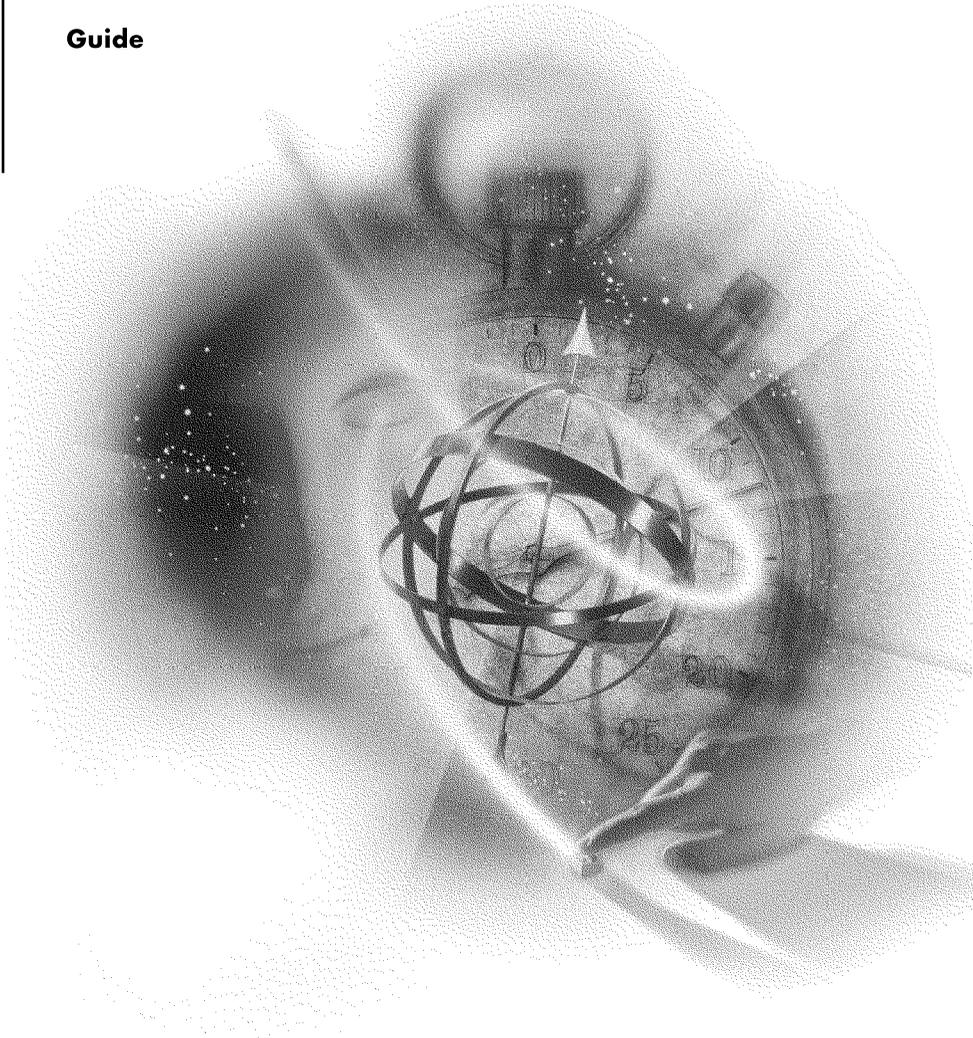


Administration

Guide



NetWare® News Server

Novell®

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NetWare News Server Administration Guide

This manual is written for network administrators who want to add news servers to their networks. Before you configure NetWare[®] News Server, refer to Chapter 2, “Planning Your News Server,” on page 17.

Because the News Server is scalable, the recommended use of memory and hard drive space varies according to your needs.

- ◆ A minimum 128 MB RAM is recommended. 1 GB RAM is recommended if you’re using a full UseNet feed (20,000 plus newsgroups).
- ◆ A minimum 200 MB space on the volume you’re installing on is recommended. 20 GB hard drive space is recommended if you’re using a full UseNet feed (20,000 plus newsgroups).

1

Overview

NetWare® News Server makes intranet and Internet collaboration a reality by bringing the full power of open standards technology to focused discussion groups. By using the News Server for discussion groups, the people in your company can easily share information both within the company and across the Internet.

Features of the News Server

NetWare News Server provides the following features for enterprise-sized discussion groups:

- ◆ Support for standard protocols
- ◆ Easy creation and management of discussion groups
- ◆ Full-text search across multiple discussion groups
- ◆ Access control at both server and discussion group levels
- ◆ Security using SSL and client certificates
- ◆ Discussion group replication

Support for Standard Protocols

The NetWare News Server supports the following protocols:

- ◆ Network News Transport Protocol (NNTP) for supporting discussion over TCP/IP networks
- ◆ Lightweight Directory Access Protocol (LDAP) for connection to LDAP servers
- ◆ Secure Socket Layer for authentication and encryption

- ◆ Simple Network Management Protocol (SNMP) for remotely monitoring and managing IP devices across a network

Easy Creation and Management of Discussion Groups

You can easily create and manage discussion groups with the Discussion Group Manager. You can delegate discussion group management tasks to users if you grant them the appropriate permissions.

Searching across Multiple Discussion Groups

You can specify full-text indexing of discussion groups for searching purposes. Users can specify search profiles to more easily monitor and track discussions across multiple discussion groups.

Access Control at Both Server and Discussion Group Levels

You can create private or public discussion groups. You can specify access control on your entire server, on your entire server and certain discussion groups on your server, or only on certain discussion groups on your server.

Security Using SSL and User Certificates

NetWare News Server uses SSL and user certificates to provide authentication and encryption when communicating with other SSL-enabled products.

Discussion Group Replication

Discussion group replication is the way two or more news servers exchange articles and share information. Servers can accept discussion groups, send discussion groups, or both.

Administering the News Server

To administer the News Server:

- 1 In a browser, type `https://serveripaddress:netwarewebmanager port`

The General Administration page appears.

- 2** From the General Administration page, click the News Server *server name* button.
- 3** Click the button that corresponds to what you want to administer.

The following illustration shows the General Administration page and News Server button.

Figure 1 General Administration Page



Locating More Information

To help you install, configure, and administer your NetWare News Server, see the following resources:

| If You Want To | Refer To |
|--|--|
| Learn more about this product | The online documentation |
| Find current technical support information on this product | The Novell Technical Support Web site at http://support.novell.com (http://support.novell.com) |

2

Planning Your News Server

Before you install your NetWare® News Server, you need to

- ♦ “Choosing Your Directory Service” on page 17
- ♦ “Determining Access Control and Security Requirements” on page 17
- ♦ “Planning Discussion Groups” on page 18
- ♦ “Planning Your Replication Sites” on page 18

For information on the NetWare News Server installation, refer to NetWare News Server in *NetWare 5.1 Installation Guide*.

Choosing Your Directory Service

Your directory service stores information about users and groups, discussion groups, and access control. Novell Directory Services® (NDS)[™] is the default directory. You can change the default directory in the NetWare Web Manager > Global Settings > Configure Directory Service.

Determining Access Control and Security Requirements

To decide what type of access control and security you need, ask yourself the following questions:

- ♦ What type of information will be stored on the server?
- ♦ How critical is the privacy of this information to my organization?
- ♦ Who does and does not require access to this information?
- ♦ Will some information be private and some information public?

- ◆ Will some information be shared with people outside of my organization?

Your answers to these questions determine your access control and security requirements.

By default, access control is turned off. Any user can read and post to your server. Open or unrestricted access is common in intranet environments where users are known and trusted. If you require other access control, you must modify the access control settings.

To determine what tasks you must perform to provide the appropriate level of access control for your server, refer to Chapter 5, “Controlling Access to Your Server,” on page 49.

To determine what tasks you must perform to provide the appropriate level of access control for discussion groups, refer to Chapter 6, “Managing Discussion Groups,” on page 57.

By default, security features are disabled. If you require security, you must modify the security settings. If your network communicates with networks outside of your organization, consider using authentication, encryption, and firewalls. For more information about security, refer to Chapter 8, “Securing the NetWare News Server,” on page 87.

Planning Discussion Groups

You must decide what discussion groups you want your News Server to provide to your users. You can create new discussion groups and receive discussion groups from other servers, including the Usenet newsgroups. For more information about creating and receiving discussion groups, refer to Chapter 6, “Managing Discussion Groups,” on page 57.

Planning Your Replication Sites

Before you configure your server for discussion group replication, ask yourself the following questions:

- ◆ What discussion groups do I want the NetWare News Server to provide to my users?

You will make this decision based on the content you want to provide and how much disk space you have available.
- ◆ What discussion groups do I want to replicate with other sites?

- ♦ Are my replication sites internal to my organization, or will I also be replicating discussion groups with external sites?

After you've decided what discussion groups you want to provide and what your replication sites will be, contact the administrators of the remote sites to set up replication. For more information on configuring your replication sites, refer to Chapter 7, "Managing Replication," on page 75.

3

Setting Up Your Server

This section describes the basic tasks you need to perform to set up the NetWare® News Server.

Starting and Stopping the Server

You can start or stop the News Server on the General Administration form and in the News Server interface.

- 1 From the General Administration form, click On or Off on the switch to the left of the News Server server name button

or

From the News Server interface, click Server Preferences > Start/Stop the Server > Start or Stop.

Specifying Search Options

The News Server provides full-text search across multiple discussion groups. This feature lets users easily monitor and track discussions on a wide variety of topics.

The News Server also provides a profiling feature that stores the results of a search in a virtual discussion group that is updated periodically. To users, the virtual discussion group looks like any other discussion group. To specify which discussion groups are indexed, refer to “Indexing Discussion Groups” on page 71.

To enable or disable searching and profiling options:

- 1 From the General Administration page, click the News Server *server name* button > Server Preferences > Search Options.

- 2 Enable or disable searching.

If you disable searching, some news readers might still be able to search headers within a discussion group.

- 3 Enable or disable profiling.

You must enable profiling before users can store search results in virtual discussion groups.

- 4 Click OK.

Specifying Directory Service Information

You specify the default directory in the Configure Directory Service form (from the NetWare Web Manager, click Global Preferences > Configure Directory Service). NDS™ is the default directory.

The Directory Server Control Options form specifies the username and password used to connect LDAP or the local directory. If you are using NDS, this form is not applicable.

To change the username and password that connects to the directory server:

- 1 From the General Administration page, click the News Server *server name* button > Server Preferences > Directory Server Options.
- 2 Type the user ID that identifies the News Server to LDAP or the local directory service.
- 3 In the Password and Again fields, type the password associated with the user ID.
- 4 Click OK.

If you get an error when you click OK, the user ID and password you specified are probably incorrect.

Controlling User Connections to Your Server

You might want to control connections to the News Server if you will be performing maintenance tasks on your server. The following are examples of when you might choose to control connections for maintenance:

- ♦ To renumber the active file, you can specify read-only access (no posts, no feeds).

- ♦ If you need to shut down the server for some reason, you can disable newsreader connections. Users already connected to the server are allowed to finish their tasks.
- ♦ If you want to control your News Server's content, you can prevent the server from replicating discussion groups with other servers.

To specify the type of connections to control:

- 1** From the General Administration page, click the News Server *server name* button > Server Preferences > Connection Control.
- 2** Check Reject New Articles for This Reason if you do not want users and other servers to post articles to your server.

Users can still connect to your server to read articles.

- 3** In the Reject New Articles for This Reason field, type an explanation for the rejection.

The text you type is sent to any user who attempts to connect to your server while the connections are disabled.

- 4** Check Reject Reader Connection for This Reason if you do not want users to connect to the server.

Servers can still connect to send articles.

- 5** In the Reject Reader Connections for This Reason field, type an explanation for the rejection.

The text you type is sent to any user who attempts to connect to your server while the connections are disabled.

- 6** Click OK.

Specifying SNMP Configuration

Simple Network Management Protocol (SNMP) is used to remotely monitor and manage IP devices across a network. Enabling SNMP allows others to manage objects from any SNMP manager utility, such as ManageWise®. The SNMP agent for NNTP is NEWSSNMP.NLM, located in the SYS\SYSTEM directory. If you want your NetWare News Server to be visible on an SNMP network, you must specify SNMP configuration for your server.

To configure SNMP for your server:

- 1 Copy the NNTP.MIB file to the directory that you want to use to view MIB files.

The NNTP.MIB file is in NOVONYX\SUITESPOT\BIN\NEWS.

- 2 Compile the NNTP.MIB file.
- 3 From the General Administration page, click the News Server *server name* button > Server Preferences > SNMP Setup.
- 4 Type a description for your server, for example, News Server.
- 5 Type the name of your organization.
- 6 Type the physical location of your machine, for example, the building address.
- 7 Type the name of the person to contact about this server.

Usually this is the server administrator.

- 8 To make your server visible on the SNMP network, click SNMP Monitoring On.

Take your server off the network by clicking SNMP Monitoring Off. Enabling SNMP allows others to manage objects from any SNMP manager utility screen.

- 9 Click OK.

Specifying Technical Settings

The Technical Settings form for your server specifies information about background tasks, limits, organization name, port number, and spool directory location.

When you install your server, most of the technical settings have default values. For example, the port number reflects the server port number you specified when you installed NetWare 5.1. The default port is 119.

You might want to change the settings for various reasons. The following sections describe how to view and change technical settings for your server.

Specifying Background Tasks

The News Server automatically runs certain tasks, such as periodically expiring articles and sending discussion groups to other news servers. You can

specify when and how often the News Server should perform these background tasks.

- 1** From the General Administration page, click the News Server *server name* button > Server Preferences > Technical Settings.
- 2** Under Background Tasks, from the Send Outgoing News drop-down list, select how often you want your server to send discussion groups to the designated replication sites.

Frequently sending outgoing news keeps your replication sites current but places greater load on your News Server.

- 3** From the Update Indexes drop-down list, select how often batch files are processed.
- 4** From the Update Profiles drop-down list, select how often search profiles are updated.

Frequently updating profiles keeps the search profiles more current but places greater load on your news server.

- 5** From the Perform Daily Tasks drop-down list, select when the server will run news.daily.

You should choose a time when the server is least busy.

- 6** Click OK.

Specifying Limits

You might want to control connections to the News Server to speed up your server. The following are examples of when you might choose to control connections for performance reasons.

- ◆ Limiting newsreader timeout and number of connections can improve server performance and aid in preventing server overload because of excessive activity.
- ◆ Limiting article size can help to conserve disk space.

To specify user connection and article size values:

- 1** From the General Administration page, click the News Server *server name* button > Server Preferences > Technical Settings.
- 2** Under Limits, in the Connection Timeout field, specify how long the News Server will wait for another request from a newsreader before closing the connection.

This option prevents idle newsreaders from consuming system resources.

- 3 Specify the number of newsreaders that connect concurrently to your server.

By limiting the number of newsreaders, you can improve server performance. If you set the maximum newsreader connections too high and your server isn't configured to handle this many connections, server performance might be poor.

- 4 Specify the maximum article size the news server will accept from a newsreader or another server.

The value you specify depends on your business requirements.

- 5 Click OK.

Specifying an Organization Name

When users post articles to your server, they generally have an organization header listed in their message header information. This header might be the name of the company they work for or the name of the school they attend.

The organization header can be set as an option in the user's newsreader. If someone posts an article that does not have an organization header to your server, you can specify that a default organization header be added.

The following illustration shows the organization name in the header of an article.

Subject: Documentation Suggestions

Date: Wed, 20 Oct 1999 13:24:21 -0600

From: Eric Taylor <etaylor@mycompany.com>

Organization: Marketing

Newsgroups: product.component.documentation

Hi,

Be sure to include install information in your Getting Started guide.

Thanks,

Eric

To specify a default organization header:

- 1 From the General Administration page, click the News Server *server name* button > Server Preferences > Technical Settings.
- 2 Under Organization Name, in the Organization field, type the default header.
- 3 Click OK.

Changing the Port Number

You might want to change the port number to improve server security. Be aware that changing the server port number has implications for all clients, including other news servers attempting to connect to your server. If a client is unaware of the port number change, the client can no longer connect to your server.

To change the port number:

- 1 From the General Administration page, click the News Server *server name* button > Server Preferences > Technical Settings.
- 2 Under Port Number, type the port number.
- 3 Click OK.

The server will check whether this port is in use by some other server to prevent re-use.

Spool Directory Location

The spool directory indicates the location where all of the articles on your server are kept. Articles are stored in subdirectories corresponding to their discussion group names. For example, you might find music, theater, and dance subdirectories. Under music you might find rock and classical directories.

When you install the server, the spool directory is automatically created. You might want to point to another spool directory, or you might want to create a new spool directory.

Changing the Spool Directory Location

You can change the location of the spool directory without affecting the HISTORY file. (The HISTORY file contains a mapping of the message IDs to the filenames in the spool directory.)

Be sure the new spool directory has the correct ownership and permissions (read, write, and execute). Otherwise, you will have problems with your server.

- 1** From the General Administration page, down the News Server by clicking Off.
- 2** Copy the spool hierarchy to the new directory.
- 3** From the General Administration page, click the News Server *server name* button > Server Preferences > Technical Settings.
- 4** Under Spool Directory Location, in the Spool Directory field, type the new location.
- 5** Click OK.

Creating a New Spool Directory

If you are copying the entire spool, you do not need to create new subdirectories.

- 1** Create the directory where you want to keep the spool.
The new directory (and subdirectories) must have the same ownership and permissions as the original subdirectory.
- 2** Create the following subdirectories:
 - ♦ in.coming
 - ♦ out.going
 - ♦ over.view
 - ♦ news.archive
- 3** From the General Administration page, click the News Server *server name* button > Advanced Tasks > Recovery.
- 4** Rebuild any full-text indexes.

Specifying a Message of the Day

You might want to leave a message such as status condition notes of your News Server for other administrators who help to maintain your server. The administrators will not receive the message of the day by e-mail. They must access the Message of the Day field through the News Server interface to view the message.

To specify a message of the day:

- 1** From the General Administration page, click the News Server *server name* button > Server Preferences > Message of the Day.
- 2** Type the message.
- 3** Click OK.

Informing Your Users

After you have set up the News Server, you should inform your users how to use the News Server. For information on how to set up a news reader, refer to *Accessing the NetWare News Server* in *User Solutions Guide*.

4

Generating and Viewing Reports

This section describes how you can create NetWare[®] News Server reports. You can create reports about the daily maintenance, general server activities and statistics, replication, and disk usage.

Using the Daily Report

Understanding the Daily Report

The News Server uses the program `news.daily` to perform daily maintenance processes, some of which are reported in the daily report. For more information on `news.daily`, refer to “Running `News.daily`” on page 99.

The daily report also includes information summaries of the server's performance and activities for the last day. The daily report shows you the following:

- ◆ The status of the server (running or stopped) and whether it's accepting new replication and reader connections
- ◆ The file system status, including how much disk space is being used
- ◆ The sizes of the following files: HISTORY, ACTIVE, Server Log, and the Discussion Replication Log
- ◆ Information about expiration policies and expiration status, including the number of article lines processed, articles retained, expired entries, unlinked files, old entries dropped, old entries retained
- ◆ Information about archival logs

- ◆ Information about server statistics, including statistics time summary; replication statistics; all articles posted to the server; and user connections, posts, and reads

The server statistics can also be seen in the Server Statistics report.

Some information is color-coded (red, green, or yellow). For example, the file system capacity appears in green if you have a lot of disk space left; it appears in red if you are running out of disk space.

The daily report is generated at the same time the daily tasks are run. You can specify that the daily report be sent automatically to your e-mail address in the Mail Notices to News Administrator form (from the News Server interface, click Reports > Mail Notices).

Generating the Daily Report

- 1 From the General Administration page, click the News Server *server name* button > Reports > View Daily Report.
- 2 Select the daily report that you want to view.
- 3 Click View Report.

Using the Server Log

Understanding the Server Log

The server log contains information about most server activities, such as who connected to the server, what discussion groups were read, what articles were posted, and what problems occurred.

Messages are numbered according to priority, with lower numbers representing higher-priority messages. The number can be found in the log entry after the last colon. Highest-priority messages, usually indicating an error condition that requires some action on your part, appear in red. For example, the entry [99/07/12 15:53.41] innd:indexer-special opened indexer-special:6:file indicates a level 6 priority.

A typical message you might see in the server log shows the message format:

```
3 [96/06/19 04:00.58] innd:ME new client starting: "/news/ns-news-pb2/bin/news/bin/nmrpd -s -i 204.257.234.169"
```

If you are having problems with your server, the server log is the first place you should look for information. The information you see depends on the log level specified: Debug, Fatal, Error, or Notice. Debug lists all messages. Notice lists a minimal number of messages.

The server log is archived each time the server's daily maintenance routines are run.

Processes that Log Messages

The processes that frequently send messages to both the server and discussion replication logs are listed in the following table.

| Process | Description |
|----------|--|
| innd | The main server process that handles all discussion group replications, listens to the specified news port, and responds to connections from newsreaders. |
| nnrpd | The server process that spawns a thread for each newsreader it is handling. The nnrpd process is sometimes referred to as "reader process" or "reader processes" and is invoked by innd. |
| nntpsend | The process that batches discussion group replications for transmittal by the innxmit process. |
| innxmit | The process that transmits articles to servers. The nntpsend process invokes this process. |
| indexer | The process that indexes articles for full-text searching purposes. |
| newstime | The process that schedules jobs, such as running news.daily, updating profiles, the nntpsend process, and so on. |

| Process | Description |
|----------|------------------------------------|
| ns-admin | The administration server process. |

Viewing the Server Log

To determine the number of log cycles and the level of detail in the server replication log, refer to “Specifying Logging Preferences” on page 47.

- 1 From the General Administration page, click the News Server *server name* button > Reports > View Server Log.
- 2 Select the log you want to view.
- 3 Type the number of entries you want to view.
- 4 In the View Only Entries Containing field, type a search string if you want to find specific entries.

For example, if you want to see information about errors, type Errors in the search field.

- 5 Click View Log.

Interpreting the Server Log

The following section provides examples of server log messages and how to interpret them.

Client Connection Information

Client connection information provides a record of who has been accessing your server. These messages are informational only and do not indicate an error or problem.

The following message indicates that the main process (innd) is starting a new reader and handing off the connection to a reader process (nnrpd). The connecting client has the IP address 204.257.234.169.

```
3 [96/06/19 04:00.58] innd:ME new client starting: "/news/ns-
news-pb2-bin/news/bin/nnrpd -s -i 204.257.234.169
```

The next message indicates that the nnrpd process has accepted the handoff for the above connections. (Notice that the IP address is the same.)

```
3 [96/06/19 4:00.59] nnrpd (5): Starting new reader, got
  socket: 22 and cmdline: "/news/ns-news-pb2/bin/news/bin/
  nnrpd -s -i 204.257.234.169" from innd
```

The next message indicates that the host TS368.DIALUP.PREM.NET has successfully connected. (This host has IP address 204.257.234.169, so it is the same host as in the previous two messages.)

```
3 [96/06/19 04:01.02] nnrpd(5):ts369.dialup.prem.net connect
```

Normal Client Session and Disconnects

During a client session and when a client disconnects, the client process logs informational messages about the sessions. Some of this information is used by the daily report to generate statistics.

The following message indicates that the connected client read three articles in the discussion group SUPPORT.NOVELL:

```
3 [96/06/19 04:01.02] nnrpd(2):245.dallas-3.tx.dial-
  access.att.net group support.novell 3
```

The next message indicates that the client read a total of three articles in one discussion group during its session, then disconnected from the server:

```
3 [96/06/19 04:01.02] nnrpd(2):245.dallas-3.tx.dial-
  access.att.net exit articles 3 groups 1
```

The next message indicates that the client was connected a total of 1662.313 seconds, used 3.360 seconds of CPU time for user code, and 0.620 seconds for system code:

```
3 [96/06/19 04:01.02] nnrpd(2):245.dallas-3.tx.dial-
  access.att.net times user 3.360 system 0.620 elapsed
  1662.313
```

Abnormal Client Disconnects

Abnormal client disconnect messages indicate that a client is acting improperly. You can generally ignore these types of messages.

The following message indicates that a client has attempted to connect to the news port, but was unable to do so:

```
2 [96/06/19 04:00.58] innd:ME cant accept RCreator Protocol
  error
```

You might see this message if a client that is not a newsreader attempts to connect to the news port. Because the server and the connecting program do

not use the same protocol, they cannot communicate, so innd closes the connection. In most cases, you can ignore this message.

The next message indicates the network connection has been closed due to a timeout:

```
3 [96/06/19 04:01.02] nnrpd(2):245.dallas-3.tx.dial-  
access.att.net timeout
```

Most news clients send a quit message when they are finished. However, some clients do not send quit messages. Normally, the server keeps the network connection open until it receives a quit message. However, if a certain amount of time has passed and the client has not sent anything to the server, the server closes the connection. This is called a timeout, which you can safely ignore.

Incoming Discussion Groups

Incoming discussion groups are articles sent to your server from other servers.

The following example message indicates that the server NEWS.FOO.COM connected and sent 31 articles to your server. Your server accepted 29, refused 1, and rejected 1.

```
[96/07/15 15:58.03] innd:news.foo.com:29 closed seconds 12  
accepted 29 refused 1 rejected 1
```

Outgoing Discussion Groups

Outgoing discussion groups are articles sent by your server to other servers.

The following message indicates that your server is sending articles to another server (called SECNEWS in this example). Your server offered one article, which was rejected:

```
[96/06/19 04:25.06] nntpsend:[28260:28261] innxmit -a -t180  
secnews.netscape.com...[96/06/19 04:25.07]  
innxmit:secnews.netscape.com stats offered 1 accepted 0  
refused 0 rejected 1[96/06/19 04:25.07]  
innxmit:secnews.netscape.com times user 0.180 system 0.060  
elapsed 0.453
```

If only one article is rejected, you need not worry. If, however, all your articles are refused or rejected, you should contact the administrator of the other server. If the administrator of the other server indicates that the server is not receiving your replicated discussion groups, check for the following status messages in your log file:

```
4 [96/06/19 04:05.04]
  innd:E:secnews.netscape.com:secnews.netscape.com.work [96/
06/19 04:05.04] innd:secnews.netscape.com makebatch-
>secnews.netscape.com.work[96/06/19 04:05.04]
  innd:secnews.netscape.com closed[96/06/19 04:05.04]
  innd:secnews.netscape.com opened
  secnews.netscape.com:23:file
```

These messages indicate that the innd process has created a batch file containing article information to send to the server SECNEWS. Check to see if nntpsend and innxmit are running. If they are not, make sure SECNEWS is configured as a replication host in the Configure Replication Host form (from the General Administration form, click Discussion Replication > Configure Replication Host).

Server Load Information

The server process (innd) occasionally asks the reader processes (nnrpd) for status. Each reader process provides information about the number of clients it is handling. Next, innd notes the active value for future load balancing efforts. The reader process messages are informational only and do not indicate an error or problem.

Innd Errors

Server errors generally indicate a problem with the server that must be investigated and corrected if necessary.

The following message indicates an error occurred when innd was attempting to write information to a sending host. The error number, 10054, indicates that the connection was reset, which usually means that the sending host closed the connection early:

```
2 [96/08/16 15:20.50] innd:257.0.180.15:7 can't write
  [Errno:10054]
```

If you see a lot of these messages and your incoming discussion groups from that site (257.0.180.15 in this case) seem to be lacking, contact the administrator of the other site and see why the connection is getting dropped.

The next message indicates that innd can't communicate with an nnrpd process that it expects is running:

```
2 [96/08/16 17:00.38] innd:unable to query nnrpd(0): 232
```

The nnrpd has hung.

The following message indicates that your ACTIVE file is bad.

```
2 [96/06/29 04:15.11] innd:ME bad_format active
```

The next message indicates that innd couldn't delete a file. Normally this is not a problem, but it can be a symptom of another problem. If you start to see a lot of these messages, check for other problems, such as problems with permission or ownership.

```
2 [96/07/07 21:10.34] innd:ME cant unlink
```

The next message indicates that innd couldn't link an article file. (Article files are linked when an article is cross-posted to save space.) The linking can fail for various reasons, including one of the link names existing as a regular file. If you get the following message too often, try renumbering your ACTIVE file in the Server Recovery form (from the News Server interface, click Advanced Tasks > Recovery.)

```
2 [96/07/25 19:08.17] innd:ME cant link talk/politics/misc/
965
```

ACTIVE File Errors

The ACTIVE file contains information about all the discussion groups your server carries. The ACTIVE file might contain a formatting error, an invalid discussion group name, an illegal discussion group name, duplicate discussion group names, or incorrectly formatted lines.

The following message indicates that the two required discussion groups, control and junk, do not exist. Without these groups, the server will not run:

```
1 [96/06/24 09:29.43] innd:ME internal no control and/or junk
group
```

You can add the groups through the Discussion Group Manager (from the News Server interface, click Discussion Groups > Manage Discussion Groups > OK) or you can remake the ACTIVE file in the Server Recovery form (from the News Server interface, click Advanced Tasks > Recovery) if the groups exist but are not in the ACTIVE file.

The next message indicates that discussion groups listed in your ACTIVE file have invalid names according to RFC1036, the Internet standards document that defines valid newsgroup names.

```
2 [96/07/09 11:14.37] ctlinnd:parseactive invalid newsgroup
name2 [96/06/21 20:23.29] ctlinnd:parseactive invalid
newsgroup name "GPsemi.lincoln.test3": Illegal
```

The discussion group name might be in uppercase, for example, or might contain numbers, such as FOO.COM.752.

You can rename the group or remove the group. Although it is not recommended, you can override group name validity checking by changing the REQUIRE_VALID1036_NAMES parameter value in the NSNEWS.CONFfile from DO to DONT. If you change the value, be aware that doing so might cause server problems. For example, your server's replication with fail to hosts that have the parameter set to DO.

The next message indicates a failure to write to the HISTORY file. The News Server stores information about all articles in a file called HISTORY. If the News Server cannot write to the HISTORY file, disk configuration problems and corruption of files can occur. The News Server will be unable to expire articles or to accept new articles:

```
2 [96/07/25 19:08.18] innd:ME cant write history
  [Errno:10009]
```

Check for permission problems and lack of disk space. After fixing the problem, you will need to restart your server. You might also want to rebuild your HISTORY files, but this can take several hours, depending on the size of the HISTORY file and the number of articles on the server.

The next message indicates a failure to flush the log files. The server flushes the log files when running news.daily, for example, or when rotating log files. The server names the backup log file NAME.OLD.

```
inte2 [96/06/24 09:29.43] innd:ME cant fflush log [Errno:9]
```

The error code indicates that there is a bad descriptor. Try stopping the server and restarting it.

Using the Discussion Replication Log

Understanding the Discussion Replication Log

The discussion replication log provides information about incoming discussion groups, including information about which articles your server accepts, which articles your server rejects, and why articles are rejected.

The discussion replication log is archived each time the server's daily maintenance routines are run. For more information about the processes that

are logged in the discussion replication log, refer to “Processes that Log Messages” on page 33.

Red messages indicate an error condition.

Viewing the Discussion Replication Log

To determine number of log cycles and level of detail in the discussion replication log, refer to “Specifying Logging Preferences” on page 47.

- 1** From the General Administration page, click the News Server *server name* button > Reports > View Discussion Replication Log.
- 2** Select the log you want to view.
- 3** Type the number of entries you want to view.
- 4** In the View Only Entries Containing field, type a search string if you want to find specific entries.

For example, if you only want to view information about incoming discussion groups from a specific server, type your server name.

- 5** Click View Log.

Interpreting the Discussion Replication Log

The following are examples of what you might see in the log:

On September 24, at the given time, your server was offered and accepted an article from the server NEWS.ROYAL.COM. The plus sign (+) indicates that your server accepted the article.

```
Sep 24 15:24:10.569 + news.royal.com  
<sad231dadas@news.moof.com> news.somecom.com
```

On December 4, at the given time, your server was offered and rejected an article from the server NEWS.ROYAL.COM. The minus sign (-) indicates that your server rejected the article because NEWS.DEV.BATMAN is not listed in the server's ACTIVE file.

```
Dec 4 11:27:45:586 - news.royal.com  
<32A5CBF6.72E3@novell.com> 437 Unwanted newsgroup  
"news.dev.batman"
```

Using Server Statistics

Understanding Server Statistics

You can view statistics from the View Server Statistics form (from the News Server interface, click Reports > View Server Statistics) about replication, all articles posted to the server, user connections, user posts, and user reads.

Replication Statistics

You can view the following information about incoming and outgoing discussion groups:

- ◆ Hostnames
- ◆ The number of articles offered, accepted, refused, and rejected by your server

An article is refused usually because it is a duplicate of another article on your server. An article is rejected because there is something wrong with the article and therefore it cannot be posted.

- ◆ The average number of articles per second sent from or received by your server

All Articles Posted to the Server

All Articles Posted to the Server refers to articles posted to your server by users and by discussion group replication. Article size is measured in bytes.

You can view the following information about articles and discussion groups on your server:

- ◆ The total number and size of articles received by your server.
- ◆ The number of posts to your server that were not received by your server. (Your server did not include the post in the article spool.)
- ◆ A list of the highest-posting discussion groups and hosts on your server.
- ◆ The total number of articles posted to your server that failed and the reason for the failure (for example, duplicate)
- ◆ A list of the top hosts sending articles to discussion groups not supported by your server, determined by the total number of articles sent to the unsupported discussion group by each host

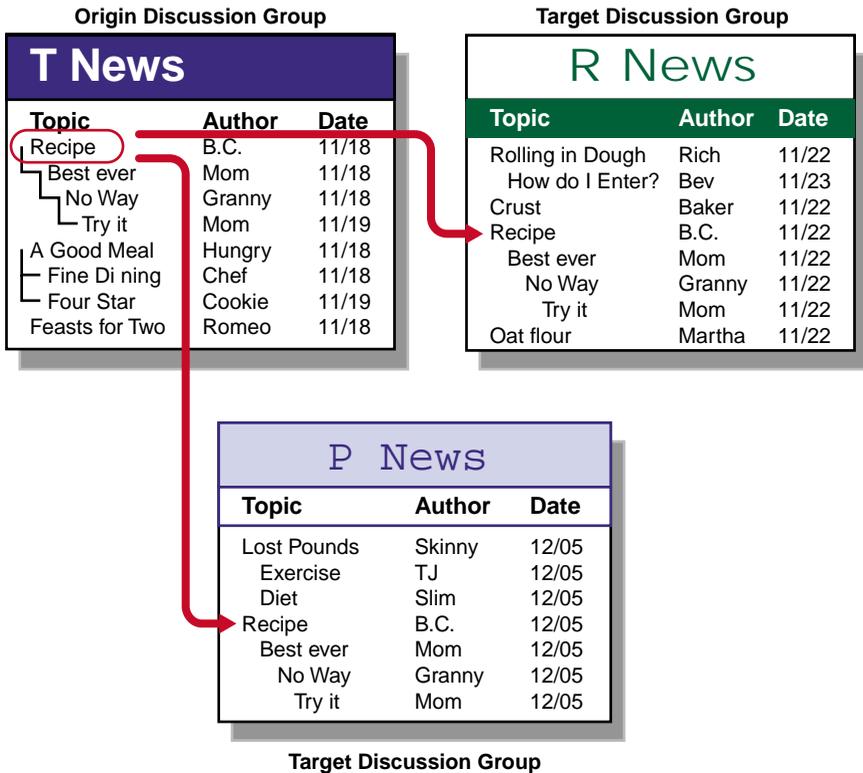
- ◆ A list of the top hosts posting unapproved articles to moderated discussion groups on your server, determined by the total number of unapproved articles sent by each host
- ◆ A list of the top unsupported discussion groups being fed to your server, determined by the number of articles in each discussion group
- ◆ A list of the top moderated discussion groups on your server receiving unapproved articles, determined by the number of unapproved articles received by each discussion group

Understanding Posts and Cross-Posts

If an article is posted simultaneously to multiple discussion groups, only one copy of the article is stored in the spool.

For example, an article is posted to ROYAL.PETS.SNAKES, ROYAL.PETS.LIZARDS, and ROYAL.PETS.TURTLES. One copy of the article is stored in the spool for ROYAL.PETS.SNAKES. The copies for the other discussion groups are links to the article stored in ROYAL.PETS.SNAKES. The post is the article stored in ROYAL.PETS.SNAKES and the cross-posts are the copies in ROYAL.PETS.LIZARDS and ROYAL.PETS.TURTLES.

The following illustration shows one post in the origin server and two cross-posts in the target servers.



Cross-posts are not considered when determining statistics about the size of articles received by your server.

User Connections

A user connection is a connection by a user, not by a server. Connection time is measured in seconds.

You can view information about each user connection and the reason for each disconnection.

User Posts

A user post is a post to your server from a user, not a replication from another server.

You can view the following information about user posts:

- ◆ Article statistics

- ◆ The number of posts to your server that failed
- ◆ A list of the highest-posting discussion groups, hosts, and users on your server

User Reads

A read is when a user reads an article on your server.

You can view the following information about user reads:

- ◆ Read statistics
- ◆ A list of the top discussion groups, hosts, and users on your server, determined by the number of articles read in each entity

Viewing Server Statistics

- 1** From the General Administration page, click the News Server *server name* button > Reports > View Server Statistics.
- 2** Click one of the following options:
 - ◆ Get Statistics For drop-down list > select the time period
 - ◆ Get Statistics From > type the appropriate information in the associated fields
 - ◆ Get All Available Statistics
- 3** Click one of the following options:
 - ◆ Get Statistics Summary
 - ◆ Get Statistics for Users Matching > type the users in the associated field
 - ◆ Get Statistics for Hosts Matching > type the hosts in the associated field
 - ◆ Get Statistics for Discussion Groups Matching > type the discussion groups in the associated field

You can use wildcard characters in your search string.
- 4** Select the number of entries you want to view.
- 5** Click OK.

Interpreting Server Statistics

The following statistic tools are used to gather server information.

Discussion Replication

You can use the discussion replication statistics to determine if your discussion group replications are operating correctly. You can determine if you are

- ◆ Receiving articles from the expected hosts
- ◆ Sending articles to the expected hosts
- ◆ Not offering articles to an expected host, indicating you are not sending to the host at all
- ◆ Offering articles to another host, but too many of your articles are being rejected by the host, indicating a problem with the replication setup to the host

All Articles Posted to the Server

You can use the All Articles Posted to the Server statistics to determine

- ◆ If you meet necessary disk storage requirements
- ◆ Which discussion groups you no longer want to support because they are consuming too much disk space and are not critical to your business
- ◆ Problems with the moderation policy on your server or on servers that are sending to your server
- ◆ Broken software at other sites sending malformed articles

User Connections

You can use the user connection statistics to determine

- ◆ Appropriate reader limits
- ◆ Server load and size
- ◆ Total usage

You can use the user disconnection statistics to determine

- ◆ Network troubles
- ◆ Client software problems

- ◆ Appropriate reader limits

User Posts

You can use the user posts statistics to determine

- ◆ Overall server usage
- ◆ Specific post problems to your server
- ◆ Traffic in local discussion groups that might not otherwise show in the All Articles Posted to Your Server section due to relatively low volume.

User Reads

You can use the user reads statistics to determine local discussion group usage.

Using Disk Usage

Understanding Disk Usage

You can view the following information about disk usage:

- ◆ The percentage of disk space used
- ◆ The total amount of disk space used
- ◆ The number of articles stored on the disk
- ◆ The number of subdirectories

The statistics are shown for each directory in the spool. You will always see statistics for the following directories:

- ◆ in.coming (incoming articles)
- ◆ out.going (outgoing articles)
- ◆ over.view (indexes)
- ◆ news.archive (archived articles, if you have any)

Viewing the Disk Usage Summary

- 1** From the General Administration page, click the News Server *server name* button > Reports > Disk Usage.
- 2** Type the directory name.

- 3 Click Run Summary.

Interpreting Disk Usage

You can use the disk usage information to determine

- ♦ If you are running out of disk space
- ♦ If you need to run expire more frequently because the archive is too big
- ♦ Where the bulk of your disk space is being used
- ♦ How large each hierarchy is

Using Logging Preferences

Understanding Logging Preferences

You can specify the number of log cycles and the level of detail that you want in the log files.

Specifying Logging Preferences

- 1 From the General Administration page, click the News Server *server name* button > Reports > Logging Preferences.
- 2 Type the number of log cycles.

This is the number of archived copies of the daily reports and logs that you can view from the View Daily Report and View Server Log forms.
- 3 Click the Log Level drop-down list > select the level of detail that you want in your logs: Notice, Fatal, Error, or Debug.

Each log level provides more information, with Debug providing the most information.
- 4 Click OK.

Using E-Mail Notices

Receiving E-Mail Notices

You can specify whether you want to receive the news.daily report and emergency warnings, such as "News.daily cannot send a report because it cannot write to a temporary file."

You can view the news.daily report in the View Daily Report form (News Server interface > Reports > View Daily Report), so you might not want to receive the report by e-mail. It is a good idea, however, to receive emergency warnings by e-mail so you can take corrective action immediately.

You can also receive control articles by e-mail if you specify to in the Control Article Handling form (from the News Server interface, click Discussion Replication > Control Article Handling).

Specifying an E-Mail Address for Notices

- 1** From the General Administration page, click the News Server *server name* button > Reports > Mail Notices.
- 2** Type the e-mail address of the administrator.
- 3** Type the mail hostname.
- 4** Check the Send News.daily Report to Admin Via E-Mail check box if you want to receive the news.daily report.
- 5** Check the Send Emergency Warnings to Admin Via E-Mail check box if you want to receive emergency warnings.
- 6** Click OK.

5

Controlling Access to Your Server

After you decide what type of access control your server requires (refer to Chapter 2, “Planning Your News Server,” on page 17) perform the tasks that correspond to the appropriate level of access control. The following list outlines the tasks necessary to set up access control for your server and discussion groups. Only perform those tasks that correspond to the determined level of access control.

1. Enable access control.

For more information on access control, refer to “Understanding How Access Control Works” on page 64.

2. Define the users and groups who will access your server.

If you are using Novell® Directory Services® (NDS)™, you can use the users and groups you have already defined.

3. Define and manage the roles that determine the type of access a user has to a particular discussion group or discussion group hierarchy.
4. Specify access control rules (for LDAP and local directory users only).
5. Delegate discussion group management tasks if appropriate (for LDAP and local directory users only).

With NDS, only the News Server administrator can manage discussion groups.

Controlling Access with NDS

If you are using Novell Directory Services (NDS), you set up access control through NetWare™ Administrator. Use the NDS objects you have already created and then grant rights to the discussion group directories.

Be certain that your users or group are in the context specified in the Configure Directory Service form of the NetWare Web Manager (Global Settings > Configure Directory Service). If your users or group are in a subcontext of the context listed on this form, they must specify this additional context when authenticating to the discussion group.

For example, if the context listed in the Configure Directory Service form is DOC, a user who is in the Writers Organizational Unit under DOC must authenticate to the discussion group by typing username.writers.

Setting Up Access Control Using NDS

- 1** From the General Administration page, click the News Server *server name* button > Access Control > Access Control Options.
- 2** Select Access Control On.
Select any other options you want. For more information about this form, click Help.
- 3** From the General Administration page, click Users & Groups.
- 4** Select the User or Group that you want to have access to the discussion group.
If you select a Group, all members of the Group will have the same access rights to the discussion group.
- 5** Copy (CTRL + C) the context of the user or group that appears after Current NDS Object.
- 6** Click Users & Groups > *server name volume*.
- 7** Click to the directory that you want the user or group to have rights to.
The spool directory location is listed in the Technical Settings form (from the News Server interface, click Server Preferences > Technical Settings). The default is \NOVONYX\SUITESPOT\NEWS-*server name*\SPOOL.
- 8** Click Access Control List > in the Add Trustee field, paste the user or group context.
- 9** Check the rights that you want the User or Group to have.
To specify the reader role for a User or Group, check File Scan and Read.
To specify the poster role for a User or Group, check File Scan, Read, Create, and Write.
- 10** Click Add Trustee > OK.

Controlling Access with LDAP or a Local Directory

If you are using LDAP or a local directory, you can use the News Server interface to enable access control and create Users and Groups.

Setting Up LDAP

To set up LDAP:

- 1** From the General Administration page, click Global Settings > Configure Directory Service > LDAP Directory Server > OK.
- 2** In the three fields, type the BASE DN, BIND DN, and BIND password.
There is only one base dn in LDAP, so choose it carefully.
- 3** Restart the NetWare Web Manager by typing `nvxadmdn` and then `nvxadmup` at the server console.
- 4** Restart the News Server by typing `nvxnewdn` and `nvxnewup` at the server console.
- 5** From the General Administration page, click the News Server *server name* button > Preferences > Directory Server Options.
- 6** Type the fully distinguished username and password.
For example, if your user name is admin, the fully distinguished username is `cn=admin, o=mycompany`. Be sure to use the LDAP-standard comma.
- 7** Run the EXTNSCAL.NLM from the server that has both NDS and LDAP running.
The EXTNSCAL.NLM creates class definitions in NDS so that it works properly with LDAP.
- 8** In NetWare Administrator, double-click on your LDAP group.
If nothing happens after you double-click, you might have a version of NetWare Administrator that doesn't understand LDAP groups. If this is the case, you will need to get a version of NetWare Administrator that does.
- 9** Verify that the Allow Clear Text Passwords box is checked > click OK.
If you have a big tree, this process may take a while.
- 10** Under your BASE DN, create an OU called Netscape Servers.

The News Server role information will be kept here.

- 11** Create an ASCII file in LDIF format.

The file should have the following information:

```
dn: ngcomponent=.,ou=Netscape Servers,basedn
objectclass: top
objectclass: nginfo
ngcomponent: .
nsaclrole: reader:rv
nsaclrole: poster:prvc?
nsaclrole: manager:amnprvc?
nsnewsacl: 1:*:a:D:poster::::d:
```

- 12** Using LDAPADD at the command line, create an ASCII file with the following information:

```
Ldapadd -a -h <NDS master server ip address> -D <fully distinguished
username> -w <password> -v -f <filename>
```

Enabling and Disabling Access Control

When the server is installed, access control is off by default. Thus, anyone can access your server with no restrictions. This is usually only done in an intranet environment in which users are known and trusted. You might want to enable access control in order to give users access restrictions. If you enable access control, you also enable authentication.

Enabling Access Control

- 1** From the General Administration page, click the News Server *server name* button > Access Control > Access Control Options.
- 2** Click Access Control On.
- 3** If you want to require authentication when a user first connects, check the box.
- 4** Under Default Authentication Method, check one of the following authentication methods:
 - ◆ Use Basic Username/Password

If you are not running an SSL-enabled server, the only authentication method available is Basic Username/Password.

- ◆ Use Client Certificate

5 If you want to control access by restricting host connections, check the box. In the Accept Connections from These Clients field, type the hosts you will accept connections for.

- ◆ You can specify hostnames or IP addresses.
- ◆ Specify all clients by specifying an asterisk (*).
- ◆ Use an asterisk (*) to specify domains, such as *.XYZ.COM or 123.456.789.*.
- ◆ Use the exclamation point (!) to deny access. For example, you can specify no clients by typing !*. Deny access to host1 by typing !host1.

Limiting host connections is especially useful for granting access to users who are external to your organization's internal network. You can grant access to specific host machines without having to create special groups for the external organization.

6 If you do not want to resolve IP addresses into hostnames for access control, check the box.

If you check the box, you will improve authentication performance. However, you will only see IP addresses in your server reports, and you cannot refer to hostnames when filling out forms (such as in Step 5), specifying search criteria, and so on.

7 Click OK.

Disabling Access Control

1 From the General Administration page, click the News Server *server name* button > Access Control > Access Control Options.

2 Click Access Control Off.

3 Click OK.

After access control is disabled:

- ◆ All users can access all discussion groups
- ◆ Any access control rules remain defined, but are no longer enforced
- ◆ The server does not check the authenticity of Cancel messages

Defining and Managing Roles

A role is a set of permissions that a user, group, or host has to a particular discussion group or discussion group hierarchy. Three roles are predefined:

- ♦ **Manager:** Has all permissions (Admin, Cancel, Cancel Any, Moderate, Newgroup, Post, Read, and View) to a particular discussion group or discussion group hierarchy
- ♦ **Poster:** Can view, read, and post messages.
Posters can cancel their own posted messages.
- ♦ **Reader:** Can view and read messages

You can also create new roles and associate permissions with the new roles. The easiest way to grant roles to users is by creating groups and assigning roles to the groups.

Be careful when creating roles because you cannot delete them. If you create a role you do not need, do not assign any user or group to that role.

To create, modify, or view roles:

- 1** From the General Administration page, click the News Server *server name* button > Access Control > Manage Roles.
- 2** Locate the scroll-down menu of the role you want to update.
- 3** In the associated scroll-down menu, Ctrl+click the permissions you want to add to the role

or

To delete permissions from the role, Ctrl+click the highlighted permissions.
- 4** In the Role Name field, type the name of the role you want to create.
- 5** In the Role Name scroll-down menu, select the permissions you want the role to have.
- 6** Click OK.

Specifying Access Control Rules

You specify access to a particular discussion group by creating an access control rule. The access control rule maps the user or group to a particular discussion group and specifies which role the user has in the discussion group.

You specify access control rules in the Discussion Group Manager.

Delegating Discussion Group Management

You can use roles to delegate discussion group management tasks to other managers or end users. The managers or users can perform the following tasks on the discussion group hierarchy they manage:

- ◆ View all discussion groups
- ◆ Create new discussion groups
- ◆ Remove discussion groups
- ◆ Access and change basic information about any discussion group
- ◆ Add new access to any discussion group
- ◆ Modify the access to any discussion group
- ◆ Specify managers and moderators for lower-level discussion groups
- ◆ Cancel messages posted by other people

The managers or end users must be assigned a manager role to access the discussion group management functions available through a browser.

By delegating discussion group management tasks, you can focus more on system administrative tasks, such as

- ◆ Configuration and maintenance
- ◆ System security
- ◆ Replication of discussion groups
- ◆ Load balancing and system tuning

If you decide to delegate discussion group management, educate your delegates about the effect of roles on access control to your server.

6

Managing Discussion Groups

This section describes how to create, control access to, and manage discussion groups. Before you create discussion groups, refer to “Planning Discussion Groups” on page 18.

You can delegate these discussion group management tasks to users by granting them a manager role. For more information about delegating discussion group management, refer to “Delegating Discussion Group Management” on page 55.

You manage discussion groups through the Discussion Group Manager. The following illustration shows the Discussion Group Manager.

Figure 2 Discussion Group Manager



Creating a Discussion Group

To create a discussion group, the server must be running.

- 1 From the General Administration page, click the News Server *server name* button > Discussion Groups > Manage Discussion Groups > OK.
- 2 Select the parent discussion group
or
Select the root-level discussion group to add a top-level discussion group.
- 3 Click New.
- 4 In the Name field, type the name of the discussion group that the user will see.

The name cannot include spaces, most special characters, numbers, and uppercase letters, unless you specifically configure the server to allow for them. For more information about naming, refer to “Naming Your Discussion Groups” on page 61.

5 In the optional Description field, type the discussion group topic.

The name can include spaces, lowercase and uppercase letters, and special characters.

6 Click one of the following options:

◆ Categorized Discussion Group

A categorized discussion group provides a three-paned interface in which the user can view the entire discussion group hierarchy, all of the articles within a particular discussion group, and the text of a particular article. The categorized attribute only affects the presentation of the discussion group within the client newsreader.

In a categorized discussion group, any lower-level discussion group is a category. A categorized discussion group cannot contain another categorized discussion group.

If the parent discussion group is already categorized, you do not see a choice for the type of discussion group. Instead, the type of discussion group becomes a category discussion group.

◆ Standard Discussion Group

A standard discussion group provides a two-paned interface in which the user can view all of the articles within a particular discussion group and the text of a particular article.

7 Under Advanced Options, select the option you want:

| Option | Purpose |
|--|---|
| Create Group on Local Server Only | Specifies to create the discussion group only on the local News Server. |
| Create Group on All Internal Connected Servers | Specifies to create the discussion group on all connected servers. The request to create the discussion group is also sent to the replication sites. |

| Option | Purpose |
|---|---|
| Allow Local and Remote Postings | <p data-bbox="852 166 1201 218">Specifies to allow local and remote postings.</p> <p data-bbox="852 248 1201 387">Local postings are articles posted directly to your discussion groups by users. Remote postings are articles sent to your discussion groups by replication.</p> |
| Allow Only Remote Postings (Feed Only) | <p data-bbox="852 421 1201 531">Specifies that only articles sent to your discussion groups by replication can be posted to the discussion group.</p> |
| Moderate Discussion Group and Send Postings Via E-Mail To field | <p data-bbox="852 565 1201 675">Specifies that this discussion group will be moderated and includes an e-mail address for the moderator's e-mail address.</p> |
| Gateway to E-Mail Address field | <p data-bbox="852 710 1201 791">Specifies that the discussion group will be a gateway. Type the e-mail address for the gateway.</p> |
| Do Not Keep Articles for This Discussion Group, but Pass Them to Feed Sites | <p data-bbox="852 826 1201 907">Specifies that articles are stored in the spool only until they are sent to other replication sites.</p> <p data-bbox="852 935 1201 987">Users cannot read the articles from your server.</p> |
| This Discussion Group is a Referral For field | <p data-bbox="852 1022 1201 1074">Specifies discussion groups that are no longer in use or useful.</p> <p data-bbox="852 1104 1201 1359">For example, suppose you want to obsolete DISCUSSIONA and point users to DISCUSSIONB. In the Referral field for DISCUSSIONA, you type DISCUSSIONB. When users post to DISCUSSIONA, they will get a message to post to DISCUSSIONB.</p> |

8 Click Submit.

The server administrator receives a notification control message for each discussion group that is created.

Naming Your Discussion Groups

The News Server enforces the latest proposed newsgroup naming standards. A few Usenet newsgroups do not comply with these standards. Your server will reject these newsgroups.

Although it is not recommended, the server administrator can override discussion group name validity checking.

To change the naming standards:

- 1 Open the NSNEWS.CONF file.

The file is located in the NOVONYX\SUITESPOT\NEWS-SERVERNAME\CONFIG directory.

- 2 Change the REQUIRE_VALID1036_NAMES parameter from DO to DONT.

IMPORTANT: If you do change the value, some server problems might occur. For example, your server's replication will fail to hosts that have the parameter set to DO.

When creating your own local discussion groups on a news server that also contains Usenet newsgroups, you shouldn't use any Usenet group names. You should keep the convention of general to specific. For example, if your company is called Royal, you might create a discussion group named ROYAL.HR.BENEFITS. The company name is first, followed by a department name, followed by a topic name.

Modifying Discussion Group Properties

You can modify any of the discussion group properties you originally created the discussion group with.

- 1 From the General Administration page, click the News Server *server name* button > Discussion Groups > Manage Discussion Groups > OK.
- 2 Select the discussion group you want to modify.
- 3 Click General Properties.
- 4 To modify the name the user sees, in the Display Name field, type the new discussion group name.

- 5** To modify the description, in the optional Description field, type the particular topic that the discussion group is about.
- 6** To modify the type of discussion group, click Categorized Discussion Group or Standard Discussion Group.

If the parent discussion group is already categorized, you will not see a choice for the type of discussion group.

- 7** Under Advanced Options, select the option you want to modify.

| Option | Purpose |
|---|--|
| Allow Local and Remote Postings | Specifies to allow local and remote postings. Local postings are articles posted directly to your discussion groups by users. Remote postings are articles sent to your discussion groups by replication. |
| Allow Only Remote Postings (Feed Only) | Specifies that only articles sent to your discussion groups by replication can be posted to the discussion group. |
| Moderate Discussion Group and Send Postings Via E-Mail To field | Specifies that this discussion group will be moderated and includes an e-mail address for the moderator's e-mail address. |
| Gateway to E-Mail Address field | Specifies that the discussion group will be a gateway. Type the e-mail address for the gateway. |
| Do Not Keep Articles for This Discussion Group, but Pass Them to Feed Sites | Specifies that articles are stored in the spool only until they are sent to other replication sites. Users cannot read the articles from your server. |

| Option | Purpose |
|---|---|
| This Discussion Group is a Referral For field | <p>Specifies discussion groups that are no longer in use or useful.</p> <p>For example, suppose you want to obsolete DISCUSSIONA and point users to DISCUSSIONB. In the Referral field for DISCUSSIONA, you type DISCUSSIONB. When users post to DISCUSSIONA, they will get a message to post to DISCUSSIONB.</p> |

8 Click Submit.

Access to a Discussion Group

The process of controlling access to your discussion groups depends on your directory service. If you are using Novell Directory Services® (NDS®), refer to “Setting Up Access Control Using NDS” on page 50. If you are using LDAP or a local directory service, this section explains how to set up access control.

You configure access control for a discussion group by creating access control rules. An access control rule defines the rights a user, group, or host has to a particular discussion group. Each access rule determines

- ◆ The name of the user, group, or host for whom the rule applies
- ◆ The method of authentication
- ◆ The role granted to the user, group, or host, or denial of all access
- ◆ Whether the rule is continued or absolute (not continued)

By default, two access control rules are created. The first rule grants the role of poster to anyone. The second rule grants the role of manager to the user ID that connects to the directory service.

Understanding How Access Control Works

To determine access control for a user, the News Server first checks the hostname in the first rule. If the hostname does not match, the server stops checking and the user is denied access.

If the hostname matches, the server then verifies that the user information matches the other information specified in the rule. The server recognizes the host either by its hostname or IP address, depending on what you specify in the Access Control Options form (from the News Server, click Access Control > Access Control Options).

If the user information matches, the server goes on to the second rule if the first rule is continued. When a rule is continued, the server continues to search for subsequent access control rules that correspond to the user. When a rule is absolute (not continued), the server grants the user the rights specified in the absolute rule.

A lower-level discussion group in a discussion group hierarchy inherits the access control rules for the main discussion group. So the server begins checking the user's access at the top level of the discussion group hierarchy. The server continues moving down the hierarchy until it detects an absolute rule. Every rule beneath the absolute rule inherits the access control of the absolute rule. The server keeps checking for the user's rights until it reaches the end of the list of rules.

You can specify new rules that override these inherited rules, even if a rule is absolute. You cannot modify the inherited rules, however, unless you have manager access to the higher-level discussion group.

IMPORTANT: If you are denying access to lower-level discussion groups, grant yourself manager access before or you will deny yourself access to the discussion groups. If you deny yourself access, you'll need to contact your server administrator to fix the problem.

Understanding Access Control for a Virtual Discussion Group

Be aware of the following issues about access control for a virtual discussion group:

- ◆ When a user creates a search profile for a virtual discussion group, the results of the search depend on the access rights of the creator. If the creator does not have access to a discussion group, articles from that group are not returned in the virtual discussion group.

- ◆ By default, only the creator can read the virtual discussion group. The server automatically adds an access control rule for the creator of the virtual discussion group.
- ◆ We recommend that you do not change the default access control for a virtual discussion group because the virtual discussion group is created based on the creator's access rights.

If another user has access to the virtual discussion group but not to one of the source discussion groups, the user cannot view the text of the article, but can view the headers, including the subject line, of the article.

For more information on virtual discussion groups, refer to “Specifying Search Options” on page 21.

Creating Access Control Rules

To create an access control rule, be sure that you have first enabled access control. For information on enabling access control, refer to “Enabling Access Control” on page 52.

- 1** From the General Administration page, click the News Server *server name* button > Discussion Groups > Manage Discussion Groups > OK.
- 2** Select the parent or root-level discussion group.
- 3** Click Access Control Rules > New Rule.
- 4** In the Users, Groups, or Hosts fields, type the user or group ID or hostname to which this rule applies.

You must specify information in at least one of these fields. You can specify information in all of the fields.

In the Users or Groups fields, separate multiple users or groups with commas. To specify access for all users in the directory, type all.

In the Hosts field, you can specify a hostname or IP address, if IP address resolution is enabled. To specify all hosts, type an asterisk (*). If you do not type a hostname, an asterisk is entered.

- 5** (Optional) Click Edit to create, modify, or delete multiple users or groups through the ACL User Group Finder.

IMPORTANT: If you click Anyone (No Authentication) on the Finder form, the user still might be denied access based on other settings, such as hostname or IP address.

- 6** Click the Auth By drop-down list > select the type of authentication that will verify the user for the discussion group.
 - ◆ Default: Authentication determined in the Access Control Options form (from the News Server interface, click Access Control > Access Control Options).

- ◆ Certs: Authentication determined by a valid user certificate. If users have a valid user certificate, they do not need to log in to the discussion group. This method requires a secure server.

If you select user certificate authentication in any access control rule for a discussion group, all users will be asked to authenticate by certificate—regardless of the authentication method specified in later rules for a particular user. A user will be asked for a certificate, but if a user does not have to authenticate by user certificate, he or she will still be able to authenticate by username and password.

- 7** Click the Then Allow Role of drop-down list > select the role you are allowing the user or group.

For more information on roles, refer to “Defining and Managing Roles” on page 54

or

Select Deny to deny the user or group all access to the discussion group.

You can choose Deny as a quick and safe way to set up access control rules. After denying all access, you can then choose to grant a particular role to a user.

- 8** Check the Continue check box if you want the server to continue checking for access control rules that match the user, discussion group, and current action.

If the rule is continued, the Set from field displays the higher-level discussion group from which the rule is inherited. Inherited rules are viewable, but not selectable.

or

If you want the rule to be absolute, uncheck the Continue check box.

- 9** Click the Up- or Down-arrow to change the order of rules.

- 10** Click Submit All Changes.

Creating a Guest Rule

You can create a guest rule that allows any host or user (whether defined in the directory or not) to access a discussion group without authentication. You can also specify a guest rule for a particular host.

- 1** From the General Administration page, click the News Server *server name* button > Discussion Groups > Manage Discussion Groups > OK.
- 2** Select the discussion group you want to create a guest rule for.
- 3** Click Access Control Rules > New Rule.
- 4** In the Users field, type **Anyone**.
- 5** In the Groups field, type **Anyone**.
- 6** In the Host field, type an asterisk (*) for all hosts
or
Type the hostname or IP address of the guest.
- 7** Click the Auth By drop-down list > select Default.

The default authentication method is specified in the Access Control form (from the News Server interface, click Access Control > Access Control Options). If the default is authentication by certificate, the guest must have a valid certificate.
- 8** Click the Then Allow Role of drop-down list > select the role you are allowing the guest.
- 9** Check the Continue checkbox.
- 10** Click Submit All Changes.

Deleting an Access Control Rule

- 1** From the General Administration page, click the News Server *server name* button > Discussion Groups > Manage Discussion Groups > OK.
- 2** Select the parent or root-level discussion group.
- 3** Click Access Control Rules.
- 4** In the rule you want to delete, click the trash can icon.

Moderating a Discussion Group

You can assign managers and users to moderate discussion groups. Moderators can control the amount of traffic and the message count a discussion group receives by approving messages or filtering out unwanted material.

A discussion group moderator

- ♦ Reviews submitted messages
- ♦ Specifies which messages can be posted
- ♦ Sends e-mail to the authors of the denied messages
- ♦ Forwards accepted messages to the discussion group
- ♦ Combines messages and articles to create a digest that gets posted periodically

When an article is posted to a moderated discussion group, the server looks for the header `Approved: moderatoraddress`. If the address in the header matches the moderator's address for the discussion group, the message is added to the spool. If the address does not match the moderator's address, the message is sent by e-mail to the moderator.

Setting Up Moderating

If you decide that you want a discussion group moderated, you need to

- ♦ Modify the discussion group properties
- ♦ Provide the moderator with the necessary information

Modifying the Discussion Group Properties

- 1** From the General Administration page, click the News Server *server name* button > Discussion Groups > Manage Discussion Groups > OK.
- 2** Select the discussion group that you want moderated.
- 3** Click General Properties.
- 4** Under Advanced Options, select the Moderate Discussion Group.
- 5** In the Send Postings Via E-Mail To field, type the moderator's address.
- 6** Click Submit.

Providing the Moderator with the Necessary Information

You need to provide the moderator with the following:

- ◆ A copy of the NSNEWS.CONF file, in
NOVONYX\SUITESPOT\NEWS-SERVERNAME\CONFIG
- ◆ A copy of the INEWS program, in
NOVONYX\SUITESPOT\BIN\NEWS\BIN

The INEWS program is the News Server moderating program. (INEWS is a client utility.) The INEWS program shipped with the News Server must run on Windows* NT*, and the News Server must run on NetWare®.

- ◆ The Moderators Handbook (<http://www.landfield.com/moderators/handbook/handbook.draft>)

This describes moderator formats used to post articles and common practices of moderators

You should also provide the following steps to the moderator:

- 1** From the client NT console, set the NS_NEWSCONF environment variable in the NSNEWS.CONF file to the full pathname of the NSNEWS.CONF file.
- 2** When you receive a message for approval, save the message to any file, and edit the message to receive the moderator header information.
- 3** To approve the article, run the inews command on the article from the NT console, then forward the article to the discussion group.

For example, in the command

```
inews -h -a moderuser@news.royal.com  
filename_article
```

the **-h** option indicates that the file contains headers, and the **-a** option indicates that the file is approved.

- 4** To reject the article, do not forward the message to the discussion group.
- 5** If you reject the article, send an e-mail to the author, and explain why the message was rejected.

Moderating and Access Control

If access control is enabled, the following rules also apply to moderating a discussion group:

- ◆ You must grant the moderator role to the moderator.
- ◆ You must specify that the moderator use basic authentication.

If you are requiring authentication at first connect and client authentication is the default, the moderator cannot use the INEWS program.

- ◆ The moderator must specify a username and password when running the INEWS program.

For example:

```
inews -h -a moderuser@news.royal.com -u mewing -w passwd  
filename_article
```

Importing Discussion Groups

You can host on your server discussion groups from other servers by importing the names of the discussion groups from an ACTIVE file, a list of discussion groups that are supported by a server. Importing is a quick way to support the same discussion groups that are available on other servers.

To host the same discussion groups on your server that are being sent by another server, you should obtain that server's ACTIVE file and import the desired discussion groups into your server's ACTIVE file. Importing can take several minutes, depending on the size of the ACTIVE file being imported.

IMPORTANT: Because the server is sensitive to the exact format of the ACTIVE file, you should never manually edit it. All modifications should be done through the Import Discussion Groups form, which automatically pauses the server.

To import a discussion group:

- 1** From the General Administration page, click the News Server *server name* button > Discussion Groups > Import Discussion Groups.
- 2** Click one of the following options:
 - ◆ ACTIVE File to Import Discussion Groups From
In the associated field, type the path to and name of the ACTIVE file.
 - ◆ Remote Host to Import Discussion Groups From

In the associated field, type the server name or IP address of the remote host.

- 3** Type the name of the discussion groups to import.
- 4** Type the name of the person who created the discussion group.
- 5** Click OK.

Indexing Discussion Groups

You can create an index to allow your users to search across all discussion groups hosted by your server. By default, indexing is turned off. Indexing is automatically turned on when you create an indexer.

An indexer identifies the discussion groups to index for full-text searching purposes. You create indexers in the Full Text Indexing form. After articles are indexed, they are available for searching and profiling.

In general, you need only one indexer. It is possible, however, to create multiple indexers with different configurations. For example, you might want to configure multiple indexers if you think you need different batch sizes for each indexer. If you expect an indexer to receive more than 1000 articles every 15 minutes, you might want to change the batch file size for performance reasons. The batch size is determined by a parameter in the INDEXSEND.CTL file, in NOVONXY\SUITESPOT\NEWS-SERVERNAME\CONFIG.

The batch file for each indexer is created by the innd process. The batch file contains the list of articles to be indexed. By default, the batch file is processed every 15 minutes. To determine how often the batch files are processed, refer to “Specifying Technical Settings” on page 24.

Creating an Indexer

- 1** From the General Administration page, click the News Server *server name* button > Discussion Groups > Full Text Indexing.
- 2** In the Index Identifier field, type the name of the indexer.
- 3** Click the Index Which Discussion Groups drop-down list.
- 4** Select which discussion groups you want to index.

- 5** If you select Specified Discussion Groups or All But Specified Discussion Groups, in the Discussion Groups field, type the names of the discussion groups.
- 6** Click OK.

After you create an indexer, it appears in the list of indexers at the bottom of the Full Text Indexing form. All indexer names are preceded by the word *indexer*.

After you create an indexer, the Edit and Remove buttons appear at the bottom of the form.

Editing an Indexer

- 1** From the General Administration page, click the News Server *server name* button > Discussion Groups > Full Text Indexing.
- 2** In the For Indexer list, click the Edit button that corresponds to the indexer you want to edit.
- 3** Select which discussion groups you want to index.
- 4** If you select Specified Discussion Groups or All But Specified Discussion Groups, in the Discussion Groups field, type the names of the discussion groups.
- 5** Click OK.

Removing an Indexer

When you remove an indexer

- ◆ All configuration files for the indexer are removed
 - ◆ No more articles are indexed for this particular indexer
 - ◆ Existing articles remain in the index until they expire
- 1** From the General Administration page, click the News Server *server name* button > Discussion Groups > Full Text Indexing.
 - 2** In the For Indexer list, click the Remove button that corresponds to the indexer that you want to remove.

Removing a Discussion Group

- 1** From the General Administration page, click the News Server *server name* button > Discussion Groups > Manage Discussion Groups > OK.
- 2** Select the discussion group.
- 3** Click Remove.
- 4** Click Remove Group on Local Servers Only
or
Click Remove Group on All Internal Connected Servers.

If you have configured the News Server to notify you about rmgroup control articles in the Configure Replication Host form (from the News Server interface, click Discussion Replication > Configure Replication Host), you will receive one notification control message for the removed discussion group and its lower-level discussion groups.

If the discussion group is removed from your local server and not a replication host, you will still receive an e-mail notification.

7

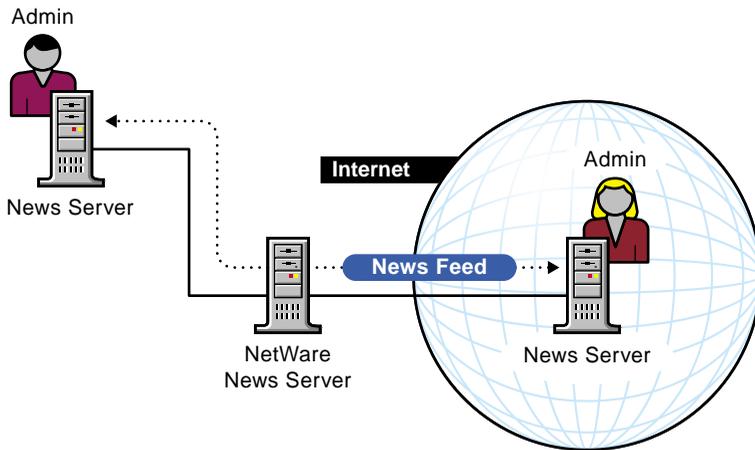
Managing Replication

This section describes how your NetWare® News Server can replicate, or share and exchange articles and discussion groups, with other news servers. Before you configure your News Server for replication, refer to “Planning Your Replication Sites” on page 18.

Understanding Replication

Discussion group replication is the process of exchanging and transferring articles and discussion groups between servers. Your server can send to any remote server, and any remote server can send to your server. To accept incoming discussion groups, each server must be configured to do so. Thus replication is a two-way exchange of discussion groups coordinated by the server administrators.

The following illustration shows an example of replication.



Discussion group replication does the following:

- ◆ Expands the number of discussion groups available to your server
- ◆ Lets you post your discussion groups to Usenet so that your users can participate in the global news server community

For more information on Usenet, refer to “About Usenet” on page 77.

- ◆ Allows for fast response and high availability because discussion groups can be kept on several machines that send the discussion group articles to each other.

For example, you could have servers in several different buildings that share discussion groups.

Replication Relationships Between Servers

There are two types of replication relationships between servers:

- ◆ As peers
- ◆ As master and synchronized replica

Replication as Peers

As peers, both servers can spool posted articles and send and receive replication feeds to and from one another and other servers. You can, however, receive discussion groups from a server and not send discussion groups to that

server. You just need to specify which outgoing discussion groups to send to other servers in the Configure Replication Host form (from the News Server interface, click Discussion Replication > Configure Replication Host).

You cannot control which incoming discussion groups your server receives. You do control, however, which discussion groups your server supports. If your server does not support the discussion group sent by the other server, all the articles in the discussion group are rejected by your server. You use control articles to accept or reject incoming discussion groups. For more information about control articles, refer to “Understanding Control Articles” on page 83.

To host the same discussion groups on your server that are being sent by another server, you should obtain the server’s ACTIVE file and import the desired discussion groups into your server’s ACTIVE file.

Replication as Master and Synchronized Replica

As master and synchronized replica, one server is designated as master server, and one or more servers are designated as synchronized replicas of the master server.

Only the master server can spool posted articles and can send and receive replication feeds to and from other servers.

The synchronized replica

- ◆ Maintains the same discussion groups, articles, and article numbering as its master server.
- ◆ Accepts replication feeds only from its master server.
- ◆ Cannot send replication feeds to other servers.
- ◆ Cannot spool articles posted to it, but must forward all posted articles to its master server for spooling.

The master server then sends the articles to its synchronized replicas.

Master and synchronized replication is a way to help balance the load of your news servers. This setup allows users to maintain the same seen/unseen state for articles, regardless of which synchronized replica they use.

About Usenet

If you want to receive global discussion groups, you will want to receive the Usenet feed. Usenet is the public collection of newsgroups. These newsgroups

are sent around the world, and their articles are stored on many servers. Not all news servers receive a full news feed, that is, they don't give you access to all Usenet newsgroups because the server administrator has not configured the server to receive a full news feed.

If you're new to the Internet or Usenet newsgroups, you might want to buy a book that lists and describes all the Usenet newsgroups. (The list is very long.) Or you can subscribe to one of the newsgroups that publishes lists, such as news.announce.newgroups and news.announce.newusers.

Usenet addresses look similar to Internet addresses, but the most general category appears first instead of last. For example, rec.pets.cats is about cats, but the general category is about recreation.

Usenet newsgroups are organized into the following groups:

- ◆ The alt (alternative) group contains less formal topics.
- ◆ The comp (computer) group contains topics about computers.
- ◆ The misc (miscellaneous) group contains various topics.
- ◆ The news groups contains topics about newsgroups.
- ◆ The rec (recreational) group contains topics about arts, hobbies, sports, and so on.
- ◆ The sci (science) group contains topics on biology, chemistry, physics, and math.
- ◆ The soc (social) group contains topics on social issues.
- ◆ The talk group contains topics that are hotly debated, such as politics and religion.

Access Control, Security, and Replication

If you set up discussion group replication, you need to understand certain access control and security issues.

Access Control

If your News Server sends discussion groups to external or internal sites that use another method of access control, you cannot control access to the discussion groups residing on the remote server. If you are concerned about access control for the discussion groups you are sending, make certain that you trust the remote site.

Incoming Discussion Groups

To receive encrypted data or to replicate discussion groups with remote servers that have encryption enabled, the server must have a valid certificate and must have encryption enabled. When you replicate discussion groups with a remote server that has encryption enabled, all data between the two servers is encrypted. Keep in mind, however, that after the articles have transferred to the other server, the articles are only as secure as the remote server.

Outgoing Discussion Groups

The News Server can send encrypted or unencrypted data whether running with encryption enabled or not. Additionally, the server can send encrypted private discussion groups and unencrypted public discussion groups. The receiving server determines whether the transmission should be encrypted. You configure the server to use the receiving server's port number and SSL setting for transmissions.

News Server can send to a port number other than the one it listens to. This feature, however, does not guarantee that you can receive discussion groups from the remote server. To send to your server, the remote server must have the ability to send to a port number other than the one to which it listens and must be configured to send to your server's port number.

Creating a Replication Host

- 1** From the General Administration page, click the News Server *server name* button > Discussion Replication > Configure Replication Host.
- 2** In the Remote Server Hostname field, type the name of the host your server will exchange articles with.

You can specify a hostname, such as SECNEWS.NOVELL.COM, or you can specify an IP address. If you have configured your News Server to not resolve hostnames into IP addresses, you must specify an IP address in the hostname field.
- 3** Check the box if you want the host to be synchronized with a master host.

Synchronized replica configuration cannot be changed.
- 4** Check the box if you want the remote server to be treated as internal to your company.

If you treat the host as internal, you can create or remove discussion groups on it. Before you treat the host as internal, notify the remote server administrator.

- 5** In **Outgoing Settings**, click the **Send** drop-down list > select which discussion groups to send.
- 6** If you select **Specified Discussion Groups** or **All but Specified Discussion Groups**, in the **Discussion Groups Field**, type the name of the discussion groups.

You can specify patterns, such as **ROYAL.*** to send all discussion groups that start with **royal**. You can also use negation patterns, such as **!*.ANIMALS.*** to specify not to send anything that has animals in its name.

- 7** In **Remote Server Port**, select one of the following options:
 - ◆ **Use Port Number (Same as This Server)**: Select if the port of the receiving server is the same port number as your News Server.
 - ◆ **Use This Port**: Select if you send to a remote server that listens to a different port number than your News Server. In the associated field, type the port number.

You should always use port number 563 for servers with encryption enabled.

- 8** In **SSL Setting for Outgoing Connection**, select one of the following options:
 - ◆ **Use SSL Setting of This Server**: Select if the remote server has the same security settings as your News Server.

If a remote server has a different setting, any attempted transmissions to that server will generate an error message in the replication log.
 - ◆ **Remote Server Uses SSL**: Select if transmissions must be encrypted before they are sent to the remote server.
 - ◆ **Remote Server Does Not Use SSL**: Select if transmissions must not be encrypted before they are sent to the remote server.

- 9** In **Incoming Settings for Control Articles**, type the discussion groups for which you will accept newgroup control articles in the **Accept Newgroup Control Articles for Groups** field.

If you want to accept newgroup control articles on all discussion groups, type an asterisk (*).

- 10** Click the When Newgroup Control Articles Arrive drop-down list > select how you want to handle the control articles..

If you select Make Log Entry, the articles will be logged in the server log.

- 11** In the Accept Rmgroup Control Articles for Groups field, type the discussion groups for which you will accept rmgroup control articles.
- 12** Click the When Rmgroup Control Articles Arrive drop-down list > select how you want to handle the control articles.
If you select Make Log Entry, the articles will be logged in the server log.
- 13** Click OK.

Editing a Replication Host

- 1** From the General Administration page, click the News Server *server name* button > Discussion Replication > View/Manage Replication Hosts.
- 2** Click Edit under the replication host you want to modify.
- 3** Modify the Configure Replication Host form.

For information on how to use this form, refer to “Creating a Replication Host” on page 79.

Configuring a Synchronized Replica

- 1** From the General Administration page, click the News Server *server name* button > Discussion Replication > Set Master Host.
- 2** Type the fully qualified name of the master server for which your server is to be a synchronized replica in the Master Host field.

The Set Master Host form applies only to this News Server. If you want to configure this server to be the master host, you must access the News Server interface for each of the designated synchronized replicas and put this server’s name in the Master Host field.

- 3** Click OK.

If you do not type anything in the Master Host field, your NetWare News Server will not be a synchronized replica.

Creating the Default Replication Settings

If you want to send the same outgoing discussion groups to all replication hosts, you can create a default replication setting that specifies those discussion groups. The default replication setting is to send no discussion groups.

- 1** From the General Administration page, click the News Server *server name* button > Discussion Replication > Edit Default Replication Settings.
- 2** Click the Send drop-down list.
- 3** Select which discussion groups you want to send.
- 4** If you select Specified Discussion Groups or All But Specified Discussion Groups, in the Discussion Groups field, type the name of the discussion groups.

You can specify patterns, such as ROYAL.* to send all discussion groups that start with royal. You can also use negation patterns, such as !*.ANIMALS.* to specify not to send anything that has animals in its name.

- 5** Click OK.
- 6** To apply the default replication settings to a replication host, when you configure your replication host, select Default Discussion Groups from the Send drop-down list on the Configure Replication Host form.

Editing the Default Replication Settings

- 1** From the General Administration page, click the News Server *server name* button > Discussion Replication > View/Manage Replication Hosts.
- 2** Under Default Replication Settings, click Edit.
- 3** Modify the Edit Default Replication Settings form.

For information on how to use this form, refer to “Creating the Default Replication Settings” on page 82.

Removing a Replication Host

- 1 From the General Administration page, click the News Server *server name* button > Discussion Replication > View/Manage Replication Hosts.
- 2 Click Remove under the replication host you want to remove.

Resending Articles

You might want to resend articles to replicate your spool to a replication host that has crashed or has somehow lost articles that you have previously sent to it. Resending articles can take a long time depending on the number of articles sent.

- 1 From the General Administration page, click the News Server *server name* button > Discussion Replication > View/Manage Replication Hosts.
- 2 In the For Host list, click the Resend that corresponds to the replication host you want to resend articles to.
- 3 In the Resend to Host form, select one of the following options:
 - ◆ Send All Available Articles
 - ◆ Send Only Articles Less Than _ Days

In the associated field, type the number of days.

The Refeed will happen when specified in the Send Outgoing News drop-down list in the Technical Settings form (from the News Server interface, click Server Preferences > Technical Settings).

Understanding Control Articles

A News Server that sends discussion groups to another server communicates with the receiving server about when to create a discussion group, delete an outdated discussion group, cancel an article, and so on. This information is transmitted in articles that are called control articles.

Control articles are sent just like other news articles and are stored in the control discussion group. The RFC 1036 defines the format for these articles. Control articles are sent with a control header or a subject header that starts with the characters CSMG.

Generally, control articles are sent automatically as the result of an administrative action you perform. For example, when you create a discussion group, a newgroup control article is sent to your server to create the discussion group.

The following control articles are supported by the News Server.

| Control Article | Result |
|------------------------|--|
| Newgroup | Requests that the receiving server create a new discussion group |
| Rmgroup | Requests that the receiving server delete a discussion group |
| Checkgroups | Contains a list of the valid discussion groups within a specific discussion group hierarchy |
| Sendsys | Requests that a description of the receiving server's discussion group replication to other servers be mailed to the article's reply address |
| Version | Requests that the name and version of the receiving server be mailed to the article's reply address |

The rmgroup and newgroup control articles apply to a specific discussion group sent from a specific replication host. The other three control articles specify information about replications in general.

Handling Control Articles

You can specify how you want your News Server to handle control articles that it receives. It is possible to handle control articles differently from each remote host.

If you want manual control over articles, you can specify that control articles be e-mailed to you for immediate appraisal on an individual basis. If you choose this option, you become a moderator for your News Server. For each

control article you receive, you can decide whether you want to allow the action to be performed on your News Server. If you do not want the action to be performed, you can ignore the request. If you want the action to be performed, you must save the article as a file, edit it, and post it via your NT console. For more information about moderating, refer to “Moderating a Discussion Group” on page 68.

You can specify that control articles be entered into the server log so you can quickly review them in their entirety and choose whether to accept them or not. You can choose the logging option if you do not plan on changing the discussion groups and articles your News Server offers, but just want to be aware of what remote servers are sending you.

If you do not want manual control over any action that can affect your News Server, you can specify that control articles should be handled automatically as they are received. In general, it is easier to administer replicated internal discussion groups if you allow control articles to be executed automatically.

You can also specify that your News Server ignore control articles. For example, if you do not want discussion groups created on your server, you can specify to ignore newgroup control articles.

To specify how to handle control articles:

- 1** From the General Administration page, click the News Server *server name* button > Discussion Replication > Control Article Handling.
- 2** Click the Checkgroups drop-down list > select how you want checkgroups to be handled.

You specify the admin e-mail address in the Mail Notices to News Administrator form (from the News Server interface, click Reports > Mail Notices).

- 3** Click the Sendsys drop-down list > select how you want sendsys to be handled.
- 4** Click the Version drop-down list > select how you want version to be handled.
- 5** Click OK.

The handling of newgroup and rmggroup is specified in the Configure Replication Host form (from the News Server interface, click Discussion Replication > Configure Replication Host).

8

Securing the NetWare News Server

NetWare® News Server uses the Novell Certificate Server 2.0 to transfer private data over TCP/IP networks. This section focuses on security as it specifically relates to the News Server. For more information about the Novell Certificate Server, refer to the Novell Certificate Server 2.0 Administration Guide.

Understanding Basic Authentication

Basic authentication requires the user to specify a username and password. The username and password are stored in the directory service. Any user with access to a valid username and password can access your discussion group from any machine that can access your discussion groups.

If you want a more secure News Server, you should use the Novell Certificate Server to provide encryption.

Understanding Certificate Authentication

Over the Internet and intranets, identification takes the form of an authentication certificate, or simply, a certificate. News Server supports both server and user certificates.

Server Certificates

Server certificates are used by servers to authenticate to other servers or clients when exchanging encrypted information. A news server authenticates to a

newsreader or to another news server that is connecting to send encrypted data.

When a newsreader connects to a news server, the server certificate identifies the news server to the newsreader. The newsreader is assured that it is connecting to the correct news server.

When a news server connects to a remote news server to send encrypted data, the remote news server sends its certificate to the sending server to identify itself. After the remote news server successfully identifies itself, the sending server starts the encrypted transmissions.

The following example provides a general overview of the behind-the-scenes server authentication process:

1. A client (either a newsreader or another news server) sends a request to connect to a secure news server.
2. The server sends its certificate and its public key to the client.
3. The client checks whether the server certificate was issued by a Certificate Authority (CA) it trusts.

If so, the client proceeds to the next step. If the client doesn't trust the CA, it can cancel the connection or proceed without server authentication. If the client is another news server, it will cancel the connection.

4. The client compares the information in the certificate with the information it just received concerning the server's domain name and its public key.

If the information matches, the client accepts the server's certificate.

5. The client generates a session key, a key to be used only for this transaction. The client encrypts the session key using the server's public key.
6. The client sends the encrypted session key to the server.
7. The server receives the session key and decrypts it using the server's private key.
8. The client and the server use the session key to encrypt and decrypt the data they send and receive.

User Certificates

User certificates are used for newsreader authentication when a newsreader connects to the News Server. When a newsreader attempts to connect to the News Server, the server can request that the newsreader authenticate by sending a user certificate.

To transfer the user certificate, both the user and the server must be using Novell Certificate Server 2.0.

User certificates provide more secure authentication than the basic username and password authentication. Only machines with a valid certificate signed by a CA that you trust can authenticate to your news server.

The following example provides a general overview of the behind-the-scenes user authentication process:

1. A newsreader sends a request to connect to your News Server.
2. The server sends its server certificate and its public key to the newsreader.
3. After the server authenticates to the newsreader, the server requests that the newsreader authenticate by sending its user certificate.
4. The newsreader sends a user certificate and its public key to the server.
5. The server uses the newsreader's public key, which is included in the certificate, to verify that the owner of the certificate is the same one who signed the certificate.
6. The server checks whether the user certificate's CA is one that the server trusts.

If so, the server proceeds to the next step. Otherwise, the server informs the newsreader that the user certificate was issued by an unknown CA.
7. The server compares the information in the certificate with the information it just received about the newsreader. If all the information matches, the server accepts the newsreader as authenticated.
8. The newsreader generates a session key and encrypts it using the server's public key.
9. The newsreader sends the encrypted session key to the server.
10. The server receives the session key and decrypts it using the server's private key.
11. The newsreader and the server use the session key to encrypt and decrypt the data they send and receive.

If you require authentication by user certificates, be aware of the following:

- ◆ The newsreader must obtain a user certificate from Novell Certificate Server v2.0.
- ◆ The News Server must have encryption enabled.

Enabling Encryption

You should enable encryption if

- ◆ You want to receive encrypted data.
- ◆ You want to replicate discussion groups with remote servers running in secure connection mode.
- ◆ You require user certificate authentication to your server.

With encryption enabled, all communications between your server and SSL-enabled browsers are private and server-authenticated.

The encryption setting affects your incoming connections only. If you enable encryption, your server will receive encrypted data only. Newsreaders without SSL support cannot connect to your News Server.

Before using encryption, you must have a CA and Key Material Object (KMO) in NDS. If you accepted the default Novell Certificate Server 2.0 settings during the NetWare 5.1 install, the CA and KMO were automatically created for you. If you did not accept the default settings, you must create a CA and KMO using client ConsoleOne™. For more information on creating these components, refer to ConsoleOne help.

To enable NetWare News Server encryption:

- 1** Enable encryption for the NetWare Web Manager in the Encryption On/Off form (from the General Administration page, click Admin Preferences > Turn On/Off SSL).
- 2** Down the NetWare Web Manager.
- 3** Restart the NetWare Web Manager at the server console by typing
`nvxadmup`
- 4** From the General Administration page, click the News Server *server name* button > Encryption > Activate Connection Security.

If you can't access the General Administration page, be sure that you have specified *https* in your address, for example, `https://123.456.789`.

- 5** Select Encryption On.
- 6** In the Port Number field, type a port number for incoming connections.
The standard port number for secure servers is 563.
- 7** Select an alias for the key pair file and certificate file.
The alias is the NDS™ object name you specified when creating the CA and KMO during the NetWare 5.1 install.
- 8** Click OK.
- 9** Down the News Server.
- 10** Restart the News Server at the server console by typing
`nsnewup`

Managing an Encrypted News Server

If you enable encryption on your News Server, you need to be aware of how encryption affects

- ◆ URL construction
- ◆ Article storage
- ◆ Replication with other news servers

URL Construction

Normally, you access news server with the following URL:

news://servername/discussiongroup

To access a secure news server, use the following URL:

snews://servername/discussiongroup

To access a secure news server with security temporarily disabled, use the following URL:

news://servername:563

Article Storage

With a secure news server, connections and transmissions are secure. After the article reaches its destination, however, it is only as secure as the machine on which it is stored.

Replication with Other News Servers

If you have already set up replication and now want to receive encrypted replication feeds, you need to modify the Configure Replication Host form.

- 1** From the General Administration page, click the News Server *server name* button > Discussion Replicaton > Configure Replication Host.
- 2** Under Remote Server Port, select Use This Port. In the associated field, type the port number you specified in the Encryption On/Off form (from the News Server interface, click Encryption > Activate Connection Security).
- 3** Under SSL Setting for Outgoing Connection, select Remote Server Uses SSL.
- 4** Click OK.

If you have encryption enabled on your News Server, you can still send to a News Server that does not have encryption enabled. For more information about replication, refer to Chapter 7, “Managing Replication,” on page 75.

You cannot specify that certain discussion groups be secure and others not be secure. (This release does not support multiple instances of the News Server.) Because Usenet newsfeeds run nonsecure server software, you cannot receive Usenet newsfeeds if your server has encryption enabled.

Disabling Encryption

- 1** From the General Administration page, click the News Server *server name* button > Encryption > Activate Connection Security.
- 2** Select Encryption Off.
- 3** Click OK.

9

Maintaining the News Server

This section describes the steps you need to take to ensure that the News Server runs efficiently and properly.

Understanding Article Expiration

NetWare[®] News Server stores discussion group articles in the local spool directory. You determine how long you want to store articles on disk. How long you store articles in a discussion group depends on the following factors:

- ◆ Your disk capacity: How much disk space you have determines how many articles you can store at a given moment.
- ◆ The number of articles posted to a discussion group: If the number of articles posted daily to a particular discussion group is very large, you might need to frequently expire articles in the discussion group.
- ◆ The content of articles: If the content of the discussion group is critical to your organization, you might never expire articles in the discussion group. If the content is not particularly critical, you might want to expire the articles of the discussion group frequently.

When you no longer want to store an article, News Server uses the Expire program to remove the article. The Expire program purges articles from your spool and purges references from the HISTORY file as indicated by your configuration settings. When the News Server performs its daily maintenance tasks, it checks the expiration policies and expires articles accordingly.

You might want to run Expire if you are running out of disk space, or you have modified your expiration policies and you want to immediately run Expire according to the new policies.

You can specify a default expiration policy for all discussion groups, or you can specify a custom expiration policy for a specific discussion group.

Editing the Default Expiration Policy

The following is the default expiration policy for articles:

- ◆ Obey expiration headers of articles

Expiration headers are headers that say when to expire the message. The expiration header is determined by the client who posts the message.

- ◆ Keep articles without expiration headers for 10 days
- ◆ Keep articles in the HISTORY file for 14 days

For more information about the HISTORY file, refer to “Recovering the HISTORY File” on page 100.

The default expiration policy covers all discussion groups that are not covered by a custom policy. You can edit the default policy and specify your own values.

To edit the default expiration policy:

- 1** From the General Administration page, click the News Server *server name* button > Expiration > View/Manage Expiration Policies.
- 2** Under Default Expiration Policy, click Edit.
- 3** From the Edit Default Expiration Policy form, type the number of days you want articles to remain in the HISTORY file.

The Remember HISTORY field should be equal to or higher than the longest expiration setting. The Remember HISTORY field tells the server how long to keep the message ID in the HISTORY file, regardless of how long the article actually remains in the spool. For more information about the HISTORY file, refer to “Recovering the HISTORY File” on page 100.

- 4** To determine how long you want to keep articles on disk, select one of the following options:
 - ◆ Obey Expiration Headers: Obeys any expiration headers that the client sends when posting a message. In the associated field, type the number of days to keep articles without expiration headers.

Do not specify this option if you want to maintain control over the expiration policy of all articles stored in your spool.

- ◆ **Override Expiration Headers:** Overrides any expiration headers that the client sends when posting a message. In the associated fields, type the minimum and maximum number of days to keep all articles.
- ◆ **Never Expire Articles:** Never expires articles. Select this option only if you are sure you have the disk capacity required for the discussion groups you want to support.

5 Click OK.

Creating a Custom Expiration Policy

When you create a custom expiration policy for a discussion group, you override the default expiration policy for that discussion group.

- 1** From the General Administration page, click the News Server *server name* button > Expiration > Create a Custom Expiration Policy.
- 2** Click the For drop-down list > select the discussion group criteria for which you want to specify the expiration policy.
- 3** In the Discussion Groups Matching field, type the discussion group name or pattern that you want to create the policy for.
- 4** To determine how long you want to keep the articles from the specified discussion group on disk, select one of the following options:
 - ◆ **Obey Expiration Headers:** Obeys any expiration headers that the client sends when posting a message. In the associated field, type the number of days to keep articles without expiration headers.

Do not specify this option if you want to maintain control over the expiration policy of all articles stored in your spool.

- ◆ **Override Expiration Headers:** Overrides any expiration headers that the client sends when posting a message. In the associated fields, type the minimum and maximum number of days to keep all articles.
 - ◆ **Never Expire Articles:** Never expires articles. Select this option only if you are sure you have the disk capacity required for the discussion groups you want to support.
- 5** Click OK.

Modifying a Custom Expiration Policy

- 1** From the General Administration page, click the News Server *server name* button > Expiration > View/Manage Expiration Policies.
- 2** Under Custom Expiration Policies, click Edit under the policy you want to modify.
- 3** In the Custom Expiration Policy form, click the For drop-down list > select the discussion group criteria for which you want to specify the expiration policy.
- 4** In the Discussion Groups Matching field, type the discussion group name or pattern that you want to create the policy for.
- 5** To determine how long you want to keep the articles from the specified discussion group on disk, select one of the following options:
 - ♦ **Obey Expiration Headers:** Obeys any expiration headers that the client sends when posting a message. In the associated field, type the number of days to keep articles without expiration headers.

Do not specify this option if you want to maintain control over the expiration policy of all articles stored in your spool.
 - ♦ **Override Expiration Headers:** Overrides any expiration headers that the client sends when posting a message. In the associated fields, type the minimum and maximum number of days to keep all articles.
 - ♦ **Never Expire Articles:** Never expires articles. Select this option only if you are sure you have the disk capacity required for the discussion groups you want to support.
- 6** Click OK.

Removing a Custom Expiration Policy

- 1** From the General Administration page, click the News Server *server name* button > Expiration > View/Manage Expiration Policies.
- 2** Under Custom Expiration Policies, click Remove under the custom expiration policy you want to remove.

Performing Recovery Tasks

Under normal circumstances, the news.daily program performs the daily maintenance tasks for the News Server. There might be times, however, when you need to take recovery steps. For example, if the HISTORY file becomes corrupted, the Expire program will not remove articles that it should.

To execute a recovery task:

- 1 From the General Administration page, click the News Server *server name* button > Advanced Tasks > Recovery.
- 2 Click the Do It that corresponds to the task you want to perform.

Some recovery tasks can be performed at any time. Other tasks can be performed only while the server is up or only while the server is down. The following table shows what state the server must be in to perform the recovery tasks. Additional information about each task are in the subsections that follow.

| Recovery Task | When Necessary | Necessary Status of Server |
|---|--|----------------------------|
| Releasing the throttled server. (This task must be completed from the Start/Stop the Server form.) | The server has paused and is no longer accepting connections. | Down |
| Running news.daily | <ul style="list-style-type: none">♦ You want to force the server to perform all of its maintenance tasks immediately.♦ You need to expire articles. | Up or down |
| Running expire | <ul style="list-style-type: none">♦ You are running out of disk space.♦ You have modified the expiration policies and want to run expire according to the new policies. | Up or down |

| Recovery Task | When Necessary | Necessary Status of Server |
|--------------------------------|---|-----------------------------------|
| Renumbering the ACTIVE file | <ul style="list-style-type: none"> ♦ Your server is unexpectedly throttling with errors when writing or linking articles. ♦ You think the ACTIVE file might be corrupt. | Up |
| Remaking the ACTIVE file | If you renumbered the ACTIVE file and are still having problems. | Down |
| Rebuilding the HISTORY indexes | <ul style="list-style-type: none"> ♦ You notice performance problems. ♦ You think the HISTORY file might be corrupt. | Down |
| Updating the HISTORY file | <ul style="list-style-type: none"> ♦ You notice performance problems. ♦ You rebuilt the HISTORY indexes and are still having problems. | Up |
| Remaking the HISTORY file | You rebuilt the HISTORY indexes and updated the HISTORY files and are still having problems. | Down |
| Remaking the search indexes | <ul style="list-style-type: none"> ♦ You are experiencing performance problems. ♦ You want to index existing articles in a discussion group that was previously excluded from indexing. | Down |
| Updating the overview files | You want to make sure all articles in discussion groups are up-to-date. | Down |
| Rebuilding the overview files | You think the messages are corrupted. For example, you double-click on a message and nothing comes up. | Down |

Releasing the Throttled Server

The Release the Throttled Server button only appears on the Start/Stop the Server form if the server has paused.

- 1** From the General Administration page, click the News Server *server name* button > Server Preferences > Start/Stop the Server.
- 2** Under News Server Status, verify that your server is accepting the connections you have specified.
- 3** If the server has paused, check the errlog to determine the cause.
The errlog is in NOVONYX\SUITESPOT\NEWS-SERVERNAME.
- 4** From the Start/Stop the Server form, click Release the Throttled Server after the problem has been identified and fixed.

Running News.daily

News.daily is the Collabra Server program that performs the daily maintenance tasks and writes the maintenance information to a set of log files. News.daily periodically expires articles, maintains the ACTIVE and HISTORY files, rotates the log files to purge old files, and sends discussion groups to other news servers.

If running news.daily takes a long time, you can run the program from outside the Collabra Server browser interface. At the server console, type

```
Load sys:novonyx/suitespot/bin/news/bin/newsdly.nlm
      sys:novonyx/suitespot/news-servername/config/
      nsnews.conf
```

Running Expire

The Expire program purges articles from your spool and purges references from the HISTORY file as indicated by your configuration settings.

Recovering the ACTIVE File

The ACTIVE file contains a list of all the discussion groups stored on your server. For each discussion group, the low and high articles numbers and a flag indicating the type of group are included. The server is sensitive to the exact format of this file.

Renumbering the ACTIVE file will renumber the list of discussion groups stored on your server.

Remaking the ACTIVE file rebuilds the ACTIVE file based on the contents of your spool directory. Remaking the ACTIVE file can take some time if you are supporting a lot of discussion groups. If you have a full UseNet feed, obtain a copy of the ACTIVE file from your news provider and then renumber that ACTIVE file.

If you remake the ACTIVE file, most special flag settings will be lost. For example, flag settings indicating moderated discussion groups and discussion groups that can't be posted to locally will be reset to the default settings.

Recovering the HISTORY File

The HISTORY file contains a list of the articles your server has stored and possibly expired. The HISTORY file prevents your server from accepting articles it has already accepted.

The HISTORY file includes information about the creation time of the article, the message ID, and the location of the article in the spool. (Message IDs are generated using the creation time in seconds since January 1970, appended to the process identification and the hostname for the computer that created the article.) The News Server adds a line for each article it posts to the spool.

Articles might be sent to your News Server from several other news servers. Consequently, some articles might be sent more than once. In addition, articles might be delayed several days in their various paths to your News Server. By referencing the HISTORY file, your News Server can decline articles that it has already stored.

For example, you might have an article stored for one week, and then a week later a replication site wants to send the same article to your server. News Server compares the article message ID with the list of message IDs in the HISTORY file. If your News Server has already received the file, it rejects the file from the replication site.

You specify the number of days that the HISTORY file will remember an article that it receives. Seven to fourteen days is recommended. If you set the HISTORY file to remember fewer days, your HISTORY file will be smaller, but the likelihood of getting duplicate articles increases. After the number of days specified, the server will purge old lines from the HISTORY file during the expiration process.

Rebuilding the HISTORY indexes rebuilds the HISTORY.DIR and HISTORY.PAG files from the HISTORY file.

Updating the HISTORY file opens every article to rebuild the HISTORY index.

Remaking the HISTORY file rebuilds the HISTORY file.

Recovering the Overview Files

Recovering the overview files recovers the list of messages in each discussion group.

Remaking the Search Indexes

Remaking the search indexes rebuilds the search indexes.

Cancelling Articles

You might want to cancel an article if its content is not appropriate.

- 1** From the General Administration page, click the News Server *server name* button > Advanced Tasks > Cancel Articles.
- 2** Type the ID of the message that you want to cancel, for example, <330BC222.6A9A@ROYAL.COM>.

To determine the message ID, select the message header. In your newsreader, click the View menu. In the Headers section, select All. The message ID will appear in the message header.

- 3** Click OK.

10 Troubleshooting the News Server

This section includes information on troubleshooting problems with the NetWare® News Server.

Why can't I connect to the directory server?

Cause

The user ID or password you specified is incorrect.

Solution

If you are using the local directory service, you can check the user ID and specify a password from the General Administration page by clicking Users & Groups > select the user.

If you are using an LDAP server, you might need to contact the directory server administrator and ask for the correct user ID and password.

Which NSNEWS.CONF file do I modify?

Cause

There are two NSNEWS.CONF files.

Solution

The NSNEWS.CONF file in
\\NOVONYX\\SUITESPOT\\BIN\\NEWS\\INSTALL\\CONFIG is only used

when installing. The nsnews.conf file you should modify is found in
\\NOVONYX\\SUITESPOT\\NEWS-SERVERNAME\\CONFIG.

Why can't I view the daily report?

Cause

A temp file cannot be opened.

Solution

Verify that news.daily is done running. If news.daily is still running, wait for it to finish. If you still cannot see the report, delete the temp file

A

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