

User

ENlighten/DSM helps you easily manage users and groups, and observe various activities. This process is the same whether you are configuring a single file server or a network of heterogeneous file servers and workstations. ENlighten/DSM supports `/etc/passwd` file, NIS, and NIS+ naming services.

This section describes how you can configure users, query for information about users, configure a group, disallow or allow logins, and monitor users' activities. The options are:

- Configure
- Query
- Groups
- Login Status
- Activity Monitor

Configure



You can use this module to manage user access and monitor user processes. When you activate this program, a window will appear displaying a list of all current user accounts ([Figure 4-1](#)).

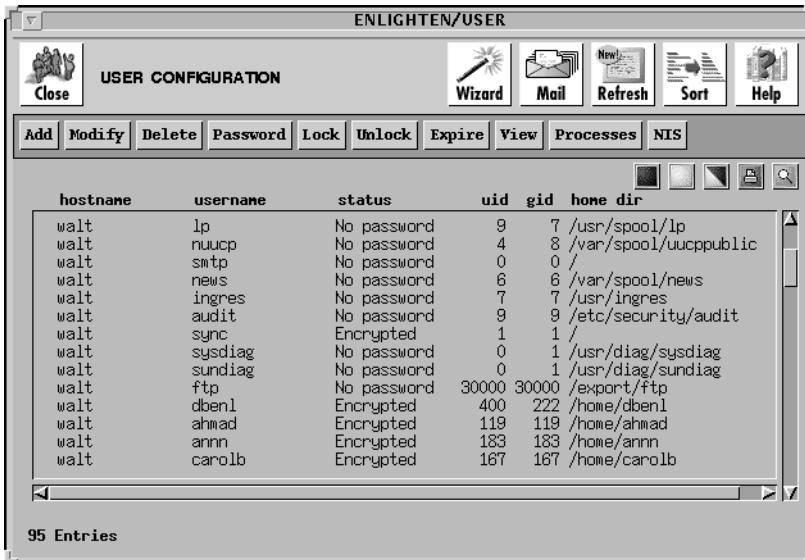


Figure 4-1 Current User Accounts List

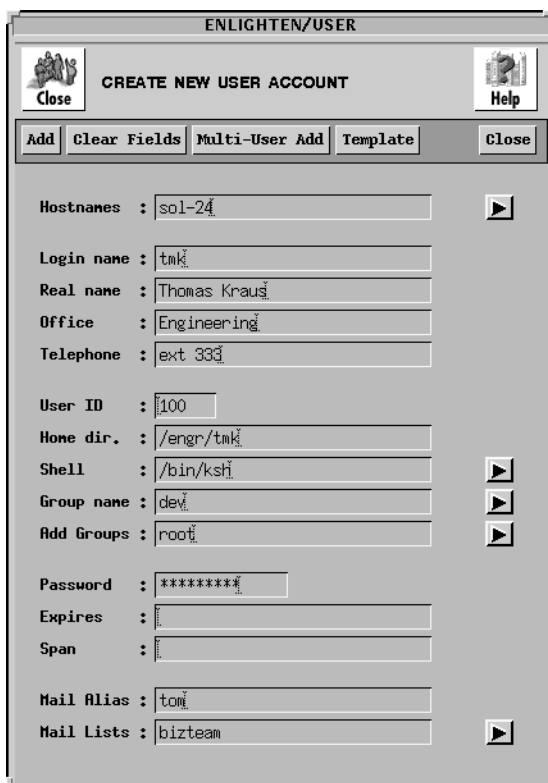
You can use this window to:

- Add a user
- Modify a user
- Delete a user
- Set or modify a password for a user
- Lock a user account
- Unlock a user account
- Expire a user's password
- View a user's information
- Monitor user processes
- Push NIS maps on any active NIS servers

The rest of this section details each of these options.

Add

Click the Add button to create user accounts. You can do this individually or en masse. The Create New User Account window (Figure 4-2) also gives you the option to use default parameters, as defined in the Configure —> New User Templates window. These defaults ensure all new user accounts in a particular type are created with consistent information (see [“New User Templates” on page 2-17](#) for more details).



The screenshot shows a window titled "ENLIGHTEN/USER" with a sub-title "CREATE NEW USER ACCOUNT". The window has a "Close" button on the top left and a "Help" button on the top right. Below the title bar is a menu bar with buttons for "Add", "Clear Fields", "Multi-User Add", "Template", and "Close". The main area contains several input fields with labels and values:

- Hostnames : sol-24
- Login name : tmk
- Real name : Thomas Kraus
- Office : Engineering
- Telephone : ext 333
- User ID : 100
- Home dir. : /engr/tmk
- Shell : /bin/ksh
- Group name : dev
- Add Groups : root
- Password : *****
- Expires :
- Span :
- Mail Alias : tom
- Mail Lists : bizteam

Figure 4-2 Create New User Account window

If you leave one of the fields blank when adding a user account, ENlighten/DSM will fill in the field with the default value (where possible) or prompt you for any additional information. After you've filled in all the fields properly and clicked on the Add button,

ENlighten/DSM will create the user account and home directory, update the appropriate naming service, and create the home directory with the required shell scripts.

The rest of this subsection describes the functionality of this window's fields and buttons.

Fields

You can fill in all of these fields manually or have ENlighten/DSM set defaults in most of the fields for you. Either way, you need to specify the following five fields before trying to add the user account.

Hostnames

If you want to limit the creation of this account to specific hostnames within a pool, enter those hostnames in this field. If you are using multiple entries, leave a blank between each entry. You can also use the arrow button to the right to select the available hosts from the current pool.

Login name

The Login name is a unique name that identifies a user account. A user needs a login name, and a password to gain access to the system. The login name must be unique and the first character should be set in lower case (e.g., cHE034). You may also use macros in this field; see [“User Account Macros” on page K-2](#) for more details.

Real name

This is the user's actual name. This field can identify a person, company, or organization. You can use this field to associate the sometimes cryptic Login name with the actual user's name. On larger systems, this name matching is invaluable.

Office

This field should contain the location where the user will normally access the system. The field can be an office number, an assigned location code, or a department name. This field does not allow punctuation characters.

Telephone

This field can contain the telephone number, telephone extension, or some other information to help locate and contact the user. The format of the field is user definable.

At this point you can have ENlighten/DSM automatically fill in the remainder of the form by clicking on the Add button. The default values entered depend on the values set in the Configure → New User Templates window.

Or, you can fill in the rest of the fields manually. The fields and their defaults are:

User ID

This field contains the UID number. The UNIX operating system uses this number to identify each user. This number does not have to be unique, but should be for easier system administration. Enter the UserID number to be assigned to this user account.

If the New User Template you're using is set to automatically generate a unique UID, then this field will be initialized with that number. See [“New User Templates” on page 2-17](#) for more details.



If this field is left blank, ENlighten/DSM will prompt you for an entry in this field when it tries to create the user.

Home dir.

The Home dir. field specifies where the user's start-up directory is attached. Most systems will use /usr or /home as the default parent directory. Each user will have their own directory created under the default home directory, for example, /usr/charlie. ENlighten/DSM stores /usr as the default HOME directory unless you change this field.

If you specify a HOME directory that does not exist, ENlighten/DSM creates and initializes it. ENlighten/DSM initializes the HOME directory by executing the *HOME directory initialization* script

`$/ENLIGHTEN/scripts/user.rc`. This copies the initialization files (e.g., `.profile` and `.cshrc`) into the `HOME` directory. You can modify this script to perform other initialization procedures.

You may also use macros in this field; see [“User Account Macros” on page K-2](#) for more details.

Shell

The Shell is a program that acts as a translator between the user and the UNIX operating system. There may be several standard shells on a system, including the C Shell, the Bourne Shell, the Korn Shell, and the restricted Bourne, C, and Korn Shells. This, however, does not stop experienced users from creating custom shells. Each shell has its own start-up executable program:

Bourne Shell	<code>/bin/sh</code>
Restricted Bourne Shell	<code>/bin/rsh</code>
C Shell	<code>/bin/csh</code>
Korn Shell	<code>/bin/ksh</code>
Restricted Korn Shell	<code>/bin/rksh</code>
Other	user defined

ENlighten/DSM uses the Bourne shell as the default shell in this field (`/bin/sh`). All users on the system do not have to use the same shell; this is a matter of user preference, as each shell offers different functionality. The number of standard shells available for this field depends on your system. Click the arrow button to display a pick list of available shells.

Group name

Every user account must be assigned to at least one User Group. The User Group is part of the UNIX security system; each user group has specific read, write, and execute privileges associated with every file created on the system.

Enter the primary Group name for this user or leave this field blank to have the default assigned. Click the arrow button for a pick list of defined User Groups. If you enter a Group Name that does not exist, ENlighten/DSM will prompt you for a correct Group Name when it tries to create the user.

Add Groups

You can use this field to put the user in additional user groups. This will effectively give the user more group privileges beyond those set in the primary user group. Enter the names of the user groups to which the user should also belong. Click the arrow button for a pick list of defined User Groups. Select the User Groups and click the Apply button to import them.

Password

The password is part of the UNIX security system. Each user must have a password. You can make the password the same as the user login, and the user can then change the password. Don't use passwords such as spouse names, pet names, or addresses, they are easy for another user to guess. You may also use macros in this field; see ["User Account Macros" on page K-2](#) for more details.



If the entry in the password field is not long enough, an error message will be displayed when you try to add this user account.

Expires

For systems that support password aging, this optional field contains the time when the password will expire. Once a password has expired, the system will force the user to change their password the next time they log in to the system.

If this field is left blank, the appropriate default parameter will be used. If no default is set in the User Add window (when you're adding a user), password aging will be turned off for that user. For more details, refer to [Appendix D, "Password Aging."](#)

To specify a time format, see [Appendix C, "Time Formats."](#)

Span

In conjunction with the Expires field, this field defines the minimum period of time that needs to elapse before the user can change his or her password. You can, however, change the user's password at any time by using the Password button in the User Configuration window. See ["Password" on page 4-16](#) for more details. To specify a time format, see [Appendix C, "Time Formats."](#)

Mail Alias (Create New User Account Window only)

This field specifies the default mail alias the account will use. An alias designates a short name as the substitute for the full pathname for a particular user or group. You may also use macros in this field; see ["User Account Macros" on page K-2](#) for more details.

Mail Lists

This field specifies which mailing lists will be updated to include this user. A mail list defines a group of people under one alias, so sending mail to that alias will distribute a copy to everyone on that list. Click the arrow button for a pick list of defined Mail Lists.

Buttons

This window contains the following buttons:

Add

Once you've entered the relevant information, click the Add button to create the user. If the information is incorrect, use the mouse to navigate through the fields and make the necessary changes. When complete, click the Add button again.

Clear Fields

Click the Clear Fields button to clear the existing choices in all fields.

Multi-User Add

Refer to ["Multi-User Add" on page 4-9](#) to use this button and the window it generates.

Template

Click this button for a pick list of defined New User Templates. You can use one of these templates to populate default values in the new user's account, make any necessary changes, and then Add the user. Only those fields that are currently blank (in the Create New User Account window) will be initialized from your selected template.

Close

Click this button to discard any changes and close the window.

Multi-User Add

You can also use the Create New User Account window to add multiple users in a single operation. Click the Multi-User Add button. The pop-up window shown in [Figure 4-3](#) is then activated for creating new users en masse.

The screenshot shows a window titled "ENLIGHTEN/USER" with the subtitle "ADD MULTIPLE USERS FROM TEXT FILE". At the top left is a "Close" button and at the top right is a "Help" button. Below these are three buttons: "Apply", "Clear Fields", and "Template", followed by another "Close" button on the far right. The main area contains several input fields and options:

- Filename of Accounts DB: []
- Hostnames: [] ▶
- Starting User ID Number: [100] ▶
- Default User Group: [] ▶
- Default Home directory: [/usr]
- Default Startup Shell: [/bin/sh] ▶
- Mail Alias: []
- Mail Lists: [] ▶

Below these is a section titled "Default Password Configuration:" with three options, each with a diamond-shaped selection icon:

- ◆ Add all users with same initial password
- ◆ Generate random password for each user
- ◆ Password same as user name

At the bottom, there are three more input fields:

- Initial Password: []
- Password to expire: []
- Span between changes: []

Figure 4-3 Creating Multiple New Users

You must first create a text file before you can use this program properly. Each line is the record for one user account. See [“Record Format” on page 4-14](#) for details on creating this file.

The rest of this subsection describes the functionality of this window’s fields and buttons.

Fields

This window contains the following fields:

Filename of Accounts DB

Use this field to specify which database file contains the user account information.

Hostnames

If you want to limit this user’s access to specific hostnames within a pool, enter those hostnames in this field. If you are entering multiple entries, leave a blank between each entry. You can also use the arrow button to the right to select the available hosts from the current pool.

Starting User ID Number

If the Userid field (field #5) is left blank in any of the records, ENlighten/DSM will assign the first available (unique) Userid found (higher than the UID entered in this field). Click the arrow button on the right to view the already assigned UserIDs. A pop-up menu will appear with a current list of UserIDs. Highlight the desired ID number and then click the Apply button. ENlighten/DSM will automatically insert the starting Userid into the appropriate record.

Default User Group

If the GroupID Number field (field #6) is left blank in any of the records, ENlighten/DSM will use this field to assign those users a default Group Name. Click the arrow button on the right to view a current list of User Groups. Highlight the desired entry in the pop-up menu and then click the Apply button to make the selection. ENlighten/DSM will automatically insert the Group Name into the appropriate record.

Default Home directory

If the Home Directory field (field #7) is left blank in any of the records, ENlighten/DSM will use this field to assign those users a default Home directory. Use the full pathname of the parent directory where all user's HOME directories will be created.

If you specify a HOME directory that does not exist, ENlighten/DSM creates and initializes it. ENlighten/DSM initializes the HOME directory by executing the *HOME directory initialization* script `$/ENLIGHTEN/scripts/user.rc`. This copies the initialization files (e.g., `.profile` and `.cshrc`) into the HOME directory. You can modify this script to perform other initialization procedures.

You may also use macros in this field; see [“User Account Macros” on page K-2](#) for more details.

Default Startup Shell

If the Shell field (field #8) is left blank in any of the records, ENlighten/DSM will use this field to assign those users a default shell. Click the arrow button on the right to view a current list of shells. Highlight the desired entry in the pop-up menu and then click the Apply button to make the selection. ENlighten/DSM will automatically insert the shell name into the appropriate record.

Mail Alias

This field specifies the default mail alias the account will use. An alias designates a short name as the substitute for the full pathname for a particular user or group. You may also use macros in this field; see [“User Account Macros” on page K-2](#) for more details.

Mail Lists

This field specifies which mailing lists will be updated to include this user. A mail list defines a group of people under one alias, so sending mail to that alias will distribute a copy to everyone on that list. Click the arrow button for a pick list of defined Mail Lists.

Default Password Configuration

When a user is created in UNIX, he or she must be assigned a password. If the password field (field #9) is left blank in the database record, the system must be told which method to use to create a password. Choose one of the following options as the default:

- Add all users with the same initial password (the default)
- Generate random password for each user
- Password same as user name

Initial Password

Use this field if you choose to add all users with the same initial password. Enter the password to be assigned to all the user accounts created from this process. Remember to check later and make sure each new user has changed his or her initial password. You may also use macros in this field; see [“User Account Macros” on page K-2](#) for more details.

Password to expire

For systems that support password aging, this optional field contains the time when the password will expire. Once a password has expired, the system will force the user to change their password the next time they log in to the system.

If this field is left blank, the appropriate default parameter will be used. If no default is set in the User Add window (when you’re adding a user), password aging will be turned off for that user. For more details, refer to [Appendix D, “Password Aging.”](#)

To specify a time format; see [Appendix C, “Time Formats.”](#)

Span between changes

In conjunction with the Expires field, this field defines the minimum period of time that needs to elapse before the user can change his or her password. You can, however, change the user's password at any time via ENlighten/DSM .

To specify a time format, see [Appendix C, "Time Formats."](#)

Buttons

This window contains the following buttons:

Add

Once you've entered the relevant information, click the Add button to start the user account creation process. ENlighten/DSM first checks that all field entries are valid and then starts creating the new user accounts.

ENlighten/DSM will then output a list of generated passwords after all the accounts have been created. Click the Print button if you want to print the list.

Clear Fields

Click this button to clear the existing choices in all fields.

Template

Click this button for a pick list of defined New User Templates. You can use one of these templates to populate default values in the new user's account, make any necessary changes, and then Add the user. Only those fields that are currently blank (in the Create New User Account window) will be initialized from your selected template.

Close

Click this button to discard any changes and close the window.

Record Format

The format for each record in the text file is:

Field #	Description	Comment
1	Login Name	Mandatory
2	User Real Name	Mandatory
3	Office	Optional
4	Telephone	Optional
5	Userid Number	Optional
6	Groupid Number	Optional
7	Home Directory	Optional
8	Shell	Optional
9	Password	Optional

Each record (line) in the file represents one user. Each user can have up to nine fields in the record. Use a comma (,) to separate each field specified. Each record is terminated with a carriage return (<CR>). There is no limit to the amount of records you can specify in the file.

The following example sets the account details for five people.

```
fred,The Fredster  
barney,The Barnarama,Head office  
wilma,Wilma Fraglerock,,233-7625  
betty,Betty Boomrock,,,401,other  
bambam,Boom,,,403,other,/usr/bambam,/bin/sh,bedrock
```

Modify

Click this button to modify user accounts. A pop-up window similar to the Create New User Account window will appear, except you cannot modify the Login name or Password fields.

There are also two button differences in the Modify window:

- You can use the Modify button (rather than the Add button) after you've made all your changes, and
- You can use the Next button to modify additional user accounts if you've selected more than one account to modify from the User Configuration list.

For a description of the rest of the buttons and fields in this window, see ["Add" on page 4-3](#).

Delete

Click this button to easily delete a user from the system. This program will delete the user account and also (optionally) remove the HOME directory and all of its contents (files and subdirectories) associated with the user. Highlight the username(s) you wish to delete from the system and then click the Delete button. ENlighten/DSM will prompt you to confirm your action.

ENlighten/DSM will NOT delete the users HOME directory if:

- It is considered to be a required directory. The directories are:

/	/usr	/etc	/bin
/lib	/home	/dev	/sbin
/usr/bin	/usr/adm	/usr/lib	/usr/sbin
/usr/man	/usr/lib/uucp		

- It is shared by more than one user. In this case, the HOME directory is not deleted since this would also delete the HOME directory of any sharing co-users.
- It is not owned by the user whose HOME directory it is supposed to be. In this case, ENlighten/DSM will then ask for your confirmation before deleting it.

Furthermore, ENlighten/DSM will not delete the root user account; this is considered to be too dangerous to allow.

Password

Click this button to change a currently defined User Account password. You don't need to know the password. A pop-up window will ask you to set the new password for the highlighted user ([Figure 4-4](#)).

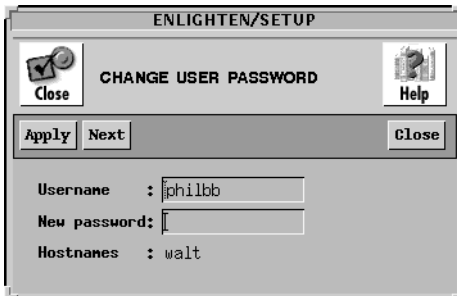


Figure 4-4 Changing User Account Password

If you have selected multiple usernames, clicking the Apply button will set the current password and bring up the next user. Clicking the Next button causes ENlighten/DSM to skip to the next selected user without changing the user's password.

Click the Close button to discontinue changing passwords. Any previous changes made by using the Apply button remain; they are not undone by clicking this button.

Lock

Click this button to deny a specific user access to the system without deleting the user's account. This procedure is part of the ENlighten/DSM security module; be cautious about who can access it. A pop-up window will prompt you to confirm this action.



You must assign a new password to unlock a user—the existing password will be lost! See the previous section to assign a password.

Unlock

Click this button to remove a lock from a user account. Because locking and unlocking user accounts is considered part of system security, ENlighten/DSM will ask for a new password when it unlocks a User Account. See [“Password” on page 4-16](#) to create the new password.

Expire

Click this button to expire the password for the selected user account(s) immediately. This option will only work on systems that support password aging. The next time the user attempts to log in to the system, he or she will be forced to change his/her password. You must confirm this option before it will be executed.

For more details on password aging, see [Appendix D, “Password Aging.”](#)

View

Click this button to view existing User Account information. A pop-up window will appear ([Figure 4-5](#)).

The View User window is similar to the Create New User Account window. It has two additional fields that contain:

- the date and time the user last logged in to the system (if available), and
- the date and possibly the time the user last changed their password (if available).

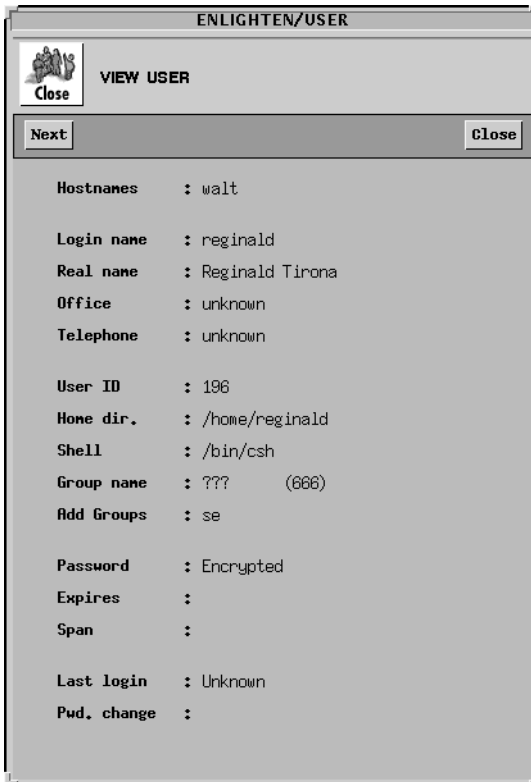


Figure 4-5 User Account Information

This is a read-only window; no modifications may be made. If you have highlighted multiple usernames, click the Next button to see the next highlighted username.

See [“Add” on page 4-3](#) for a description of the display fields in this window. Refer to [“Modify” on page 4-14](#) to modify this information.

Processes

This command displays a window of all processes currently running that belong to the highlighted users. To view the processes, highlight the users you wish to view and then click the Processes button. A window will appear displaying all processes for the highlighted users. To further manipulate this information, see [“Process Status” on page 4-31](#).

NIS

Click this button to push/remake the NIS maps on any active NIS servers. This updates the NIS servers and hosts on your network with any Host Entry changes you've made to the Configuration list. If there are no NIS servers to update for your choice(s), ENlighten/DSM will display a dialog box telling you so.

Query



You can use this module to query desired User account information on one or more users depending on your search criteria. You can search for active or inactive accounts, accounts using a specific shell, accounts assigned to specific office locations, and so on. Once your query is successful, you can then modify the accounts, monitor the accounts, print the account configurations, or send mail to the marked users.

When you activate this program, the following window will appear ([Figure 4-6](#)).

The screenshot shows a window titled "ENLIGHTEN/USER" with a sub-title "USER LIST QUERY". The window contains the following elements:

- Buttons: "Close" (top left), "Help" (top right), "Execute Search", "Clear Fields", and "Close" (bottom right).
- Fields:
 - User names : [text box]
 - Group names : [text box]
 - UID between : [text box] and [text box]
 - GID between : [text box] and [text box]
 - Home dirs. : [text box]
 - Shell(s) : [text box]
 - Real name : [text box]
 - Office : [text box]
 - Telephone : [text box]
 - Logged in since : [text box]
 - Not logged in since : [text box]
- Options: Password : Encrypted Locked None

Figure 4-6 Query User Account Information window

This window gives you the ability to search for information about the user that otherwise might be tedious and time-consuming to gather. The rest of this section describes the functionality of this window's fields and buttons. For additional descriptions of the field names, see ["Add" on page 4-3](#)

Fields

This window contains the following fields:

User names

You can use this field to specify that one or more user names will be used in the search criteria. Multiple user names may be entered, but must be separated by spaces.

Group names

You can use this field to specify that one or more group names will be used in the search criteria. Multiple group names may be entered, but must be separated by spaces.

UID between ... and

You can use these fields to limit the range of the User IDs in the search criteria. This data must be numeric. When ENLIGHTEN/DSM performs the search, user accounts whose UserID is less than or greater than the respective values are ignored.

GID between ... and

You can use these fields to limit the range of the Group IDs in the search criteria. This data must be numeric. When ENLIGHTEN/DSM performs the search, user accounts whose GroupID is less than or greater than the respective values are ignored.

Home dirs.

You can use this field to find all users whose home directory matches this search criteria. Multiple directory names may be entered, but must be separated by spaces.

The standard UNIX wild cards `'*'`, `'[]'`, and `'?'`, along with the negation operator `'!'`, can be used in this field (e.g., `/home/*`).

Shell(s)

You can use this field to find all shell programs that match this search criteria. Multiple shell names may be entered, but must be separated by spaces.

The standard UNIX wild cards ‘*’, ‘[]’, and ‘?’, along with the negation operator ‘!’, can be used as in this field (e.g., /bin/[ck]sh).

Real name

You can use this field to find all users whose Real Name matches this search criterion. Multiple names may be entered, but must be separated by spaces.

Office

You can use this field to find all users whose Office description matches this search criterion. Multiple locations may be entered, but must be separated by spaces.

Telephone

You can use this field to find all users whose telephone number matches this search criterion. Multiple telephone numbers may be entered, but must be separated by spaces.

Logged in since

Every time a user gains access to the system, the system date is recorded. You can use this field to search for users based on the time of their last system login on the local system. If the user’s date of last login is earlier than the date in this field, the search will skip the user.

This field can be used in two ways. The first is as a static date, where the date entered is the date used in the search. The second is a relative date, against the system clock. To specify a time format, see [Appendix C, “Time Formats.”](#)

Not logged in since

Every time a user gains access to the system, the system date is recorded. You can use this field to specify a cutoff date the search program will use to match users. If the date of last login of a user is later than the date entered in this field, the search will skip the user.

To specify a time format, see [Appendix C, “Time Formats.”](#)

Password

You must indicate which Password type is used in the search criteria: Encrypted, Locked, or None. Any combination of one or more of these three attributes may be selected (the default is all three).

Buttons

This window contains the following buttons:

Execute Search

Once you've selected your search criteria, click the Execute Search button. A User Query Results window appears with the results listed. If you click this button without filling in any of the fields, all current user's information will be displayed.

Then you can use the following options to act further on the results:

- Modify
- Delete
- Password
- Lock
- Unlock
- Expire
- View
- Processes

See ["Configure" on page 4-2](#) for more details.

Clear Fields

Click this button to clear the existing choices in all fields.

Close

Click this button to discard any changes and close the window.

Groups



You can use this module to add, modify, delete, or assign users to a group(s). ENlighten/DSM will display the list of currently configured user groups, as shown in [Figure 4-7](#).

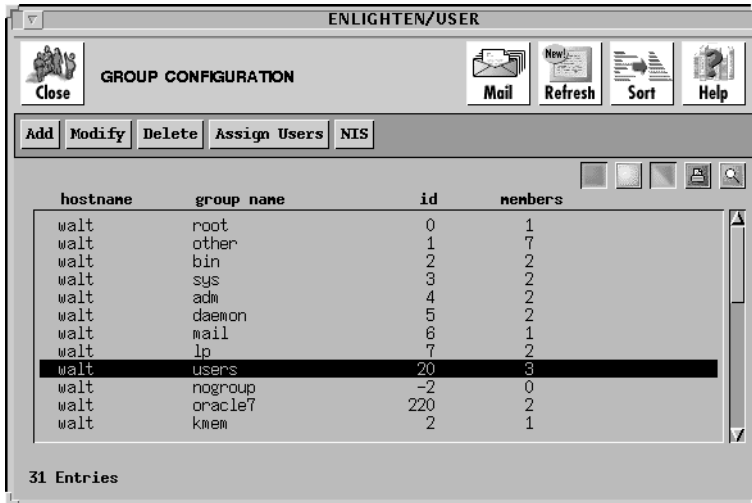


Figure 4-7 Currently Configured User Groups

The rest of this section details how to use the functionality of this module.

Add

Click the Add button to create a new user group. A pop-up window will appear prompting you for the Hostnames, Group Name, and Group ID ([Figure 4-8](#)).

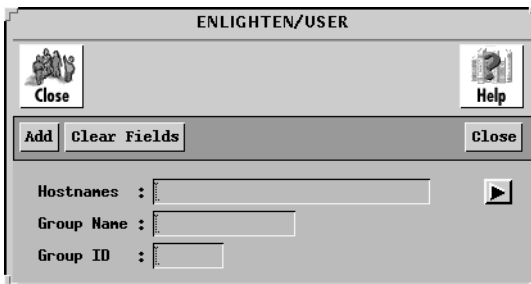


Figure 4-8 New User Group window

Fields

This window contains the following fields:

Hostnames

If you want to limit the creation of this group to specific hostnames within a pool, enter those hostnames in this field. If you are entering multiple entries, leave a blank between each entry. You can also use the arrow button to the right to select the available hosts from the current pool.

Group Name

The Group Name represents how this group will be identified. In most cases the name is related to the activities of the group. For example, the general accounting department group might be known as `acctgen` while the accounting supervisors group may be called `acctsup`. Enter the new User Group Name.

Group ID

The Group ID (or GID) is how the operating system refers to the User Group. The Group ID is a numeric way of referring to a User Group, while the Group Name is the more user friendly way of referring to the same Group. Enter the GID number. Decimals are not allowed in this field.

Buttons

This window contains the following buttons:

Add

Click the Add button to add the new user group.

Clear Fields

Click this button to clear the existing choices in all fields.

Close

Click this button to discard any changes and close the window.

Modify

Click this button to modify a group's parameters. A pop-up window similar to the Add Group window will appear, except you cannot modify the Hostnames field. To modify more than one group at a time, you must highlight each group individually before proceeding.

There are two additional buttons in the Modify window:

- Click the Modify button (rather than the Add button) after you've made all your changes, and
- Click the Next button to modify additional user accounts if you've selected more than one account to modify from the User Configuration list.

For a description of the rest of the buttons and fields in this window, see ["Add" on page 4-24](#).

Delete

Click this button to delete a group definition. ENlighten/DSM will prompt you to confirm your action. This command will remove the currently highlighted User Group from the system and also delete any links between the User Group and members of the group.

Assign Users

Click this button to add users, delete users, or move users to another group. A window will appear ([Figure 4-9](#)).

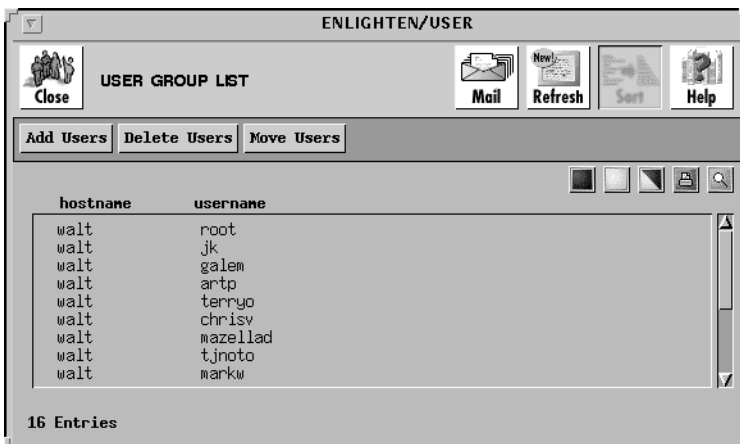


Figure 4-9 User Group List window

The rest of this subsection details how to use these window buttons.

Add Users

Click this button to add users to a group. After you do so, a pop-up menu will be brought up showing all current users on the system. Highlight the users to add to this group and click the Apply button.

Delete Users

Click this button to delete one, some, or all of the users from the currently selected User Group. A pop-up window will appear asking you to confirm this action.

Move Users

Click this button to move one or more User Accounts from the currently selected User Group to another defined User Group. A pop-up window will appear requesting the name of the new user group. You can also click the arrow button on the right to display a pick list of available groups. Highlight the group you wish to move the users to and then click Apply.

When you've selected a new user group, click the Apply button in the New User Group window. ENlighten/DSM will then prompt you to confirm that each marked user should be moved to the new user group.

Login Status



You can use this menu choice to allow or disallow logins. The second option stops any users from gaining access to the system. This only works on systems that recognize the `/etc/nologin` mechanism. Typically you use the second option during system maintenance or when a large job is running that requires most of the CPU's resources.

Highlight the desired action and ENlighten/DSM will prompt for confirmation, if needed. For example, if you highlighted Allow Logins and no confirmation appeared, you are already allowing logins. Otherwise a pop-up window will appear and you can click OK to execute the desired action.



The only way to remove a temporary lockout from the system is to go back to the User menu and choose Allow Logins. Or you can reboot the system.

Activity Monitor



You can use this module to monitor login activity, process statuses, and CPU usage by user. The actual options are:

- Who is Logged In
- Process Status
- CPU Summary

The rest of this section details how to use each of these options.

Who is Logged In

You can use this program to see at a glance which users are currently logged in (accessing) the system ([Figure 4-10](#)). The program displays the following information: Hostname, Username, TTY, Login Time, Idle Time, Process ID, and the location of the TTY (if available).

hostname	username	tty	login time	idle	pid	location
happy	kjk	ttyp0	Feb 4 10:55	0:06	468	speedy.sftw.com
happy	rich	ttyp8	Feb 4 08:11	2:35	367	wabbit.sftw.com
happy	root	console	Jan 31 17:33	old	1002	
happy	root	ttyp2	Jan 23 14:54	16:26	1031	taz.sftw.com
happy	root	ttyp5	Jan 31 17:33	old	16581	
happy	root	ttyp6	Jan 31 17:33	old	16589	happy:0.0
happy	root	ttyp7	Jan 31 17:33	old	16588	happy:0.0
happy	stevet	ttyp3	Jan 27 14:51	old	16474	hockey.sftw.com
rocky	dunne	ttyq0	Feb 3 18:17	15:35	8587	
rocky	kjk	ttyq2	Feb 4 10:48	0:07	8870	
rocky	matthew	ttyq4	Feb 4 11:19	13:15	10135	
rocky	rich	ttyq3	Feb 4 08:11	2:30	8700	
rocky	sallys	ttyq6	Feb 5 10:13	.	20988	

Logins are currently enabled

Figure 4-10 Logged In Users

You may select one or more user accounts for further processing by highlighting the desired users. Then select one of the following menu options:

Write

Use the Write command to write a message directly to the highlighted users. When you click the Write button, a window will appear. You can now write a message of any length to each of the highlighted users (one at a time). When you have completed your message, press the <return> key and the message will be sent. To close down the window, press <Control>-C or the interrupt key. The recipient can respond to this message.

Message

The Message command is similar to the Mail command (see Appendix A, “ENlighten/DSM Basics,” in the *ENlighten/DSM User Guide*), except a predefined or custom form letter is sent directly to the user’s screen instead of the user’s mailbox. The recipient cannot reply to this message.

Logout

This command will terminate all highlighted work sessions by killing the initial Shell process belonging to the marked users.



This command can be dangerous as it may also cause related user processes to be killed. Be careful!

Processes

This command displays a window of all processes currently running that belong to the highlighted users. To view the processes, highlight the users you wish to view and then click the Processes button. A window will appear displaying all processes for the highlighted users. To further manipulate this information, see the next section, [“Process Status.”](#)

Process Status

You can use this menu item to display a list of all active processes ([Figure 4-11](#)).

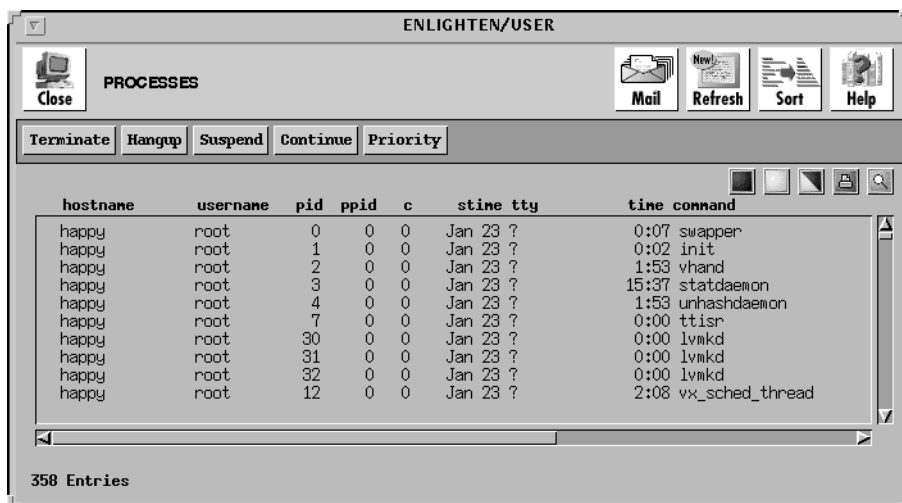


Figure 4-11 Active Processes List

Then you can select a process and use the menu buttons to impact it, as described in the following subsections.

Terminate

This command is very powerful and can be extremely dangerous. It will immediately kill the highlighted process. This command will not kill related processes, so if there are child processes running they will become orphans and will have to be terminated separately. A pop-up window will prompt you for verification to terminate the process.

Hangup

This command is similar to the Terminate command, except it provides enough time for the process to shut down properly. This means the process can close any files and terminate any child processes. A pop-up window will prompt you for verification to hang up the process.

Suspend

This command stops a process from working, but it does not terminate the process. Essentially, this command puts a process on hold; it can be activated again at a later time. You must use the Continue command to re-activate a suspended process. A pop-up window will prompt you for verification to suspend the process.

Continue

This command allows you to re-activate a process that was previously put on hold by a Suspend command. A pop-up window will prompt you for verification to resume the process.

Priority

This command allows you to change the priority of a process. This priority determines when the CPU acts on a process. It may have a value from -20 to +20; the smaller the number, the higher the priority. Clicking the Priority button activates a Process Priority window. You can enter the desired priority or use the arrow buttons to make your selection.

CPU Summary

This program allows you to view a breakdown of CPU usage by user. The Summary of Process window will show all currently logged in users, the current number of processes, and the total cumulative CPU usage for each active user ([Figure 4-12](#)).

hostname	username	telephone	procs	cpu time
happy	daemon	unknown	4	12:00
happy	kjk	unknown	11	0:00
happy	lp	unknown	1	0:00
happy	rich	unknown	1	0:00
happy	root	unknown	105	4069:07
happy	stevet	unknown	1	0:00
rocky	auditor	unknown	7	0:35
rocky	dunne	unknown	1	0:00
rocky	kjk	unknown	10	0:01
rocky	lp	unknown	1	0:00
rocky	matthew	unknown	1	0:00
rocky	rich	unknown	1	0:00
rocky	root	unknown	95	7:40
rocky	stevet	unknown	1	0:00
taz	dunne	unknown	77	264:25
taz	root	unknown	48	361:00

16 Entries

Figure 4-12 CPU Summary window

You now have the option to Graph all or selected processes, or to view individual processes.

Graph

To graph the processes, highlight the information you wish to view and then click the Graph button. A window will appear displaying the highlighted items in a graphical format.

Processes

To view the processes, highlight the users you wish to view and then click the Processes button. A window will appear displaying all processes for the highlighted users. To further manipulate this information, see [“Process Status” on page 4-31](#).

