

**Gopher Service Properties**

The Gopher Service property sheet sets user properties for the Gopher service.

**Connection Timeout**

Sets the length of time before the server disconnects an inactive user. This value ensures that all connections are closed if the Gopher protocol fails to close a connection.

**Maximum Connections**

Sets the maximum number of simultaneous connections to the Gopher service.

**Service administrator**

Specifies the values the Gopher service will report to Gopher service users.

**Anonymous Logon**

Sets the Windows NT user account to use for permissions of all anonymous connections. By default, Internet Information Server creates and uses the account IUSR\_*computername*. Note that the password is used only within Windows NT; anonymous users do not log on using a username and password.

**Comment**

Specifies the comment displayed in Internet Service Manager's report view.

## **Gopher Directories**

The Gopher Directories property sheet sets directories and directory behavior

### **Directory listing box**

Lists the directories used by the Gopher service.

**Directory** lists the path of directories used by the service.

**Alias** is the path for Gopher service users. Note that aliases do not appear in Gopher listings; you must create tag files to include virtual directories in Gopher listings.

**Error** indicates system errors, such as difficulty reading a directory.

### **Add, Remove, and Edit buttons**

To set up a directory, press the Add button or select a directory in the Directories listing box and press the Edit button. The Remove button removes the directories you select.

## **Gopher Directory Properties**

Configure the Gopher service directories by using this dialog box. Press the Add button on the Directories property sheet to set up new directories.

### **Directory**

Sets the path to the directory to use for the Gopher service.

### **Browse button**

Use to select the directory to use for the Gopher service.

### **Home Directory**

Choose this to specify the root directory for the Gopher service.

Internet Information Server provides a default home directory, \Gopheroot, for the Gopher service. The files that you place in the Gopher home directory, and its subdirectories, are available to remote browsers. You can change the location of the default home directory.

### **Virtual Directory**

Choose this to specify a subdirectory for the Gopher service. Enter the directory name or "alias" that service users will use.

These directories are accessed using the alias in the URL as if the alias were a subdirectory of the home directory. That is, you can publish from other directories and have those directories accessible from within the home directory. Such directories are called "virtual directories."

Note that virtual directories will not appear in Gopher directory listings; you must create explicit links in tag files in order for users to access virtual directories. Users can also type in the URL if they know the alias for the virtual directory; however, they must precede the alias name with "11/". For example, to access the virtual directory "books" from your Gopher server which is named gopher.company.com, you would use the following URL:

```
gopher://gopher.company.com/11/books
```

The administrator can specify the physical location of the virtual directory and the virtual name (alias), which is the directory name used by remote browsers.

The published directories can be located on local or network drives. If the virtual directory is a network drive, provide the username and password with access to that network drive. Virtual directories on network drives must be on computers in the same Windows NT domain as the Internet Information Server.

### **Account Information**

This box is active only if the Directory specified in the first line of this dialog box is a Universal Naming Convention (UNC) server and share name, for example, \\Webserver\Htmlfiles. Enter the username and password that has permission to use the network directory. Virtual directories on network drives must be on computers in the same Windows NT domain as the Internet Information Server.

**Important** If you specify a username and password to connect to a network drive, all Internet Information Server access to that directory will use that username and password. You should use care when using UNC connections to network drives to prevent possible security breaches.

### **Logging Properties**

The Logging property sheet sets logging for the selected information service.

#### **Enable Logging**

Select this box to start or stop logging for the selected information service.

#### **Log to File**

Choose this option to log to a text file for the selected information service.

#### **Automatically open new log**

Select this box to generate new logs at the specified interval. If not selected, the same log file will grow indefinitely.

#### **Log file directory**

Shows the path to the directory containing all log files. To change directories, click Browse and select a different directory.

#### **Log file filename**

Names the log file. The lowercase letters **yy** will be replaced with the year, **mm** will be replaced with the month, and **dd** will be replaced with the day.

#### **Log to SQL/ODBC Database**

Choose this button to log to any ODBC data source. Set the Datasource name, Table name (not the filename of the table), and specify a username and password that is valid for the computer on which the database resides. You must also use the ODBC applet in Control Panel to create a system data source.

### **Advanced Properties**

The Advanced property sheet sets access by specific IP address to block individuals or groups from gaining access to your server. You can also set the maximum network bandwidth for outbound traffic, to control the maximum amount of traffic allowed on your server.

#### **IP Access Control**

You can control access to each Microsoft Internet Information Server service by specifying the IP address of the computers to be granted or denied access.

If you choose to grant access to all users by default, you can then specify the computers to be denied access. For example, if you have a form on your WWW server and a particular user on the Internet is entering multiple forms with fictitious information, you can prevent the computer at that IP address from connecting to your site. Conversely, if you choose to deny access to all users by default, you can then specify which computers are allowed access.

#### **Granted Access**

Choose this option, then press the Add button to list computers that will be denied access.

#### **Denied Access**

Choose this option, then press the Add button to list computers that will be granted access.

#### **Add**

To add computers that you want to deny access to, select the Granted Access button and click Add. Conversely, to add computers that you want to grant access to, select the Denied Access button, and click Add.

#### **Limit Network Use by all Internet Services on this computer**

You can control your Internet services by limiting the network bandwidth allowed for all of the Internet services on the server. Set the maximum kilobytes of outbound traffic permitted on this computer.

**Gopher Grant or Deny Access**

Choose Single Computer and provide the IP Address to exclude a single computer. Choose Group of Computers and provide an IP Address and subnet mask to exclude a group of computers. Press the button next to the IP address to use a domain name system (DNS) name instead of IP address. Your server must have a DNS server specified in its TCP/IP settings.

You are specifying, by IP address or domain name, which computer or group of computers will be granted or denied access. If you choose to, by default, grant access to all users, you will specify the computers to be denied access. If you choose to, by default, deny access to all users, you will then specify the specific computers to be allowed access. You should fully understand TCP/IP networking, IP addressing, and the use of subnet masks to use this option.

Help not available.

Help not available.

## **Gopher Overview**

Although the Gopher service is similar to FTP because it allows you to easily publish existing archives of files, the Gopher service overcomes some limitations of the FTP service. The Gopher service allows you to create links to other computers or services, to annotate your files and directories, and to create custom menus.

The Microsoft Internet Information Server Gopher service supports all Gopher features. In addition, the Gopher service supports Gopher+ selector strings, which allows the server to return additional information to the client, such as administrator name, modification date, and MIME-type.

Setting up a Gopher site is as simple as copying your files to the \Inetsrv\Gophroot directory. Clients can then browse the Gopher directories as easily as using File Manager. To enhance your site you can create tag files that enable links to other computers or services, to annotate your files and directories, and to create custom menus. See [Setting Up Tag Files](#) for more information.

## **Controlling Security by User Name and Password**

### **To set username and password security**

- 1 In Internet Service Manager, double-click the Gopher service to display its property sheets and then click the Service tab.
- 2 In the Anonymous Logon box, type the username and password that you want the Gopher service to use when accessing resources on behalf of a Gopher client.

By default IUSR\_*computername* is used for anonymous logons. You can also use any valid Windows NT account set up in the Windows NT User Manager.

- 3 Click OK.

## Setting Up Tag Files

Tag files allow you to supplement the standard Gopher display returned to clients with additional information and to provide links to other computers.

You create tags for your Gopher site with the **gdsset** utility. To see the complete syntax of the **gdsset** command, type **gdsset** at the command line with no parameters.

Tag files are hidden files. Use File Manager to set the hidden attribute for tag files.

On drives formatted using the FAT file system, the tag filename is the same as the file it describes, with .Gtg appended to the filename. For example, if the content filename is Catalog.txt then the tag filename would be Catalog.txt.gtg.

On drives formatted using NTFS, the tag filename is the same as the file it describes with :Gtg appended to the filename. NTFS tag files are stored in an alternate data stream. For example, if the content filename is Catalog.txt then the tag filename would be Catalog.txt:gtg. Note that a colon rather than a period is used to start the extension.

Tag files stored on FAT volumes can be edited using most ASCII-based text editors, such as Notepad. The file may need to be unhidden to edit it. Tag files stored on NTFS volumes cannot be edited by most text editors because the file is stored in an alternate data stream.

### To create a link from your local Gopher site to a directory on another computer

▶ Run the **gdsset** command with the following syntax.

```
gdsset -c -gn -f file description -a "administrator's name" -e e-mail -h hostname filename
```

Where:

**-c**

Edits or creates a new file.

**-gn**

The value for *n* can be any single-digit code from 0 to 9. If you omit this flag, the code for the file type will default to 9, binary. For a list of type codes, see [Interpreting Gopher Type Codes](#).

**-f "*file description*"**

A synopsis of the contents of the file.

**-a "*administrator's name*"**

The value between the quotation marks is the administrator's name. If you omit this flag, the value defaults to the service administrator's name in the Service dialog box of the Microsoft Internet Service Manager.

**-e *e-mail***

The value is the administrator's e-mail address. If you omit this flag, the value defaults to the service administrator's e-mail address in the Service dialog box of the Microsoft Internet Service Manager.

**-h *hostname***

Specifies the name of the computer to link to.

*filename*

The value is the name of the file for which you want to create a tag file.

**Gdsset** automatically hides the tag files you create.

The following command displays information stored in a tag file:

```
gdsset -r filename
```

To create a batch command to tag a series of files that have the same type, such as a series of text files, use the following syntax:

```
for %i in (*.txt) do <echo %i && gdsset -c -g0 -f %i %i
```

## Interpreting Gopher Type Codes

The following list shows all possible Gopher item type codes and what they mean. The first character is the type code.

**0**

File, usually a flat text file.

**1**

Gopher directory.

**2**

CSO phonebook server.

**3**

Error.

**4**

Binary-hexidecimal Macintosh file.

**5**

MS-DOS binary archive.

**6**

UNIX UUencoded file.

**7**

Index-search server.

**8**

Telnet session.

**9**

Binary file.

**c**

Calendar or calendar of events.

**g**

Graphic Interchange File graphic (GIF).

**h**

HTML World Wide Web hypertext page.

**i**

In-line text that is not an item.

**l**

Another kind of image file.

**m**

BSD format mbox file.

**P**

PDF document.

**T**

TN3270 mainframe session.

**:**

Bitmap image (use Gopher+ information for type of image).

**;**

Movie (use Gopher+ info for type of movie).

<

Sound file.

+

Redundant server.

!

Another kind of image file.

**Note:** For \*.Gif files, the file type I and g can be used interchangeably.

