server are to be sent to the printer.

File Contents shows the type of file that was sent for this print job.

Byte Stream indicates that this print job consists of a byte stream file, such as a graphic, or PostScript file.

Text indicates that this print job consists of a text file, containing only ASCII characters.

Tab Size is used only with text files, and sets the number of spaces between tab stops.

Form Feed shows whether or not a form feed character is sent to the printer at the end of this print job.

Notify When Job is Printed shows whether users are notified when this print job has been completed.

Entry Date shows the date that this print job was submitted to the queue.

Entry Time shows the time that this print job was submitted to the queue.

Form shows which printer form is being used to print this print job. You can select from available printer forms using the drop-down box.

Print Banner shows whether a banner page with identification information is being printed as the first page of this print job.

Name identifies the user who sent this print job. This is only valid if a banner page is printed.

Banner Name indicates the name of the print job. This is only valid if a banner page is printed.

Defer Printing indicates that the printing of this job is delayed until a later date and time.

Target Date shows the date when this print job will be printed. This field is valid only if Defer Printing is selected.

Target Time shows the time when this print job will be printed. This field is only valid if Defer Printing is selected.

OK saves changes in this dialog and returns to the list of print jobs in this print queue.

Cancel closes this dialog without saving changes and returns to the list of print jobs in this print queue.

Print Queue Assignments Page *

The Assignments page lists the printers this print queue is assigned to and the print servers assigned to the printers. You cannot change these assignments here, only view them.

To change assignments between Print Server and Printer objects, use the Print Server object dialog. To change assignments between Printer and Print Queue objects, use the Printer object dialog.

Procedures

[How to Use the Object Dialog](#)

[Setting Up NetWare Print Services](#)

Screen regions and buttons

Authorized Print Servers shows the print servers that are servicing this print queue. You must use the Print Server object dialog to change these assignments.

Printers Servicing Print Queue shows the printers that are receiving print jobs from this print queue. You must use the Printer object dialog to change these queue assignments.

View or Change the List of Print Queue Operators

Operators of a [print queue](#) are allowed to manage the print jobs in the print queue. This includes activities such as deleting print jobs or changing their order. Use the Operators page to record operators of this print queue. For example, you can do the following:

- * See which objects are listed as operators
- * Add or delete objects from the list of operators

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you have entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Add an Operator](#)

[Delete an Operator](#)

Screen regions and buttons

Operators lists objects that are operators of this print queue.

OK saves the changes specified in all pages of the object dialog and returns you to the browser.

Cancel closes the dialog without saving the changes entered in any page.

Add an Operator

1. Choose Add.
2. Select objects that you want to add as operators.
3. Choose OK.

The objects you selected are listed as operators. These objects can manage the print jobs in this print queue.

Delete an Operator

1. Select an operator from the Operators list.
2. Choose Delete.
The operator is removed from the list.
3. Choose OK.

View or Change the List of Users for a Print Queue

Objects that are listed as users of this [print queue](#) are allowed to submit print jobs to this print queue, and to manage jobs they submit.

The Users page lists users of this print queue. This list is created and maintained by the network supervisor. On this page, if you have appropriate rights, you can do the following:

- * View users who access this print queue
- * Add or delete a user of this print queue

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you have entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Add a User](#)

[Delete a User](#)

Screen regions and buttons

Users lists all objects that are users of this print queue and are allowed to submit print jobs to it.

OK returns to the browser and saves any changes you have made.

Cancel returns to the browser without saving any changes that you have made.

Add a Print Queue User

1. Choose Add.
2. Choose the object you want to add to the list.
3. Choose OK.

You return to the Users page, and the new object is displayed. This object can now submit print jobs to this print queue.

Delete a Print Queue User

1. Select a user from the Users list.
2. Choose Delete.
The user is deleted from the list.
3. Choose OK.

Log In to a Server

Server Login allows you to establish a bindery connection to a NetWare server that is not in your current Directory tree so that you can access its print queues.

Enter your username and password for the server, then choose OK.

Reference a Bindery Queue

Allows you to browse for an existing print queue outside of your Directory tree so that you can create a Print Queue object for that queue.

Creating a Print Queue object allows you to manage printing in an environment that is running multiple versions of NetWare or that has more than one Directory tree.

You can locate print queues on any server you have an account on.

To locate a print queue

1. At the Create Print Queue dialog, choose Reference a Bindery Queue.
2. From the Network Servers list, select a server.
To access a print queue on a server you are not attached to, unmark List Only Attached Servers.
2. From the Queues list, select the print queue that you want to appear in the Directory tree.
3. Choose OK.

You can now create a print queue object in the Directory tree.

Screen regions and buttons

Network Server/Queue displays the queue that appears in the Directory tree and the queue's bindery server.

List Only Attached Servers allows you to limit the list of bindery servers to only those you are currently attached to or expand the list to all bindery servers in the network. If your network is large, building a list of all servers can take some time.

Network Servers lists servers outside of your Directory tree from which you may want to access queues.

Queues lists queues available on the server highlighted in the Network Servers list.

OK transfers the information listed in the Network Sever/Queue field to the appropriate fields in the Create Print Queue dialog.

Cancel returns you to the Create Print Queue dialog without changing any of its information.

Related Topics

[Setting Up NetWare Print Services](#)

View Print Layout

Print layout shows a map of your printing setup. You can see which print objects are assigned to each other and each object's status. This information can help you quickly determine if printing is up or which print objects may have problems.

Double-clicking on a print object in the print layout expands or contracts the tree of objects below.

A trouble icon indicates printing problems. Expand the print layout tree completely to see exactly which object is not functioning

A dashed line between objects means the connection is established only for the current print server session rather than configured to connect every time the print server is loaded.

Screen regions and buttons

Update refreshes the print layout tree to reflect any changes with the print objects.

Status provides a brief summary of the selected printing object's details. For complete detail information, select the object in the browser Directory tree and choose Details.

To view the status for an object, use the right-hand mouse button.

Status for print jobs is not available in print layout. Manage print jobs from the queue the job is stored in.

Audit Print Jobs

The auditing log is a file created by the print server that allows you to track print jobs. The log stores information such as which printer the job was sent to, how large the job was, and how long it took to print. By default, the auditing log is not enabled. No log file is created unless you enable auditing, and then unload and reload the print server.

The auditing log provides information about all jobs that have been printed. Auditing records are retained as ASCII files so that they can be read with any text editor. In designing the auditing log, Novell has recognized that companies do accounting in a variety of ways. For this reason, the auditing log provides a basic default format based on ASCII and a fixed record length. Both characteristics are designed to make it as easy as possible to write a customized program to retrieve the information you need in a format determined by your organization.

The auditing log is sufficiently flexible to record whatever information a printer sends to it. Regardless of printer type, the log records how many bytes a job took to print, the user who submitted the job, when the job entered the print queue, when the job was printed, and what printer serviced the job.

If the printer is an XNP type used by Macintosh or UNIX, the log might also indicate how long it took to print the job, how many pages were printed, when the job was printed, and when the job was submitted.

Screen regions and buttons

Status indicates whether auditing is enabled or disabled. Choose Enable Auditing to enable auditing. Choose Disable Auditing to disable auditing.

Location of Auditing Log shows the path where the log file is created. This location is not configurable.

Current Size is the size of the file.

Limit Size allows you to specify whether you want to limit the size of the log file. If the print server log is not monitored regularly, it can grow until it uses all available disk space. Limiting the size of this file prevents this problem, but you risk losing valuable accounting information because information is not recorded after the maximum size has been reached.

Maximum Print Jobs allows you to limit the number of print jobs recorded in the auditing log.

After auditing has been enabled, you must unload and then reload the print server for auditing to begin.

After you have enabled auditing, we suggest that you submit a print job to ensure that the log is recording information on print jobs properly.

Change a Print Server Password

You can help ensure security for your print server by limiting access to it with a password. Security could be compromised if someone gains unauthorized access as a Print Server object and takes advantage of security equivalencies.

The following are suggestions for passwords that improve network security:

- * Don't use common dictionary words
- * Don't use the names of family members or pets
- * Don't use birthdays
- * Use combinations of words
- * Combine alpha and numeric characters in the password

To change a password

1. In the New Password field, type the new password. (The Old Password field is permanently dimmed.)
The password is not case sensitive.
2. In the Retype New Password field, type the new password again.
3. Choose OK.

Note: To remove a password without assigning a new one, leave both fields blank and choose OK.

Screen regions and buttons

New Password is where you enter the new password.

Retype New Password is where you enter the new password a second time.

OK changes the password.

Cancel closes this dialog without changing the password.

How to Use the Object Dialog

Use the object dialog to set or change information about an object. You can open an object dialog several different ways.

The object dialog has two areas:

- * An information area, where you work with that object
- * A page area, where you specify information about the object

To open pages, choose a page button. The information area changes when you open a page. All pages are part of the object dialog. When you open a page, you're still in the same object dialog.

You can move back and forth between pages by pressing the <CTRL> Page Up and <CTRL> Page Down keys on your keyboard.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Screen regions and buttons

More * allows multiple entries in a field.

browser * appears next to fields that require the complete name of an object. Lets you browse and select an object.

Page buttons change the information you can edit.

OK saves the changes in all pages of the dialog.

Cancel closes the dialog without saving the changes entered in any page.

Enter a Title

The Title property is one of several properties of this object that are shown on the Identification page of the object dialog.

Use this procedure as an example for entering values for any of the properties on the Identification page with a similar field style.

To enter a title

1. Select the Title field.

Note: If this is not the first value in the Title property, you must choose the More button to the right of the Title field and use the dialog that appears to enter other values. Choose Help in that dialog for more information.

2. Type the title that you want recorded as a property of this object.

3. Choose OK.

The information is saved to NetWare Directory Services when you choose OK.

Enter Another Name for This Object

The Other Names field can record any identification information you think is useful for this object. You can add several alternative names for this object. Any of these names can be used when searching for this object.

Use this procedure as an example for entering values for any of the properties on the Identification page with a similar field style.

To enter another name for this object

1. Select the Other Name field.

Note: If this is not the first value in the Other Names property, choose the More button to the right of the Other Names field and use the dialog that appears to enter other values. Choose Help in that dialog for more information.

2. Type the name you want recorded as a property of this object.
3. Choose OK.

The information is saved to NetWare Directory Services when you choose OK.

Enter a Location for This Object

The Location field can record any information that you think is useful for this object. It is generally used to record the physical location of the object, such as where your office complex is located.

Use this procedure as an example for entering values for any of the properties on the Identification page with a similar field style.

To enter a location

1. Select the Location field.
Note: If this is not the first value in the Location property, choose the More button to the right of the Location field and use the dialog that appears to enter other values. Choose Help in that dialog for more information.
2. Type the location that you want recorded for this object.
3. Choose OK.
The information is saved to NetWare Directory Services when you choose OK.

Enter a Description of This Object

The Description field can record any information that you think is useful.

You can enter up to 30 lines of 37 characters each.

Description is a property of most objects in NetWare Directory Services.

To enter a description

1. Select the Description field.
2. Type the information that you want recorded for this object.
The information scrolls as you type. Use the scroll bar to the right of the field to scroll through the text that you have entered. Choose Help for more information.
3. Choose OK.
The information is saved to NetWare Directory Services when you choose OK.

Enter a Serial Number for This Object

The Serial Number field can be used to record the unique serial number of this object. A serial number uniquely identifies each piece of equipment you own.

This field can be very useful when searching for information about a specific piece of equipment.

To enter a serial number

1. Select the Serial Number field.
2. Type the serial number of the piece of equipment represented by this object.
3. Choose OK.
The information is saved to NetWare Directory Services when you choose OK.

Enter a Fax or Phone Number for This Object

The Fax and Telephone Number fields record numbers where the people or places represented by this object can be reached.

You can enter several fax numbers and several phone numbers for each object.

Use this procedure as an example for entering values for any of the properties on the Identification page with a similar field style.

To enter a fax or phone number

1. Select the Fax or Telephone Number field.

Note: If this is not the first value in the Fax or Telephone Number property, choose the More button to the right of the field and use the dialog that appears to enter other values. Choose Help for more information.

2. Type the number that you want recorded as a property of this object.
You can use any characters or symbols.
3. Choose OK.

The information is saved to NetWare Directory Services when you choose OK.

See What Name Spaces Are Used on This Volume

To see what name spaces are available (or installed) on the volume where this file or directory is stored, look at the Name Space list. Every file or directory on a volume must have a name in every name space that is installed on that volume.

For example, if your file has a name shown for DOS, OS/2, and Macintosh name spaces, those name spaces are available to every file on that volume, and every file must have a name in each of those name spaces.

See the Name of This File or Directory in Each Available Name Space

The name of each file or directory is listed with all of the available name spaces in the table on the Identification page of the object dialog for the file or directory. Look at the table to see what the name of the file or directory name is in each of the available name spaces.

Printer Forms

You can designate a printer form in a print job configuration to prevent your printer from printing a job on the wrong paper.

When the print server detects a job in the print queue and that job requests a form other than the form currently mounted in the intended printer, the printer is paused and you are notified that a new form must be mounted before the print job can be serviced.

Printer forms do not in themselves specify any action for the printer to take. They simply prevent a job from printing until you change to the type of paper you want to print on and then tell the printer (using PCONSOLE, PSC, or NetWare Administrator) to resume printing. You can also mount printer forms at the NetWare Server console in the print server console.

Printer form names must begin with an alphabetic character and can have up to 12 alpha-numeric characters. Numbers can range from 0-255. Length can range from 1-255. Width can range from 1-999. Width numbers are for your information only. They do not control what the printer does. The length value is used by the rewind function.

The Printer Forms page lists the different forms that can be used when printing to a Printer object in this [container](#).

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Create a New Printer Form](#)

[Modify a Printer Form](#)

[Delete a Printer Form](#)

Screen regions and buttons

Number/Name lists the number and name of each printer form defined for this container object.

Create opens the Create Printer Form dialog, where you can enter values for a new printer form.

Modify opens the Modify Printer Form dialog with the values of the selected printer forms displayed. You can then change any of these values.

Delete opens the Delete Printer Form dialog that displays the values of the selected printer forms. This allows you to see what you are deleting when you choose OK.

All changes take effect immediately.

Create a New Printer Form

1. From the Printer Forms page, choose Create.
The Create Printer Form dialog appears.
2. In the Name field, enter a name.
The name must begin with a letter and must be unique. It can be up to 12 characters long. Spaces are converted to underscores (_).
3. In the Number field, enter a number from 0 to 255.
4. In the Length field, enter a number from 1 to 255.
This is the length of the printer form you are defining, measured in lines of text.
5. In the Width field, enter a number from 1 to 999.
This is the width of the printer form you are defining, measured in characters.
6. Choose OK.
A printer form with the name you entered is listed in the Printer Forms list box. Any time that printer form is used, the values you entered with that printer form name are used.

Modify a Printer Form

1. From the Printer Forms page, select a printer form from the Printer Forms list box.
2. Choose Modify.
The Modify Printer Form dialog appears. The values for the printer form that you selected appear in the fields of the dialog. You can change any of the fields.
3. (Optional) In the Name field, enter a new name.
The name must begin with a letter and must be unique. It can be up to 12 characters long. Spaces are converted to underscores (_).
4. (Optional) In the Number field, enter a number from 0 to 255.
5. (Optional) In the Length field, enter a number from 1 to 255.
This is the length of the printer form you are redefining, measured in lines of text.
6. (Optional) In the Width field, enter a number from 1 to 999.
This is the width of the printer form you are redefining, measured in characters.
7. Choose OK.
The form is now modified. The printer form that you selected in Step 1 is still selected. It appears with a different name if you changed the Name field in Step 3.
You do not have to choose OK in the object dialog to complete the action.

Delete a Printer Form

1. From the Printer Forms dialog, select a printer form from the Printer Forms list box.
2. Choose Delete.
The Delete Printer Form dialog appears. The values for the printer form you selected appear in the fields, but are grayed. You can see what values you are deleting as part of this printer form, but you cannot change them here.
3. Choose OK.
You return to the Printer Forms list box. The printer form that you selected is deleted from the list of printer forms.
The Delete operation cannot be undone.
You do not have to choose OK in the object dialog to complete the action.

Print Device Definitions

The Print Devices page lists the names of different types of print devices that can be used as printers in this container. You can add new definitions for print devices, or modify the definitions of existing print devices. Use Import and Export to avoid re-entering information for the same device in different containers.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Create a New Print Device Definition](#)

[View or Modify a Print Device Definition](#)

[Delete a Print Device Definition](#)

[Import a Print Device Definition](#)

[Export a Print Device Definition](#)

Screen regions and buttons

Print Devices lists the names of the print devices defined for use in this container object.

Create opens the Create Print Device dialog, where you can enter the name for a new print device. Functions and modes are added using the Modify Print Device dialog.

Modify opens the Modify Print Device dialog, where you can view or add functions and modes for the selected print device.

Delete opens the Delete Print Device dialog, where you can see the name of the selected print device definition before deleting it. You cannot examine functions and modes from this dialog.

Import opens the Import Print Device dialog, which allows you to use an existing definition without re-entering the information.

Export opens the Export Print Device dialog, where you can enter the name of a file that the selected print device definition should be saved as.

All changes take effect immediately.

Create a Print Device

This dialog allows you to create a new print device that can be used by objects in this container. A print device is defined by name, functions, and modes, but you enter only a name in the Create dialog. Use the Modify Print Device dialog to enter functions and modes.

To create a new print device definition

1. In the Name field, enter a print device name.
You can use up to 32 characters for the name. It must begin with a letter or number; spaces are allowed.
2. Choose OK.
The name of the print device that you entered is added to the list. Use the Modify Print Device dialog to define functions and modes for this print device before using it.

Delete a Print Device Definition

This dialog allows you to delete the definition of a print device that was previously entered. The definition can then no longer be used by objects in this container. All functions and modes are deleted at the same time.

To delete this print device definition

1. From the Print Devices list box, select a print device name.
2. Choose Delete.
The Delete Print Device dialog appears with the Name field and the Functions and Modes buttons grayed. You cannot modify the definition here; you can only see what you are deleting.
3. Choose OK.
The print device that was listed in the Name field is deleted from the Print Devices list box and is no longer available to objects in this container.

Import a Print Device

This dialog allows you to import a definition for a print device that can be used by objects in this container. A definition consists of a name, functions, and modes.

With NetWare, Novell ships a set of commonly used .PDF files, which are found in the SYS:PUBLIC directory. In order to use these definitions in your job configurations, they must be imported.

The Import button allows you to use an existing definition without re-entering all of the functions and modes. You may import a definition that was provided with NetWare or that was created for another container. To import a print device in this dialog, use the following procedure:

To import a print device definition

1. From the File Open dialog, choose Import below the Print Devices list box.
2. From the Files window, select the file for the print device definition that you want to import.
The file extension .PDF is used for print device definition files.
3. Choose OK.
The print device is added to the Print Devices list box, and the definition contained in the file can now be used by objects in this container.

Export a Print Device

This dialog allows you to export a print device definition listed in this dialog from a database. The print device definition can then be imported for use in other containers without re-entering all functions and modes.

To export a print device definition

1. From the Print Devices list box, select a print device definition.
2. Choose Export below the Print Devices list box.
3. Find the directory where you want to create a file containing this print device definition.
The file extension .PDF is used for print device definition files.
The name of the print device definition is used as the filename when you export a definition. All spaces are removed and the first eight characters of the print device definition are used.
4. Choose OK.
The print device definition is saved. All functions and modes are included in the definition. The definition can be imported to another container.

Modify a Print Device Definition

This dialog allows you to modify the definition of a print device that was previously created. You can add, change, or delete the functions and modes that are defined for this device. The definition can be used by objects in this container.

You can change a print device name, or any of its functions or modes.

A function is an action that the print device can perform, such as bold text or proportional spacing.

A mode is a combination of functions that you define to prepare the print device for specific printing needs. For example, you might define a print mode called Title that includes functions for bold, double wide, and letter-quality printing.

Procedures

[Change the Name of This Print Device](#)

[Add a Function to This Print Device](#)

[Modify a Function](#)

[Delete a Function](#)

[Add a Mode to This Print Device](#)

[Modify a Mode](#)

[Delete a Mode](#)

Screen regions and buttons

Name shows the name of this print device.

Functions shows the functions that have been entered for this print device. These include all of the capabilities of this print device, such as compressed or letter-quality printing.

Modes shows the modes that have been entered for this print device. A mode is a combination of functions that you define to serve a specific printing need.

Create Function allows you to add a function to the Functions list.

Create Mode allows you to define a new mode and add it to the Modes list.

Modify allows you to change the selected mode or function by adding or removing functions or control sequences, respectively, from its definition.

Delete deletes the selected mode or function. The functions that were a part of a selected mode are not affected; they are still part of the print device definition.

Change the Name of This Print Device

1. In the Name field, enter a new name.
2. Choose OK.
You return to the list of print devices. The new name appears in the list.

Add a Function to This Print Device

1. Choose Create Function.
The Create Function dialog appears. The name of the print device is at the top of the dialog.
2. In the Function Name field, enter a name for the new function.
Function names must be unique (no two names can be the same) and no longer than 32 characters. Function names are not case sensitive. You can use both letters and numbers.
3. Enter the characters used by this printer as a control sequence to engage this function.
Characters with ASCII values from 33 through 126 are not delimited; they appear as is. If a character in the control sequence has an ASCII value less than 33 or equal to 127, the character is displayed as a delimited acronym, as listed below. If the character's ASCII value is greater than 127, it is displayed as a delimited ASCII value. The value is a decimal number.

The space character can be entered as a space or as a delimited token. A space is displayed as a delimited token.

Except for delimited tokens, characters in a function follow the used as is rule. This means that the characters you see displayed are the actual characters that make up the function.

Delimited Tokens

PRINTDEF functions can contain special characters when delimited tokens are included in the function. A delimited token has two parts--the delimiters and the token.

The three types of delimiters are

Angle brackets < and >

Backwards slash \

Caret ^

Because these characters function as delimiters, they are exceptions to the used as is rule. To enter a left-angle bracket (<), backwards slash (\), or caret (^), you must enter two characters. The right-angle bracket (>) can be used as is.

For example, a function that contains the string \\<<^^ will be interpreted as \<^^. The double rule is used when entering and displaying PRINTDEF functions.

The other part to a delimited token is the token. A token can be a number, character, or a valid character string.

Numbers are used in conjunction with the angle bracket or backwards slash delimiters and can be entered in decimal or hexadecimal. To enter a hexadecimal number, use a 0x or 0X prefix. A number without the hexadecimal prefix is assumed to be decimal.

For example, the ASCII control character can be input by the delimited numbers <27>, <0x1b>, <0X1B>, \27, \0x1b, or \0X1B.

You can enter any ASCII character value from 0 to 255 using this method.

Character tokens can be used with angle bracket or caret delimiters. Valid characters are A through Z and a through z. Delimited character tokens are the same as ASCII control characters. In other words, ^A has an ASCII value of 1, ^B has an ASCII value of 2, etc.

Character string tokens are the names or acronyms of ASCII control characters. The name is not case sensitive. For example, the ASCII control character can be input by the delimited strings <esc>, <ESC>, or <Esc>.

The syntax for a delimited token is any of the following:

delimited_token = delimited_number, delimited_character, or delimited_string

delimited_number = <number_token> or \number_token

delimited_character = ^character_token or <^character_token>

delimited_string = <string_token>

character_token = A - Z or a - z

string_token = <control character name>

The following are examples of three equivalent functions:

<ESC><SI>^^<soh>

<0x1B><0xF>\0x5E<0x7F>^A

\27<15><94><127>\1

ASCII ValueVALID STRING TOKENS

0	NUL, NULL
1	SOH, ^A, START OF HEADER, START_OF_HEADER, STARTOFHEADER
2	STX, ^B, START OF TEXT, START_OF_TEXT, STARTOFTEXT
3	ETX, ^C, END OF TEXT, END_OF_TEXT, ENDOFTEXT
4	EOT, ^D, END OF TRANSMISSION, END_OF_TRANSMISSION, ENDOFTRANSMISSION
5	ENQ, ^E, ENQUIRE
6	ACK, ^F, ACKNOWLEDGE
7	BEL, ^G, BELL
8	BS, ^H, BACK SPACE, BACK_SPACE, BACKSPACE
9	TAB, ^I, HT, HORIZONTAL TAB, HORIZONTAL_TAB, HORIZONTALTAB
10	LF, ^J, LINE FEED, LINE_FEED, LINEFEED
11	VT, ^K, VERTICAL TAB, VERTICAL_TAB, VERTICALTAB
12	FF, ^L, FORM FEED, FORM_FEED, FORMFEED
13	CR, ^M, RET, CARRIAGE RETURN, CARRIAGE_RETURN, CARRIAGERETURN
14	SO, ^N, SHIFT OUT, SHIFT_OUT, SHIFTOUT
15	SI, ^O, SHIFT IN, SHIFT_IN, SHIF TIN
16	DLE, ^P, DATA LINK ESCAPE, DATA_LINK_ESCAPE, DATALINKESCAPE
17	DC1, ^Q, DEVICE CONTROL 1, DEVICE_CONTROL_1, DEVICECONTROL1
18	DC2, ^R, DEVICE CONTROL 2, DEVICE_CONTROL_2, DEVICECONTROL2
19	DC3, ^S, DEVICE CONTROL 3, DEVICE_CONTROL_3, DEVICECONTROL3
20	DC4, ^T, DEVICE CONTROL 4, DEVICE_CONTROL_4, DEVICECONTROL4
21	NAK, ^U, NEGATIVE ACKNOWLEDGE, NEGATIVE_ACKNOWLEDGE, NEGATIVEACKNOWLEDGE
22	SYN, ^V, SYNCHRONOUS
23	ETB, ^W, END OF TRANSMISSION BLOCK, END OF TRANS BLOCK, END_OF_TRANSMISSION_BLOCK, ENDOFTRANSMISSIONBLOCK
24	CAN, ^X, CANCEL
25	EM, ^Y, END OF MEDIUM, END_OF_MEDIUM, ENDOFMEDIUM
26	SUB, ^Z, SUBSTITUTE
27	ESC, ^[, EC, ESCAPE
28	FS, ^/, FILE SEPARATOR, FILE_SEPARATOR, FILESEPARATOR
29	GS, ^], GROUP SEPARATOR, GROUP_SEPARATOR, GROUPSEPARATOR
30	RS, RECORD SEPARATOR, RECORD_SEPARATOR, RECORDSEPARATOR
31	US, ^_, UNIT SEPARATOR, UNIT_SEPARATOR, UTILSEPARATOR
32	SP, SPACE
127	DEL, DELETE

4. Choose OK.

You return to the Modify Print Device dialog. The function that you entered is listed in the Functions list.

Modify a Function

You can create or modify print device functions by entering the necessary control sequences. These control sequences (also called control codes or escape sequences) are described in the operator's manual for your printer.

A function is an action that the print device can perform, such as bold text or proportional spacing. You can cause the print device to perform the function by sending control codes to the print device.

Create or modify a print device function

1. From the Functions list, select a function.
You cannot select a function and a mode at the same time in this dialog.
2. Choose Modify.
The Modify Function dialog appears. The name of the print device is shown at the top of the dialog.
3. (Optional) In the Function Name field, enter a new name for the function.
Function names must be unique (no two names can be the same) and no longer than 32 characters. Function names are not case sensitive. You can use both letters and numbers.
4. Enter the characters used by this printer as a control sequence to engage this function.
Characters with ASCII values from 33 through 126 are not delimited; they appear as is. If a character in the control sequence has an ASCII value less than 33 or equal to 127, the character is displayed as a delimited acronym, as listed below. If the character's ASCII value is greater than 127, it is displayed as a delimited ASCII value. The value is a decimal number.

The space character can be entered as a space or as a delimited token. A space is displayed as a delimited token.

Except for delimited tokens, characters in a function follow the used as is rule. This means that the characters you see displayed are the actual characters that make up the function.

Delimited Tokens

PRINTDEF functions can contain special characters when delimited tokens are included in the function. A delimited token has two parts--the delimiters and the token.

The three types of delimiters are

Angle brackets < and >

Backwards slash \

Caret ^

Because these characters function as delimiters, they are exceptions to the used as is rule. To enter a left-angle bracket (<), backwards slash (\), or caret (^), you must enter two characters. The right-angle bracket (>) can be used as is.

For example, a function that contains the string \\<<^> will be interpreted as \<^>. The double rule is used when entering and displaying PRINTDEF functions.

The other part to a delimited token is the token. A token can be a number, character, or a valid character string.

Numbers are used in conjunction with the angle bracket or backwards slash delimiters and can be entered in decimal or hexadecimal. To enter a hexadecimal number, use a 0x or 0X prefix. A number without the hexadecimal prefix is assumed to be decimal.

For example, the ASCII control character can be input by the delimited numbers <27>, <0x1b>, <0X1B>, \27, \0x1b, or \0X1B.

You can enter any ASCII character value from 0 to 255 using this method.

Character tokens can be used with angle bracket or caret delimiters. Valid characters are A through Z and a through z. Delimited character tokens are the same as ASCII control characters. In other words, ^A has an ASCII value of 1, ^B has an ASCII value of 2, etc.

Character string tokens are the names or acronyms of ASCII control characters. The name is not case sensitive. For example, the ASCII control character can be input by the delimited strings <esc>, <ESC>, or <Esc>.

The syntax for a delimited token is any of the following:

delimited_token = delimited_number, delimited_character, or delimited_string

delimited_number = <number_token> or \number_token
delimited_character = ^character_token or <^character_token>
delimited_string = <string_token>
character_token = A - Z or a - z
string_token = <control character name>

The following are examples of three equivalent functions:

<ESC><SI>^^<soh>
<0x1B><0xF>\0x5E<0x7F>^A
\27<15><94><127>\1

ASCII Value VALID STRING TOKENS

0	NUL, NULL
1	SOH, ^A, START OF HEADER, START_OF_HEADER, STARTOFHEADER
2	STX, ^B, START OF TEXT, START_OF_TEXT, STARTOFTEXT
3	ETX, ^C, END OF TEXT, END_OF_TEXT, ENDOFTEXT
4	EOT, ^D, END OF TRANSMISSION, END_OF_TRANSMISSION, ENDOFTRANSMISSION
5	ENQ, ^E, ENQUIRE
6	ACK, ^F, ACKNOWLEDGE
7	BEL, ^G, BELL
8	BS, ^H, BACK SPACE, BACK_SPACE, BACKSPACE
9	TAB, ^I, HT, HORIZONTAL TAB, HORIZONTAL_TAB, HORIZONTALTAB
10	LF, ^J, LINE FEED, LINE_FEED, LINEFEED
11	VT, ^K, VERTICAL TAB, VERTICAL_TAB, VERTICALTAB
12	FF, ^L, FORM FEED, FORM_FEED, FORMFEED
13	CR, ^M, RET, CARRIAGE RETURN, CARRIAGE_RETURN, CARRIAGERETURN
14	SO, ^N, SHIFT OUT, SHIFT_OUT, SHIFTOUT
15	SI, ^O, SHIFT IN, SHIFT_IN, SHIF TIN
16	DLE, ^P, DATA LINK ESCAPE, DATA_LINK_ESCAPE, DATALINKESCAPE
17	DC1, ^Q, DEVICE CONTROL 1, DEVICE_CONTROL_1, DEVICECONTROL1
18	DC2, ^R, DEVICE CONTROL 2, DEVICE_CONTROL_2, DEVICECONTROL2
19	DC3, ^S, DEVICE CONTROL 3, DEVICE_CONTROL_3, DEVICECONTROL3
20	DC4, ^T, DEVICE CONTROL 4, DEVICE_CONTROL_4, DEVICECONTROL4
21	NAK, ^U, NEGATIVE ACKNOWLEDGE, NEGATIVE_ACKNOWLEDGE, NEGATIVEACKNOWLEDGE
22	SYN, ^V, SYNCHRONOUS
23	ETB, ^W, END OF TRANSMISSION BLOCK, END OF TRANS BLOCK, END_OF_TRANSMISSION_BLOCK, ENDOFTRANSMISSIONBLOCK
24	CAN, ^X, CANCEL
25	EM, ^Y, END OF MEDIUM, END_OF_MEDIUM, ENDOFMEDIUM
26	SUB, ^Z, SUBSTITUTE
27	ESC, ^[, EC, ESCAPE
28	FS, ^/, FILE SEPARATOR, FILE_SEPARATOR, FILESEPARATOR
29	GS, ^], GROUP SEPARATOR, GROUP_SEPARATOR, GROUPSEPARATOR
30	RS, RECORD SEPARATOR, RECORD_SEPARATOR, RECORDSEPARATOR
31	US, ^_, UNIT SEPARATOR, UNIT_SEPARATOR, UTILSEPARATOR
32	SP, SPACE
127	DEL, DELETE

5. Choose OK.

Delete a Function

1. From the Functions list, select a function.

You cannot select a function and a mode at the same time in this dialog.

2. Choose Delete.

The Delete Function dialog appears. The name of the print device is at the top of the dialog. All fields are grayed because you cannot change anything; you can only see what you are deleting.

3. Choose OK.

Add a Mode to This Print Device Definition

To create a mode, you select functions that have been defined for this print device. You can repeat a function in a mode definition. Functions are executed in the order listed.

1. Choose Create Mode.
The Create Mode dialog appears. The name of the print device is shown at the top of the dialog.
All of the functions defined for this printer are listed in the Device Functions list box.
2. In the Mode Name field, enter a name for the new mode.
3. From the Device Functions list, select the function that you want to be executed first. Functions are executed in the order listed.
4. Choose Add Below.
5. From the Device Functions list, select the function that you want to be executed next.
You can select the same function more than once if the mode requires it.
6. Repeat Steps 4 and 5 until all of the functions that you want as part of this mode are listed in correct order in the Mode Functions list box.
If you make a mistake, use the Delete or Add Above buttons to rearrange the functions listed in Mode Functions.
7. Choose OK.

Modify a Mode

1. From the Modes list in the Modify Print Devices dialog, select a mode.
You cannot select both a function and a mode in this dialog.
2. Choose Modify.
The Modify Mode dialog appears. The name of the print device is shown at the top of the dialog for your reference.
All of the functions defined for this printer are listed in the Device Functions list box.
3. (Optional) In the Mode Name field, enter a new name for the mode.
4. From the Device Functions list, select the function that you want to add to the mode.
5. In the Mode Functions list, select the function next to where you want to insert the new function.
6. Choose Add Below or Add Above to insert the selected device function in the correct place in the Mode Functions list.
7. Select any mode function that you want to delete from the definition of this mode.
8. Choose Delete.
The selected function is no longer a part of this mode definition. The function is still a part of this device definition, but is not used for this mode.
9. Repeat Steps 4 through 8 for modes you want to modify.
10. Choose OK.
You return to the Modify Print Device dialog.

Delete a Mode

1. Select a mode from the Modes list.
Note: You cannot delete the [Reinitialization] mode from the list, even if it has no functions defined. You should add functions to the [Reinitialization] mode to restart your printer and create the correct settings. Refer to your printer documentation.
You cannot select a function and a mode at the same time in this dialog.
2. Choose Delete.
The Delete Mode dialog appears. The name of the print device is shown at the top of the dialog. All fields are grayed because you cannot change anything; you can only see what you are deleting.
3. Choose OK.

Create a Function for a Print Device

This dialog allows you to enter a name and control sequences to define a print device function. Control sequences (also called control codes or escape sequences) are described in the operator's manual of your print device.

A function is an action that the print device can perform, such as bold text or proportional spacing. You cause the print device to perform the function by sending control sequences to the print device.

To create a new function definition

1. In the Function field, enter a function name.
Function names must be unique (no two names can be the same) and no longer than 32 characters. Function names are not case sensitive. You can use both letters and numbers.
2. In the Control Sequence field, enter a control sequence by typing the characters that the printer uses to set that function.

See the operator's manual for your print device to find the correct control sequences for print device functions.

Characters with ASCII values from 33 through 126 are not delimited; they appear as is. If a character in the control sequence has an ASCII value less than 33 or equal to 127, the character is displayed as a delimited acronym, as listed below. If the character's ASCII value is greater than 127, it is displayed as a delimited ASCII value. The value is a decimal number.

The space character can be entered as a space or as a delimited token. A space is displayed as a delimited token.

Except for delimited tokens, characters in a function follow the used as is rule. This means that the characters you see displayed are the actual characters that make up the function.

Delimited Tokens

PRINTDEF functions can contain special characters when delimited tokens are included in the function. A delimited token has two parts--the delimiters and the token.

The three types of delimiters are

- Angle brackets < and >
- Backwards slash \
- Caret ^

Because these characters function as delimiters, they are exceptions to the used as is rule. To enter a left-angle bracket (<), backwards slash (\), or caret (^), you must enter two characters. The right-angle bracket (>) can be used as is.

For example, a function that contains the string \\<<^> will be interpreted as \<^>. The double rule is used when entering and displaying PRINTDEF functions.

The other part to a delimited token is the token. A token can be a number, character, or a valid character string.

Numbers are used in conjunction with the angle bracket or backwards slash delimiters and can be entered in decimal or hexadecimal. To enter a hexadecimal number, use a 0x or 0X prefix. A number without the hexadecimal prefix is assumed to be decimal.

For example, the ASCII control character can be input by the delimited numbers <27>, <0x1b>, <0X1B>, \27, \0x1b, or \0X1B.

You can enter any ASCII character value from 0 to 255 using this method.

Character tokens can be used with angle bracket or caret delimiters. Valid characters are A through Z and a through z. Delimited character tokens are the same as ASCII control characters. In other words, ^A has an ASCII value of 1, ^B has an ASCII value of 2, etc.

Character string tokens are the names or acronyms of ASCII control characters. The name is not case sensitive. For example, the ASCII control character can be input by the delimited strings <esc>, <ESC>, or <Esc>.

The syntax for a delimited token is any of the following:

- delimited_token = delimited_number, delimited_character, or delimited_string
- delimited_number = <number_token> or \number_token

delimited_character = ^character_token or <^character_token>
 delimited_string = <string_token>
 character_token = A - Z or a - z
 string_token = <control character name>

The following are examples of three equivalent functions:

<ESC><SI>^^<soh>
 <0x1B><0xF>\0x5E<0x7F>^A
 \27<15><94><127>\1

ASCII ValueVALID STRING TOKENS

0	NUL, NULL
1	SOH, ^A, START OF HEADER, START_OF_HEADER, STARTOFHEADER
2	STX, ^B, START OF TEXT, START_OF_TEXT, STARTOFTEXT
3	ETX, ^C, END OF TEXT, END_OF_TEXT, ENDOFTEXT
4	EOT, ^D, END OF TRANSMISSION, END_OF_TRANSMISSION, ENDOFTRANSMISSION
5	ENQ, ^E, ENQUIRE
6	ACK, ^F, ACKNOWLEDGE
7	BEL, ^G, BELL
8	BS, ^H, BACK SPACE, BACK_SPACE, BACKSPACE
9	TAB, ^I, HT, HORIZONTAL TAB, HORIZONTAL_TAB, HORIZONTALTAB
10	LF, ^J, LINE FEED, LINE_FEED, LINEFEED
11	VT, ^K, VERTICAL TAB, VERTICAL_TAB, VERTICALTAB
12	FF, ^L, FORM FEED, FORM_FEED, FORMFEED
13	CR, ^M, RET, CARRIAGE RETURN, CARRIAGE_RETURN, CARRIAGERETURN
14	SO, ^N, SHIFT OUT, SHIFT_OUT, SHIFTOUT
15	SI, ^O, SHIFT IN, SHIFT_IN, SHIFTOIN
16	DLE, ^P, DATA LINK ESCAPE, DATA_LINK_ESCAPE, DATALINKESCAPE
17	DC1, ^Q, DEVICE CONTROL 1, DEVICE_CONTROL_1, DEVICECONTROL1
18	DC2, ^R, DEVICE CONTROL 2, DEVICE_CONTROL_2, DEVICECONTROL2
19	DC3, ^S, DEVICE CONTROL 3, DEVICE_CONTROL_3, DEVICECONTROL3
20	DC4, ^T, DEVICE CONTROL 4, DEVICE_CONTROL_4, DEVICECONTROL4
21	NAK, ^U, NEGATIVE ACKNOWLEDGE, NEGATIVE_ACKNOWLEDGE, NEGATIVEACKNOWLEDGE
22	SYN, ^V, SYNCHRONOUS
23	ETB, ^W, END OF TRANSMISSION BLOCK, END OF TRANS BLOCK, END_OF_TRANSMISSION_BLOCK, ENDOFTRANSMISSIONBLOCK
24	CAN, ^X, CANCEL
25	EM, ^Y, END OF MEDIUM, END_OF_MEDIUM, ENDOFMEDIUM
26	SUB, ^Z, SUBSTITUTE
27	ESC, ^[, EC, ESCAPE
28	FS, ^/, FILE SEPARATOR, FILE_SEPARATOR, FILESEPARATOR
29	GS, ^], GROUP SEPARATOR, GROUP_SEPARATOR, GROUPSEPARATOR
30	RS, RECORD SEPARATOR, RECORD_SEPARATOR, RECORDSEPARATOR
31	US, ^_, UNIT SEPARATOR, UNIT_SEPARATOR, UTILSEPARATOR
32	SP, SPACE
127	DEL, DELETE

3. Choose OK.

The name of the function definition that you entered is added to the Functions list. The function can now be used by the print device or by any mode you define for this print device.

Modify a Function for a Print Device

This dialog allows you to modify the name and control sequence for the function that you selected in the Functions dialog box.

A function is an action that the print device can perform, such as bold text or proportional spacing. You cause the print device to perform the function by sending control sequences to the print device.

To modify a function definition

1. (Optional) In the Function field, enter a new function name.
Function names must be unique (no two names can be the same) and no longer than 32 characters. Function names are not case sensitive. You can use both letters and numbers.
2. (Optional) Edit the control sequence in the Control Sequence field by typing the characters that the printer uses to set the function.

To find the correct control sequences for print device functions, see the operator's manual for your print device .

Characters with ASCII values from 33 through 126 are not delimited; they appear as is. If a character in the control sequence has an ASCII value less than 33 or equal to 127, the character is displayed as a delimited acronym, as listed below. If the character's ASCII value is greater than 127, it is displayed as a delimited ASCII value. The value is a decimal number.

The space character can be entered as a space or as a delimited token. A space is displayed as a delimited token.

Except for delimited tokens, characters in a function follow the used as is rule. This means that the characters you see displayed are the actual characters that make up the function.

Delimited Tokens

PRINTDEF functions can contain special characters when delimited tokens are included in the function. A delimited token has two parts--the delimiters and the token.

The three types of delimiters are

- Angle brackets < and >
- Backwards slash \
- Caret ^

Because these characters function as delimiters, they are exceptions to the used as is rule. To enter a left-angle bracket (<), backwards slash (\), or caret (^), you must enter two characters. The right-angle bracket (>) can be used as is.

For example, a function that contains the string \\<<^> will be interpreted as \<^>. The double rule is used when entering and displaying PRINTDEF functions.

The other part to a delimited token is the token. A token can be a number, character, or a valid character string.

Numbers are used in conjunction with the angle bracket or backwards slash delimiters and can be entered in decimal or hexadecimal. To enter a hexadecimal number, use a 0x or 0X prefix. A number without the hexadecimal prefix is assumed to be decimal.

For example, the ASCII control character can be input by the delimited numbers <27>, <0x1b>, <0X1B>, \27, \0x1b, or \0X1B.

You can enter any ASCII character value from 0 to 255 using this method.

Character tokens can be used with angle bracket or caret delimiters. Valid characters are A through Z and a through z. Delimited character tokens are the same as ASCII control characters. In other words, ^A has an ASCII value of 1, ^B has an ASCII value of 2, etc.

Character string tokens are the names or acronyms of ASCII control characters. The name is not case sensitive. For example, the ASCII control character can be input by the delimited strings <esc>, <ESC>, or <Esc>.

The syntax for a delimited token is any of the following:

- delimited_token = delimited_number, delimited_character, or delimited_string
- delimited_number = <number_token> or \number_token
- delimited_character = ^character_token or <^character_token>

delimited_string = <string_token>
character_token = A - Z or a - z
string_token = <control character name>

The following are examples of three equivalent functions:

<ESC><SI>^^<soh>
<0x1B><0xF>\0x5E<0x7F>^A
\27<15><94><127>\1

ASCII ValueVALID STRING TOKENS

0	NUL, NULL
1	SOH, ^A, START OF HEADER, START_OF_HEADER, STARTOFHEADER
2	STX, ^B, START OF TEXT, START_OF_TEXT, STARTOFTEXT
3	ETX, ^C, END OF TEXT, END_OF_TEXT, ENDOFTEXT
4	EOT, ^D, END OF TRANSMISSION, END_OF_TRANSMISSION, ENDOFTRANSMISSION
5	ENQ, ^E, ENQUIRE
6	ACK, ^F, ACKNOWLEDGE
7	BEL, ^G, BELL
8	BS, ^H, BACK SPACE, BACK_SPACE, BACKSPACE
9	TAB, ^I, HT, HORIZONTAL TAB, HORIZONTAL_TAB, HORIZONTALTAB
10	LF, ^J, LINE FEED, LINE_FEED, LINEFEED
11	VT, ^K, VERTICAL TAB, VERTICAL_TAB, VERTICALTAB
12	FF, ^L, FORM FEED, FORM_FEED, FORMFEED
13	CR, ^M, RET, CARRIAGE RETURN, CARRIAGE_RETURN, CARRIAGERETURN
14	SO, ^N, SHIFT OUT, SHIFT_OUT, SHIFTOUT
15	SI, ^O, SHIFT IN, SHIFT_IN, SHIF TIN
16	DLE, ^P, DATA LINK ESCAPE, DATA_LINK_ESCAPE, DATALINKESCAPE
17	DC1, ^Q, DEVICE CONTROL 1, DEVICE_CONTROL_1, DEVICECONTROL1
18	DC2, ^R, DEVICE CONTROL 2, DEVICE_CONTROL_2, DEVICECONTROL2
19	DC3, ^S, DEVICE CONTROL 3, DEVICE_CONTROL_3, DEVICECONTROL3
20	DC4, ^T, DEVICE CONTROL 4, DEVICE_CONTROL_4, DEVICECONTROL4
21	NAK, ^U, NEGATIVE ACKNOWLEDGE, NEGATIVE_ACKNOWLEDGE, NEGATIVEACKNOWLEDGE
22	SYN, ^V, SYNCHRONOUS
23	ETB, ^W, END OF TRANSMISSION BLOCK, END OF TRANS BLOCK, END_OF_TRANSMISSION_BLOCK, ENDOFTRANSMISSIONBLOCK
24	CAN, ^X, CANCEL
25	EM, ^Y, END OF MEDIUM, END_OF_MEDIUM, ENDOFMEDIUM
26	SUB, ^Z, SUBSTITUTE
27	ESC, ^[, EC, ESCAPE
28	FS, ^/, FILE SEPARATOR, FILE_SEPARATOR, FILESEPARATOR
29	GS, ^], GROUP SEPARATOR, GROUP_SEPARATOR, GROUPSEPARATOR
30	RS, RECORD SEPARATOR, RECORD_SEPARATOR, RECORDSEPARATOR
31	US, ^_, UNIT SEPARATOR, UNIT_SEPARATOR, UTILSEPARATOR
32	SP, SPACE
127	DEL, DELETE

3. Choose OK.

Any changes that you made are retained in the print device definition. If you changed the function name, the name changes in the Functions list box.

Delete a Function for a Print Device

This dialog allows you to delete the function that you selected in the Modify Print Device dialog box. All fields are grayed because you cannot change anything; you can only see the function you are deleting.

To delete the selected function definition, choose OK.

You return to the Modify Print Device dialog. The selected function is deleted from the list and cannot be used by the print device definition or any of its modes.

Create a Mode Definition for a Print Device

This dialog allows you to enter a name and a list of functions to define a printer mode.

A mode is a combination of functions that you define to prepare the print device for specific printing needs. For example, you might define a print mode called Title that includes functions for bold, double wide, and letter-quality printing.

To create a new mode definition

1. Choose Create Mode.
2. In the Mode Name field, enter a name for the new mode.
You can use any eight-character name that begins with a letter. You should choose a name that represents the purpose of the printer mode.
Example: You might have modes for different types of documents like memos or reports, for different user's preferred settings, or for the requirements of different papers or forms that you use.
2. From the Device Functions list, select the function that you want to be executed first.
Functions are executed in the order they are listed.
3. Choose Add Below.
4. From the Device Functions list, select the function that you want to be executed next.
You can select the same function more than once if the mode requires it.
5. Repeat Steps 3 and 4 until all of the functions that you want as part of this mode are listed in the correct order in the Mode Functions list box.
If you make a mistake, use the Delete or Add Above buttons to rearrange the functions listed in Mode Functions.
6. Choose OK.

Modify a Mode Definition for a Print Device

This dialog allows you to modify a mode definition that you previously entered.

From this dialog, you can change the name of the mode or which functions are executed by this mode.

A mode is a combination of functions that you define to prepare the print device for specific printing needs. For example, you might define a print mode called Title that includes functions for bold, double wide, and letter-quality printing.

To modify an existing mode definition

1. (Optional) In the Mode Name field, enter a new name for the mode.
2. From the Device Functions list, select the function that you want to add to the mode.
3. In the Mode Functions list, select the function next to where you want to insert the new function.
4. Choose Add Below or Add Above to insert the selected device function in the correct place in the Mode Functions list.
5. Select any mode function that you want to delete from the definition of this mode.
6. Choose Delete.
The selected function is no longer part of this mode definition. The function is still a part of this device definition, but is not used for this mode.
7. Repeat Steps 2 through 6 as needed.
8. Choose OK.

Delete a Mode Definition for a Print Device

This dialog allows you to delete a mode definition. All fields are grayed because you cannot change anything; you can only see what you are deleting.

1. Select the mode definition you want to delete.
2. Choose OK.

The mode name you selected is removed from the Modes list box. That mode can no longer be used by this print device. The function is still part of this device definition, but is not used for this mode.

View or Modify Print Job Configurations

The Job Configuration page lists the names of different print job configurations that can be used. You can add new job configurations or modify the parameters of existing configurations.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Change Which Print Job Configuration Is the Default](#)

[Create a New Print Job Configuration](#)

[View or Modify a Print Job Configuration](#)

[Delete a Print Job Configuration](#)

Screen regions and buttons

Name/Owner lists the names of the print job configurations that can be used, and the object at which the configuration was defined. If you are looking at a Container object, then only the jobs assigned to that container are in the list. If you are looking at a User object, then the jobs assigned to the user and the jobs assigned to the user's container are in the list.

New opens the Create Print Job Configuration dialog, where you can enter a name and parameters for a new print job configuration.

Modify opens the Modify Print Job Configuration dialog, where you can view and modify the parameters of any of the print job configurations that are listed.

Delete removes the selected print job configuration from the list. It can no longer be used.

Default marks the selected print job configuration as the default configuration, as noted by the printer icon.

Changes take place immediately.

Change Which Print Job Configuration is the Default

1. From the Print Job Configurations list box, select the print job configuration that you want to make the default configuration.
2. Choose Default.
The printer icon to the left of the configuration names moves to the selected configuration. That configuration is now the default.

Create a Print Job Configuration

1. Complete each of the applicable fields in the dialog.
2. Choose OK.
The name of the new print job configuration is added to the list.

Related topic

[Print Job Configuration Fields](#)

View or Modify a Print Job Configuration

1. Change any fields in the dialog.
You cannot change the name of the print job configuration. You must create a new print job configuration.
2. Choose OK.
The print job configuration is saved with any new values you entered.

Related topic

[Print Job Configuration Fields](#)

Delete a Print Job Configuration

1. Select a print job configuration from the Name/Owner list box.
2. Choose Delete.
The selected print job configuration is removed from the list.
3. Choose OK.

Print Job Configuration Fields

Print Job Name lists the name of the print job configuration (as listed in the Job Configuration list box) that a user specifies to be used for a printing job. This field is entered when you create a new job configuration. It cannot be changed.

Number of Copies indicates how many copies of the file to print. The number of copies can range from 1 to 65,000.

File Contents can be byte stream or text. If text is selected, then tabs are recognized and tab size can be set.

Tab Size is the number of spaces between tab stops. For example, if a job has two consecutive tabs, the position moves two tab stops to the right. This field is only available if you select the File Contents field.

Form Feed determines whether a form feed is sent when a job is completed.

Notify When Done determines whether a message is sent to the workstation of the print job originator when the job has finished printing.

Local Printer specifies which parallel port of your computer print jobs should be sent to. The values listed are LPT1 through LPT9.

Auto End Cap causes the queue file to close automatically when a print job is completed.

Printer/Queue allows you to select the Printer or Queue object that the print job configuration should use. The Select Object dialog appears when the browser button is selected.

Device allows you to select which print device this print job configuration uses.

Mode allows you to select the mode this print job configuration uses. The modes listed are defined by the device you selected.

Form Name allows you to select which printer form this print job configuration uses.

Print Banner determines if this print job configuration includes a banner page at the beginning of each print job. If this check box is selected, the next two fields are available.

Name is part of the banner page that is printed at the beginning of a print job using this configuration. If this field is left blank, the name of the user who originated the print job is used. This field can only be entered if the Print Banner field is selected.

Banner Name is part of the banner page that is printed at the beginning of a print job using this configuration. If this field is left blank, the name of the file being printed appears if NPRINT is used. If CAPTURE is used, the port number appears. This field can only be entered if the Print Banner field was selected.

Enable Timeout determines whether each print job will time out after a specified period of time. If this is selected, the Timeout Count field can be set.

Timeout Count field is the number of seconds that each print job takes to time out if the printer does not respond. You must select the Enable Timeout field to enter a value here. Timeout can range from 1 to 1000 seconds.

View or Change an Object's Rights to Directories and Files

The Rights to Files and Directories page shows all trustee assignments that this object has to files and directories on a volume. For example, you can

- * See trustee assignments that this object has to a directory or file
- * Change this object's trustee assignment to any directory or file
- * See the effective rights of this object to any directory or file

You can view trustee assignments to files and directories on volumes that are listed in the Volumes list. To see trustees on a volume other than those listed, you must add that volume to the list.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[View Trustee Assignments to a Directory or File](#)

[Change Trustee Assignments to a Directory or File](#)

[Grant This Object a Trustee Assignment to a Directory or File](#)

[View Effective Rights to a Directory or File](#)

[Add a Volume to the Volumes List](#)

[Remove a Volume from the Volumes List](#)

Screen regions and buttons

Volumes lists Volume objects. Any trustee assignment that this object has to a directory or file on a volume is listed in the Files and Directories list when you select that Volume object.

Find allows you to search for a Volume object from a context you specify.

Show lets you to add a Volume object to the Volumes list.

Hide lets you remove a Volume object from the Volumes list.

Files and Directories lists files and directories that this object has a trustee assignment to. If you do not have rights to change the trustee assignment to that file or directory, the names of the rights are grayed.

Add lets you create a new trustee assignment for this object to a directory or file.

Delete lets you delete this object's trustee assignment to the directory or file.

Rights displays the rights that make up the trustee assignment to the directory or file.

Effective Rights lets you see this object's effective rights to a directory or file.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Related topics

[Trustees and Trustee Paths](#)

Search Context

This dialog allows you to search for Volume objects from any point you specify in the Directory tree.

View Trustee Assignments to a Directory or File

1. From the Volumes list, select the volume that contains the directory or file for which you want to view this object's trustee assignment.
2. From the Directories and Files list, select the directory or file.

If you don't have rights to change this trustee assignment, the name of the file and all rights will be grayed.

The directory or file's trustee assignment appears in the Rights field.

Note: If you have multiple browser windows open, the volume name shown for this file might not be the one you selected the file from. This has no affect on the operation; you are simply viewing the same physical file from different objects or views.

Change Trustee Assignments to a Directory or File

1. From the Volumes list, select the volume that contains the directory or file.
2. From the Directories and Files list, select the directory or file.

The rights that make up this object's trustee assignment to the file or directory appear in the rights area.

Note: If you don't have rights to change this trustee assignment, the name of the file and all rights are grayed.

Note: If you have multiple browser windows open, the volume name shown for this file might not be the one that you selected the file from. This has no affect on operation; you are simply viewing the same physical file from different objects or views.

3. Select the check boxes for rights you want to change.

Note: If the names of the rights are grayed, you don't have rights to change this trustee assignment. You must have the Access Control right to the file or directory.

4. Choose OK.

The new trustee assignment is now effective for this object.

Grant This Object a Trustee Assignment to a Directory or File

1. Choose Add.
The Select Object dialog appears.
2. Select the directory or file that you want to grant rights to for this object.
If you don't have rights to change this trustee assignment, the name of the file and all rights are grayed.
Note: If you have multiple browser windows open, the volume name shown for this file might not be the one you selected the file from. This has no affect on operation; you are simply viewing the same physical file viewed from different objects or views.
3. Choose OK.
If you have sufficient rights, the Read and File Scan rights are granted by default. The rights that make up this object's trustee assignment to the file or directory appear in the Rights field.
4. Select the check boxes for rights you want to change.
Note: If the names of the rights are grayed, you don't have rights to change this trustee assignment. You must have the Access Control right to the file or directory.
5. Choose OK.
The new trustee assignment is now effective for this object.

Add a Volume to the Volumes List

Note: The Rights to Files and Directories page lists Volumes on which this object is a trustee. Being on this list does not affect the volumes.

1. Choose Show.
2. Select Volume objects that you want listed in the Rights to Files and Directories page.
You can view or change trustee assignments only to files and directories located on volumes listed here.
3. Choose OK.
The volumes you selected are added to the Volumes list.

Remove a Volume from the Volumes List

Note: The Rights to Files and Directories page lists volumes on which this object is a trustee. Being on this list does not affect the volumes.

1. From the list at the top of the dialog, select a volume.
2. Choose Hide.

The volume is removed from the list.

To unhide the volume, choose Show and select the volume from the browser; then choose OK.

View This Object's Effective Rights to a Directory or File

1. From the Files and Directories list, select a file or directory.

Note: If you have multiple browser windows open, the volume name shown for this file might not be the one that you selected the file from. This has no affect on operation; you are simply viewing the same physical file from different objects or views.

2. Choose Effective Rights

This object's effective rights to the object you selected are shown below the File/Directory field.

Effective rights are bold; rights not available to this object are grayed.

3. To see effective rights to specific properties, choose a property from the list.
4. Choose Close.

Note: If you have made changes to this dialog, they are not reflected in Effective Rights until you exit this dialog with OK. When you return to this dialog, any previous changes are reflected in Effective Rights.

Related topics

[More about Effective Rights](#)

Add or Delete Values

To add a value

1. Choose Add.
2. Enter a value.
 - 2a. If the property that you are adding a value to requires an object as a value, select an object.
 - 2b. If the property that you are adding a value to requires text or a number as a value, enter text.
3. Choose OK.

The value is added to the list.

To delete a value

1. From the box above the buttons in this dialog, select the value that you want to delete.
2. Choose Delete.

The value is removed from the list.

Screen regions and buttons

Add lets you add values.

Delete lets you delete values.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Select an Object

1. To search the Directory tree, double-click on objects the Directory Context list box.
The objects located in each context you select appear in the Objects list box.
Use the arrow buttons to the right side of each box to browse through that box.
2. From the Objects list box, select the object you want once it is shown.
The classes of objects listed here for you to select depend on the active field in the previous dialog.
3. Choose OK.
The object that you selected is entered into the active field in the previous dialog.

Screen regions and buttons

Selected Object shows the object that you have selected from the Objects list box.

Current Context shows where you are in the Directory tree (the position in the Directory tree of the object that you are working with at the moment).

Name Filter allows you to limit the objects that appear in the left-side list box by using wildcard characters or object names. For example, if you wanted only objects that start with the letter P to appear in the left-side list box, you could type P* in this field. If you wanted only an object named Computer1 to appear in the left-side list box, you would type Computer1 in this field.

Directory Context Filter allows you to limit the containers that appear in the right-side list box by using wildcard characters or container names. For example, if you wanted only containers that start with the letter N to appear in the Objects list box, you could type N* in this field. If you wanted only a container named OrgUnitA to appear in the right-side list box, you would type OrgUnitA in this field.

Objects shows the objects that you can select. Only certain types of objects are listed here, depending on the dialog you are entering information for. Choose the desired object to select it and return to the previous dialog. A maximum of 4,600 objects can be listed.

Directory Context shows objects at the next level down the Directory tree. Choose an object to open it and display its contents in the left-side list box. The up-arrow key moves back up the Directory tree. A maximum of 8,192 objects can be listed.

Change Context allows you to enter a new context to begin searching for an object in, without using the Directory Context list to browse all over the Directory tree.

OK returns to the previous dialog, inserting the object that you have selected in the active field. You must select an object from the Objects list box before OK is available.

Cancel returns to the previous dialog without any object selected.

Select One or More Objects

To choose an object

1. To search the Directory tree, double-click on objects in the Directory Context list box
The objects located in each context you select appear in the Objects list box.
Use the arrow buttons to the right side of each box to browse through that box.
2. From the Objects list box, select the object you want.
The classes of objects listed here for you to select depend on the active field in the previous dialog.
To select multiple objects listed sequentially, hold down the <Shift> key as you select objects. To select multiple objects listed sequentially, hold down the <Ctrl> key as you select objects.
3. Choose OK.
The objects you selected are entered into the active field in the previous dialog.

Screen regions and buttons

Selected Object shows the objects that you have opened to reach the list of objects in the Objects list box.

Current Context shows where you are in the Directory tree (the position in the Directory tree of the object you are working with at the moment).

Object shows the objects that you can select. Only certain types of objects are listed here, depending on the dialog you are entering information for. Choose the desired object to select it and return to the previous dialog. A maximum of 4,600 objects can be listed.

Directory Context shows objects at the next level down the Directory tree. Choose an object to open it and display its contents in the Objects list. The up-arrow key moves back up the Directory tree. A maximum of 8,192 objects can be listed.

Change Context allows you to enter a new context to begin searching for an object without using the Directory Context list to browse up and down the Directory tree.

OK returns to the previous dialog, inserting the object that you have selected in the active field. You must select an object in the Objects list before OK is available.

Cancel returns to the previous dialog without any object selected.

Change Context to Select an Object

This dialog allows you to change the context you are viewing.

By changing your context, you can view other parts of the Directory tree that you have rights to browse, without being blocked by upper areas of the Directory tree that you do not have rights to browse.

Select an Object from a Bindery

Use this dialog to select an object that exists in the bindery of a NetWare 3 server. This allows you to do limited management tasks on NetWare 3 servers, such as changing the owner of a file, or making trustee assignments to a file or directory.

To select an object from a bindery

1. From the list shown, select the User object or Group object.
2. Choose OK.

The object you selected is shown in the field you were in before entering this dialog.

Enter a Property Value

1. Type the value you want to add to the property field.
You can only enter one item in this dialog. Any characters can be used, up to 64 characters.
2. Choose OK.
The value appears in the Selected Property field.

Set a Network Address

The Network Addresses page shows the address of the object you selected in all network protocols through which it can be accessed. These addresses tell NetWare Directory Services how to locate the physical object, depending on which protocol is being used. On this page, you can

- * See the addresses of the object for different protocols
- * Add or delete addresses

Note: There is also a Network Address Restrictions page that lists network addresses that a user is allowed to log in from.

Because many different protocols can be active on the network at one time, an object can have an address for each protocol.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Add a Network Address](#)

[Delete a Network Address](#)

Screen regions and buttons

Network Protocol lists the protocol for the new address. Complete the fields in the dialog with values appropriate for the protocol you use.

Add... lets you add another network address to the Network Addresses list.

Delete removes the selected network address from the Network Addresses list.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Add a Network Address

1. Choose the protocol of the address by choosing a protocol button.
2. Choose Add.
3. Fill in all fields for the new address.
4. Choose OK.
The new network address is added to the Network Addresses list.

Delete a Network Address

1. From the Network Addresses list, select a network address.
2. Choose Delete.

The network address is deleted from the list. The object can no longer be found at that address. If that was the only address using a certain protocol, then no one using that protocol can find the object.

IPX SPX Protocol Dialog

Enter a value for each field shown here to define a network address in this protocol. See your hardware documentation for more information on each field if necessary.

The Network number is assigned arbitrarily to a cable segment when the network is set up.

The Node number is unique to each computer, and is determined by the network board in the computer. For Ethernet boards, the number is set at the factory; for token ring and ArcNet boards, the number can be selected using jumpers on the board.

SDLC Protocol Dialog

Enter a value for each field shown here to define a network address in this protocol. See your hardware documentation for more information on each field if necessary.

Synchronous Data Link Control (SDLC) is a protocol used to receive data from or transmit data to Systems Network Architecture (SNA) networks.

Token Ring and Ethernet Protocol Dialog

To define a network address in this protocol, enter a value for each field shown here. See your hardware documentation for more information on each field if necessary.

TCP/IP Protocol Dialog

To define a network address in this protocol, enter a value for each field shown here . See your hardware documentation for more information on each field if necessary.

TCP/IP stands for Transmission Control Protocol/Internet Protocol.

An address consists of four one-byte numbers. The left part indicates which part of the network the computer is on. The right part identifies the computer.

OSI Protocol Dialog

To define a network address in this protocol, enter a value for each field shown here. See your hardware documentation for more information on each field if necessary.

Open Systems Interconnection (OSI) is a higher-level protocol used with TCP/IP.

AppleTalk Protocol Dialog

To define a network address in this protocol, enter a value for each field shown here . See your hardware documentation for more information on each field if necessary.

Clear Button

Choose Clear to make all rights above the Clear button undefined. All check boxes in front of the rights become grayed. When rights are undefined, no rights are explicitly granted to this trustee. Rights to this object can still be inherited.

Note: You are deleting an entry from the ACL property.

Example: You don't want this user to have explicit object rights anymore, so you choose Clear under the list of object rights. All boxes become grayed.

Using the See Also Page

The See Also page gives you a place to list the names of objects related to the object you selected. A [supervisor](#) or [manager](#) can use it to record information about this object.

Note: This list is for your reference only. NetWare does not access this information.

On this page, you can

- * List the complete name of related objects
- * See which objects are listed as having information related to the selected object
- * Add objects to or delete objects from the list

You cannot enter text to describe the relationship of other objects to this object.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog Box](#)

[Add a New Object to the See Also Page](#)

[Delete an Existing from the See Also Page](#)

Screen regions and buttons

See Also lists the names of related objects.

Add opens a dialog where you choose an object to add to this list.

Delete removes the selected object from the list.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Add a New Object to the See Also Page

1. Choose Add.
2. Select objects you want to add to the See Also page.
3. Choose OK.
The objects you selected are added to the page.

Delete an Object from the See Also Page

1. From the See Also list, select the object that you want to delete.
2. Choose Delete.
The object is deleted from the list.
3. Choose OK to return to the browser.

View or Change the List of Operators

Use the Operators page to record operators of an object. On this page, you can

- * See which objects are listed as operators
- * Add objects to or delete objects from the list of operators

Note: This list is for your reference only and doesn't affect who can use the object. Some utilities may use this list to validate who can access statistical information about a NetWare server.

A supervisor or manager can use it to record information about this object.

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Add a New Operator](#)

[Delete an Operator](#)

Screen regions and buttons

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Add a New Operator

1. Choose Add.
2. Select objects that you want to add as operators.
3. Choose OK.
The objects you selected are listed as operators.

Delete an Operator

1. From the Operators list, select an operator.
2. Choose Delete.
The operator is removed from the list.
3. Choose OK.

Set Address Information

The Postal Address page shows the postal address of the object you selected. On this page, you can

- * See the address of this object
- * Set the mailing address to match the address in the object's container with Copy to Label

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

You can search on individual fields in the top half of the page. The bottom half cannot be searched.

Procedures

How to Use the Object Dialog

Screen regions and buttons

Street Address contains the number and street name.

Post Office Box contains the post office box for this object.

City shows for the name of the town.

State or Province shows the state or province that this object is located in.

Postal (Zip) Code (for USA) is where you enter the zip code. For other countries, enter the appropriate information.

Copy to Label copies the information entered in the fields above into the fields in the Postal Address area.

Note: If you enter street address and post office box information in the fields at the top of the page, only the post office box information appears in the Mailing Label Information section.

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Create or Change a Login Script

Use the Login Script page to specify commands that automatically execute when a user logs in. On this page, you can

- * Add a drive mapping to a login script
- * Add a command to run a program automatically when the user logs in

Important: OK and Cancel affect the entire object dialog, not just this page. Do not choose OK until you've entered all changes to this page and other pages. If you choose Cancel, you lose all changes in every page of this dialog.

Procedures

[How to Use the Object Dialog](#)

[Edit a Login Script](#)

[Copy a Login Script from another Location](#)

[Determine What Scripts Will Be Executed at Login](#)

Screen regions and buttons

OK saves changes in all pages of this dialog.

Cancel closes this dialog without saving changes in any page.

Related topics

[Login Script Syntax and Commands](#)

Determine What Scripts Are Executed at Login

Use the following list to determine which scripts are executed when a user logs in to NetWare Directory Services.

1. Is there a login script entered in the container immediately above the User object?
If so, it is executed first.
2. Is there a Profile object listed for the user? (see the Login Script page of the User's object dialog).
If so, the script in the Profile object is executed second.
3. Is there a login script entered for the user?
If so, it is executed third.
4. If none of these scripts exists, a default login script is used to map a drive to the \PUBLIC directory so that this user can use NetWare utilities.

Login Script Commands and Syntax

Each login script command must be written on its own line. Blank lines are ignored. This list shows commonly used login script commands. There are other commands described in *Supervising the Network*.

Commands

Executes an external command and returns to the next line of the login script.

Example: #DIR

ATTACH Connects to a NetWare server in a different Directory tree.

Example: ATTACH Acctserver/John

BREAK [on | off] Allows the use of <Ctrl><Break> or <Ctrl><C> to stop the login script. Default is OFF.

CLS Clears the display screen.

CONTEXT Changes to a specified context.

Example: CONTEXT users.sales

DISPLAY filename Displays a text file.

Example: DISPLAY NOTICE.TXT

DRIVE Specifies the default drive.

EXIT (filename) Terminates execution of a login script.

Example: EXIT Menu Account

FDISPLAY Filters out control characters and display only ASCII character values 1 to 126.

Example: FDISPLAY README.DOC

FIRE PHASERS Makes a sound to alert you to certain conditions.

Example: FIRE PHASERS 3 times

GOTO label Skips part of the script and jump to another label. Usually used with an IF conditional.

Example: Loop:

Set X=<X>+ 1

Write <X>

IF <X> is less than value 10

GOTO loop

IF ... THEN Tests conditions to execute or skip parts of a login script.

Example: IF day_of_week=friday THEN
Write It's the Weekend!

END

INCLUDE Executes another file of login script commands before continuing with this login script.

Example: INCLUDE sys:public\script.fil

MACHINE Sets the machine name in the DOS environment.

Example: MACHINE = IBM_PC

MAP Sets drive mappings during login using a Volume or Directory Map object.

Example: MAP g:=.SALES_Vol.Novell:Apps\WP

PAUSE Temporarily stops the login script.

Example: IF hour24=23 then PAUSE

REMARK Puts comments in the login script or prevents commands from being executed.

Example: REM temporary drive mapping, delete 10/93

SET name = value Sets or changes DOS or OS/2 environment variables.

Example: SET prompt = \$p\$g

SET TIME [ON | OFF] Synchronize a workstation with the servers. SET TIME ON is the default.

Example: SET TIME OFF

WRITE Prints messages to the screen.

Example: WRITE Hello World

Defining Additional Properties

In the Create dialog, you enter only enough information to name the object.

Choose Define Additional Properties to enter values for other properties associated with the object.

To define additional properties

1. In the Create dialog, select Define Additional Properties.
2. Choose Create.
3. Enter needed information in the various pages of the object dialog.
4. Choose OK.

The new object appears in the browser.

Note: You can change an object's property values by opening the object's dialog and making changes.

Opening an Object Dialog

Options for opening an object's dialog:

- * Double-click on the object (leaf objects only).
Double-clicking on a container object displays the objects it holds.
- * Right-click the mouse on the object and select Details from the menu that appears.
- * Single-click the object and choose Details from the Object menu.
- * When creating a new object in the Create dialog, select Define Additional Properties and choose Create.

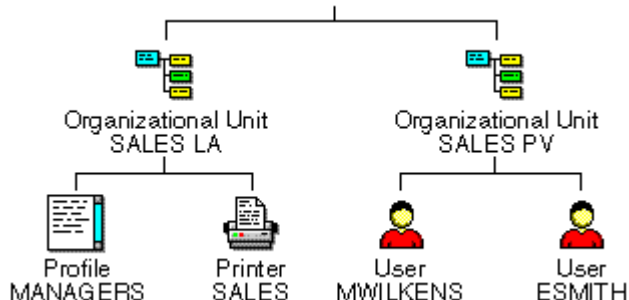
Related topics

[How to Use the Object Dialog](#)

Effective Rights to an Object

Effective rights are the rights that an object can use to access information about another object.

In this diagram, if user ESMITH wants to access Profile MANAGERS, user ESMITH's effective rights to do so can come from



- * Trustee assignments on Profile MANAGERS that list User ESMITH (explicit rights are granted)
- * Trustee assignments on Profile MANAGERS that list Organizational Unit SALES PV (rights are inherited from user ESMITH's container)
- * Trustee assignments on Organizational Unit SALES LA that list User ESMITH; rights must pass through Profile MANAGERS' Inherited Rights Filter before becoming effective (inherited from object's container)
- * Trustee assignments on Organizational Unit SALES LA that list Organizational Unit SALES PV. Rights must pass through Profile MANAGERS' Inherited Rights Filter before becoming effective (rights are inherited from object's container and trustee's container)
- * Trustee assignments to any object listed in the Security Equal To list of user ESMITH, such as a Group object (only valid when the object requesting rights is a User object)

Note: Every object is security equivalent to all objects in its complete name, that is, all of the objects directly above it to the [Root] of the Directory tree. This security equivalence cannot be changed. None of those objects are listed in the Security Equal To list.

If user ESMITH has a trustee assignment to Organizational Unit SALES LA and to Profile MANAGERS, the Trustee assignment on Profile MANAGERS overrides the trustee assignment on Organizational Unit SALES LA. Trustee assignments to Group objects, however, are added to previous trustee assignments for User objects.

You cannot change effective rights directly. You must locate the trustee assignment through which the rights were granted and then change it, or add an Inherited Rights Filter to block rights.

If you select one trustee before choosing the Effective Rights button, the effective rights of that trustee are displayed. Otherwise, you can use the browser button to the right of the Name field * to choose whose effective rights you want to view.

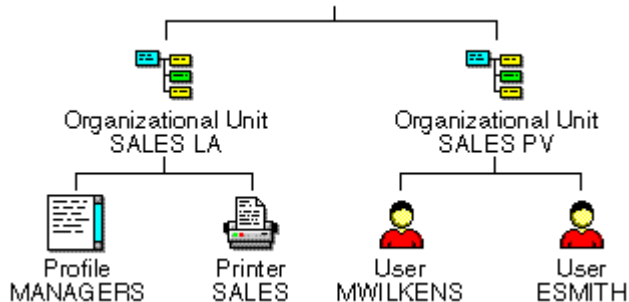
You must have the Write or Supervisor property right to an object's ACL property to view other object's effective rights to the object.

Note: If you have made changes anywhere in the Trustees dialog, those changes are not reflected in the Effective Rights dialog until you exit the Trustees dialog with OK. When you return to the Trustees dialog, any previous changes are reflected in the effective rights of an object.

Effective Rights Paths to an Object

Effective rights are the rights that an object can actually use to access information about another object. Effective rights are verified each time one object tries to access another object.

In this diagram, user ESMITH's effective rights to Profile MANAGERS can come from several places:



- * Trustee assignments on Profile MANAGERS that list user ESMITH (explicit rights are granted)
- * Trustee assignments on Profile MANAGERS that list Organizational Unit SALES PV (rights are inherited from ESMITH's container)
- * Trustee assignments on Organizational Unit SALES LA that list user ESMITH; rights must pass through Profile MANAGERS' Inherited Rights Filter before becoming effective (rights are inherited from object's container)
- * Trustee assignments on Organizational Unit SALES LA that list Organizational Unit SALES PV; rights must pass through Profile MANAGERS' Inherited Rights Filter before becoming effective (rights are inherited from object's container and trustee's container)
- * Trustee assignments to any object listed in the Security Equal To list of user ESMITH, such as a Group object (valid only when the object requesting rights is a User object)

Note: Every object is security equivalent to all of the objects in its complete name, that is, all of the objects directly above it to the [Root] of the Directory tree. This security equivalence cannot be changed, but none of those objects are listed in the Security Equal To list.

If user ESMITH has a trustee assignment to Organizational Unit SALES LA and to Profile MANAGERS, the Trustee assignment on Profile MANAGERS overrides the trustee assignment on Organizational Unit SALES LA. Trustee assignments to Group objects, however, are added to previous trustee assignment for User objects.

You cannot change effective rights directly. You must locate the trustee assignments where the right was granted and change it, or add an Inherited Rights Filter to block the right.

If you select a trustee then choose Effective Rights, the effective rights of that trustee are displayed. Also, you can use the browser button to the right of the Name field * to choose the object whose effective rights you want to view.

You need the Write or Supervisor property right to an object's ACL property to view other object's effective rights to the object.

Note: If you have made changes anywhere in the Trustees dialog, those changes are not reflected in the Effective Rights dialog until you exit the Trustees dialog with OK. When you return to the Trustees dialog, any previous changes are reflected in the effective rights of an object.

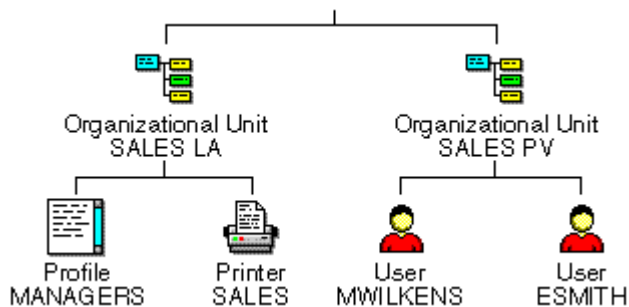
Inherited Rights Filter

An Inherited Rights Filter blocks rights that would otherwise be inherited by objects who had rights granted higher in the Directory tree. In other words, the Inherited Rights Filter filters out the rights that other objects have to you, not the rights that you have to other objects.

An Inherited Rights Filter can block any of the trustee assignment rights, including rights for specific properties, but object rights and property rights are inherited separately. An Inherited Rights Filter can block certain property rights without affecting any object rights.

The rights that you have because you are in a container are gained because you are security equal to that container, not because you inherit rights from that container.

Note: The Inherited Rights Filter cannot give rights to anyone; it can only take rights away from a user or group that has more rights to an object than you want it to have.



If user ESMITH has a trustee assignment to Organizational Unit SALES LA, user ESMITH also inherits rights to Profile MANAGERS. Those rights can be blocked by an Inherited Rights Filter on Profile MANAGERS.

If user ESMITH also has a trustee assignment to Profile MANAGERS, then that trustee assignment grants user ESMITH certain rights which are not affected by the Inherited Rights Filter for Profile MANAGERS.

If a check box in the Inherited Rights Filter dialog for Profile MANAGERS is selected, user ESMITH can inherit that right. If a check box is not selected, user ESMITH or Organizational Unit SALES PV must have a trustee assignment to Profile MANAGERS to use that right.

Note: For objects in NetWare Directory Services, the Supervisor object right **can** be blocked by the Inherited Rights Filter. For directories and files, the Supervisor right **cannot** be blocked by the Inherited Rights Filter.

Effective Rights in Files and Directories

An object's effective rights to a directory or file are the rights that they can actually use on the directory or file.

Effective rights are verified each time someone tries to access a directory or file. They are determined by:

- * Trustee assignments to the directory or file.
- * Inherited rights from trustee assignments to a parent directory.
- * Trustee assignments to objects listed in a user's Security Equal To list, such as Group objects.

Any rights granted to a trustee for a directory above this directory or file must pass through the Inherited Rights Filter before becoming part of the effective rights.

Note: If a user has a trustee assignment to a directory that is higher in the directory structure as well as an assignment to this directory or file, the current trustee assignment overrides the previous one.

You cannot change effective rights directly. You must locate the trustee assignments where the right was granted and change it, or add an Inherited Rights Filter to block the right.

If you select a trustee then choose Effective Rights, the effective rights of that trustee are displayed. Otherwise, you can use the browser button to the right of the Name field * to choose which user's effective rights to this directory or file you want to view.

You must have the Access Control right to a directory or file to view other user's effective rights to it. However, if the directory or file is on a NetWare 2 or 3 volume, you can only see your own effective rights.

Note: If you have made changes anywhere in the Trustees dialog, those changes are not reflected in the Effective Rights dialog until you exit the Trustees dialog with OK. When you return to the Trustees dialog, any previous changes are reflected in the effective rights of a user or group.

Inherited Rights Filter for Files and Directories

An Inherited Rights Filter blocks rights that would otherwise be inherited by users who had rights granted by a trustee assignment higher in the directory structure.

If a user or group has a trustee assignment to a directory or file, that assignment will override the Inherited Rights Filter on the same directory or file. But, if a user or group has rights to a directory or file only by inheriting rights from a directory higher in the directory structure, those rights can be blocked by the Inherited Rights Filter.

An Inherited Rights Filter can block any of the rights that can be specified in a trustee assignment.

The Inherited Rights Filter cannot grant rights to anyone, it can only revoke rights from a user or group that has more rights to an object than you want it to have.

If a check box in the Inherited Rights Filter dialog is selected, users can inherit that right for this directory or file. If the check box is not selected, only users and groups with a trustee assignment on this directory or file have that right.

Note: For directories and files, the Supervisor right **cannot** be blocked by the Inherited Rights Filter. For objects, the Supervisor object right **can** be blocked by the Inherited Rights Filter.

Example: Users in group SALES have Create and Erase rights for your PROJECTS directory; however, you don't want anyone to have rights to the JANUARY subdirectory under PROJECTS. Create an Inherited Rights Filter for JANUARY that doesn't have any check boxes selected. Rights given for PROJECTS cannot be inherited for JANUARY (except the Supervisor right). The Inherited Rights Filter blocks all rights that are not given to trustees of JANUARY.

Trustees of This Object and Rights to Other Objects

You can view both NetWare Directory Services objects and file system files and directories. This means that you sometimes view object and property rights, and other times view file/directory rights, and the attributes of files or directories.

You can use the following access control and security features:

- * Select an object and choose Trustees of This Object from the Object menu. You can see trustees of the object you selected, its object and property rights, and view and change its Inherited Rights Filter.
- * Select an object and choose Rights to Other Objects from the Object menu. You see where the object you selected has a trustee assignment. You also see object and property rights that this object has to other objects. You can't change the Inherited Rights Filter here.
- * Select an object and choose Details from the Object menu. Select the Rights to Files and Directories page in the object dialog. You see which files and directories the object has rights to (by a trustee assignment). You see file and directory rights.
- * Select a file or directory in a volume and choose Details from the Object menu. Then select the Trustees of This File or Directory page in the object dialog. The objects that have rights granted to the file or directory through a trustee assignment are listed. You see file and directory rights. You can also view and change the file or directory's Inherited Rights Filter.
- * Volume is a NetWare Directory Services object that allows you to work with the file system as well. If you select a volume and choose Trustees of This Object from the Object menu, you see a Trustees dialog showing who has rights to see or change the Volume object. Object and Property rights are shown.
If you select a volume and choose Details from the Object menu and then the Trustees of the [Root] Directory page, you see the file and directory rights that apply to the first level of directories on that volume.

Trustees of the [Root] Object

The following rules control trustees of the [Root] object (the object above the highest Country or Organization object) in the Directory tree.

- * When the Directory tree is created, user ADMIN is given the Supervisor object right to the [Root] object. You can change the name of user ADMIN, and user ADMIN can grant to other objects the Supervisor object right to the [Root] object.
- * At least one user must be a trustee of the [Root] object with the Supervisor object right. If only one trustee of the [Root] object has the Supervisor object right, you cannot delete that trustee from the Trustees list, or remove the Supervisor object right for that trustee.
- * Because the Supervisor object right can be blocked by the Inherited Rights Filter on objects below the [Root] object. You would cut yourself off from part of the Directory tree, if you could remove the Supervisor object right from the last trustee.
- * NetWare Administrator prevents you from deleting the last trustee with Supervisor object right or changing the Inherited Rights Filter when there is no Supervisor. But you could still delete the user that is listed as a trustee with the Supervisor object right. Then no one would have the Supervisor object right to part of the Directory tree.

Important: Keep track of the users who have the Supervisor object right at the [Root] of the Directory tree or at container objects in the tree so that you do not cut yourself off from any part of the Directory tree.

The [Root] Object in the Directory Tree

The [Root] object of the Directory tree contains no information. Its purpose is to

- * Provide the highest point to access to Country and Organization objects
- * Allow trustee assignments that grant rights to the entire Directory tree

User Object ADMIN

The user ADMIN is created when you create the Directory tree. User ADMIN is granted a trustee assignment to the [Root] object of the Directory tree with the Supervisor object right. This allows a network administrator to log in to the network as ADMIN, and have sufficient rights to set up the rest of the network.

Once the network has been set up and other objects (including users) have been created, ADMIN should grant a trustee assignment to the user chosen to supervise the entire Directory tree. After another user has the Supervisor object right to the [Root] object, consider deleting the user object ADMIN.

ADMIN only has rights granted by trustee assignments. User ADMIN does not have access to everything, like user SUPERVISOR had in previous versions of NetWare.

The Root Directory of a Volume - Assigning Rights

The file and directory rights for the root directory of each volume are recorded in each Volume object. These are separate from the object and property rights that control access to the Volume object.

When a NetWare server and its volumes are installed, the user installing the server and its volumes is granted the Supervisor object right to the NetWare Server object. This grants that user supervisor-level access to the file systems of all volumes attached to that server. As in previous versions of NetWare, the supervisor right on files and directories cannot be blocked by an Inherited Rights Filter.

The trustee who installed the NetWare server and volumes must make other trustee assignments to the directories and files, using the FILER or NetWare Administrator utilities.

Public as a Trustee

PUBLIC can be listed in the Trustees list of any object to indicate the rights that any object requesting access receives if no other rights are effective.

A person can use all of the rights granted to PUBLIC before logging in. Because of this, no audit trail is created. Restrict the use of PUBLIC as a trustee to non-secure areas.

You can add PUBLIC as a trustee whenever you are defining trustees of an object or file. You can also delete PUBLIC as a trustee of any object or file.

PUBLIC is granted the Browse object right to the [Root] object when NetWare 4 is installed. This allows all objects to see all other objects until trustee assignments or Inherited Rights Filters are put in place by a network administrator.

Supervisor Object Right Restrictions

The Supervisor object right allows unlimited access to an object. Because a Directory tree can span many divisions or organizations, the Supervisor object right can be blocked from part of the tree by the Inherited Rights Filter.

If the Supervisor object right is blocked at a container object with an Inherited Rights Filter and no other object has the Supervisor object right to that object, you can lose access to part of the tree.

The NETADMIN and NetWare Administrator utilities prevent this problem by restricting when you can grant or remove the Supervisor object right. You **cannot**

- * Create an Inherited Rights Filter that blocks the Supervisor object right if a trustee with the Supervisor object right doesn't already exist for that object.
- * Delete the last trustee of an object with the Supervisor object right or remove the Supervisor object right for that trustee if the Inherited Rights Filter of that object blocks the Supervisor object right.

Important: Nothing prevents you from deleting a user how is listed as a trustee with the Supervisor object right. Keep track of users who have this right at the [Root] of the Directory tree or at container objects in the tree so that you do not cut yourself off from any part of the Directory tree.

Inheriting Object Rights - Inheriting Property Rights

Object rights and all property rights are inherited separately. Specific property rights are not inherited (because different object classes have different properties).

An object's effective object rights to a container object flow down to objects below. An object's effective all property rights to a container object flow down to objects below. Once the effective object rights and the effective all property rights are determined for a leaf object, they are combined to determine the total effective rights to the object.

Select Multiple Objects or Trustees

You can select more than one object at the same time. To select multiple objects listed sequentially, hold down the <Shift> key while making selections. To select multiple objects not listed sequentially, hold down the <Ctrl> key.

If you select more than one object at once, the changes you make affect this object's rights to all selected objects.

