Features - Domino Mailbox Archiver Agent

TABLE OF CONTENTS

OVERVIEW

SYSTEM REQUIREMENTS - DOMINO MAILBOX ARCHIVER AGENT

INSTALLATION

- Install the Domino Mailbox Archiver Agent Windows
- Install the Domino Mailbox Archiver Agent Unix

COMPLIANCE AND MIGRATION ARCHIVING - DOMINO MAILBOX ARCHIVER AGENT

RECOVER DATA - DOMINO MAILBOX ARCHIVER AGENT

CONFIGURATION

- Agents
- Archive Sets
- Subclients

MANAGEMENT

- Archive History
- Recovery History

USE CASES

• Archive Management for Unix-Based Domino Servers

Overview - Domino Mailbox Archiver Agent

Choose from the following topics:

- Introduction
- Supported Data Types
- Tree Levels in the Domino Mailbox Archiver Agent
- License Requirement
- Installation
- Configuration
- Migration Archiving and Recovery
- Compliance Archiving and Retrieve
- Disaster Recovery Considerations

INTRODUCTION

The Domino Mailbox Archiver Agent is a software module that periodically moves unused or infrequently used Lotus Notes Mailbox messages on a host computer to secondary storage. The Domino Mailbox Archiver Agent provides support for two distinct archiving scenarios:

- Migration Archiving, which is useful if you want to reduce the number of messages routinely backed up to primary storage by the Lotus Notes/Domino Server iDataAgent.
- Compliance Archiving, which is useful if you want to index messages copied to the journaling mailbox to meet security and compliance standards.

These archiving scenarios are further contrasted in the following table:

| MIGRATION ARCHIVING (Domino Mailbox Archiver Agent with Migration-only configurations set) | COMPLIANCE ARCHIVING (Domino Mailbox Archiver Agent with Migration and Compliance configurations set) |
|---|--|
| Message content is moved from the source mailbox to the designated secondary storage location, leaving only the message header and a corresponding stub icon. Users can later recover the original message contents by double-clicking the stub icon. | Messages copied to the Domino Server journaling mailbox are moved to the designated secondary storage location. Only authorized users may retrieve messages archived from the journaling mailbox. Client mailbox copies of archived messages remain intact within their respective client mailboxes. |
| Primary storage resources and data protection operation time used by the Lotus Notes/Domino Server <i>i</i> DataAgent are reduced. | Messages are archived securely with no impact on the source mailboxes or databases. |
| Messages may be recovered in-place (i.e., to the source mailbox) or out-of-place (i.e., to another mailbox). | Messages are retrieved out-of-place (i.e., to a secure mailbox created exclusively for compliance purposes). |

SUPPORTED DATA TYPES

The Domino Mailbox Archiver Agent provides data protection support for all .nsf mail databases visible to the Domino Server.

Only databases with alphanumeric names are supported.

Data Protection Operations for all other data types not mentioned above are not supported by the Domino Mailbox Archiver Agent.

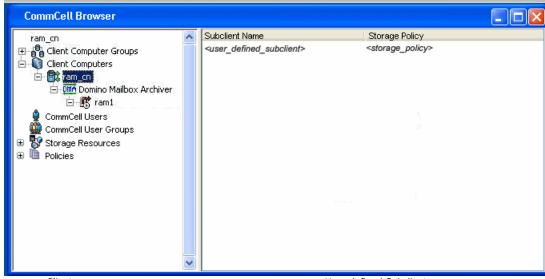
CLUSTER SUPPORT

The Domino Mailbox cluster configuration is supported only if:

- All Domino servers which are part of the Domino Cluster are installed on different physical machines.
- Multiple Domino partitions running on the same client machine, binds to different IP addresses on a single NIC card.
- Multiple Domino partitions running on the same client machine, binds to different IP addresses on multiple NIC cards.

TREE LEVELS IN THE DOMINO MAILBOX ARCHIVER AGENT

When the Domino Mailbox Archiver Agent is installed, the following levels are automatically created in the CommCell Browser.



ram_cn: Client

<user defined subclient>: User-defined Subclients

Domino Mailbox Archiver: Agents

ram1: Instances (Partitions)

INSTALLATION

Besides the CommServe and MediaAgent, there is one component to be installed for the Domino Mailbox Archiver Agent:

• Domino Mailbox Archiver Agent

For the procedures on installing this component, refer to Deployment - Domino Mailbox Archiver Agent.

After installing the Domino Mailbox Archiver Agent, the Lotus Notes Mailbox master template should be configured to display a stub icon for each message archived. When this configuration is performed, the Lotus Notes client mailbox will automatically display archived messages with a stub icon. Users can then recall the archived message by opening the message in the Lotus Notes client mailbox.

See Configure Stub Icons for Lotus Notes Mailboxes for step-by-step instructions.

CONFIGURATION

The archive operation is based on subclients, so the following configuration is on a per subclient basis. Most of the following options are located in the subclient properties dialog box.

ARCHIVING RULES

The configuration of the archiving rules is central to customizing migration archiving operations to meet the needs of your organization. For more information, see Migration and Compliance Archiving - Domino Mailbox Archiver Agent.

Archiving Rules are initially disabled by default. After creating a subclient, you must clear the **Disable All Rules** option and configure archiving rules before Archive Operations are possible. Otherwise, the system will ignore all archiving rules (except for the Do Not Create Stub rule) for the subclient.

OPERATION MODES

The Domino Mailbox Archiver Agents provides three modes which further direct how archive and recovery operations behave for each subclient. These modes can be selected using the **General** tab of the **Subclient Properties** dialog box and should be configured prior to running the first archive operation.

See Operation Modes for more information.

INDEXING OPTION

To keep the index within a manageable size, a new index will be created every certain number of migration archiving operations. This value can be entered in the **Create new index every** *n* **Archive Operations** field on the subclient properties Archiving Rules tab. This setting will apply only when the messages are recovered using browse and recovery from the CommCell Console (stand-alone application). The CommCell Console also allows you to specify a point-in-time to find a message/item archived before the last creation of a new index. Note that the new index creation interval setting established in the subclient properties can be overridden during the running of a migration archiving operation by selecting the **Create New Index** option from the Advanced Archive Options (Data)

tab

Note that this setting does not affect recovering messages/items from Lotus Notes client mailboxes.

STORAGE POLICY

The retention criteria for preserving archived data through Storage Policies associated with Archiver Agents is based only on time, not cycles. For more information on Storage Policies, see Storage Policies.

STUB RETENTION

By default, stub retention length is decided by the retention of the archived messages/items associated with the stub. After the messages/items on the media (all the copies) have expired, the stub will be pruned in next migration archiving operation.

Users can also specify a value in days for stub retention time, from the subclient properties Archiving Rules tab. Keep in mind that the stub could be pruned before this value, if the storage policy retention time is smaller than this value.

PROXY MODE

Often archive operation will take sizable amount of resource from Domino server. To avoid the resource contention between production Domino server functions and archive operation, archive operation can be offloaded

MIGRATION ARCHIVING AND RECOVERY

Once the Domino Mailbox Archiver Agent is installed and the Domino Server has been configured to display stub icons, the administrator can schedule migration archiving jobs similar to scheduling backup jobs for the Lotus Notes/Domino Server iDataAgent.

When mailbox messages are archived in a migration archiving scenario, the content of the messages, including any attachments, are automatically removed from the source mailbox as they are copied to secondary storage. However, the source mailbox will retain the original message header, as well as a corresponding stub icon, both which can be used to recover the message at a later time.

See Compliance and Migration Archiving - Domino Mailbox Archiver Agent for more information on these archiving scenarios.

RECOVERY

The migration archive process allows two methods for recovering an archived message:

- using the **Browse** functionality of the CommCell Console.
- double-clicking the message's stub icon in the source Lotus Notes client mailbox.
- double-clicking the message itself in the source Lotus Notes client mailbox.

Refer to Recover and Retrieve Data - Domino Mailbox Archiver Agent for more information.

COMPLIANCE ARCHIVING AND RETRIEVE

Once the Domino Mailbox Archiver Agent is installed and the Domino Server has been configured to display stub icons, the administrator can schedule compliance archiving jobs similar to scheduling backup jobs for the Lotus Notes/Domino Server iDataAgent.

The Domino Mailbox Archiver Agent works in conjunction with the message journaling feature of the Domino Server software to archive all incoming and outgoing messages and attachments. As incoming or outgoing messages pass through the Domino Server, they are instantly captured and recorded in the Domino Server Journal Mailbox. The Domino Mailbox Archiver Agent can then archive the journal mailbox to secondary storage, where the messages will remain readily available for access and retrieval by authorized users. Once archived, all messages are protected from any editing or alteration.

See Compliance and Migration Archiving - Domino Mailbox Archiver Agent for more information on these archiving scenarios.

RETRIEVE

To retrieve archived messages, you can simply search or scan the secondary storage to which the journaling mailbox messages were archived using certain criteria, such as the contents of the subject, the original sender (from) and the original intended recipient (to). Additionally, if Content Indexing is enabled you can also search for messages by their content and attachments.

See Recover and Retrieve Data - Domino Mailbox Archiver Agent for more information on retrieving messages archived for compliance.

WHAT YOU NEED TO KNOW ABOUT LOTUS DOMINO SERVER

A Lotus Domino server can be set up and organized in a number of ways. It is important to understand this organization to create an effective archive plan.

The following sections describe the main components that comprise a typical Lotus Domino Server. Note that the Domino Mailbox Archiver Agent is only supported for Notes mailboxes.

NOTES PARTITIONS

A Notes partition is an instance of Lotus Domino Server running on a given computer. Lotus Domino Server may be installed multiple times on the same computer, each instance, or partition, acting as an individual server.

For example, computer A is running a simple Notes database. It is decided that computer A will also host a Domino web server database. The Domino administrator could add this data to the existing Domino partition, or install another partition of Domino Server for this new database. Installing a new partition would allow the administrator to tune the performance characteristics of each partition individually while offering a simpler organizational scheme.

NOTES DATA PATHS

Each partition of Lotus Domino Server will have a data path which describes the location of the database files. Databases existing outside of the data path are linked to the primary data path (see below).

NOTES LINKS AND LINK FILES

A Notes link is a pointer to a database outside of the data path for a given partition. A Notes link file is a text file that contains the path or paths of those databases. There are two types of Notes link files, database link files and folder link files. A database link is a .nsf file containing the path of a single database. A folder link is a .dir file containing a path or paths to multiple databases.

- Only database link files (.nsf) are supported by the Domino Mailbox Archiver Agent.
- The Domino Mailbox Archiver Agent does not support mailboxes whose corresponding non-linked database file
 (.nsf) exists outside of the Domino data directory specified in the notes.ini file. Any such non-linked database
 files will be filtered out during the Discovery process. However, databases residing outside of the Domino data
 directory that are referenced by a database or folder link are supported.

DATA DOCUMENTS

Data documents are the primary data storage component within Lotus Notes. They are comparable to records in other database programs. Each data document contains several data objects, including but not limited to, user input, mail messages and other data.

DOMINO SERVER TRANSACTION LOGS

A transaction log is a file containing a record of changes to all databases on a Domino Server partition. It is used to:

- recover a server partition upon a restart
- bring a database up-to-date during a restore job.

Lotus Domino Server offers many styles of transaction logging:

- archive
- circular
- linear
- disabled

Enabling archive logging should not cause the transaction log to grow excessively, since the Domino Server automatically prunes the transaction logs. If you allocate a reasonable amount of space on your Domino server for transaction logs and back up the server regularly, under normal operating conditions the transaction logs will not exceed the disk space allotted to them.

The Domino Mailbox Archiver Agent can archive messages with or without archive style transaction logging enabled on the Domino Server. If transaction logging is used, however, it is recommended that you increase the backup schedules of the truncation logs to accommodate the logged transaction created during the archive process.

DOMINO SERVER ID

The Domino Server ID should not have an associated password. Having one assigned does not hinder future backups, but does prevent a complete unconditional overwrite of a database if you have not selected the option to share the password with Notes addins.

If the Domino Server ID has a password associated with it, you must enable the option on the ID called Don't prompt for password from other Notes based programs (Share this user ID password with these Notes addins). This option can be found in the Domino Administrator, on the Configuration tab, under Tools/Certification/ID Properties for the SERVER ID file. A server restart is required after setting this option. In addition to this, the Domino Server ID must be running during the restore operation.

LICENSE REQUIREMENT

To perform a data protection operation using this Agent a specific Product License must be available in the CommServe® Server.

Review general license requirements included in License Administration. Also, View All Licenses provides step-by-step instructions on how to view the license information.

DISASTER RECOVERY CONSIDERATIONS

The Domino Mailbox Archiver product does not provide the ability to restore the entire system in the event of a disaster. Systems using an Archiver Agent should also be protected using the corresponding backup and recovery agent. Domino Mailbox Archiver relies upon the Lotus Domino Server *i*DataAgents to perform a full system restore of application data, and the Windows File System *i*DataAgent to restore the operating system. For more information, see Full System Restore - Lotus Domino Server *i*DataAgents.

Back to Top

System Requirements - Domino Mailbox Archiver Agent

System Requirements | Supported Features

The Domino Mailbox Archiver Agent supports the following Lotus Domino Server releases in both Domino Cluster and non-Domino Cluster environments.

| APPLICA | TION/OPERATING SYSTEM | PROCESSOR | | |
|---|---|---|--|--|
| LOTUS DOMINO SERVER RELEASE 8.02 32-BIT ON: | | | | |
| AIX | AIX 6.1 | Power PC (Includes IBM System p) | | |
| | AIX 5.3 with technology level 7 (or higher) and runtime library xlC.rte 8.0.0.0 or higher | Power PC (Includes IBM System p) | | |
| LINUX | RED HAT ENTERPRISE LINUX/CENTOS | | | |
| | Red Hat Enterprise Linux/CentOS 5.x with glibc 2.5.x | Intel Pentium, x64 or compatible processors | | |
| | SUSE LINUX (SLES) | | | |
| | SuSE Linux 10.x with glibc 2.4.x | Intel Pentium, x64 or compatible processors | | |
| SOLARIS | Solaris 10.x with a minimum of SunOS (Sparc) Patch 119963-14 | UltraSPARC III and higher recommended | | |
| WINDOWS | WINDOWS 2008 | | | |
| | Microsoft Windows Server 2008 x64 Editions* *Core and R2 Editions not supported | All Windows-compatible processors supported | | |
| | Microsoft Windows Server 2008 32-bit Editions* | All Windows-compatible processors supported | | |
| | WINDOWS 2003 | | | |
| | Microsoft Windows Server 2003 x64* Editions with a minimum of Service Pack 1 | All Windows-compatible processors supported | | |
| | Microsoft Windows Server 2003 32-bit Editions with a minimum of Service Pack 1 | All Windows-compatible processors supported | | |
| LOTUS DO | MINO SERVER RELEASE 8.02 64-BIT ON: | | | |
| AIX | AIX 6.1 64-bit | Power PC (Includes IBM System p) | | |
| | AIX 5.3 with technology level 7 (or higher) and runtime library xlC.rte 8.0.0.0 or higher | Power PC (Includes IBM System p) | | |
| WINDOWS | WINDOWS 2003 | | | |
| | Microsoft Windows Server 2003 x64 Editions with a minimum of Service Pack 1 | All Windows-compatible processors supported | | |
| LOTUS DO | MINO SERVER RELEASE 8.5.X 32-BIT ON: | | | |
| AIX | AIX 6.1 64-bit | Power PC (Includes IBM System p) | | |
| | AIX 5.3 with technology level 7 (or higher) and runtime library xlC.rte 8.0.0.0 or higher | Power PC (Includes IBM System p) | | |
| LINUX | RED HAT ENTERPRISE LINUX/CENTOS | | | |
| | Red Hat Enterprise Linux/CentOS 5.x with glibc 2.5.x | Intel Pentium, x64 or compatible processors | | |
| | SUSE LINUX (SLES) | | | |
| | SuSE Linux 11.x with glibc 2.9.x and above | Intel Pentium, x64 or compatible processors | | |
| | SuSE Linux 10.x with glibc 2.4.x | Intel Pentium, x64 or compatible processors | | |
| SOLARIS | Solaris 10.x with a minimum of SunOS (Sparc) Patch 119963-14 | UltraSPARC III and higher recommended | | |
| WINDOWS | WINDOWS 2003 | | | |

Microsoft Windows Server 2003 \times 64* Editions with a minimum of Service Pack All Windows-compatible processors supported 2

*Core Editions not supported

Microsoft Windows Server 2003 32-bit Editions with a minimum of Service Pack All Windows-compatible processors supported 1

LOTUS DOMINO SERVER RELEASE 8.5.X 64-BIT ON:

| AIX | AIX 6.1 64-bit | Power PC (Includes IBM System p) | |
|---------|---|---|--|
| | AIX 5.3 with technology level 7 (or higher) and runtime library xlC.rte $8.0.0.0$ or higher | Power PC (Includes IBM System p) | |
| WINDOWS | WINDOWS 2008 | | |
| | Microsoft Windows Server 2008 x64 Editions* | All Windows-compatible processors supported | |
| | *Core Editions not supported | | |
| | WINDOWS 2003 | | |
| | Microsoft Windows Server 2003 x64* Editions with a minimum of Service Pack 2 | All Windows-compatible processors supported | |
| | Microsoft Windows Server 2003 32-bit Editions with a minimum of Service Pack 2 | All Windows-compatible processors supported | |

HARD DRIVE

1.5 GB minimum of hard disk space for software.

500 MB of free disk space is required for job result directory.

MEMORY

AIX, LINUX, AND SOLARIS

64 MB RAM per stream/drive minimum required beyond the requirements of the operating system and running applications

Swap space = 2*RAM size

WINDOWS

32~MB~RAM~per~stream/drive~minimum~required~beyond~the~requirements~of~the~operating~system~and~running~applications*

*Very Large Memory Module (VLMM) supported.

LOTUS NOTES CLIENT ADD-IN

The Lotus Notes Client Add-In is supported with the following Lotus Notes client applications running on a Microsoft Windows platform:

- Notes Client 8.5.x
- Notes Client 8.0.x
- Notes Client 9.0.x

PERIPHERALS

DVD-ROM drive

Network Interface Card

MISCELLANEOUS

NETWORK

TCP/IP Services configured on the computer.

The Domino Mailbox Archiver Agent does not support Domino Attachment and Object Service (DAOS).

If the Domino Mailbox Archiver Agent for Unix is installed on a client computer where the File Archiver for Unix Agent is installed and the computer is running a kernel not supported by the File Archiver for Unix Agent, then the GXHSMService will not launch. In such scenarios, uninstall the File Archiver for Unix Agent. This will not uninstall the GXHSMService as the Domino Mailbox Archiver Agent for Unix is still installed on the client computer.

MICROSOFT VISUAL C++

Microsoft Visual C++ 2008 Redistributable Package is automatically installed. Note that Visual C++ 2008 Redistributable Package can co-exist with other versions of this software.

.NET FRAMEWORK

.NET Framework 2.0 is automatically installed. Note that .NET Framework 2.0 can co-exist with other versions of this software.

SELINUX

If you have SELinux enabled on the client computer, create the SELinux policy module as a root user before performing a backup. The SELinux Development package must be installed on the client.

To create an SELinux policy module, perform the following steps as user "root":

1. Create the following files in the /usr/share/selinux/devel directory:

| File Name | Content of the File |
|--|---|
| <pre><directory>/<file_name>.te</file_name></directory></pre> | The content of the file should be as follows: |
| where: | policy_module(<name>,<version>)</version></name> |
| <pre><directory> is /usr/share/selinux/devel</directory></pre> | ################################### |
| Tille name, is the name of the only me, areated to save the | where: |
| policy module statement. It is a good idea to use the same name for policy module and the file. | <name> is the name of the policy module. You can give any unique name to the policy module, such as a process or application name.</name> |
| For example: When you are creating a policy module for backup_IDA application, you can use the following file name: backup_IDA.te | <pre><version> is the version of the policy module. It can be any number, such as 1.0.0.</version></pre> |
| | For Example: While creating a policy module for the backup_IDA application, you can use the following content. |
| | policy_module(backup_IDA,1.0.0) |
| <pre><directory>/<file_name>.fc</file_name></directory></pre> | The content of the file should be as follows: |
| <pre>where: <directory> is /usr/share/selinux/devel</directory></pre> | Note that the following list of files is not exhaustive. If the process fails to launch, check /var/log/messages. Also, if required, add it to the following list of files. |
| <pre><firectory> is /usr/snare/selinux/devel <file_name> is the name of the Unix file, created to save the policy module statement. It is a good idea to use the same name for policy module and the file. For example: When you are creating a policy module for backup_IDA application, you can use the following file name: backup_IDA.fc</file_name></firectory></pre> | <pre>/opt/<software directory="" installation="">/Base/libCTreeWrapper.so gen_context (system_u:object_r:texrel_shlib_t,s0)</software></pre> |
| | /opt/ <software directory="" installation="">/Base/libCVMAGuiImplgso gen_context (system_u:object_r:texrel_shlib_t,s0)</software> |
| | <pre>/opt/<software directory="" installation="">/Base/libdb2locale.so.1 gen_context (system_u:object_r:texrel_shlib_t,s0)</software></pre> |
| | <pre>/opt/<software directory="" installation="">/Base/libdb2osse.so.1 gen_context (system_u:object_r:texrel_shlib_t,s0)</software></pre> |
| | <pre>/opt/<software directory="" installation="">/Base/libDb2Sbt.so gen_context (system_u:object_r:texrel_shlib_t,s0)</software></pre> |
| | <pre>/opt/<software directory="" installation="">/Base/libdb2trcapi.so.1 gen_context (system_u:object_r:texrel_shlib_t,s0)</software></pre> |
| | <pre>/opt/<software directory="" installation="">/Base/libDrDatabase.so gen_context (system_u:object_r:texrel_shlib_t,s0)</software></pre> |
| | <pre>/opt/<software directory="" installation="">/Base/libIndexing.so gen_context (system_u:object_r:texrel_shlib_t,s0)</software></pre> |
| | /opt/ <software directory="" installation="">/Base/libSnooper.so gen_context (system_u:object_r:texrel_shlib_t,s0)</software> |
| | |

2. Create the policy file from command line. Use the following command. Ensure that you give the following commands in the /usr/share/selinux/devel directory.

```
[root]# make backup_IDA.pp
Compiling targeted backup_IDA module
/usr/bin/checkmodule: loading policy configuration from tmp/backup_IDA.tmp
/usr/bin/checkmodule: policy configuration loaded
/usr/bin/checkmodule: writing binary representation (version 6) to tmp/backup_IDA.mod
Creating targeted backup_IDA.pp policy package
rm tmp/backup_IDA.mod tmp/backup_IDA.mod.fc
[root]# semodule -i backup_IDA.pp
[root]#
```

3. Execute the policy module. Use the following command:

[root]# restorecon -R /opt/<software installation directory>

SELinux is now configured to work with this application.

For 32-bit Domino Servers running on Windows Server 2003 and 2008 x64 platforms, special considerations apply. See Installing 32-bit Components on a Microsoft Windows x64 Platform for more information. For Windows Server 2008 platforms, Core Editions are not supported.

NOTES ON DOMINO CLUSTER INSTALLATIONS

If you are running a Lotus Domino Server in a Domino Cluster, special restore considerations apply. See Restore Considerations for this Agent in Restore Data - Lotus Notes/Domino Server for more information.

NOTES ON LOTUS NOTES CLIENT ADD-IN INSTALLATIONS

For Windows clients, JRE 1.7.0_17 is installed automatically with the Lotus Notes Client Add-In software if it is not already installed.

For Macintosh clients, JRE 1.5.x must be installed manually prior to installing the Lotus Notes Client Add-In software.

Lotus Client Add-In is supported only as 32-bit component on a Microsoft Windows x64 platform.

The Lotus Notes Client Add-In can be installed on the following platforms:

- Microsoft Windows Server 2008
- Microsoft Windows 7 Editions
- Microsoft Windows Vista Editions
- Microsoft Windows XP Editions

DISCLAIMER

Minor revisions and/or service packs that are released by application and operating system vendors are supported by our software but may not be individually listed in our System Requirements. We will provide information on any known caveat for the revisions and/or service packs. In some cases, these revisions and/or service packs affect the working of our software. Changes to the behavior of our software resulting from an application or operating system revision/service pack may be beyond our control. The older releases of our software may not support the platforms supported in the current release. However, we will make every effort to correct the behavior in the current or future releases when necessary. Please contact your Software Provider for any problem with a specific application or operating system.

Additional considerations regarding minimum requirements and End of Life policies from application and operating system vendors are also applicable

^{*}Server Editions are not commonly used for the Client Add-In

Install the Domino Mailbox Archiver Agent - Windows

TABLE OF CONTENTS

Install Requirements

Before You Begin

Install Procedure

Getting Started
Select Components for Installation
Configuration of Other Installation Options
Client Group Selection
Schedule Automatic Install of Updates
Storage Policy Selection
Select Partitions
Verify Summary of Install Options
Setup Complete

Post-Install Considerations

INSTALL REQUIREMENTS

The Domino Mailbox Archiver Agent is installed on the computer from which the Domino Server resides. (This computer is referred to as the *Client* computer in this install procedure.)

Verify that the computer in which you wish to install the software satisfies the minimum requirements specified in System Requirements - Domino Mailbox Archiver Agent.

The following procedure describes the steps involved in installing the Domino Mailbox Archiver Agent. If you choose to install multiple components simultaneously, refer to the appropriate procedures for installation requirements and steps specific to the component. Note that when you install multiple components, the sequence of the install steps may vary.

Review the following Install Requirements before installing the software:

GENERAL

- Review Install Considerations before installing the software.
- Agents should be installed only after the CommServe and at least one MediaAgent have been installed in the CommCell. Also, keep in mind that the
 CommServe® software and MediaAgent must be installed and running (but not necessarily on the same computer), before you can install the Agent.
- Close all applications and disable any programs that run automatically, including anti-virus, screen savers and operating system utilities. Some of the programs, including many anti-virus programs, may be running as a service. Stop and disable such services before you begin. You can re-enable them after the installation.
- Ensure there is an available license on the CommServe software for the Agent.
- Verify that you have the Software Installation Disc that is appropriate to the destination computer's operating system.

BEFORE YOU BEGIN

• Log on to the Domino Server as a local Administrator or as a member of the Administrators group on that computer.

INSTALL PROCEDURE

GETTING STARTED

1. Place the Software Installation Disc for the Windows platform into the disc drive.

After a few seconds, the installation program is launched.

If the installation program does not launch automatically:

- Click the Start button on the Windows task bar, and then click Run.
- Browse to the installation disc drive, select **Setup.exe**, click **Open**, then click **OK**.

- If you are installing on Windows Server Core editions, mount to Software Installation Disc through command line, go to the AMD64 folder and run Setup.exe.
- Choose the language you want to use during installation. Click the down arrow and select the desired language from the drop-down list, and click **Next** to continue.

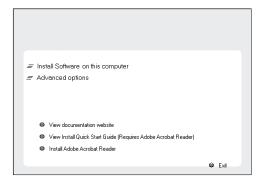
3. Select the option to install software on this computer.

NOTES

 The options that appear on this screen depend on the computer in which the software is being installed.

 Read the license agreement, then select I accept the terms in the license agreement.

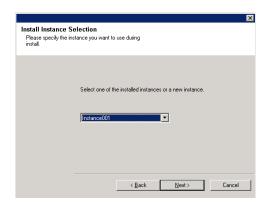
Click Next to continue.





SELECT COMPONENTS FOR INSTALLATION

5. Select a new or existing instance you wish to use during install.



6. Select the component(s) to install.

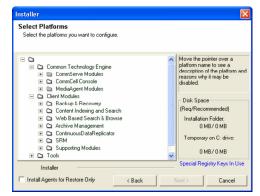
- Your screen may look different from the example shown.
- Components that either have already been installed, or which cannot be installed, will be dimmed. Hover over the component for additional details.
- If you wish to install the agent software for restore only, select Install Agents for Restore Only checkbox. See Installing Restore Only Agents for more information.
- The Special Registry Keys In Use field will be highlighted when

 ${\tt GalaxyInstallerFlags}$ registry key is enabled. Move the mouse pointer over this field to see a list of registry keys that have been created in this computer.

Click **Next** to continue.

To install the Domino Mailbox Archiver Agent expand the Client Modules folder, and the Archive Management folder, then select the following:

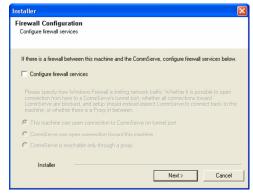
• Domino Mailbox Archiver Agent



 If this computer and the CommServe is separated by a firewall, select the Configure firewall services option and then click Next to continue.

For firewall options and configuration instructions, see Firewall Configuration and continue with the installation.

If firewall configuration is not required, click **Next** to continue.



8. Enter the fully qualified domain name of the CommServe Host Name. This should be TCP/IP network name. e.g., computer.company.com.

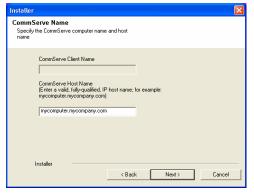
NOTES

- The CommServe client name is the name of the computer. This field is automatically populated.
- Do not use space and the following characters when specifying a new name for the CommServe Host Name:

\|`~!@#\$%^&*()+=<>/?,[]{}:;'"

- If a computer has already been installed, this screen will not be displayed; instead the installer will use the same Server Name as previously specified.
- If you do not specify the CommServe Host Name, a window will be prompted to continue in decouple mode. Click Yes to continue to Decoupled Install. Click No to specify a CommServe Name and continue with the installation.

Click **Next** to continue.



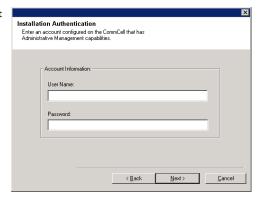
CONFIGURATION OF OTHER INSTALLATION OPTIONS

9. Enter the **username** and **password** associated with an external domain user account or a CommCell user account to authorize the installation of this agent.

NOTES

 This window will be displayed when the Require Authentication for Agent Installation option is selected in the CommCell Properties. For more information, see Authentication for Agent Installs.

Click **Next** to continue.



- **10.** Enter the following:
 - The local (NetBIOS) name of the client computer.
 - The TCP/IP IP host name of the NIC that the client computer must use to communicate with the CommServe Server.

- Do not use spaces when specifying a new name for the Client.
- The default network interface name of the client computer is displayed if the computer has only one network interface. If the computer has multiple network interfaces, enter the interface name that is preferred for communication with the CommServe Server.
- If a component has already been installed, this screen will not be displayed; instead, the install program will use the same name as previously specified.

Click Next to continue.

11. Select **Add programs to the Windows Firewall Exclusion List**, if you wish to add CommCell programs and services to the Windows Firewall Exclusion List.

NOTES:

- If Windows Firewall is enabled on the computer, this option is selected by default and must be enabled to proceed with the installation.
- If Windows Firewall is disabled on the computer, you can select this option to add
 the programs and services to enabled CommCell operations across the firewall, if
 the firewall is enabled at a later time.

You can either select this option during install or add the programs and services after installation. For adding the programs and services after installation, see Configure Windows Firewall to Allow CommCell Communication.

Click Next to continue.

12. Specify the location where you want to install the software.

NOTES

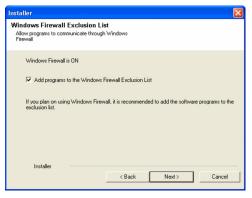
- Do not install the software to a mapped network drive.
- Do not use the following characters when specifying the destination path:
 /:*?"<>|#

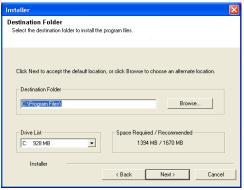
It is recommended that you use alphanumeric characters only.

- If you intend to install other components on this computer, the selected installation directory will be automatically used for that software as well.
- If a component is already installed in this computer, this screen may not be displayed. The software will be automatically installed in the same location that was previously specified.

Click **Browse** to change directories.

Click Next to continue.





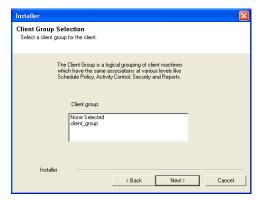
CLIENT GROUP SELECTION

13. Select a Client Group from the list.

Click **Next** to continue.

NOTES

 This screen will be displayed if Client Groups are configured in the CommCell Console. For more information, see Client Computer Groups.

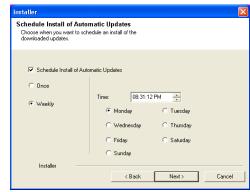


SCHEDULE AUTOMATIC INSTALL OF UPDATES

14. If necessary, select this option to schedule an automatic installation of software updates.

- Schedule Install of Automatic Updates allows automatic installation of the necessary software updates on the computer on a single or weekly basis. If you do not select this option, you can schedule these updates later from the CommCell Console.
- To avoid conflict, do not schedule the automatic installation of software updates to occur at the same time as the automatic FTP downloading of software updates.
- If a component has already been installed, this screen will not be displayed; instead, the installer will use the same option as previously specified.

Click Next to continue.



STORAGE POLICY SELECTION

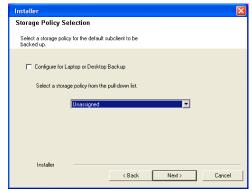
15. Select the storage policy through which you want to back up/archive the agent.

NOTES

- A storage policy directs backup data to a media library.
- If desired, you can change your storage policy selection at any time after you have installed the client software.
- This screen may appear more than once, if you have selected multiple agents for installation. You will be prompted to configure the storage policy association for each of the selected agents.

Click Next to continue.

If you want to use different storage policies for any of the available partitions, leave them unconfigured in this step and add them using the CommCell Browser after the installation is complete. See Add a Lotus Domino Server Partition on Windows.



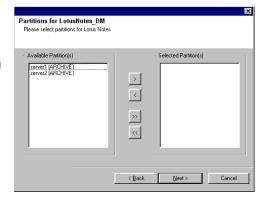
SELECT PARTITIONS

 Select one or more partitions from the Available Partitions pane to include in the install.

NOTES

 All partitions selected in this step are configured to use the storage policy selected through Storage Policy Selection.

Click Next to continue.



VERIFY SUMMARY OF INSTALL OPTIONS

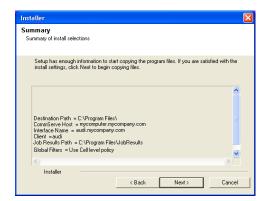
17. Verify the summary of selected options.

NOTES

 The Summary on your screen should reflect the components you selected for install, and may look different from the example shown.

Click **Next** to continue or **Back** to change any of the options.

The install program now starts copying the software to the computer. This step may take several minutes to complete.



18. The System Reboot message may be displayed. If so, select one of the following:

Reboot Now

If this option is displayed without the **Skip Reboot** option, the install program has found files required by the software that are in use and need to be replaced. If **Reboot Now** is displayed without the **Skip Reboot** option, reboot the computer at this point. The install program will automatically continue after the reboot.

Exit Setup

If you want to exit the install program, click Exit Setup.

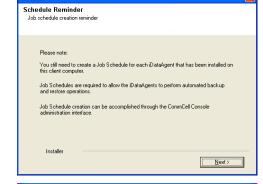


SETUP COMPLETE

19. Click **Next** to continue.

NOTES

 Schedules help ensure that the data protection operations for the Agent are automatically performed on a regular basis without user intervention. For more information, see Scheduling.



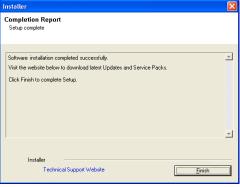
20. Setup displays the successfully installed components.

NOTES

- The Setup Complete message displayed on your screen will reflect the components you installed, and may look different from the example shown.
- If you install an Agent with the CommCell Console open, you need to refresh the CommCell Console (F5) to see the new Agents.
- If Reboot Now button is displayed make sure to reboot the computer before
 performing any other operations from the computer.

Click $\boldsymbol{\mathsf{Finish}}$ to close the install program.

The installation is now complete.



POST-INSTALL CONSIDERATIONS

- Review Install Considerations after installing the software.
- Install post-release updates or Service Packs that may have been released after the release of the software. When you are installing a Service Pack, ensure that it is the same version as the one installed in the CommServe Server. Alternatively, you can enable Automatic Updates for quick and easy installation of updates in the CommCell component.

Back to Top

Install the Domino Mailbox Archiver Agent - Unix

TABLE OF CONTENTS

Install Requirements

Before You Begin

Install Procedure

Getting Started
Select Components for Installation
Base Software Installation
Enable Global Filters
Client Group Selection
Storage Policy Selection
Configure Partitions
Setup Complete

Post-Install Considerations

INSTALL REQUIREMENTS

The Domino Mailbox Archiver Agent is installed on the computer from which the Domino Server resides. (This computer is referred to as the *Client* computer in this install procedure.)

Verify that the computer in which you wish to install the software satisfies the minimum requirements specified in the following:

- System Requirements Domino Server iDataAgents
- System Requirements AIX File System iDataAgent
- System Requirements Linux File System iDataAgent
- System Requirements Solaris File System *i*DataAgent

Review the following Install Requirements before installing the software:

GENERAL

- Review Install Considerations before installing the software.
- Agents should be installed only after the CommServe and at least one MediaAgent have been installed in the CommCell. Also, keep in mind that the
 CommServe and MediaAgent must be installed and running (but not necessarily on the same computer), before you can install the Agent.
- Ensure there is an available license on the CommServe for the Agent.
- Verify that you have the Software Installation Disc that is appropriate to the destination computer's operating system.

BEFORE YOU BEGIN

- Log on to the client as root.
- The install package requires super-user permissions to execute.

INSTALL PROCEDURE

GETTING STARTED

1. Place the software installation disc for the Unix platform into the disc drive.

You can also install the product using a disc drive mounted on another computer on the network.

- On Solaris, double-click the **cvpkgadd** program from the File Manager window.
- On other Unix platforms, open the Terminal window, navigate to the software installation disc and then enter ./cvpkgadd.
- **2.** The product banner and other information is displayed.

Press Enter to continue.

- 3. Read the license agreement. Type **y** and press **Enter** to continue.
- **4.** Enter the number corresponding to the setup task you want to perform.

NOTES

- For Install data protection agents on this computer option, follow the steps described in this procedure.
- Advance options provide additional setup features such as record and play setup, creating a custom package and External Data Connector Agent software.

To create a custom package and for record and play setup, follow the steps described in Custom Package - Unix.

Please select a setup task you want to perform from the list below:

Advance options provide extra setup features such as creating custom package, recording/replaying user selections and installing External Data Connector software.

- 1) Install data protection agents on this computer
- 2) Advance options
- 3) Exit this menu

To install the External Data Connector Agent, follow the steps described in External Your choice: [1] Data Connector - Unix.

5. If your computer is 32-bit, press Enter.

If your computer is 64-bit, see Install Unix Agents on 64-bit Platform for step-by-step

default, we will install 32 bit binary set that has full support for all the modules included in this package. Please note that 64 bit binary set currently only support limited modules.

- 1) All platforms (32 bit)
- 2) FS and MA only (64 bit)

Your choice: [1]

This prompt is displayed only when you are installing on AIX, HP-UX, Linux, or Solaris 6. computers.

Press Enter to continue

NOTES

When you install on non-clustered computer, you must select the number associated with the option Install on a physical machine.

Certain Calypso packages can be associated with a virtual IP, or in other words, installed on a "virtual machine" belonging to some cluster. At any given time the virtual machine's services and IP address are active on only one of the cluster's servers. The virtual machine can "failover" from one server to another, which includes stopping services and deactivating IP address on the first server and activating the IP address/services on the other

This machine supports both 32 bit and 64 bit binaries. By

You now have a choice of performing a regular Calypso install on the physical host or installing Calypso on a virtual machine for operation within a cluster.

Most users should select "Install on a physical machine"

- 1) Install on a physical machine
- 2) Install on a virtual machine
- 3) Exit

Your choice: [1]

7. If you have only one network interface, press **Enter** to accept the default network interface name and continue.

If you have multiple network interfaces, enter the number corresponding to the network interface that you wish to use as default, and then press **Enter** to continue.

- The interface name and IP addresses depend on the computer in which the software is installed and may be different from the example shown.
- 8. Specify the client name for the computer.

Press Enter to accept the default name and continue, or Enter a new client name for the computer and then press **Enter** to continue. We found one network interface available on your machine. We will associate it with the physical machine being installed, and it will also be used by the CommServe to connect to the physical machine. Note that you will be able to additionally customize Datapipe Interface Pairs used for the backup data traffic later in the Calypso Java

Please check the interface name below, and make connections if necessary:

Physical Machine Host Name: [angel.company.com]

Please specify the client name for this machine.

It does not have to be the network host name: you can enter any word here without spaces. The only requirement is that it must be unique on the CommServe.

Physical Machine Client name: [angel]

SELECT COMPONENTS FOR INSTALLATION

Enter the number corresponding to the CVGxLndmIDA module.

A confirmation screen will mark your choice with an "X". Type "d" for Done, and press Enter to continue.

NOTES

- To select multiple component, enter the number by adding a space.
- Your screen may look different from the example shown.
- Components that either have already been installed, or which cannot be installed, will not be shown.
- In addition, the list of modules that appear depends on the specific Unix File System in which the package is installed. (e.g., CVGxWA will appear only when the installation package is run on a Solaris computer.)

Install Calypso on physical machine client.company.com

Select the Calypso module that you would like to install

- [1301] [CVGxMA] [] 1) Media Agent [] 2) FileSystem IDA [1101] [CVGxIDA] >) >>>> NEXT PAGE >>>>>

[a=all n=none r=reverse q=quit d=done >=next <=previous ? =help1

Enter number(s)/one of "a,n,r,q,d,>,<,?" here: 2

BASE SOFTWARE INSTALLATION

If you wish to install the agent software for restore only, enter Yes and press Enter to continue. See Installing Restore Only Agents for more information.

Otherwise, accept no, press Enter to continue.

Type the appropriate number to install the latest software scripts and press **Enter** to 11. continue.

NOTES

 Select Download from the software provider website to download the latest software scripts from your software provider website.

Do you want to use the agents for restore only without consuming licenses? [no]

Installation Scripts Pack provides extra functions and latest support and fix performed during setup time. Please specify how you want to get this pack.

If you choose to download it from the website now, please make sure you have internet connectivity at this time. This process may take some time depending on the internet Make sure you have internet connectivity when you are using this option.

- Select Use the one in the installation media, to install the software scripts from the disc or share from which the installation is performed.
- Select Use the copy I already have by entering its unix path, to specify the
 path if you have the software script in an alternate location.
- Enter Yes to download and install the latest service packs and post packs from the software provider.

NOTES

- Internet connectivity is required to download updates.
- This step is applicable for multi instancing.

Press Enter to continue.

13. Specify the location where you want to install the software.

NOTES

- Do not use the following characters when specifying the path: $0 \#\%^*$
- The amount of free space required depends on the components selected for install, and may look different from the example shown.

Press **Enter** to accept the default path and continue, or Enter a path and then press **Enter** to continue.

Press Enter again to confirm the path.

14. Specify the location for the log files.

NOTES

- All the modules installed on the computer will store the log files in this directory.
- The amount of free space required depends on the components selected for install, and may look different from the example shown.

Press **Enter** to accept the default path and continue, or Enter a path and then press **Enter** to continue.

Press Enter again to confirm the path.

Indicate whether you would like to launch processes with inherent database access rights.

Press **Enter** to assign a new group, or Type **No** and then press **Enter** to continue.

16. If you indicated Yes in the previous step, you will be prompted for the group name that must be used to launch processes.

Enter the group name and then press **Enter** to continue.

Press Enter again to continue.

 Type a network TCP port number for the Communications Service (CVD) and press Enter.

Type a network TCP port number for the Client Event Manager Service (EvMgrC) and press **Enter**.

connectivity.

- 1) Download from the software provider website.
- 2) Use the one in the installation media
- 3) Use the copy I already have by entering its unix path $% \left(1\right) =\left(1\right) \left(1\right)$

Your choice: [1] 2

Keep Your Install Up to Date - Latest Service Pack

Latest Service Pack provides extra functions and latest support and fix for the packages you are going to install. You can download the latest service pack from software provider website.

If you decide to download it from the website now, please make sure you have internet connectivity at this time. This process may take some time depending on the internet connectivity.

Do you want to download the latest service pack now? [no] Press <ENTER> to continue ...

Please specify where you want us to install Calypso

It must be a local directory and there should be at least 98MB of free space available. All files will be installed in a "calypso" subdirectory, so if you enter "/opt", the files will actually be placed into "/opt/calypso".

Installation Directory: [/opt]

٠.

Calypso will be installed in /opt/calypso. Press ENTER to continue \dots

Please specify where you want to keep Calypso log files.

It must be a local directory and there should be at least 100MB of free space available. All log files will be created in a "calypso/Log_Files" subdirectory, so if you enter "/var/log", the logs will actually be placed into "/var/log/calypso/Log_Files".

Log Directory: [/var/log]

• •

Calypso log files will be created in /var/log/calypso/Log_Files. Press ENTER to continue ...

Most of Calypso processes run with root privileges, but some are launched by databases and inherit database access rights. To make sure that registry and log files can be written to by both kinds of processes we can either make such files world-writeable or we can grant write access only to processes belonging to a particular group, e.g. a "calypso" or a "dba" group.

We highly recommend now that you create a new user group and enter its name in the next setup screen. If you choose not to assign a dedicated group to Calypso processes, all temporary and configuration files will be created with - rw-rw-rw permissions.

If you're planning to backup Oracle DB you should use "dba" group.

Would you like to assign a specific group to Calypso? [yes]

Please enter the name of the group which will be assigned to all Calypso files and on behalf of which all Calypso processes will run.

In most of the cases it's a good idea to create a dedicated "calypso" group. However, if you're planning to use Oracle iDataAgent or SAP Agent, you should enter Oracle's "dba" group here.

Group name: dba

REMINDER

If you are planning to install Calypso Informix, DB2, PostgreSQ1, Sybase or Lotus Notes iDataAgent, please make sure to include Informix, DB2, etc. users into group "dba".

Press <ENTER> to continue ...

Every instance of Calypso should use a unique set of network ports to avoid interfering with other instances running on the same machine.

The port numbers selected must be from the reserved port number range and have not been registered by another application on this machine.

NOTES

- For more information about Network TCP Ports, see Network TCP Port Requirements.
- For more information about these services, see Services.
- If the port number you entered already exists, a message will be displayed Port #### is already reserved in /etc/services. To work around this issue, enter different port number.

18. If this computer and the CommServe is separated by a firewall, type Yes and then press Enter to continue.

For firewall options and configuration instructions, see Firewall Configuration and continue with the installation.

If you do not wish to configure the firewall services, type No and then press Enter to

19. Type the name of the CommServe computer and press **Enter** to continue.

- Ensure that the CommServe is accessible before typing the name; otherwise the installation will fail.
- If you enter a short name which resolves to the same IP address as the fully qualified CommServe name, you will be asked if you would prefer to use the fully
- 20. Enter the username and password information for an external domain user account or a CommCell user account. This authorizes the installation of an agent on the CommCell.

• This is only displayed when the Authentication for Agent feature is enabled in the CommCell Properties. Users must belong to a User Group with Agent Management capabilities to enable this feature. For more information, see Authentication for Agent Installs.

Click Enter to continue.

Please enter the port numbers.

Port Number for CVD : [8600]

Port Number for EvMgrC: [8602]

Is there a firewall between this client and the CommServe? [no]

Please specify hostname of the CommServe below. Make sure the hostname is fully qualified, resolvable by the name services configured on this machine.

CommServe Host Name:

Enter your CommCell user name and password:

User Name :

Password :

Press <ENTER> to continue ...

ENABLE GLOBAL FILTERS

Type the appropriate number for configuring Global Filters for the default subclient and press Enter to continue.

NOTES

- Select Use Cell level Policy to inherit the global filter policy configuration set for the CommCell, i.e., if the Use Global Filters on All Subclients option is selected in the Global Filters dialog box (from the CommCell Console's Control Panel), then this policy will be applied to the default subclient as well. If is not selected, then the global filters will not be applied to the default subclient.
- Select Always use Global filters to always apply the global filters policy to the default subclient regardless of the policy set for the CommCell
- Select Do not use Global filters to disregard applying the global filters to the default subclient regardless of the policy set for the CommCell.

Commcell Level Global Filters are set through Calypso GUI's Control Panel in order to filter out certain directories or files from backup Commcell-widely. If you turn on the Global filters, they will be effective to the default subclient. There are three options you can choose to set the filters.

- 1) Use Cell level policy
- 2) Always use Global filters 3) Do not use Global filters

Please select how to set the Global Filters for the default subclient? [1]

CLIENT GROUP SELECTION

Type the number of a Client Group and press **Enter**.

A confirmation screen will mark your choice with an "X". Type ${\bf d}$ for done with the selection, and press Enter to continue.

NOTES

- This screen will be displayed only if Client Groups are configured for the CommCell. For more information, see Client Computer Groups.
- Press Enter to continue.

NOTES

• Schedules help ensure that the data protection operations for the Agent are automatically performed on a regular basis without user intervention. For more information, see Scheduling.

Client Group(s) is currently configured on CommServe cs.company.com. Please choose the group(s) that you want to add this client client.company.com to. The selected $\operatorname{group}\left(s\right)$ will be marked (X) and can be deselected if you enter the same number again. After you are finished with the selection, select "Done with the Selection".

- [] 1) Unix [] 2) DR
- [] 3) DKS

[a=all n=none r=reverse q=quit d=done >=next <=previous ? =help1

Enter number(s)/one of "a,n,r,q,d,>,<,?" here: 2

IMPORTANT:

In addition to installing Calypso on this computer, you will also need to create a Job Schedule for each $\,$ iDataAgent that has been installed on this client computer.

Job Schedules are required to allow the Calypso iDataAgents to perform automated backup and restore

Job Schedule creation can be accomplished through the Calvoso CommCell Console administration interface.

STORAGE POLICY SELECTION

24. Enter the number corresponding to the storage policy through which you want to back Please select one storage policy for this IDA from the up the File System iDataAgent and then press **Enter** to continue.

- A storage policy directs backup data to a media library. Each library has a default storage policy.
- When you install an Agent, the install program creates a default subclient for most
- If desired, you can change your storage policy selection at any time after you have installed the client software.
- If this screen appears more than once, it is because you have selected multiple agents for installation and are configuring storage policy association for each of the installed agents.
- The storage policy(ies) displayed on your screen may look different from the example shown.

list below:

- 1) SP_StandAloneLibrary2_2
 2) SP_Library3_3
 3) SP_MagLibrary4_4
 4) fornax_fornax_HWCmp

- 5) ranger_ranger_HWCmp
- 6) fornax_fornax_ClntCmp7) fornax_fornax_MACmp
- 8) fornax_fornax_NoCmp

Storage Policy: [3]

CONFIGURE PARTITIONS

The home directory reflects the directory in which the Lotus Notes software is installed. Type the name of home directory for the partition and then press Enter to

26. The partition name reflects the name of the computer on which the software is installed. Type the name of the partition and then press **Enter** to continue.

NOTES

- All partitions selected in this step are configured to use the storage policy selected in Storage Policy Selection.
- The data directory reflects the directory in which all databases reside. Type the name 27. of the data directory for the partition and then press **Enter** to continue.
- 28. Review the information listed on the verification screen and then press Enter to continue.

To change partition information, type no and press Enter. The system returns you to Configure Partitions to enter the partition name again.

The system asks if you would like to configure another partition. 29.

> If you don't want to configure another partition, press Enter; otherwise type yes and press Enter to return to Configure Partitions and configure another partition.

30. The install program now starts copying the software to the computer. The progress of the operation is displayed.

Please enter Domino Home Directory.

Notes Home Directory:

Please enter Domino Partition Name

Domino Partition Name:

Please enter Domino Data Directory.

Domino Data Directory:

You have entered all the required information for this

Please review it now, and answer "yes", if it is correct:

Domino Partition Name..... your entry here Domino Home Directory.....your entry here Is this correct? [yes]

Configured 1 partition(s) of Notes so far.

Would you like to configure another partition? [no]

.

Successfully copied xx files

Successfully installed <package name>.

Press ENTER to continue ...

SETUP COMPLETE

31. If this module was the last possible module to install, you are automatically exited from the program.

Otherwise, type the number for the **Exit** option and then press **Enter**. Your screen may appear different from the example shown.

The installation is now complete.

- 1) Proxy FileSystem iDataAgent <= CVGxProxyIDA</pre>
- 2) Oracle iDataAgent
- <= CVGxOrIDA
- 3) DB2 iDataAgent
- 4) Exit this menu

Module number: [1]

POST-INSTALL CONSIDERATIONS

GENERAL

- $\bullet \;\;$ Review Install Considerations after installing the software.
- Install post-release updates or Service Packs that may have been released after the release of the software. When you are installing a Service Pack, ensure that it is the same version as the one installed in the CommServe Server. Alternatively, you can enable Automatic Updates for quick and easy installation of updates in the CommCell component.

Compliance and Migration Archiving - Domino Mailbox Archiver Agent

Topics | How To | Related Topics

Overview

How to Setup and Run a Migration Archive Operation

Migration Archiving

Compliance Archiving

Archiving Considerations

Advanced Archive Options

OVERVIEW

This section discusses archive information specific to the Domino Mailbox Archiver Agent. See Archiving Operations for a general overview.

During both migration and compliance archive operations, the Domino Mailbox Archiver Agent will archive subclient content (i.e., client or journaling mailbox messages) that meet the preset criteria specified in the **Archiving Rules** dialog box.

The following sections describe each of the archiving rules available for the Domino Mailbox Archiver Agent, as well as the criteria required for migration archiving and compliance archiving scenarios.

HOW TO SET UP AND RUN A MIGRATION ARCHIVE OPERATION

The following section provides the steps to set up and run a Migrate Archive Operation:

1. Enable the Archiving Rules for the subclient that contains the content you wish to archive. See Enable (Disable) Archiving Rules for step-by-step instructions.

By default, this option is disabled. When selected, all archiving rules will be enabled except for Stub Rules.

- 2. Configure the Archiving Rules for the subclient. In particular, decide if you want to create stubs in your environment. Even if the Archiving Rules are disabled, the Stub Rules will apply. See Configure Archiving Rules Domino Mailbox Archiver for step-by-step instructions.
- 3. Run an archive operation. See Start a Migration Archiving Operation for step-by-step instructions.
 - o If stubs were created, end-users or applications can recover files with a non-browse recovery operation by simply opening the stub file, thereby causing it to be restored (see Recover a Message from a Lotus Notes Mailbox Client).
 - o If stubs were not created, then you can perform a browse recovery with CommCell Console (see Recover a File from the CommCell Console).

MIGRATION ARCHIVING

For migration archiving scenarios, it is strongly recommended that the **Do Not Create Stub** rule in the **Archive Rules | Stub Rule** tab remain deselected. This configuration ensures that users can recover any migrated messages by double-clicking the stub icon created during the archive process. If you choose not to create a stub for archive messages by selecting the **Do Not Create Stub** option, you must manually browse for any archived messages.

To ensure that only successfully archived messages will be changed into stubs, the archive operation is divided into two phases. The **stubbing phase** starts after the archive phase succeeds. However, stubs will only be created if the subclient properties were configured to create them during the archive operation. In the **archive phase**, the Domino Mailbox Archiver Agent will archive the messages/items meeting the pre-set archive criteria and, if applicable, put them into a list for the stubbing phase and prune expired stubs.

COMPLIANCE ARCHIVING

Compliance Archiving operations for the Domino Server journaling mailbox follow the same process as migration archiving operations with the following special requirements and configurations:

From the **Domino Server**:

- Prior to performing any compliance archiving operations, the Domino Server setting for journaling maintenance must be set to None.
- If you intend to use content indexing and search capabilities, ensure that the necessary configuration requirements for the Domino Server are met. See Agent-Specific Configuration in Content Indexing for more information.

From the CommCell Console:

- The journaling mailbox must be manually assigned to the designated subclient using the **Databases** tab in the **Subclient Properties** dialog box. To add the journaling mailbox, click the **Add Mailbox** button and typing in the name of the journaling mailbox in the space provided.
- The subclient containing the journaling mailbox should be a dedicated subclient with no other mailboxes assigned to it.
- The Do Not Create Stub option in the Archive Rules | Stub Rule tab of the Subclient Properties dialog box should be selected.

Use **Operate in Backfill Mode** option, if you have to archive and content index mail messages that existed before journaling was enabled.

For step-by-step instructions, see Operate in Backfill Mode.

ARCHIVING CONSIDERATIONS

Before performing any migration procedures, review the following information:

- To allow stub icons to be placed with archived messages in the Lotus Notes client mailboxes, each mailbox must be configured to display stub icons prior to performing any archive operation. See Configure Stub Icons for Lotus Notes Mailboxes for step-by-step instructions.
- Messages that have been migrated do not automatically appear as stubs in the Lotus Notes client mailbox when the archive operation has been completed. To display the stubs created during the archive operation, users must refresh the client mailbox manually by either:
 - o using the **F9** function on the keyboard.
 - o restarting the Lotus Notes client mailbox.
- If you would like to configure the Domino Mailbox Archiver Agent to only archive messages that reside in a specified mailbox folder (including subfolders) for a given subclient of any archive set, this can be accomplished using the **Include the following archiving folders** option on the Subclient Properties (Archiving Rules) tab. Multiple folders can be included, each separated by a comma or semicolon.

Note that any folder selected for inclusion will automatically include any subfolders within that folder.

If you would like archived messages to be viewable in the Lotus Notes client's Preview pane without recalling the message itself, the Retain Message
Body option can be selected in the Archive Rules tab of the Subclient Properties dialog box. Attachments will be annotated with a paper-clip icon, as
well

Note that the Mark docs read when opened in preview pane option should be deselected in the Lotus Notes client's User Preferences.

- To exclude documents based on their type (e.g. memo, appointment, task), use the sDOCUMENTTYPEFILTERLIST registry key to set various filter types. Once a document is excluded by this key, it should not be archived.
- Filters can be used in conjunction with the "Items That Failed" list on the data protection Job History Report to eliminate backup or archive failures by excluding items which consistently fail that are not integral to the operation of the system or applications. Some items fail because they are locked by the operating system or application and cannot be opened at the time of the data protection operation. This often occurs with certain system-related files and database application files.
- The Domino Mailbox Archiver Agents provides three modes which further direct how archive and recovery operations behave for each subclient. These
 modes can be selected using the General tab of the Subclient Properties dialog box and should be configured prior to running the first archive operation.

See Operation Modes for more information.

 By default, the Domino Mailbox Archiver Agent only discovers databases native to the Domino Server from which discovery takes place. Any replicated databases will thus need to be added manually to the subclient.

An alternative method of discovering the replicated databases is by using the SSCANADDITIONALDIRECTORIES registry key. When configured, the Domino Mailbox Archiver Agent will scan any directories specified in the registry key and automatically assign any databases contained within those directories to the subclient.

Back to Top

Compliance and Migration Archiving - Domino Mailbox Archiver Agent - How To

Topics | How To | Related Topics

Migration Archive Options

Enable(Disable) Archiving Rules

Configure Archiving Rules - Domino Mailbox Archiver Agent

Schedule a Migration Archiving Operation

Start a Migration Archiving Operation

Advanced Migration Archive Options

Start a Migration Archiving Operation in the Suspended State

Start a Migration Archiving Operation on New Media

Start a Migration Archiving Operation that Creates a New Index

Start a Migration Archiving Operation that Marks the Media Full

Start a Migration Archiving Operation with a Set Job Priority

Start a Migration Archiving Operation with VaultTracking enabled

ENABLE (DISABLE) ARCHIVING RULES

Related Topics:

• See Overview for an introduction to the archiving rules and Archiving Considerations for a list of considerations before you begin archiving with the Domino Mailbox Archiver Agent.

Before You Begin

• Do not change the archive rules of a subclient that is being archived.

Required Capability: Capabilities and Permitted Actions

- To enable the archiving rules of Archiver Agents:
- 1. From the CommCell Browser, right-click the subclient whose archiving rules you want to configure, then click **Properties** from the shortcut menu.
- 2. Click the Rules tab of the Subclient Properties.
- 3. Click the **Enable all rules** checkbox to enable rules-based migration archiving operations for this subclient. After enabling the rules, files will be archived based on the rules that are configured for the Agent.
- 4. Click **OK**.

CONFIGURE ARCHIVING RULES - DOMINO MAILBOX ARCHIVER AGENT

Related Topics:

• Archiving Rules - Domino Mailbox Archiver Agent

Before You Begin

- Do not change the archiving rules of a subclient that is being archived.
- Prior to configuring archive rules for a migration or compliance archiving operation, read the considerations outlined in Migration Archiving and/or Compliance Archiving for the Domino Mailbox Archiver Agent.

Required Capability: Capabilities and Permitted Actions

- To configure archiving rules for the Domino Mailbox Archiver Agent:
- 1. From the CommCell Browser, right-click the subclient whose archiving rules you want to configure, then click **Properties** from the shortcut menu.
- 2. Click the Archiving Rules tab of the Subclient Properties dialog box.
- 3. Choose one of the following:
 - o To enable archiving rules, select the **Enable All Rules** checkbox, then continue on to the next step.
 - o To disable archiving rules, clear the **Enable All Rules** checkbox, if not already selected, and skip to Step 7.
- 4. On the Message Rule tab:
 - In the Archive message after n days field, enter or select a value corresponding to the number of days old that a message/item must be in order for the message/item to be archived.
 - o In the **Archive message only if size is greater than** *n* **KB** field, enter or select a value corresponding to the size a message/item must be in order for the message/item to be archived.

- o You can optionally select the **Select Items with attachment(s) only** checkbox to enable the archiving of message/item attachments only.
- o You can optionally select the **Use either Age or Size rule** checkbox so that any message/item will be archived that meets either of these rules, and all other applicable Archiving Rules have been met.
- You can optionally select the Use Sent/Received time for Age rule checkbox so that any message/item will be archived if the sent/received time of
 the message/item matches the age rule, and all other applicable Archiving Rules have been met.
- o You can optionally select the **Do Not Archive Unread Messages** checkbox to specify that no unread messages will be archived even if they qualify for migration archiving under the Age and/or Size rule.
- 5. On the Watermark Rule tab, you can:
 - O Optionally select the Mailbox Quotas checkbox and select values for:
 - Archive if size of mailbox reaches *n* % of assigned quota, which is the mailbox size high watermark.
 - Stop archive when mailbox reaches *n* % of assigned quota, which is the mailbox size low watermark.
- 6. On the **Attachment Filter** tab, you can optionally include and/or exclude attachment filters by adding the appropriate filters in these fields. Note that when attachment filters are specified, the age/size rules are ignored as archiving criteria for attachments of the specified type. When attachment filters are not specified, age/size rules will determine whether the attachments will be archived.
- 7. On the Stub Rule tab, you can:
 - o Select the **Preserve stubs until the media has been pruned** radio button to allow stubs to exist in a mailbox or public folder until the media retention time has been met and data aging has been run.
 - Optionally select the **Prune stub only after** n days radio button and select a value corresponding to the number of days that will determine the
 minimum life of a stub.
 - o Enter or select a value for **Create new index every** *n* **Archive Operations** to specify how often a new index is created.
 - o Optionally select the **Do not create stub** checkbox so that no stubs are created for archived messages or items.
- 8. Click **OK** to save your changes.

SCHEDULE A MIGRATION ARCHIVING OPERATION

Before you Begin

See Overview for an introduction to the archiving rules and Archiving Considerations for a list of considerations before you begin archiving with the Domino Mailbox Archiver Agent.

 After selecting your archiving options, you will be prompted to create a schedule for the migration archiving operation job. For more information, see Scheduling.

Required Capability: Capabilities and Permitted Actions

- To schedule a migration archiving operation of a selected subclient or archive set:
- 1. From the CommCell Browser, select one of the following:
 - o To archive a subclient, right-click the subclient that you want to archive and click **Archive**.
 - To archive an archive set, right-click the archive set that you want to archive, click All Tasks and click Archive All Subclients or Archive Default
 Archive Set.
- 2. From the Archive Options dialog box, select when you want to run the job by clicking **Schedule**.
- 3. If you want to access the Advanced Archive Options, click the Advanced button.
- 4. After selecting when you want to run the job and any advanced options, click **OK**.
- 5. From the Schedule Details (Schedule Details) dialog box, create a schedule for this operation. See Create a Job Schedule for more information. Click **OK** to continue.
- 6. Your migration archiving operation will execute according to the specified schedule.

START A MIGRATION ARCHIVING OPERATION

The migration archiving process allows you to archive data immediately without having to wait for the scheduled archiving time.

Before you Begin

- Ensure that all Lotus Notes client mailboxes have been configured to display stub icons prior to performing any archiving operations. See Configure Stub Icons for Lotus Notes Mailboxes for step-by-step instructions.
- Compliance Archiving operations for the Domino Server journaling mailbox can be performed using this procedure with the following special requirements:

- o The journaling mailbox must be manually assigned to the designated subclient using the **Databases** tab in the **Subclient Properties** dialog box. To add the journaling mailbox, click the **Add Mailbox** button and typing in the name of the journaling mailbox in the space provided.
- o The subclient containing the journaling mailbox should be a dedicated subclient with no other mailboxes assigned to it.
- o The Do Not Create Stub option in the Archive Rules | Stub Rule tab of the Subclient Properties dialog box should be selected.

Prior to performing any compliance archiving operations, the Domino Server setting for journaling maintenance must be set to **None**.

Required Capability: Capabilities and Permitted Actions

- To start a migration archiving operation of a selected subclient or archive set:
- 1. From the CommCell Browser, select one of the following:
 - o To archive a subclient, right-click the subclient that you want to archive and click **Archive**.
 - To archive an archive set, right-click the archive set that you want to archive, click All Tasks and click Archive All Subclients or Archive Default
 Archive Set.
- 2. From the Archive Options dialog box, select when you want to run the job by clicking Run Immediately.
- 3. If you want to access the Advanced Archive Options, click the Advanced button.
- 4. After selecting when you want to run the job and any advanced options, click **OK**. A migration archiving operation is started for selected subclient or archive set and indicates its status in the Job Controller window.
- 5. When the migration archiving operation has completed, a confirmation message will be displayed in the Job Controller window.

START A MIGRATION ARCHIVING OPERATION IN THE SUSPENDED STATE

Use the following procedure to start a migration archiving operation in the suspended state. For more information, see Start in Suspended State.

Before you Begin

- Ensure that all Lotus Notes client mailboxes have been configured to display stub icons prior to performing any archiving operations. See Configure Stub Icons for Lotus Notes Mailboxes for step-by-step instructions.
- Compliance Archiving operations for the Domino Server journaling mailbox can be performed using this procedure with the following special requirements:
 - o The journaling mailbox must be manually assigned to the designated subclient using the **Databases** tab in the **Subclient Properties** dialog box. To add the journaling mailbox, click the **Add Mailbox** button and typing in the name of the journaling mailbox in the space provided.
 - o The subclient containing the journaling mailbox should be a dedicated subclient with no other mailboxes assigned to it.
 - o The Do Not Create Stub option in the Archive Rules | Stub Rule tab of the Subclient Properties dialog box should be selected.

Prior to performing any compliance archiving operations, the Domino Server setting for journaling maintenance must be set to **None**.

Required Capability: Capabilities and Permitted Actions

- > To start a migration archiving operation of a selected subclient or archive set:
- 1. From the CommCell Browser, select one of the following:
 - o To archive a subclient, right-click the subclient that you want to archive and click **Archive**.
 - To archive an archive set, right-click the archive set that you want to archive, click All Tasks and click Archive All Subclients or Archive Default
 Archive Set.
- 2. From the Archive Options dialog box, select when you want to run the job by clicking **Run Immediately**.
- 3. Click the Advanced button to access the Advanced Archive Options.
- 4. Click on the Advanced Archive Options (Startup) tab, and select Startup in suspended state and click OK.
- 5. After selecting when you want to run the job and any advanced options, click **OK**. A migration archiving operation is started for selected subclient or archive set and indicates its status in the Job Controller window.
- 6. When the migration archiving operation has completed, a confirmation message will be displayed in the Job Controller window.

START A MIGRATION ARCHIVING OPERATION ON NEW MEDIA

Use the following procedure to start a migration archiving operation on new media. For more information, see Start New Media.

Before you Begin

- Ensure that all Lotus Notes client mailboxes have been configured to display stub icons prior to performing any archiving operations. See Configure Stub
 Icons for Lotus Notes Mailboxes for step-by-step instructions.
- Compliance Archiving operations for the Domino Server journaling mailbox can be performed using this procedure with the following special requirements:
 - o The journaling mailbox must be manually assigned to the designated subclient using the **Databases** tab in the **Subclient Properties** dialog box. To add the journaling mailbox, click the **Add Mailbox** button and typing in the name of the journaling mailbox in the space provided.
 - o The subclient containing the journaling mailbox should be a dedicated subclient with no other mailboxes assigned to it.
 - o The Do Not Create Stub option in the Archive Rules | Stub Rule tab of the Subclient Properties dialog box should be selected.

Prior to performing any compliance archiving operations, the Domino Server setting for journaling maintenance must be set to **None**.

Required Capability: Capabilities and Permitted Actions

- To start a migration archiving operation of a selected subclient or archive set:
- 1. From the CommCell Browser, select one of the following:
 - o To archive a subclient, right-click the subclient that you want to archive and click **Archive**.
- 2. From the Archive Options dialog box, select when you want to run the job by clicking Run Immediately.
- 3. Click the Advanced button to access the Advanced Archive Options.
- Click on the Advanced Archive Options (Media) tab, and select Start new media and click OK.
 If you would like jobs with other Job IDs to use this new media, also select the Allow other schedule to use media set option.
- 5. After selecting when you want to run the job and any advanced options, click **OK**. A migration archiving operation is started for the selected subclient or archive set and indicates its status in the Job Controller window.
- 6. When the migration archiving operation has completed, a confirmation message will be displayed in the Job Controller window.

START A MIGRATION ARCHIVING OPERATION THAT CREATES A NEW INDEX

Use the following procedure to start a migration archiving operation that creates a new Index. For more information, see Create New Index.

Before you Begin

- Ensure that all Lotus Notes client mailboxes have been configured to display stub icons prior to performing any archiving operations. See Configure Stub Icons for Lotus Notes Mailboxes for step-by-step instructions.
- Compliance Archiving operations for the Domino Server journaling mailbox can be performed using this procedure with the following special requirements:
 - o The journaling mailbox must be manually assigned to the designated subclient using the **Databases** tab in the **Subclient Properties** dialog box. To add the journaling mailbox, click the **Add Mailbox** button and typing in the name of the journaling mailbox in the space provided.
 - o The subclient containing the journaling mailbox should be a dedicated subclient with no other mailboxes assigned to it.
 - o The Do Not Create Stub option in the Archive Rules | Stub Rule tab of the Subclient Properties dialog box should be selected.

Prior to performing any compliance archiving operations, the Domino Server setting for journaling maintenance must be set to **None**.

Required Capability: Capabilities and Permitted Actions

- To start an immediate migration archiving operation that will create a new index:
- 1. From the CommCell Browser, select one of the following:
 - o To archive a subclient, right-click the subclient and click **Archive**.
 - To archive all subclients in an archive set, right-click the archive set, select All Tasks and click Archive All Subclients or Archive Default Archive
 Set. Click Yes to confirm.
- 2. From the Archive Options dialog box, select when you want to run the job by clicking Run Immediately.
- 3. Click the Advanced button to access the Advanced Archive Options dialog box.
- 4. Click on the Advanced Archive Options (Data) tab, click Create new index and click OK.
- 5. From the **Archive Options** dialog box, click **OK**. The migration archiving operation will begin and you can track the progress of the job in the Job Controller window.
- 6. When the migration archiving operation has completed, Job Controller displays Completed.

START A MIGRATION ARCHIVING OPERATION THAT MARKS THE MEDIA FULL

Use the following procedure to start a migration archiving operation that marks media full on completion. For more information, see Mark Media Full.

Before you Begin

- Ensure that all Lotus Notes client mailboxes have been configured to display stub icons prior to performing any archiving operations. See Configure Stub Icons for Lotus Notes Mailboxes for step-by-step instructions.
- Compliance Archiving operations for the Domino Server journaling mailbox can be performed using this procedure with the following special requirements:
 - o The journaling mailbox must be manually assigned to the designated subclient using the **Databases** tab in the **Subclient Properties** dialog box. To add the journaling mailbox, click the **Add Mailbox** button and typing in the name of the journaling mailbox in the space provided.
 - o The subclient containing the journaling mailbox should be a dedicated subclient with no other mailboxes assigned to it.
 - o The Do Not Create Stub option in the Archive Rules | Stub Rule tab of the Subclient Properties dialog box should be selected.

Prior to performing any compliance archiving operations, the Domino Server setting for journaling maintenance must be set to **None**.

Required Capability: Capabilities and Permitted Actions

- To start a migration archiving operation of a selected subclient or archive set:
- 1. From the CommCell Browser, select one of the following:
 - o To archive a subclient, right-click the subclient that you want to archive and click **Archive**.
 - To archive an archive set, right-click the archive set that you want to archive, click All Tasks and click Archive All Subclients or Archive Default
 Archive Set.
- 2. From the Archive Options dialog box, select when you want to run the job by clicking Run Immediately.
- 3. Click the Advanced button to access the Advanced Archive Options.
- 4. Click on the Advanced Archive Options (Media) tab, and select Mark media full after successful operation and click OK.
- 5. After selecting when you want to run the job and any advanced options, click **OK**. A migration archiving operation is started for selected subclient or archive set and indicates its status in the Job Controller window.
- 6. When the migration archiving operation has completed, a confirmation message will be displayed in the Job Controller window.

START A MIGRATION ARCHIVING OPERATION WITH A SET JOB PRIORITY

Use the following procedure to start a migration archiving operation with a set job priority. For more information, see Set a Job Priority.

Before you Begin

- Ensure that all Lotus Notes client mailboxes have been configured to display stub icons prior to performing any archiving operations. See Configure Stub Icons for Lotus Notes Mailboxes for step-by-step instructions.
- Compliance Archiving operations for the Domino Server journaling mailbox can be performed using this procedure with the following special requirements:
 - o The journaling mailbox must be manually assigned to the designated subclient using the **Databases** tab in the **Subclient Properties** dialog box. To add the journaling mailbox, click the **Add Mailbox** button and typing in the name of the journaling mailbox in the space provided.
 - o The subclient containing the journaling mailbox should be a dedicated subclient with no other mailboxes assigned to it.
 - o The Do Not Create Stub option in the Archive Rules | Stub Rule tab of the Subclient Properties dialog box should be selected.

Prior to performing any compliance archiving operations, the Domino Server setting for journaling maintenance must be set to **None**.

Required Capability: Capabilities and Permitted Actions

- To start a migration archiving operation of a selected subclient or archive set:
- 1. From the CommCell Browser, select one of the following:
 - o To archive a subclient, right-click the subclient that you want to archive and click **Archive**.
- 2. From the Archive Options dialog box, select when you want to run the job by clicking **Run Immediately**.
- 3. Click the Advanced button to access the Advanced Archive Options.

- 4. Click on the Advanced Archive Options (Startup) tab, and select Change Priority and then enter a value. Click OK to continue.
- 5. After selecting when you want to run the job and any advanced options, click **OK**. A migration archiving operation is started for selected subclient or archive set and indicates its status in the Job Controller window.
- 6. When the migration archiving operation has completed, a confirmation message will be displayed in the Job Controller window.

START A MIGRATION ARCHIVING OPERATION WITH VAULTTRACKING ENABLED

Use the following procedure to start a migration archiving operation with VaultTracker enabled.

For additional information, see the following:

- VaultTracker
- VaultTracker Enterprise

Before you Begin

- Ensure that all Lotus Notes client mailboxes have been configured to display stub icons prior to performing any archiving operations. See Configure Stub Icons for Lotus Notes Mailboxes for step-by-step instructions.
- Compliance Archiving operations for the Domino Server journaling mailbox can be performed using this procedure with the following special requirements:
 - o The journaling mailbox must be manually assigned to the designated subclient using the **Databases** tab in the **Subclient Properties** dialog box. To add the journaling mailbox, click the **Add Mailbox** button and typing in the name of the journaling mailbox in the space provided.
 - o The subclient containing the journaling mailbox should be a dedicated subclient with no other mailboxes assigned to it.
 - o The Do Not Create Stub option in the Archive Rules | Stub Rule tab of the Subclient Properties dialog box should be selected.

Prior to performing any compliance archiving operations, the Domino Server setting for journaling maintenance must be set to **None**.

Required Capability: Capabilities and Permitted Actions

- To start a migration archive operation of a selected subclient or archive set:
- 1. From the CommCell Browser, select one of the following:
 - o To archive a subclient, right-click the subclient that you want to archive and click **Archive**.
 - To archive an archive set, right-click the archive set that you want to archive, click All Tasks and click Archive All Subclients or Archive Default
 Archive Set.
- 2. From the Archive Options dialog box, select when you want to run the job by clicking Run Immediately.
- 3. Click the Advanced button to access the Advanced Archive Options.
- 4. Click on the Vault Tracking tab, and select the vault tracking options you want to use and click OK.
- 5. After selecting when you want to run the job and any advanced options, click **OK**. A migration archiving operation is started for selected subclient or archive set and indicates its status in the Job Controller window.
- 6. When the migration archiving operation has completed, a confirmation message will be displayed in the Job Controller window.

Back To Top

Recover Archived Data

Topics | Support | Related Topics

Overview

- Recovery Using File Paths from the CommCell Console
- Browse Recovery from the CommCell Console
- Browse Recovery from Outlook
- Non-Browse Recovery
- Find and Recover
- · Job Restarts and Job Running Time

What You Need to Know Before Performing a Recovery

Related Reports

OVERVIEW

The system provides a powerful set of recovery options that enable you to specify and recover only the data you need. To properly specify the data, you should have a basic understanding of how the system recovers data. Due to the wide variety of recovery options, this discussion is based on the operations supported by each Agent.

Given below is a list of supported Agents. The corresponding linked page provides information on the Agent specific recovery options and procedures.

- Recover Data Domino Mailbox Archiver Agent
- Getting Started Recover Exchange Mailbox Archiver Agent
- Getting Started Recover Exchange Public Folder Archiver Agent
- Recover Data File Archiver Windows Agent
- Recover Data File Archiver NetWare Agent
- Recover Data SharePoint Archiver

RECOVERY USING FILE PATHS FROM THE COMMCELL CONSOLE

For the File Archiver Agents, you can enter a path to the archive files that you want to recover from the CommCell Console. For an overview, see Basic Restore.

BROWSE RECOVERY FROM THE COMMCELL CONSOLE

From the CommCell Console, Browse operations allow you to view the archived data providing access to the subclient's mailboxes or volumes, directories/folders and files. This enables you to easily identify the messages or files that you want to recover.

The Browse/Recovery window in the CommCell Console is the central window from which you browse and recover data. Recovery operations retrieve the data from the storage media and recover it to the desired location. See Browse Data for a more detailed discussion of the Browse feature.

BROWSE RECOVERY FROM OUTLOOK

The Outlook Add-In for Exchange Mailbox/Public Folder Archiver Agents allows you to perform browse and recovery operations from Outlook. This feature facilitates end-user recovery of archived messages in their inboxes through the convenience of browsing. See Restore from Outlook - End Users - Outlook Add-In for step-by-step instructions.

NON-BROWSE RECOVERY

Alternate methods of recovering messages, files, or documents from stubs are available through the following supported third-party applications:

- NetWare System Console (File Archiver for NetWare)
- Outlook (See Recall Messages Outlook Application)
- Outlook Web Access (OWA) (See Recall Messages Outlook Web Access (OWA))
- SharePoint Server (SharePoint Archiver Agents)
- Windows Explorer (File Archiver for Windows/NetWare)

PERSISTENT PIPELINE

When performing non-browse recovery of archived data from disk media or tape, the system maintains a common open pipeline known as a persistent pipeline

for multiple stub recall requests. The pipeline stays persistent for 20 minutes (by default) to reduce the time to open a pipeline for each individual stub recall request.

FIND AND RECOVER

The Find feature is a powerful search tool that searches the archived data for any messages or files that match the pattern used in the search. While a browse operation allows you to view the archived data in a random manner, enabling you to select data for recovery, the Find operation lets you use the system to locate messages or files with specific naming patterns. See Finding a Data Object for more information on the Find feature.

JOB RESTARTS AND JOB RUNNING TIME

For File Archiver Agents, you can click the **Job Retry** tab in the **Advanced Restore Options** dialog box to access the Job Retries and Job Running Time options, when you perform a data recovery operation.

For File Archiver Agents and Exchange Mailbox/Public Folder Archiver Agents, you can specify the maximum number of allowed restart attempts and the interval between restart attempts for all data recovery jobs. For procedures, see Specify Job Restartability for the CommCell.

For more information on these subjects, see Restarting Jobs and Job Running Time.

Back to Top

WHAT YOU NEED TO KNOW BEFORE PERFORMING A RECOVERY

To avoid common problems, review the following before starting a recovery operation:

- Verify that the CommServe, MediaAgent and media library are powered on.
- You have successfully archived the data you are attempting to recover.
- Verify that the media from which you wish to perform the recovery is available in the CommCell. Use the List Media feature to identify the media required by the recovery operation.
- Always ensure that sufficient space has been allocated for the recovery.

• Encryption Considerations

- o Exchange data that has been archived with pass-phrase encryption cannot be recovered from Outlook or OWA, but can be recovered by performing a Browse and Recovery operation from the CommCell Console.
- o Before you can perform Non-Browse Recovery (i.e., stub recovery) operation of encrypted data (i.e., using pass-phrase security) from Windows Explorer or a Unix Terminal Window, you must export the pass-phrase to the local computer. Refer to Data Encryption for the procedure to export the pass-phrase, and what action to take if you have changed the encryption settings for your client since the data was archived.
- If a subclient is configured with the **Do not create stub** archiving rule option enabled, the archived files will be removed from the computer and a stub recovery via Outlook, OWA, Internet Browser (e.g., Explorer), Windows Explorer, or Unix Terminal Window is not possible. To recover files that were archived using this option, perform a Browse Recovery from the CommCell Console.
- If you wish to recover data that has been aged, see Accessing Aged Data for information on recovering such data and saving the media containing the data for future use.

After recovering data, check the Recovery Job History to view the list of messages/files that were successfully recovered.

RELATED REPORTS

RECOVERY/RETRIEVE JOB SUMMARY REPORT

The Recovery/Retrieve Job Summary Report provides a list of recovery or retrieve operations for a specified time period.

Back to Top

Recover and Retrieve Data - Domino Mailbox Archiver Agent - How To

Topics | How To | Related Topics

Recover a Message from the CommCell Console

Recover a Message from a Lotus Notes Mailbox Client

RECOVER A MESSAGE FROM THE COMMCELL CONSOLE

Before You Begin

- Review the general recovery requirements from What You Need to Know Before Performing a Recovery and any agent-specific recovery requirements from Recovery Considerations for these Agents prior to performing any recovery.
- This procedure can be used to recover both Lotus Notes client mailbox messages and Domino Server journaling mailbox messages.

Required Capability: See Capabilities and Permitted Actions

- To Recover a Mail Message to a Mailbox from the CommCell Console:
- From the CommCell Browser, right-click the defaultarchiveset that contains the message(s) that you want to recover, click All Tasks and then click Browse command.
- Run a browse operation. See Browsing Data Migration Archiver Agents How To for a list of customized browse operations and their step-by-step instructions. If you accept all defaults, you will be browsing the latest archives for the selected data.
- 3. From the Browse window, select the message(s) that you want to recover, then click **Recover All Selected**. See Select Objects From the Browse Window for Recovery for more information.
- 4. From the Recover Options for All Selected Items (General) dialog box, perform the following tasks as applicable for your agent:
 - o Select whether to **Unconditionally Overwrite**, **Append**, or **Skip** a message in the event that the message(s) you are recovering already exist. By default, the system will append these message(s) to the mailbox folder. It will not overwrite the original message(s).
 - o Select the recovery destination as described in the Recover Out-of-Place or Cross-Application procedure. Keep in mind that the default options will recover the message(s) in place to the same client, unless otherwise specified.
- 5. From the **Advanced Recovery Options** dialog boxes, select the recovery options that you want to use. When you accept all the default settings, you will be recovering the selected data to its original location.
- 6. When recovering encrypted data, refer to Data Encryption for comprehensive feature information and procedures for using the Encryption tab of the Advanced Recovery Options dialog box.
- 7. After completing your selections, you can either start an immediate recovery or schedule the recovery.
 - o If you want to schedule the job, click the Job Initiation tab from the **Recovery Options** dialog box, click **Schedule**, schedule the job, and then click **OK**.
 - \circ If you want to run the job now, accept or click **Run Immediately** in the same tab and then click **OK**.

While the job is running, you can right-click the job in the Job Controller and select **Detail** to view information on the job. After the data has been recovered, you will see a job completion message in the Job Controller and Event Viewer.

RECOVER A MESSAGE FROM A LOTUS NOTES MAILBOX CLIENT

Before You Begin

- Review the general recovery requirements from What You Need to Know Before Performing a Recovery and any agent-specific recovery requirements from Recovery Considerations for This Agent prior to performing any recovery.
- This procedure can be used to recover only Lotus Notes client mailbox messages which have been configured to display stub icons.

Required Capability: None.

- To recover a mail message from a Lotus Notes mailbox client:
- 1. Log in to your Lotus Notes mailbox client.
- 2. Locate the message header you want to recover, and then double-click the corresponding stub icon.
- 3. The Archived Message dialog box will indicate that the message being opened is an archived message and will ask whether you want to recover the original message. You can select the **Delete stub after recovery** checkbox to delete the stub after the message or item has been recovered. Also, you can select the **Do not show this page again** checkbox to prevent the **Archived Message** dialog box from being displayed again during subsequent recoveries.
 - Click Recover to continue.
- 4. The Recovering Archived Message dialog box appears, indicating the status of the recovery.
 - After the recovery has completed you can double-click the message or item to view its contents.

Agents - Domino Mailbox Archiver

Topics | How To | Related Topics

Configurable Properties

- Activity Control
- Assigning a Filter Storage Policy for Erase Data by Browsing
- User Security
- Version

CONFIGURABLE PROPERTIES

Once installed, the agent is configured and is therefore able to manage the data on the client computer. However, you can change certain aspects of the configuration (e.g., client computer, backup sets, etc.) to manage the data in the manner that best suits your needs. Depending on the agent, you can view or change the agent configuration from the tabs that are available for that agent in the Properties dialog box.

ACTIVITY CONTROL

You can enable or disable all operations for this CommCell object and all objects below it. For more information, see Activity Control.

ASSIGNING A FILTER STORAGE POLICY FOR ERASE DATA BY BROWSING

A filter storage policy must be assigned to the agent in order to conduct Erase Data by Browsing operations. The purpose of the filter storage policy is to tell the system which media will be used to store the index filter information and how long to retain it. If one is not assigned at the time an Erase Data by Browsing job is run, the system will display a message reminding you that no filter storage policy has been defined. For step-by-step instructions, see Assign a Filter Storage Policy for Erase Data by Browsing.

USER SECURITY

You can perform the following functions:

- Identify the user groups to which this CommCell object is associated.
- Associate this object with a user group.
- Disassociate this object from a user group.

For more information, see User Administration and Security.

VERSION

The Version tab displays the software version and post-release service packs and updates installed for the component. See Version for an overview.

Agents - Domino Mailbox Archiver - How To

Topics | How To | Related Topics

Assign a Filter Storage Policy for Erase Data by Browsing

Run Erase Data by Browsing Job

Release License for Client, MediaAgent, Agent, or Enabler

Delete the Agent

View the Software Version

ASSIGN A FILTER STORAGE POLICY FOR ERASE DATA BY BROWSING

Before You Begin

- Acquire an Erase Data license.
- For an overview of all steps, see Erase Data by Browsing.

• Ensure that the filter storage policy that you associate with the agent for the Erase Data by Browsing feature has retention criteria that is greater than or equal to the retention criteria of the storage policy for the data to be erased.

Required Capability: See Capabilities and Permitted Actions

- To assign a filter storage policy for Erase Data by Browsing:
- 1. From the CommCell Browser, right-click the appropriate agent icon and then click Properties.
- 2. From the Storage Device tab of the agent Properties dialog box, select a filter storage policy from the Filter Storage Policy list.
- 3. Click OK.

RUN ERASE DATA BY BROWSING JOB

Before You Begin

- Ensure there is a Filter Storage Policy configured for the agent in the Agent Properties (Storage Device) tab.
- An Erase Data license must exist.

Required Capability: Capabilities and Permitted Actions

- To erase data by browsing:
- From the CommCell Browser, right-click the agent that contains the data which you want to erase, select All Tasks and then click Erase Data By Browsing.
- 2. You are warned that the data will be permanently removed. Click Yes to continue.
- 3. From the Erase Backup/Archived Data dialog box, perform one of the following tasks as appropriate for your agent:
 - O Click **Add**, then specify the path of a data object that you want to erase, and click **OK**.
 - Click Browse, then select a browse time range and any advanced browse options, and click OK. From the browse selection window, select the data objects that you want to erase, and click OK.
- 4. Optionally, you can click **Add Alert** to configure an alert for this job.
- 5. Click Schedule if you would like to schedule this job, otherwise it will run immediately by default.
- 6. If you want to run the job immediately, click **OK** and the Erase Data by Browsing job will begin. When the job is done, Job Controller displays Completed.
- 7. If you selected Schedule, from the Schedule Details (Schedule Details) dialog box, create a schedule for this operation. Click **OK** to continue. Your Erase Data by Browsing operation will execute according to the specified schedule. See Create a Job Schedule for more information.

RELEASE LICENSE FOR CLIENT, MEDIAAGENT, AGENT, OR ENABLER

Required Capabilities: Capabilities and Permitted Actions

Administrative Management capability cannot be used to release the license from the MediaAgent level.

Before you Begin:

- To release license for MediaAgent, ensure that all the storage policies or copies associated with the configured libraries (or drive pools) in the MediaAgent
 are deleted or re-associated to another MediaAgent.
- To release license for client, MediaAgent, agent, or enabler:
- 1. In the CommCell Browser, right-click the name of the client, MediaAgent, agent, or enabler you want to release license, click **All Tasks** (if displayed), and select **Release License**.
- 2. A popup warning message appears.

Click \mathbf{OK} to continue.

3. Another popup message then appears.

Click \boldsymbol{Yes} to continue with the deconfiguration or \boldsymbol{No} to abort.

4. If releasing a license is unsuccessful, a number of popup messages appears. In some cases, the message requests that you take some corrective action. For example, the message might advise you to ensure that there are no jobs running on the agent. In such a case, click **OK** and take the appropriate action. Then repeat the process.

If releasing a license is successful, the tree element is dimmed and available for deletion.

DELETE THE AGENT

BEFORE YOU BEGIN

You can perform agent operations as long as the agent is installed and appears enabled in the CommCell Browser. However, if you have no need to run jobs on the agent data of a client computer, you may want to delete the agent that resides on that computer. Once you have uninstalled or DeConfigured the agent, the corresponding icon in the CommCell Browser is grayed out. While this icon exists, you can recover data from the agent to another client. If you delete this icon, all of the agent's data is irretrievably lost.

NOTES

- You cannot delete an agent while operations for that agent are running.
- NAS clients do not use this procedure; for NAS, see Uninstalling Components.

Deleting the agent is a two-phase process.

- You need to uninstall or DeConfigure the agent software from the client computer. Doing so frees an agent license, thereby allowing you to install it on some
 other computer whose data you do want to secure.
- After you delete the client software, you can either leave the corresponding data intact for appropriate action, or you can remove the data immediately. If you choose to remove the data immediately, you must delete the agent from the CommCell Browser.

Required Capability: See Capabilities and Permitted Actions

- To delete an agent:
- 1. From the CommCell Browser, right-click the icon of the agent that you want to delete, and then click **Delete**. (The agent software must first have been uninstalled/DeConfigured or the delete option on the shortcut menu will not appear.)
- 2. A warning message prompts you with the following: This operation will permanently delete the data backed up from this level and it cannot be restored. Click **Ok** to continue with the deletion operation. (Clicking **No** will abort the operation.)
- 3. From the **Confirmation Text** dialog box, enter the confirmation text string, erase and reuse media. Click **Ok**. The agent icon and the data that corresponds to the selected agent will be deleted. Consequently, you will not be able to browse or recover this data.

VIEW THE SOFTWARE VERSION

- To view the Software Version:
- From the CommCell Browser, click the CommServe, Client, Agent, MediaAgent, or Enabler for which you wish to view the version, and then click Properties.
- 2. Click the Version tab.

The component version and post release service pack, additional updates and missing updates are displayed.

Archive Sets - Domino Mailbox Archiver Agent

Topics | How To | Related Topics

Overview

Domino Mailbox Archiver Agent Configurable Properties

- Backup Set/Archive Set Name
- User Security

OVERVIEW

After installation of the Domino Mailbox Archiver Agent, the system automatically creates a default archive set, which contains a default subclient. User-defined archive sets are supported.

See Backup Sets and Archive Sets for information on the different types of archive sets.

DOMINO MAILBOX ARCHIVER AGENT CONFIGURABLE PROPERTIES

Once installed, the agent is configured and is therefore able to manage the data or volumes on the client computer. However, you can change certain aspects of the archive set configuration to manage the data in the manner that best suits your needs. You can view or change the archive set configuration from the **Archive Set Properties** dialog box.

The following information can be configured for the Domino Mailbox Archiver Agent:

BACKUP SET/ARCHIVE SET NAME

You can rename a backup set or archive set. For step-by-step instructions, see Rename a Backup Set/Archive Set.

USER SECURITY

You can perform the following functions:

- Identify the user groups to which this CommCell object is associated.
- Associate this object with a user group.
- Disassociate this object from a user group.

For more information, see User Administration and Security.

Subclients - Domino Mailbox Archiver Agent

Topics | How To | Related Topics

Overview

Subclient Content

Configurable Properties

Configuring Content Indexing for Lotus Notes Backups

Activating NSF File Archiving on a User-Defined Subclient

Things to Consider when Creating and Configuring Subclients

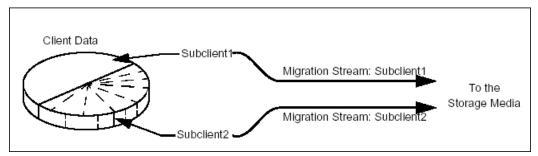
- Common
- Domino Mailbox Archiver Agent

OVERVIEW

The following table shows subclient creation and configuration details.

| AGENT | Type of Data | Default Subclient created during install of the Agent | Supports Default Subclient | Supports User Defined Subclient | Contents of the default subclient when user- defined subclient is present | Other Types of subclients supported by the Agent | Notes |
|-------|---|---|----------------------------------|---------------------------------------|---|---|-------|
| | Lotus Notes client mailbox messages/Domino Server journaling mailbox messages | | Yes | Yes | mailboxes not assigned to other subclients, unless otherwise configured* | Do Not Archive | |

The following figure shows a simple subclient configuration for a Migration Archiver Agent. Subclient1 and Subclient2 each comprise a unique subset of data on the client computer. Each subclient, when it is archived, establishes a logical data channel through which data can travel to the storage media.



In this configuration, you can schedule archive operations for Subclient1 and Subclient2 either at different times or simultaneously. Splitting the archive operations into two time periods can be useful if you have smaller operation windows at various times.

SUBCLIENT CONTENT

DOMINO MAILBOX ARCHIVER AGENT

The Domino Mailbox Archiver Agent is a software module that periodically moves unused or infrequently used Lotus Notes Mailbox messages on a host computer to secondary storage. The Domino Mailbox Archiver Agent provides support for two distinct archiving scenarios:

- Migration Archiving, which is useful if you want to reduce the number of messages routinely backed up to primary storage by the Lotus Notes/Domino Server iDataAgent.
- Compliance Archiving, which is useful if you want to index messages copied to the journaling mailbox to meet security and compliance standards.

See Compliance and Migration Archiving - Domino Mailbox Archiver Agent for in-depth information on each archiving scenario.

After installing this agent, a default subclient is automatically created by the system and initially its content is unassigned until the first migration archiving

operation. During the first migration archiving operation, the auto-discovery process will populate the content of the default subclient with mailbox databases. With each subsequent migration archiving job the system will look for unassigned mailbox databases and will automatically assign them to the default subclient. For more information, see Discovering and Assigning New Mailboxes. The user can also manually assign the mailbox databases to the default subclient or the do not archive subclient by selecting the desired mailbox databases.

Also a user-defined subclient can be manually created and its content defined. The content of this subclient can be assigned by performing a database discovery in the **Subclient Properties** dialog box. During the discovery process, the Domino Server's mail database is populated and the appropriate mailbox can then be assigned to the subclient content.

The type of content defined in each subclient depends on the archiving scenario the subclient will be used for. For migration archiving scenarios, the subclient content can include any mailbox associated with the Domino Server. For compliance archiving scenarios, only the journaling mailbox is included in the subclient content.

If the new mail database is added to the Domino server - in order to archive newly added mail database it has to be manually discovered and added in the existing subclient or new subclient.

CONSIDERATIONS

For more information, see Things to Consider when Creating and Configuring Migration Archiver Subclients.

If you want to add a new mail database to a new or existing subclient, you must first manually discover the mail database and then add it to the desired subclient. Archive operations can then be performed for the new mail database.

CONFIGURABLE PROPERTIES

Once installed, the agent is configured and is therefore able to manage the data or volumes on the client computer. However, you can change certain aspects of the subclient configuration to manage the data in the manner that best suits your needs.

You can view or change the subclient configuration from the Subclient Properties dialog box. The following information can be configured.

ACTIVITY CONTROL

You can enable or disable all operations for this CommCell object and all objects below it. For more information, see Activity Control.

ARCHIVING RULES

You can establish the criteria for a Migration Archiver subclient to determine which content will be scanned (i.e., mailboxes, libraries, volumes, folders, and directories) and which data objects will be archived (i.e., messages, items, and files). You can also establish stub creation rules, set the interval at which a new index is created and other related criteria.

For more information, see Subclient Properties (Archiving Rules).

For instructions on activating Local NSF archiving, see Activating NSF File Archiving on a User-Defined Subclient.

CONTENT/DATABASES

You can define the content of the subclient. Most agents include a configure button that displays a dialog where you can add or modify the data included as subclient content. For step-by-step instructions, see Configure Subclient Content.

For more information, see Subclient Content.

DATA TRANSFER OPTIONS

Several configurable options to efficiently use available resources for transferring data secured by data protection operations are provided in the subclient. This includes the following:

- Enable or disable Data Compression either on the client or the MediaAgent.
- Configure the transfer of data in the network using the options for Network Bandwidth Throttling and Network Agents.

DATA ENCRYPTION

You can enable or disable the encryption of data for transmission over unsecure networks and for storage on media. For more information, see Data Encryption.

DATA PATHS

You can view the data paths associated with the primary storage policy copy of the selected storage policy or incremental storage policy. You can also modify the data paths for the subclient including their priority. For additional information, see Configuring Alternate Data Paths for Subclients.

DATA PROTECTION FILTERS

You can perform the following functions:

- Define data protection filters to exclude specified subclient data from being backed up or archived. For more information, see Filters.
- Use regular expressions (or wildcards) in subclient data protection exclusion filters. See Inclusions, Exclusions, and Exceptions to Exclusions for more information.
- Perform in-place editing of subclient data protection filter exclusions and exceptions. See Editing Filters for more information.

DEDUPLICATION

Indicates whether deduplication for the subclient is enabled or disabled, and if enabled whether the signature generation (a component of deduplication) is performed on the client or MediaAgent computer. For more information, see Deduplication.

DISCOVERY FILTERS

Instead of a backup filter, the default subclient for a Domino Mailbox Archiver Agent client has a discovery filter option. Discovery filters allow you to prevent database files that match specific criteria from being discovered when the default subclient is backed up. Each default subclient has a discovery filter that is created automatically by the system. Initially, the filter is empty, which means that the default subclient discovers all new databases at backup time. These filters do not affect manual discovery operations. If you manually discover databases, you see an unfiltered list of all of the databases on the server.

The discovery filters are flexible and allow you to exclude paths and file names that match certain patterns. These paths are always relative to the Domino data path for each partition and always start with a backslash (e.g., \mail\user.nsf). Note that when you change a discovery filter, the change is effective the next time the subclient is backed up.

When defining subclient discovery filters, use regular expressions (or wildcards). See Inclusions, Exclusions, and Exceptions to Exclusions for more information.

OPERATION MODES

The Domino Mailbox Archiver Agents provides three modes which further direct how archive and recovery operations behave for each subclient. These modes can be selected using the **General** tab of the **Subclient Properties** dialog box and should be configured prior to running the first archive operation.

It is strongly recommended that you do not switch a subclient from one mode to another after the first archive operation is performed, as this may return unexpected results during data recovery operations.

If you wish to perform operations for the same subclient content using different modes, it is recommended that you:

- create separate backup sets that will be devoted exclusively to one operation mode
- · create a subclient in each backup set with the desired operation mode selected
- define the appropriate content for each subclient, ensuring no other backup sets contain subclients with the same content and operation mode defined

OPERATE IN ARCHIVER MODE

This mode is designed for both migration and compliance archiving operations.

When selected, the Domino Mailbox Archiver Agent will perform archive operations based on the rules established in the **Archive Rules** tab of the **Subclient Properties** dialog box.

This mode is selected by default for all subclients.

OPERATE IN BACKFILL MODE

This mode further refines the **Operate in Archiver Mode** option and is designed for compliance archiving operations only.

When selected, this mode allows you to back up and populate the content index with messages that were sent and/or delivered before the point-in-time at which archives of the journaling mailbox begin. This is useful if you are newly using the Domino Mailbox Archiver Agent for compliance archiving and want to ensure all messages that predate the defining of the journal mailbox are archived along with the journal mailbox content. The **Archive Rules** tab of the **Subclient Properties** dialog box is disabled and the archive operation runs as a full backup with no stubbing phase.

Once the initial archive has occurred using this mode and you are ready to begin using the journaling mailbox for further archive operations, you must perform the following steps:

- 1. Define the journal mailbox as the content for the subclient. Note that the journaling mailbox should be configured as **Unmanaged** and **Non-filtered** in the Domino Server.
- 2. Select the **Do Not Create Stub** option in the **Archive Rules | Stub Rule** tab of the **Subclient Properties** dialog box.
- 3. Deselect this mode in the **General** tab of the **Subclient Properties** dialog box.

This mode only needs to be used once, as all subsequent archives will be conducted through the journaling mailbox. Using this mode more than once for the same subclient may return unexpected results (such as duplicate data) during data recovery operations.

OPERATE IN BACKUP MODE

This mode is designed for content indexing purposes only.

When selected, this mode allows you to perform full, incremental, differential, or synthetic full backups of mailbox databases using the Domino Mailbox Archiver Agent. The **Archive Rules** tab of the **Subclient Properties** dialog box is disabled, backup operations run with no stubbing phase, and all mailbox data (with the exception of design documents) is backed up in a similar fashion to the Lotus Notes Document DataAgent.

Unlike the Lotus Notes Document *i*DataAgent, this agent allows you to later utilize content indexing and search capabilities for the mailbox databases that were backed up. However, this agent only supports backing up mail and journaling databases; it does not provide support for backing up any other database types supported by the Lotus Notes Document *i*DataAgent (see Backup - Lotus Domino Server for more information on the additional database types supported by the Lotus Notes Document *i*DataAgent).

Data backed up using Backup Mode will be retained according to the Archiver Days Retention criteria. Regular Days/Cycles Retention criteria will not be honored.

See Data Aging for more information on retention criteria.

PRE/POST PROCESSES

You can add, modify or view Pre/Post processes for the subclient. These are batch files or shell scripts that you can run before or after certain job phases. For more information, see Pre/Post Processes.

STORAGE POLICIES

You can associate the subclient to a storage policy. For more information, see Storage Policies.

SUBCLIENT NAME

You can rename a user-defined subclient.

USE PROXY

This configuration allows to run archive operation on an alternate server than domino server to save Domino server resource.

A proxy server requires:

- 1. A copy of Lotus Notes Archiver.
- 2. Lotus Notes client. After the client installation, the admin's user ID file from the original Domino server should be copied to the client so that the client can access all the databases resided in the server. Also, on Lotus Notes client, go to the File menu -> Security -> User Security. On the User security window, Don't prompt for a password from other Notes-based programs (reduced security) should be checked. Note that Lotus Notes client must be running while the archive operation operations run.

USER ACCOUNTS

You can define an account with permissions to execute Pre/Post commands for the agent's archive, backup, or volume creation jobs.

See Lotus Domino Server iDataAgents in User Accounts and Passwords for more information.

USER SECURITY

You can perform the following functions:

- Identify the user groups to which this CommCell object is associated.
- Associate this object with a user group.
- Disassociate this object from a user group.

For more information, see User Administration and Security.

CONFIGURING CONTENT INDEXING FOR LOTUS NOTES BACKUPS

Backups of Lotus Notes mail and journaling databases can be content indexed by using the Domino Mailbox Archiver Agent to back up the databases. When configured, the Domino Mailbox Archiver Agent will disable all archiving capabilities, including stub creation, and exclusively perform backups of the databases. These backups can then be content indexed.

The following procedures provide the steps necessary to prepare mail and journaling databases for backup and content indexing.

CONFIGURE THE AGENT FOR DATABASE BACKUPS

- 1. From the CommCell Console, navigate to < Client> | Domino Mailbox Archiver | < Backup Set> | < Subclient>.
- 2. Right-click the subclient and click **Properties**.
- 3. From the Archiving Rules tab, select Operate in Backup Mode.

- 4. From the Databases tab, click Configure.
- From the Add/Modify database/subclient configuration for partition/backup set dialog box, assign each database you want to back up by clicking the Subclient box and selecting this subclient from the list.
- 6. Click OK.

BACK UP THE DATABASES

- 1. From the CommCell Console, navigate to <Client> | Domino Mailbox Archiver | <Backup Set> | <Subclient>.
- 2. Right-click the subclient and and click Backup.
- 3. Select Full as the backup type and Immediate to run the job immediately.
- 4. Click OK.
- 5. You can track the progress of the job from the Job Controller or Event Viewer window of the CommCell console.

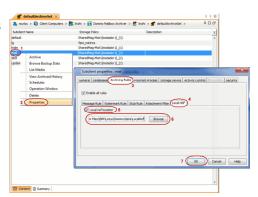
PERFORM CONTENT INDEXING OPERATIONS

Refer to Operations - Content indexing and Search for information on performing Content Indexing operations.

ACTIVATING NSF FILE ARCHIVING ON A USER-DEFINED SUBCLIENT

To activate archiving for .nsf files on a subclient, you must .

- In the CommCell Browser, expand Client Computers | <Client Name> | Domino Mailbox Archiver | <Partition Name> | <Backup Set Name>.
- In the Backup Set tab, right-click the name of a user-defined subclient, and then click Properties.
- In the Subclient Properties dialog box, click the Archiving Rules tab, and then click the Local NSF sub-tab.
- 4. Select Local nsf location.
- In the Browse box, enter the location of the folder that contains all of the user mailbox folders where NSF directories reside.
 - You must specify the location down to the folder under **Domino\data** that contains all user mailbox folders so that all NSF directories are included in the archiving process.
- 6. Click OK.



THINGS TO CONSIDER WHEN CREATING AND CONFIGURING SUBCLIENTS

When creating and configuring subclients, keep in mind the following considerations:

COMMON

- When creating and configuring a subclient, you will need to establish the archiving rules for the subclient, in addition to specifying the subclient name, storage policy association and content.
- If you enable the Do Not Create Stub or Archive Files Only, Do Not Create a Stub archiving rule option, a non-browse recovery operation is not possible and archived data must be recovered via the browse/recovery operation from the CommCell Console.
- For archive filter considerations, see Archive Filters for Migration Archiver Agents.

DOMINO MAILBOX ARCHIVER

Subclient content is defined at the mailbox level.

Back to Top

Subclients - Domino Mailbox Archiver Agent- How To

Topics | How To | Related Topics

Common

Add a Data Protection Filter for a Subclient

Associate a Subclient to a Storage Policy

Associate or Disassociate a User Group to a Subclient

Change Account for Executing Pre/Post Commands (Data Protection) (Windows-based agents)

Configure a Subclient for Pre/Post Processing of Data Protection Operations

Configure Subclient Content

Configure the Subclient for Data Encryption

Create a New Subclient

Delete a Data Protection Filter from a Subclient

Delete a User-Defined Subclient

Enable or Disable Operations

Enable or Disable Software Compression for a Subclient

Remove a Process from Pre/Post Processing of Data Protection Operations

Rename a Subclient

Set the Network Bandwidth and Network Agents for a Data Protection Operation

View Data Paths Associated with a Subclient

View Subclient Content

ADD/EDIT A DATA PROTECTION FILTER FOR A SUBCLIENT

Before You Begin

- Review Filters.
- Do not change the data protection or discovery filter of a subclient that has a data protection operation in progress.
- The system does not allow you to add entries that are not content of a particular subclient to that subclient's filter.
- For BlueArc and EMC Celerra (running at least DART OS 5.6.x) subclients, the filter string with or without wildcards must match the name or path of the file or directory being filtered.
- For NetApp subclients only name type filters (with wildcards) are supported:
 - o You cannot enter paths as a filter (e.g. /vol/vol0/datal). Since NetApp does not support the use of paths in filters, if there are multiple files with the same name, even though they may be in different directories, all of them will be excluded from backups.
 - O Name of the file or directory must exactly match the filter string.
 - O You can specify a maximum of 32 strings in the exclude list.

Select the desired procedure:

- To add a data protection or discovery filter for a subclient
- To edit a data protection filter for a subclient

Required Capability: Capabilities and Permitted Actions

- To add a data protection or discovery filter entry for a subclient:
- 1. From the CommCell Browser, right-click the subclient whose data protection or discovery filter you want to add, and then click **Properties** from the shortcut menu.
- 2. Click the Filters tab of the Subclient Properties dialog box.
- 3. For Exchange Mailbox, Exchange Mailbox/Public Folder Archiver Agents and Exchange Compliance Archiver, to specify a mailbox or folder that you want to exclude from data protection operations:
 - O Click the upper Add button.
 - o From the Browse window, expand the mailbox tree of the client computer.
 - o Click the mailbox or folder that you want to exclude from the backup/archive operations on the selected subclient, and then click **Add**. (Repeat this step for each additional entry.)
 - o From the Browse window, click **OK**.

The mailboxes or folders that you selected appear as entries in the upper pane. Repeat this step if you want to add more mailboxes and/or folders to the filter.

- 4. For NAS NDMP iDataAgents, click the **Add** button and, in the input window, type the name of the file, directory, (or path for BlueArc) that you want to exclude from the backups and click **OK**. The name displays as an entry in the **Exclude these files/folders/patterns** pane. Repeat this step if you want to add more files, directories, or paths to the filter.
- 5. For SharePoint Server iDataAgents, to specify a URL/file/folder/pattern that you want to exclude from data protection operations or to specify an exception filter for database backup sets, do one of the following:
 - Click the Add button next to Exclude these files/folder/patterns: input window and type the URLs of site collections that you want to exclude from
 the backups and click OK. The site collection displays as an entry in the Exclude these files/folders/patterns pane. Wildcards are supported. See
 Wildcards for more information. Repeat this step if you want to add more URLs, files, directories, or paths to the filter.
 - Click the Add button next to Except for these files/folders: input window and type the URLs/folders of site collections that you want to be
 exceptions for the exclusion filter and click OK. These exceptions will be included in the data protection operations. Wildcards are not supported for
 exception filters.
- 6. For Exchange Public Folder *i*DataAgents and SharePoint Server *i*DataAgent, to specify a workspace/folder that you want to exclude from the backups, click the upper **Browse** button and expand the *i*DataAgent of the client computer. Click the workspace/folder that you want to exclude from the backups and then click **Add**. Repeat this step for each additional entry.
- 7. For Windows/Unix/Macintosh File System *i*DataAgents, File Archiver for Windows/Unix Agents, and ProxyHost *i*DataAgent, to specify a file/folder/directory that you want to exclude from data protection operations, do one of the following:
 - o Click the upper **Add** button and, in the **Enter Path** window, type the complete path (including drive letter) of the file/folder/directory that you want to exclude from the backups/archive operations. Repeat this step if you want to add more files/folders/directories to the filter.
 - o Click the upper **Browse** button and expand the file system of the client computer. Click the file/folder/directory that you want to exclude from backups/archive operations and then click **Add**. Repeat this step for each additional entry.
- 8. For NetWare File System/NDS iDataAgents, to specify data that you want excluded from the backups, do one of the following:
 - o To manually enter the path:
 - Click the Add button.
 - In the Input window, type the complete path (e.g., VOL1:\demo\disk2) of the data that you want to exclude.
 - Click **OK**. (The path that you typed displays as an entry in the upper pane.) Repeat this step if you want to exclude more data.
 - $\,\circ\,$ To browse and select a path:
 - Click the **Browse** button.
 - From the Backup Data window, expand the file system or NDS tree of the NetWare server.
 - Select the data that you want to exclude, and then click Add. Repeat this step for each additional entry.
 - From the Backup Data window, click **OK.** The data that you selected displays as entries in the upper pane.
- 9. For Lotus Notes Database and Lotus Notes Document *i*DataAgents, to specify a file or folder that you want to exclude from discovery, do one of the following:
 - Select the Pattern/path to be excluded field. Then type in a file or folder that you want to exclude. The format of the entry should start with a slash
 (\). The path entered is always relative to the data path of the partition. Then click Add. Repeat this step for each additional entry.
 - o Click the upper **Browse** button and expand the file system of the client computer. Click the file or folder that you want to exclude from the backups and then click **Add**. Repeat this step for each additional entry.
- 10. For Exchange Mailbox, Exchange Mailbox/Public Folder Archiver Agents and Exchange Compliance Archiver, to specify a wildcard pattern of the folders that you want to exclude across all mailboxes within the subclient:
 - O Click the lower Add button.
 - o In the Input window, type the wildcard pattern of the folders that you want to exclude from backup/archive operations on the selected subclient.
 - o Click OK. The path that you typed appears as an entry in the lower pane. Repeat this step if you want to add more entries to the filter.
- 11. For Exchange Public Folder iDataAgents and SharePoint Server iDataAgent, to specify an exception to an excluded workspace/folder (i.e., a folder/document that you want included in the backups, but whose parent directory has been excluded), click the lower **Browse** button and expand the iDataAgent of the client computer. Click the workspace/folder that you want to include in the backups and then click **Add**. Repeat this step for each additional entry.
- 12. For Windows/Unix/Macintosh File System *i*DataAgents, File Archiver for Windows/Unix Agents, and ProxyHost *i*DataAgent, to specify an exception to an excluded folder/directory (i.e., a file or folder/directory that you want included in the data protection operations, but whose parent folder/directory has been excluded), do one of the following:
 - o Click the lower **Add** button and, in the **Enter Path** window, type the complete path (including drive letter) of the file/folder/directory that you want to include in the backups/archive operations. Repeat this step if you want to add more exceptions to the filter.
 - o Click the lower **Browse** button and expand the file system of the client computer. Click the file/folder/directory that you want to include in the backups/archive operations and then click **Add**. Repeat this step for each additional entry.

- 13. For NetWare File System/NDS iDataAgents, to specify an exception to an excluded directory or NDS container (i.e., data that you want included in the backups, but whose parent directory or NDS container has been excluded), do one of the following:
 - o To manually enter the path:
 - Click the Add button.
 - In the Input window, type the complete path (e.g., VOL1:\demo\disk2\readme) of the data that you want to include.
 - Click OK.
 - o To browse and select a path:
 - Click the **Browse** button.
 - From the Backup Data window, expand the file system or NDS tree of the NetWare server.
 - Click the file or folder that you want to include in the backups and then click **Add**. Repeat this step for each additional entry.
 - Click **OK.** The selected data displays as entries in the lower pane.
- 14. Click **OK** to save your changes.

Required Capability: Capabilities and Permitted Actions

- To edit a data protection filter entry for a subclient:
- 1. From the CommCell Browser, right-click the subclient whose data protection filter you want to edit, and then click **Properties** from the shortcut menu.
- 2. Click the Filters tab of the Subclient Properties dialog box.
- 3. Click the filter entry that you want to edit, and then click the Edit button associated with that pane.
- 4. Type the changes into the Enter Path dialog box, then click OK.
- 5. Click **OK** to save your changes.

NOTES

- When you change a data protection or discovery filter, the change is effective the next time a data protection operation is run on the applicable subclient.
- Performing a full backup after changing filters or exceptions is recommended.

ASSOCIATE A SUBCLIENT TO A STORAGE POLICY

Required Capability: See Capabilities and Permitted Actions

- To associate a subclient to a storage policy:
- 1. From the CommCell Browser, right-click the subclient whose associated storage policy you want to change, then click **Properties** from the shortcut menu.
- 2. Click the Storage Device tab of the Subclient Properties dialog box.
- 3. From the **Storage Policy** list of the **Data Storage Policy** tab, select a data storage policy to associate with this subclient. If necessary, click the **Create Storage Policy** button to create a new storage policy to which the subclient can then be associated.
- 4. From the Changing a Storage Policy window select the next type of backup operation. Click **OK**.
- 5. If applicable for your agent, you can change the number of data streams from the Number of Data/Database Backup Streams field.
- 6. If applicable for your agent, click the **Log Storage Policy** tab and select a storage policy to associate with this transaction log subclient from the **Transaction Log Storage Policy** list. Also, you can set the **Number of Transaction Log Backup Streams** from this tab.
- 7. Click **OK** to save your changes and close the Subclient Properties Storage Device tab.

ASSOCIATE OR DISASSOCIATE A USER GROUP TO A COMMCELL OBJECT

Required Capability: See Capabilities and Permitted Actions

- To associate or disassociate a user group to a CommCell entity:
- 1. From the CommCell Browser, click the CommServe, client computer group, client computer, agent, MediaAgent, Library, Storage Policy, backup set, subclient, or Shelf media, and then select **Properties**.
- 2. From the **Security** tab, select the appropriate user groups to which you want to associate to the CommCell object from the **Available Groups** pane, and then move the user group to the **Associated Groups** pane.
- 3. Click **OK**.

CHANGE ACCOUNT FOR EXECUTING PRE/POST COMMANDS (DATA PROTECTION)

Required Capability: See Capabilities and Permitted Actions

- To change a user account for executing pre/post commands for Data Protection jobs:
- 1. From the CommCell Browser, expand the tree to view the appropriate level icon for the affected agent.
 - o From the agent, instance/partition, or backup set/archive set level, right-click the appropriate icon, click **All Tasks**, and click **New Subclient** from the short-cut menu.
 - o From the subclient level, right-click the subclient icon and click **Properties** from the short-cut menu.
- 2. From the Subclient Properties dialog box, create and/or configure the subclient as appropriate. Then click the Pre/Post Process tab.
- 3. From the Pre/Post Process tab, click Change.
- 4. From the User Account dialog box, select one of the account options. If you select Impersonate User, type the appropriate user name and password.
- 5. Click **OK** to save the settings.

CONFIGURE A SUBCLIENT FOR PRE/POST PROCESSING OF DATA PROTECTION/ARCHIVE OPERATIONS

Before You Begin

- We recommend not configuring a pre/post process for a subclient that is currently running a data protection or archive operation.
- Verify that there are no pre/post processes already assigned for the subclient.
- Review the Overview and Agent-Specific Guidelines for your agent before configuring pre/post processes for data protection/archive operations.
- Pre-process commands for the iDataAgents will be executed only when the necessary resources (e.g., media, library, drive, etc.) are available.

Required Capability: Capabilities and Permitted Actions

- To configure a subclient for Pre/Post processing of data protection/archive operations:
- From the CommCell Browser, right-click the subclient for which you want to configure a pre/post process, and then click **Properties** from the shortcut menu.
- 2. Click the Pre/Post Process tab of the Properties dialog box.
- 3. For an agent other than the Oracle RAC iDataAgent, click inside the space that corresponds to one of the following phases and type the full path of the process that you want executed during that phase. Alternatively, click **Browse** to locate the process (applicable only for paths that do not contain any spaces). For the Oracle RAC iDataAgent, click **Browse** for the corresponding process, click the name of the control node client in the Select Client for Browse dialog box, and click **OK**. Then browse for and click the process.
 - o PreBackup
 - o PreScan
 - o PreArchive
 - PreCopy
 - o PreSnap
 - o PostBackup
 - o PostScan
 - o PostArchive
 - o PostCopy
 - o PostSnap

Click OK.

- 4. If you want to run a Post Process for all attempts to run that job phase, then select the corresponding checkbox.
- 5. For subclients on Windows platforms, if **Run As** displays **Not Selected**, or if you want to change the account that has permission to run these commands, click **Change**.
 - a. In the User Account dialog box, select **Use Local System Account,** or select **Impersonate User** and enter a user name and password. Click **OK**.
 - b. If you selected Local System Account, click **OK** to the message advising you that commands using this account have rights to access all data on the client computer.
- 6. Click **OK** to save your changes and close the Pre/Post Process tab of the Properties dialog box.

CONFIGURE SUBCLIENT CONTENT

Before You Begin

- · Review Subclients.
- Do not configure the content of a subclient while the parent node or any sibling subclient has a data protection or archive operation currently running on it.
- Exchange Mailbox iDataAgents and Exchange Mailbox/Public Folder Archiver Agents: If you change the contents of the default backup set or archive set then the auto-discover feature will be disabled. If you disable the auto-discovery feature, newly created mailboxes will not be backed up/archived unless they are manually discovered and assigned to a subclient.
- NAS NDMP iDataAgents: You must ensure there is no overlap in content between all subclients. Overlap in subclient content will result in loss of data. An existing subclient's contents are not automatically changed when another subclient is added with overlapping contents.
- SharePoint Server iDataAgent: The Site Content Database, the Site Collection Database, the Site Database, and the Site Index for the virtual server must all be assigned to the same subclient.
- Lotus Notes Document iDataAgent: Review Assigning Restore View Names to Newly-discovered Databases
- QR Agent: Follow these guidelines when adding a volume to a QR Agent subclient:
 - O The volume must correspond to a physical disk or RAID array.
 - o A volume created by volume management software other than VxVM is not valid subclient content.
 - o Subclients may have overlapping content; however, if two or more subclients overlap, they all must use the same snapshot engine. If the QR policies associated with the subclients are configured to use different snap engines, they must be reconfigured to use the same snap engine in this scenario.

• Caution Against Re-configuring Default Subclient Content

We recommend that you do not re-configure the content of a default subclient because this would disable its capability to serve as "catch-all" entity for client data. As a result, the likelihood that some data will not get backed up or scanned for archiving would increase.

Required Capability: See Capabilities and Permitted Actions

- To configure subclient content:
- 1. From the CommCell Browser, right-click the subclient for which you want to configure content, click All Tasks (if applicable) and then click Properties.
- 2. Follow the procedure below that is applicable for your agent:
 - o For File System, Active Directory, File Archiver, Exchange Public Folder *i*DataAgents, NDS, and SharePoint Server *i*DataAgents click the Subclient Properties (Content) tab and configure content for the subclient as described below for your agent:
 - For File System, Active Directory, File Archiver, NDS, and SharePoint Server iDataAgents: Type the full path of the data that you want to include as subclient content in the **Enter New Content** field, then click **Add**. Optionally, click **Browse** to enter the content. When browsing content while configuring SharePoint subclients, you can add content via multiple selections with the CTRL or SHIFT keys. For Windows, when specifying a UNC Path, click **As User**, and enter the user account information for the domain user with permissions for that path. For NetWare/DNS, see the Notes section below for content path examples. For Unix File Systems, you can enter the mount point of an NFS-mounted file system, see the Notes section below for examples.
 - For Exchange Public Folder iDataAgents: Click **Browse**, select folders to include as content, then click **Add**.
 - For the Unix File System iDataAgents, to facilitate the management of resource fork data in Apple double-encoded Macintosh files, click **Enable**Apple Double Support.
 - For the Unix File System iDataAgents, to view the actual data path for any symbolic link in the subclient content, click **Expand symbolic links of subclient content** and then click **Discover**.
 - o For NAS NDMP iDataAgents, configure the Backup Content Path field(s) as described below, then click Add:
 - Click the drop-down list arrow to display the root volumes on the file server. To change the root volume, click one in the list. If you want to refine the content path further, use the space to the right of (or below) the root volume list to enter additional path information. Note the following:
 - For NetApp, the root volume is the mount path of each volume.
 Example: for volume FS1 the root volume will be /vol/FS1.
 - For EMC Celerra, the root volume is the mount point created for a volume. Example: for volume FS1 with mount point /FS1 the root volume will be /FS1.
 - For Hitachi, no root volumes are shown in the drop down list. Type the full path of the root volume. Example: for volume FS1 with mount point /mnt/FS1 the root volume will be /mnt/FS1.
 - For BlueArc, the root volume is a combination of a descriptor of the path and the volume name. Example: for volume FS1 with a mount point of / the root volume will be / VOLUME /FS1.
 - Optionally, for NetApp NAS NDMP, click Browse to enter the content.
 - o For Exchange Mailbox and Exchange Mailbox/Public Folder Archiver Agents follow the procedure to Discover and Assign New Mailboxes or Assign Mailboxes to Another Subclient.
 - o For Lotus Notes Database and Document iDataAgents follow the procedure to Discover and Assign New Databases or Assign Databases to a Subclient.
 - o For DB2, DB2 DPF, Exchange Database, Novell GroupWise, SharePoint Server, SQL Server Database, Sybase, and MySQL iDataAgents, click the

Subclient Properties (Content) tab and configure content for the subclient as described below for your agent:

- For the DB2 *i*DataAgent, specify whether you want to include the entire database or a subset of this data as content for the subclient. For the DB2 DPF *i*DataAgent, specify whether you want to include all the affected database partitions or a subset of this data as content for the subclient.
- For Exchange and GroupWise iDataAgents: Click **Configure**. From the Add/Modify Subclients dialog box click the subclient entry for the database element/Storage Group that you want to add to the new subclient and select the name of the destination subclient from the list that appears. Alternatively, you can select and assign a range of databases/storage groups using the **Change all selected databases/storage groups to** list. Note that you must have at least one database element/Storage Group assigned to this subclient in order to save the configuration.

A database/Storage Group that is not configured for a subclient does not appear in the list. This can be the case if the subclient containing the database/Storage Group was deleted. If this happens, click **Discover** to display all databases/Storage Groups.

- For the SharePoint Server iDataAgent, follow the procedure to Discover and Assign New Data Types.
- For the Sybase *i*DataAgent, follow the procedure to Manually Discover Databases.
- For the MySQL iDataAgent, follow the procedure to Configure MySQL Databases.
- o For the Informix iDataAgent, click the Subclient Properties (Content) tab and define the contents of the subclient. Specifically, establish the backup mode for the data to be backed up, set the backup level, and decide whether to back up the emergency boot file and/or the ONCONFIG file.
- o For the Oracle, SAP for Oracle, or Oracle RAC *i*DataAgent, click the Subclient Properties (Content) tab and define the contents of the subclient. To configure this subclient for specialized types of backups, follow the appropriate procedure below:
 - Create Subclient for Backing Up Archived Redo Log Files
 - Create Subclient for Backing Up Offline Databases
 - Create Subclient for Backing Up Online Databases
 - Create Subclient for Performing Selective Online Full Backups
- o For SAN iDataAgents, click the Subclient Properties (Content) tab and configure content for the subclient as described below for your agent:
 - Image Level on Unix iDataAgent: Click Add. From the Add Content Path dialog box, select the volume(s) that you want to back up (use CTRL + click to select multiple volumes). Click OK. The selected volumes are added to the Contents of subclient list. These volumes are automatically configured to be CXBF devices. Alternatively, use Volume Explorer per specific scenarios to configure CXBF devices.
 - To configure an unmounted block device or raw device as content, first use Volume Explorer to configure the device as a CXBF device. Then select the configured CXBF device as subclient content. You can ignore the warning that is displayed.
 - For more information, see When to Use Volume Explorer. For a step-by-step procedure, see Configure a CXBF Device in Volume Explorer.
 - Image Level and Image Level ProxyHost on Windows iDataAgents: Click **Add**. Then in the **Add Content** dialog box, type the full path of the volume or mount point that you want to include as subclient content, then click **Add**. Optionally, click **Browse** to select the content. Click **OK**. The volume or mount point is added to the **Contents of subclient** list. Add additional content by repeating this step.
 - ProxyHost iDataAgent: Select a backup host from the Backup Host list. This is the computer to which the BCV is connected. Click Add. In the Content field of the Add/Edit Content for Subclient dialog box, type the primary host path of the content that you want to back up, or click Browse to find and select this data. In the Backup Host BCV Path field of the Add/Edit Content for Subclient dialog box, type the path through which the backup host accesses this data on the BCV, or click Browse to find and select this path. Click OK. The primary host data path and corresponding backup host BCV path are added as a single entry in the Contents of subclient list. To add additional entries, repeat these steps. Refer to Notes below for more information.
- o For Quick Recovery Agents, click the Subclient Properties (Content) tab and configure the following options:
 - Click **Add Volume**. From the Adding Volume dialog box, select volume(s) that you want to add to the subclient content (use CTRL + click to select multiple volumes). You can add/edit additional advanced options for the selected volume by select **Advanced** on the Adding Volume dialog box. Click **OK**.
 - Click Add App to select an application and associated volumes. Click **OK**.

Any instances you intend to protect and recover with the QR Agent must be configured in the QR Agent properties Authentication tab. They will not appear in the Add App dialog box if they are not configured. Only volumes containing datafiles and archive log files will be detected by Add App. Volumes containing control files and redo log files will not be detected.

For a clustered Exchange Server, if you are *not* using VSS to perform an online quiesce, sufficient permissions are required in order to be able to perform an offline quiesce; in such cases, ensure that the **User Name** specified has Exchange Administrator rights.

See also Configure Subclients for Overlapping Content.

3. Click **OK** to save your content configuration.

NOTES

- Content examples for NetWare are **OU=prospects.O=engineering.[Root]**, (for NDS content), and **SYS:\public** (for File System content).
- Content examples for adding an NFS-mounted file system to subclient content of a Unix File System iDataAgent:
 - o /mountpointA to include the entire file system at mountpointA
 - \circ $\mbox{\it /mountpointA/projects}$ for only the $\mbox{\it projects}$ directory within the file system at mountpointA.
- Informix subclients include one or more dbspaces. As databases are added to the dbspaces, the subclients are updated automatically.

- Exchange Mailbox iDataAgents and Exchange Mailbox/Public Folder Archiver Agents: Initially, all unconfigured mailboxes are assigned to the default subclient. You can create a new subclient and reassign mailboxes to this new subclient (within the same backup set/archive set). Once assigned, the mailboxes become part of the content of the new subclient.
- SharePoint Server iDataAgent: Initially, all unconfigured data types are assigned to the default subclient. You can create a new subclient and reassign data types to this new subclient. Once assigned, they become part of the content of the new subclient.
- ProxyHost iDataAgent: The primary host data path is backed up by the subclient and is the path through which the backup host accesses this data on the BCV. A primary host path and its corresponding backup host path are listed in the following format:

<primary_host_path> --> <backup_host_path>

For example, assume that you want to back up the **D:\data** directory from your primary host and **D:** is mirrored by a BCV, which is mapped to the backup host as **F:**. Consequently, the path to this data on the backup host is **F:\data**. When you add this directory to a subclient, it is listed in the **Contents of subclient** pane as **D:\data --> F:\data**.

The primary host path in the **Content** field is used for browse and restore purposes. However, it is the data in the **Backup Host BCV Path** which is actually backed up. If these two paths do not accurately correspond, the path that appears when data is browsed for restore does not accurately reflect the data that will be restored. In the example given above, assume that **D:\data** is entered in the **Content** field, while **F:\data1** is accidentally entered in the **Backup Host BCV Path**. If you browse and select **D:\data** to be restored, it is actually **D:\data1** that is restored. (Remember, **F:\Data1** is the path on the backup host that corresponds to **D:\data1** on the primary host.)

CONFIGURE THE SUBCLIENT FOR DATA ENCRYPTION

Encryption settings made at the subclient level are for data protection and recovery operations run from the CommCell Console and are not related in any way to settings made at the instance level which is for third-party Command Line operations only.

See Data Encryption - Support for a list of supported products.

Before You Begin

- Encryption must be enabled at the client level prior to configuring any subclients residing on that client. See Configure the Client for Data Encryption.
- If you are attempting to configure for third-party Command Line operations, do not use this procedure. See Configure Third-party Command Line Operations for Encryption.

Required Capability: Capabilities and Permitted Actions

- To configure the subclient for data encryption:
- 1. From the CommCell Console, right-click the subclient and click Properties.
- 2. From the Subclient Properties (Encryption) tab, select an option based on the criteria described in the Encryption tab help.
- 3. Click **OK** to save your settings and close subclient properties.

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Required Capability: Capabilities and Permitted Actions

- To configure the subclient for data encryption:
- 1. From the CommCell Console, right-click the subclient and click Properties.
- 2. From the Subclient Properties (Encryption) tab, select an option based on the criteria described in the Encryption tab help.
- 3. Click **OK** to save your settings and close subclient properties.

CREATE A NEW SUBCLIENT

Before You Begin

- · Review Subclients.
- Do not create a subclient while the parent node or any sibling subclient has a data protection or archive operation currently running on it.
- In cases where a new subclient is created with the same name as a deleted subclient, the system will append a Unix time stamp to the deleted subclient's name in data protection job history reports and views to distinguish the two subclients. For example, <code>subclientname 1104257351</code>.
- Informix iDataAgents: If you will be using the Informix ONBAR utility to create backup and restore scripts, you need not create subclients. Otherwise, if you will be using the CommCell Console to back up and restore Informix database objects (subsets/dbspaces), then you will need to create a subclient.
- ProxyHost iDataAgents: If you are using a BCV, you must prepare a batch file or a shell script file on the backup host containing commands to synchronize
 and split the BCV. The Resource Pack includes information on configurations for these batch files or shell scripts, as well as examples that apply to specific
 applications and hardware (e.g., Exchange databases in an EMC Symmetrix environment). See Resource Pack for more information on the Resource Pack.

The ProxyHost iDataAgent also requires that you set permissions for the batch/shell script file on the backup host.

- SQL Server Database iDataAgents: When running on Windows Server 2003 and VSS is enabled, the New Subclient command is not available.
- PostgreSQL iDataAgents: Once you configure the PostgreSQL instance, the system automatically generates the default backup sets and default subclients. However, you can use the CommCell Console to create user-defined subclients for dump backup sets to distribute some of the database content. You cannot create user-defined subclients for FS backup sets.

Required Capability: See Capabilities and Permitted Actions

To create a new subclient:

- From the CommCell Browser, right-click the node (agent/backup set/archive set/instance) for which you want to create a new subclient, click All Tasks (if applicable), and then simply click New Subclient for most agents.
 - For the SQL Server iDataAgent, expand New Subclient and click either Database to include individual databases or File/File Group to include database elements.
- 2. Click the General tab or General (Quick Recovery Agent) tab of the Subclient Properties dialog box and type the name (up to 32 characters) of the subclient that you want to create.
 - o For supported agents identified in Support Information Snapshot Engines, you can select a QSnap option to snap data and then perform a data protection operation on the data.
 - o For Image Level on Unix and Image Level ProxyHost on Unix, use the **Incremental Support Using** field to configure either a CXBF subclient or a checksum subclient and to enable incremental support for either subclient type.
 - o For QR Agents, you must also select a QR Policy from the QR Policy list.
 - o For the Windows iDataAgents that support VSS, you can optionally Enable VSS on a Subclient.
- 3. Select other options from the General tab as appropriate for the agent.
- 4. Click the Content or Databases tab of the Subclient Properties dialog box and Configure Subclient Content as appropriate for your agent.
- 5. For all agents (except QR), click the Storage Device (Data Storage Policy) tab of the Subclient Properties dialog box, then select a data storage policy to associate with this subclient from the storage policy list.
 - o For the DB2 and DB2 DPF *i*DataAgents, you can also change the number of data backup streams. For the DB2 DPF *i*DataAgent, the default stream threshold should be equal to the total number of database partitions for the subclient.
 - o For SQL Server *i*DataAgents, you can also click the Storage Device (Log Storage Policy) tab of the Subclient Properties dialog box, then select a log storage policy to associate with this subclient from the storage policy list and select the number of backup streams for transaction log backup jobs.
 - o For 1-Touch for Unix, it is strongly recommended that the storage policy that you select for the subclient configured for 1-Touch use a MediaAgent on a different computer. If you do this, and if the system crashes, the media will not have to be exported to another MediaAgent in order to recover the system.
- 6. For Oracle and DB2 *i*DataAgents, click the Backup Arguments (Oracle) or Backup Arguments (DB2, DB2 DPF) tab of the Subclient Properties dialog box and Configure Backup Arguments as appropriate for your agent. Note that the backup arguments for Informix are located on the Content tab.
- 7. For Migration Archiver Agents, click the **Archiving Rules** or **Rules** tab of the Subclient Properties dialog box and configure archiving rules as appropriate for your agent. In order to perform rules-based migration archiving operations, the **Disable All Rules** checkbox must be cleared.
 - If the File Archiver for Windows supports Data Classification, several filter-like configuration fields are defined as archiving rules and are available from the Subclient Properties (Rules) tab. If you want to define content and archiving rules based on file attributes other than volumes, size, and modified time (i.e., if you want to customize your rules), click the Advanced tab and configure as appropriate. Also, stub management options can be configured from the Stub Rule tab. See Configure Archiving Rules File Archiver Agents for step-by-step instructions.
- 8. For ProxyHost and Image Level ProxyHost *i*DataAgents, click the Pre/Post Process tab of the Subclient Properties dialog box. In the **PreScan** field, type the path to the batch file/shell script file that contains those commands that are to run before each backup of the subclient, or click **Browse** to locate and select this file. For ProxyHost and Image Level ProxyHost, the file must reside on the backup host or primary host.
- 9. Optionally (if supported for your agent) you can:
 - Add a Data Protection or Discovery Filter for a Subclient on the Filters tab.
 - Configure a Subclient for Pre/Post Processing of Data Protection/Archive Operations on the Pre/Post Process tab.

- Enable Software Compression for a Subclient on the Software Compression tab of the **Storage Device** tab.
- Configure the Subclient for Data Encryption on the Encryption tab.
- Enable or Disable Operations for this subclient on the Activity Control tab.
- Configure Mailbox Stores for Auto-Discovery on the Auto-discovery tab.
- Configure the Subclient for 1-Touch on the 1-Touch Recovery tab.
- · View or change the user group security associations for this subclient from the Security tab.
- Determine location from where archive logs will be backed up or deleted from the Log Destinations tab.
- 10. Click **OK** to save the subclient configuration. For QR Agents, this procedure is now complete. For all other agents, continue on to the next step.
- 11. The Backup Schedule dialog box advises you to schedule data protection operations for your new subclient. It is recommended you elect to set a schedule now. You can also associate this subclient with an All Agent Types schedule policy (which is automatically created by the system, or can be a user defined Data Protection schedule policy). If you have already associated a schedule policy at a previous level (Backup Set/Instance, Agent, Client, or Client Computer Group) the schedules defined in the Schedule Policy will be automatically applied to the new subclient. See Schedule Policy for more information.
 - o If you want to associate this subclient with an All Agent Types schedule policy, click **Associate with Generic Schedule Policy**, and then select that schedule policy from the drop-down list box. Click **OK**.
 - o If you want to associate this subclient with a specific schedule policy, click **Associate to schedule policy**, and then select the schedule policy from the drop-down list box. Click **OK**.
 - O If you have selected to define a schedule for this subclient:
 - Click Schedule.
 - From the Backup/Archive Options dialog box, select the type of data protection operation that you want to schedule.
 - If you want to set Advanced Backup/Archive Options, click **Advanced**.
 - After selecting the data protection type and any advanced options, click OK. The Schedule Details dialog box appears.
 - From the Schedule Details tab, select the scheduling options that you want to apply, then click **OK**.
 - o If you don't want to create a data protection schedule at this time, click **Do Not Schedule,** and then click **OK**.

This task is now complete.

DELETE A DATA PROTECTION FILTER FROM A SUBCLIENT

Before You Begin

- Review Filters.
- Do not change the data protection or discovery filter of a subclient that has a data protection operation in progress.
- File Archiver for Windows/Unix Agents: We recommend that you don't delete the following entries from the exclusion filter, as it could cause your file system to be inoperable. For Windows, these include: *.dll, *.bat, *.exe, *.cur, *.ico, *.lnk. For Unix, these include *.a, *.ksh, *.csh, *.sh, *.lib, *.so.

Required Capability: Capabilities and Permitted Actions

- To delete a data protection or discovery filter entry from a subclient:
- 1. From the CommCell Browser, right-click the subclient whose data protection or discovery filter you want to delete, and then click **Properties** from the shortcut menu.
- 2. Click the Filters tab of the Subclient Properties dialog box.
- 3. To delete an entry from the Exclusions list, click the entry in the upper pane then click the upper **Delete** button. (Repeat this step for each entry that you want to delete.)
- 4. To delete an entry from the Exceptions list (if applicable for your agent), click the entry in the lower pane then click the lower **Delete** button. (Repeat this step for each entry that you want to delete.)
- 5. Click **OK** to save your changes.

NOTES

- Whenever you delete an entry from the exclusion filter, check if the exceptions list (i.e., lower pane) contains any entries that are children of the deleted data (if applicable for your agent). If so, you should delete them as described in Step 4 since they no longer need to be listed. The system automatically deletes any exceptions that are children of a deleted exclusion unless you used wildcard expressions in the exclusion path.
- When you change a data protection or discovery filter, the change is effective the next time the subclient is backed up/archived.
- Data will not be backed up in a differential backup for a subclient after a filter was removed.
- Since Incremental backups only back up data that has been modified since the last backup, previously filtered files whose filters are now removed, will not be backed up unless they have been modified since that last backup. To back up previously filtered files that have not been modified but whose filters have been removed since the last backup, you need to run a Full backup.

• Performing a full backup after changing filters or exceptions is recommended.

DELETE A USER-DEFINED SUBCLIENT

Related Topics:

- Command Line Interface gdelete subclient
- Subclients

Required Capability: See Capabilities and Permitted Actions

- To delete a user-defined subclient:
- 1. From the CommCell Browser, right-click the user-defined subclient that you want to delete, and then click **Delete** from the shortcut menu.
- A confirmation message is displayed, asking if you want to delete the subclient.
 Click No to cancel the deletion and retain the subclient, or click Yes to continue the deletion. If you click Yes:
 - o the subclient, and any data that may have been protected/archived by the subclient are logically deleted, and you can no longer access the corresponding data for recovery/retrieve purposes. However, the data remains valid for the length of time specified by the associated retention period. Some agents allow you to browse data from a deleted subclient provided that the Browse Data Before date and time precedes the time that the user-defined subclient was deleted.
 - o for agents that support a default subclient, once the user-defined subclient is deleted its contents are automatically reallocated to the default subclient the next time a data protection/archive/discovery operation is run on the default subclient to ensure data protection coverage.
 - o the system deletes the selected subclient node and removes it from the CommCell Browser.
 - o the system deletes any data protection/archive and recovery/retrieve job schedules that are associated with the subclient.

ENABLE OR DISABLE OPERATIONS

Required Capability: See Capabilities and Permitted Actions

| Level | Capability |
|-----------------------|--|
| CommCell | Administrative Management with CommCell level association |
| Client Computer Group | Administrative Management with Client Computer Group level association |
| Client | Agent Management with Client level association |
| Agent | Agent Management with Agent level association |
| Subclient | Agent Management with Subclient level association |

- To enable or disable activity control at the CommCell, client computer group, client, agent, or subclient levels:
- 1. From the CommCell Browser, right-click the CommServe, client computer group, client computer, agent, or subclient, and then click **Properties** from the short-cut menu.
- 2. From the Activity Control tab of the associated Properties dialog box, select or clear option(s), as desired.
- 3. Click OK.



Disabled data management and/or data recovery operations are displayed with client and/or agent icon changes in the CommCell Browser. For a comprehensive list of all icons in the CommCell Console, see CommCell Console Icons.

ENABLE OR DISABLE SOFTWARE COMPRESSION FOR A SUBCLIENT

Before you Begin

• Do not enable/disable software compression for a subclient that is being backed up/archived.

Required Capability: Capabilities and Permitted Actions

- To enable software compression for a subclient:
- 1. From the CommCell Browser, right-click the subclient for which you wish to enable software compression and then click **Properties**.
- 2. Click the Storage Device tab and from the Data Storage Policy tab, select the storage policy from the Storage Policy list.
 - If applicable for the selected agent, click the Log Storage Policy tab and select a storage policy from the Transaction Log Storage Policy list.
- 3. Then click the Storage Device (Data Transfer Option) tab and choose the appropriate compression option for this subclient.
- 4. Click **OK** to save your changes.

This task is now complete.

REMOVE A PROCESS FROM PRE/POST PROCESSING OF DATA PROTECTION/ARCHIVE OPERATIONS

Before You Begin

- We recommend not removing a pre/post process for a subclient that is currently running a data protection or archive operation.
- Review the Overview and Agent-Specific Guidelines for your agent before removing pre/post processes for data protection/archive operations.

Required Capability: Capabilities and Permitted Actions

- To remove a process from Pre/Post processing of data protection/archive operations:
- 1. From the CommCell Browser, right-click the subclient for which you want to remove a pre/post process, and then click **Properties** from the shortcut
- 2. Click the Pre/Post Process tab of the Subclient Properties dialog box.
- 3. Click the text inside the space that corresponds to one of the following phases for which you want a pre/post process removed, then press the **Delete** key:
 - o PreScan
 - o PreArchive
 - PreCopy
 - o PreSnap
 - o PostBackup
 - $\circ \ \ PostScan$
 - o PostArchive
 - PostCopy
 - o PostSnap
- 4. Repeat Step 3 for any additional processes that you want to remove.
- 5. Click OK.

RENAME A SUBCLIENT

Before You Begin

- You can rename a subclient at any time. However, we recommend that you don't rename a subclient while a data protection or archive operation is running on that subclient.
- In cases where a subclient is renamed using the same name as a deleted subclient, the system will append a Unix time stamp to the deleted subclient's name in data protection job history reports and views to distinguish the two subclients. For example, subclientname_1104257351.

Required Capability: See Capabilities and Permitted Actions

- To rename a subclient:
- 1. From the CommCell Browser, right-click the subclient that you want to rename, and then click **Properties** from the shortcut menu.
- 2. From the Subclient Properties (General) tab, or the QR Agent Subclient Properties (General) tab, type the new name in the **Subclient Name** field, and then click **OK**.

The CommCell Browser updates the subclient with its new name. The new name will also be reflected in any associated schedules and reports.

SET THE NETWORK BANDWIDTH AND NETWORK AGENTS FOR A DATA PROTECTION OPERATION

Before you Begin

• Do not modify the network bandwidth and network agents for a subclient or instance that is being backed up.

Required Capability: Capabilities and Permitted Actions

- To Set the Network Bandwidth and Network Agents for a Data Protection Operation:
- 1. From the CommCell Browser, right-click a subclient and then click **Properties.**
 - For the DB2, DB2 DPF, Informix, Oracle, Oracle RAC, SAP, or Sybase iDataAgent, right-click an instance and then click Properties.
- 2. Click the **Storage Device** Data Transfer Option tab.

For the QR Agent:

- o To control network bandwidth settings, use the Throttle Network Bandwidth section in the General tab of the Subclient Properties dialog box.
- O To control the number of network agents, you must create a nQRNetworkAgents registry key.
- 3. Enter a number of **Network Agents** that must be used to perform data protection operations on the subclient/instance.
- 4. Click the **Throttle Network Bandwidth (MB/HR)** option and then enter the throughput as needed. Note that throttling is done on a per Network Agent basis.
- 5. Click **OK** to save the changes.

This task is now complete.

VIEW DATA PATHS ASSOCIATED WITH A SUBCLIENT

Required Capability: See Capabilities and Permitted Actions

- To view data paths:
- 1. From the CommCell Browser, right-click the subclient whose data paths you want to view, then click **Properties** from the shortcut menu.
- 2. Click the Storage Device tab of the Subclient Properties dialog box.
- 3. From the **Data [or Logs] Storage Policy** tab, click **Show Data Paths** to view the data paths used by the subclient to access the storage media for data protection operations. Click **Close** to exit the Data Paths dialog box.
- 4. Click **OK** to exit the Subclient Properties Storage Device tab.

VIEW SUBCLIENT CONTENT

Required Capability: See Capabilities and Permitted Actions

- To view content of a subclient:
- 1. From the CommCell Browser, right-click the subclient whose content you want to view, then click **Properties**.
- 2. From the Subclient Properties dialog box, click the **Content** tab (or **Databases** tab for Lotus Notes) to view the contents of the subclient.
- 3. Click \mathbf{OK} to close the dialog box.

DISABLE GLOBAL FILTERS ON A SUBCLIENT

Before You Begin

- Review Global Filters.
- Do not disable the Global Filter for a subclient that has a data protection operation in progress.
- Performing a full backup after disabling the Global Filter on a subclient is recommended.
- When you disable the Global Filter on a subclient, the change is effective the next time a data protection operation is run on the subclient.

Required Capability: Capabilities and Permitted Actions

- To disable the Global Filter on a subclient:
- 1. From the CommCell Browser, right-click the subclient whose Global Filter you want to disable, and then click **Properties** from the shortcut menu.
- 2. Click the Filters tab of the Subclient Properties dialog box.
- 3. To disable Global Filters on this subclient, select one of the following values from the Include Global Filters list:
 - O OFF select this option to always disable Global Filters for this subclient.
 - o Use Cell Level Policy select this option to disable Global Filters for this subclient only when the **Use Global Filters on All Subclients** option is disabled on the **Control Panel (Global Filters)** dialog.
- 4. Click **OK** to save your changes.

ADD/EDIT A DATA PROTECTION FILTER FOR A SUBCLIENT

Before You Begin

- Review Filters.
- Do not change the data protection or discovery filter of a subclient that has a data protection operation in progress.
- The system does not allow you to add entries that are not content of a particular subclient to that subclient's filter.
- For BlueArc and EMC Celerra (running at least DART OS 5.6.x) subclients, the filter string with or without wildcards must match the name or path of the file
 or directory being filtered.
- For NetApp subclients only name type filters (with wildcards) are supported:
 - o You cannot enter paths as a filter (e.g. /vol/vol0/datal). Since NetApp does not support the use of paths in filters, if there are multiple files with the same name, even though they may be in different directories, all of them will be excluded from backups.
 - O Name of the file or directory must exactly match the filter string.
 - O You can specify a maximum of 32 strings in the exclude list.

Select the desired procedure:

- To add a data protection or discovery filter for a subclient
- To edit a data protection filter for a subclient

Required Capability: Capabilities and Permitted Actions

- To add a data protection or discovery filter entry for a subclient:
- 1. From the CommCell Browser, right-click the subclient whose data protection or discovery filter you want to add, and then click **Properties** from the shortcut menu.
- 2. Click the Filters tab of the Subclient Properties dialog box.
- 3. For Exchange Mailbox, Exchange Mailbox/Public Folder Archiver Agents and Exchange Compliance Archiver, to specify a mailbox or folder that you want to exclude from data protection operations:
 - O Click the upper Add button.
 - o From the Browse window, expand the mailbox tree of the client computer.
 - o Click the mailbox or folder that you want to exclude from the backup/archive operations on the selected subclient, and then click **Add**. (Repeat this step for each additional entry.)
 - o From the Browse window, click **OK**.
 - The mailboxes or folders that you selected appear as entries in the upper pane. Repeat this step if you want to add more mailboxes and/or folders to the filter.
- 4. For NAS NDMP iDataAgents, click the **Add** button and, in the input window, type the name of the file, directory, (or path for BlueArc) that you want to exclude from the backups and click **OK**. The name displays as an entry in the **Exclude these files/folders/patterns** pane. Repeat this step if you want to add more files, directories, or paths to the filter.
- 5. For SharePoint Server iDataAgents, to specify a URL/file/folder/pattern that you want to exclude from data protection operations or to specify an exception filter for database backup sets, do one of the following:
 - o Click the **Add** button next to **Exclude these files/folder/patterns**: input window and type the URLs of site collections that you want to exclude from the backups and click **OK**. The site collection displays as an entry in the **Exclude these files/folders/patterns** pane. Wildcards are supported. See Wildcards for more information. Repeat this step if you want to add more URLs, files, directories, or paths to the filter.
 - Click the Add button next to Except for these files/folders: input window and type the URLs/folders of site collections that you want to be
 exceptions for the exclusion filter and click OK. These exceptions will be included in the data protection operations. Wildcards are not supported for
 exception filters.
- 6. For Exchange Public Folder *i*DataAgents and SharePoint Server *i*DataAgent, to specify a workspace/folder that you want to exclude from the backups, click the upper **Browse** button and expand the *i*DataAgent of the client computer. Click the workspace/folder that you want to exclude from the backups and then click **Add**. Repeat this step for each additional entry.
- 7. For Windows/Unix/Macintosh File System *i*DataAgents, File Archiver for Windows/Unix Agents, and ProxyHost *i*DataAgent, to specify a file/folder/directory that you want to exclude from data protection operations, do one of the following:
 - o Click the upper **Add** button and, in the **Enter Path** window, type the complete path (including drive letter) of the file/folder/directory that you want to exclude from the backups/archive operations. Repeat this step if you want to add more files/folders/directories to the filter.
 - o Click the upper **Browse** button and expand the file system of the client computer. Click the file/folder/directory that you want to exclude from backups/archive operations and then click **Add**. Repeat this step for each additional entry.
- 8. For NetWare File System/NDS iDataAgents, to specify data that you want excluded from the backups, do one of the following:
 - $\,\circ\,$ To manually enter the path:
 - Click the Add button.
 - In the Input window, type the complete path (e.g., VOL1:\demo\disk2) of the data that you want to exclude.
 - Click **OK**. (The path that you typed displays as an entry in the upper pane.) Repeat this step if you want to exclude more data.
 - o To browse and select a path:

- Click the **Browse** button.
- From the Backup Data window, expand the file system or NDS tree of the NetWare server.
- Select the data that you want to exclude, and then click **Add**. Repeat this step for each additional entry.
- From the Backup Data window, click **OK.** The data that you selected displays as entries in the upper pane.
- 9. For Lotus Notes Database and Lotus Notes Document *i*DataAgents, to specify a file or folder that you want to exclude from discovery, do one of the following:
 - o Select the **Pattern/path to be excluded** field. Then type in a file or folder that you want to exclude. The format of the entry should start with a slash (\). The path entered is always relative to the data path of the partition. Then click **Add**. Repeat this step for each additional entry.
 - o Click the upper **Browse** button and expand the file system of the client computer. Click the file or folder that you want to exclude from the backups and then click **Add**. Repeat this step for each additional entry.
- 10. For Exchange Mailbox, Exchange Mailbox/Public Folder Archiver Agents and Exchange Compliance Archiver, to specify a wildcard pattern of the folders that you want to exclude across all mailboxes within the subclient:
 - Click the lower Add button.
 - o In the Input window, type the wildcard pattern of the folders that you want to exclude from backup/archive operations on the selected subclient.
 - o Click **OK**. The path that you typed appears as an entry in the lower pane. Repeat this step if you want to add more entries to the filter.
- 11. For Exchange Public Folder *i*DataAgents and SharePoint Server *i*DataAgent, to specify an exception to an excluded workspace/folder (i.e., a folder/document that you want included in the backups, but whose parent directory has been excluded), click the lower **Browse** button and expand the *i*DataAgent of the client computer. Click the workspace/folder that you want to include in the backups and then click **Add**. Repeat this step for each additional entry.
- 12. For Windows/Unix/Macintosh File System *i*DataAgents, File Archiver for Windows/Unix Agents, and ProxyHost *i*DataAgent, to specify an exception to an excluded folder/directory (i.e., a file or folder/directory that you want included in the data protection operations, but whose parent folder/directory has been excluded), do one of the following:
 - o Click the lower **Add** button and, in the **Enter Path** window, type the complete path (including drive letter) of the file/folder/directory that you want to include in the backups/archive operations. Repeat this step if you want to add more exceptions to the filter.
 - o Click the lower **Browse** button and expand the file system of the client computer. Click the file/folder/directory that you want to include in the backups/archive operations and then click **Add**. Repeat this step for each additional entry.
- 13. For NetWare File System/NDS iDataAgents, to specify an exception to an excluded directory or NDS container (i.e., data that you want included in the backups, but whose parent directory or NDS container has been excluded), do one of the following:
 - O To manually enter the path:
 - Click the Add button.
 - In the Input window, type the complete path (e.g., VOL1:\demo\disk2\readme) of the data that you want to include.
 - Click OK.
 - O To browse and select a path:
 - Click the **Browse** button.
 - From the Backup Data window, expand the file system or NDS tree of the NetWare server.
 - Click the file or folder that you want to include in the backups and then click Add. Repeat this step for each additional entry.
 - Click **OK.** The selected data displays as entries in the lower pane.
- 14. Click **OK** to save your changes.

Required Capability: Capabilities and Permitted Actions

- To edit a data protection filter entry for a subclient;
- 1. From the CommCell Browser, right-click the subclient whose data protection filter you want to edit, and then click **Properties** from the shortcut menu.
- 2. Click the Filters tab of the Subclient Properties dialog box.
- 3. Click the filter entry that you want to edit, and then click the **Edit** button associated with that pane.
- 4. Type the changes into the ${f Enter\ Path}$ dialog box, then click ${f OK}.$
- 5. Click **OK** to save your changes.

NOTES

- When you change a data protection or discovery filter, the change is effective the next time a data protection operation is run on the applicable subclient.
- Performing a full backup after changing filters or exceptions is recommended.

Back To Top

Archive History

Topics | How To | Related Topics

Overview

Items That Failed

Content Indexing Failures

Items that were Successfully Content Indexed

Pruning Backup History Information

Messages That Were Archived

OVERVIEW

The Archive History Filter dialog box allows you to view detailed, historical information about archive operations.

Once you have chosen your filter options, they are displayed in the Archive Job History window.

For information on Job Details displayed in the Job History, see Viewing Job Information.

From this window you can view more detailed information such as:

- The items that failed during the archive job.
- Files that were not indexed during an archive job that performed content indexing.
- · Details of the archive job.
- Associated media.
- Events of the archive job.
- Messages that were archived.
- Log files of the archive job.

ITEMS THAT FAILED

The items that failed for a migration or archive operation include individual files or messages that may fail even though a particular archive operation completed successfully. You can determine the degree of success for these jobs by using this window.

Filters can be used in conjunction with the "Items That Failed" list on the data protection Job History Report to eliminate backup or archive failures by excluding items which consistently fail that are not integral to the operation of the system or applications. Some items fail because they are locked by the operating system or application and cannot be opened at the time of the data protection operation. This often occurs with certain system-related files and database application files.

CONTENT INDEXING FAILURES

Content Indexing failures allows you to look at the messages, files and documents that could not be indexed during a content Indexing operation. Content Indexing looks at each file (of the supported data types) and indexes its contents allowing advanced searches of backed up/archived data.

Files that were not indexed, (perhaps because the file's content could not be read) are added to the Content Indexing Failures list, and are viewable from the View Content Index (Failed Items) option in the Job History window. For step-by-step instruction, see View the Items that Failed to Content Index.

ITEMS THAT WERE SUCCESSFULLY CONTENT INDEXED

You can view the list of items that were successfully content indexed during a Content Indexing operation for a particular job. for step-by-step instructions, see View the Items that Were Successfully Content Indexed.

PRUNING BACKUP HISTORY INFORMATION

You can prune migration history information based on the number of days established in the **Days to keep the archive job histories** option from the **Media Management Configuration (Service Configuration)** dialog box available in the **Control Panel**.

MESSAGES THAT WERE ARCHIVED

You can view the messages that were archived during the archive operation by selecting the View Archived Messages option from an archive history window.

Back to Top

Archive Job History - How To

Topics | How To | Related Topics

View Archive Job History

View Job History Details

View the Events of a Job History

View the Media of a Job History

View the Items That Failed For a Data Protection Operation

View the Items that Were Not Indexed During Content Indexing

View the Items that Were Successfully Content Indexed

View Archived Messages

View the Log Files of a Job History

VIEW ARCHIVE JOB HISTORY

- To view the job history of archive operations:
- From the CommCell Browser, right-click the agent whose archive history you want to view, click View, then click View Job History -> Archive, or select View Retrieve History.
- 2. From the Archive Job History Filter, select the desired options, then click \mathbf{OK} .
- 3. The system displays the Archive Job History window using the options you selected.
- 4. Click OK.

VIEW JOB HISTORY DETAILS

Required Capability: See Capabilities and Permitted Actions

- To view the details of a job history:
- 1. From the CommCell Browser, right-click the entity (e.g., subclient, client computer, etc.) whose job history you want to view, click **View**, and then click job history.
- 2. From the Job History Filter dialog box, select the filter options that you want to apply and click **OK**.
- 3. From the Data Management Job History window, right-click the job whose job details you want to view, and then click View Job Details.
- 4. The Job Details dialog box appears, displaying detailed job history in General, Details, Phase Details and Attempts tabs for the selected job.
- 5. Click **OK**.



If viewing the details of a job with a pending or failed status, the **Reason for Job Delay** field will contain an Error Code, which, if clicked, will launch the customer support website displaying troubleshooting article(s) related to the specific issue.

VIEW THE EVENTS OF A JOB HISTORY

Required Capability: See Capabilities and Permitted Actions

- To view the events associated with a job:
- 1. From the CommCell Browser, right-click the entity (e.g., subclient, client computer, etc.) whose job history you want to view, click View, and then click

Job History.

- 2. From the Job History Filter dialog box, select the filter options that you want to apply and click **OK**.
- 3. From the Data Management Job History window, right-click the job whose job details you want to view, and then click View Events.
- 4. The All Found Events window gets displayed. If no events where found for the back up, a message is displayed to that effect.
- 5. Click Close.

VIEW THE MEDIA OR MOUNT PATHS OF A JOB HISTORY

- To view media or mount paths associated with a job history:
- 1. From the CommCell Browser, right-click the entity (e.g., subclient, client computer, etc.) whose job history you want to view, click **View**, and then select the appropriate history.
- 2. From the Job History window select the filter options, if any, that you want to apply, and then click **OK**.
- 3. From the job history widow, right-click the backup whose media or mount paths you want to view, and then click View Media.
- 4. The Media Used By Job ID window displays a list of media or mount paths used by the operation.
- 5. Click OK.

VIEW THE ITEMS THAT FAILED FOR A DATA PROTECTION OPERATION



A listing of files and folders that failed is not available for the Quick Recovery Agent, nor the Image Level and Image Level ProxyHost ¡DataAgents. These agents do not perform a file level backup/copy.

- To view the list of items that failed for a data protection operation:
- 1. From the CommCell Browser, right-click the entity whose history of data protection operations you want to view, click **View**, and then click to view a job history.
- 2. From the Job History Filter dialog box, select the filter options, if any, that you want to apply, and then click **OK**.
- From the Job History window, right-click the operation whose list of failed items you want to view, and then select View Failed Items. The Unsuccessful Backup Files window (for DataArchiver Agents, Items On Which Archive Failed) displays those items that failed. If no items failed, a message to that effect is displayed.
- 4. Click Close.

VIEW THE ITEMS THAT FAILED TO CONTENT INDEX



This option is available for operations that performed content indexing.

- To view the list of items that failed to content index:
- 1. From the CommCell Browser, right-click the entity whose operations you want to view, click **View**, and then click the necessary options to view a job history.
- 2. From the Job History Filter dialog box, select the filter options, if any, that you want to apply, and then click **OK**.
- 3. From the Job History window, right-click the job for which you want to view the list of items failed to content index, select **View Content Index**, and click **Failed Items**.
- 4. Click Close.
- 5. Click **Close** from the **Job History** window.

VIEW THE ITEMS THAT WERE SUCCESSFULLY CONTENT INDEXED



This option is available for operations that performed content indexing.

To view the list items that were not indexed during content indexing:

- 1. From the CommCell Browser, right-click the entity whose operations you want to view, click **View**, and then click the necessary options to view a job history.
- 2. From the Job History Filter dialog box, select the filter options, if any, that you want to apply, and then click **OK**.
- 3. From the Job History window, right-click the job for which you want to view the successfully content indexed items, select **View Content Index**, and click **Successful Items**.
- 4. Click Close.
- 5. Click **Close** from the **Job History** window.

VIEW ARCHIVED MESSAGES

- To view the messages that were archived during an archive operation:
- 1. From the CommCell Browser, right-click the agent whose archive history you want to view, click View, then select View Archive History.
- 2. From the Archive History Filter, select the desired options, then click \mathbf{OK} .
- 3. The system displays the Archive Job History window using the options you selected.
- 4. Right-click the appropriate archive job, then click **View Archived Messages**. The **Archived Messages List** window displays the messages that were archived during the archive operation.
- Click File ->Exit.

VIEW THE LOG FILES OF A JOB HISTORY

Required Capability: See Capabilities and Permitted Actions

- To view the log files of a Job History:
- 1. From the CommCell Browser, right-click the entity whose job history you want to view, and then click to view a job history.
- 2. From the job history filter window select the filter options, if any, that you want to apply, and then click **OK**.
- 3. From the job history window, right-click the job whose log files you want to view, and then click View Logs.
- 4. The contents of the log file related to the selected job history are displayed in the \mathbf{Log} File for \mathbf{Job} n window.

Back to Top

Recovery/Retrieve History

Topics | How To | Related Topics

Overview

Items That Recovered

• Showing Recovered Objects for DataArchiver Persistent Recovery Jobs

Pruning Recovery History Information

Recovery/Retrieve History Considerations

OVERVIEW

The **Recovery/Retrieve History Filter** dialog box allows you to view detailed, historical information about recovery or retrieve operations for the DataArchiver agents.

For information on Job Details displayed in the Job History, see Viewing Job Information.

Once chosen, your filter options are then displayed in the Recovery/Retrieve Job History window. From this window you can view more detailed information such as the:

- Items that did/did not recover during the recovery or retrieve job.
- Details of the recovery or retrieve job.
- Events of the recovery or retrieve job.
- Log files of the recovery or retrieve job.

If you want to change the number of days that DataArchiver recovery job history is kept, go to the Control Panel's Media Management Configuration (Data Aging) dialog box and change the settings for the **Days to keep the archiver restore job histories** field.

ITEMS THAT RECOVERED

The list of files that were recovered or retrieved by a data recovery or retrieve operation include those files that were successfully written back to the client file system are appended with the word:

- RESTORED (with the File Archiver Agent)
- RESTORED NEW (with the Exchange Mailbox/Public Folder Archiver Agents and the Exchange Compliance Archiver Agent)

Occasionally, data may not have been recovered or retrieved due to errors. Such data is appended with the word Not Restored.

Under some circumstances, the system may not recover or retrieve certain files because they are older versions of the same files already present in the files system. Such files are appended with the word OLDER. However, this word differs if the following recovery options are selected for Exchange Mailbox/Public Folder Archiver Agents:

- If the option Overwrite is selected then the message will have be appended with EXISTED, OVERWROTE.
- If the option <code>Skip</code> is selected, then the message will be appended with <code>EXISTED</code>, <code>SKIPPED</code>.

SHOWING RECOVERED OBJECTS FOR DATAARCHIVER PERSISTENT RECOVERY JOBS

The Show Recovered Objects List option may be unavailable from the Recovery History window for DataArchiver stub recovery jobs associated with a common open pipeline (i.e., persistent recovery jobs). This includes stub recoveries from disk media for File Archiver for Windows/Unix/NetWare, and stub recoveries from both tape and disk media for File Archiver for Windows/Unix/NetWare instances (Local File System, Celerra, FPolicy, Network File Share). In order to view the list of recovered objects for these DataArchiver persistent recovery jobs, select the View Job Details option then access the Job Details (Details) tab.

You can use the nDMRSendFileStatus registry key to reduce the frequency at which the stub recovery job statistics are sent to Job Manager for updating the Recovery Job History views and reports. This is useful for increasing the efficiency of system resources in cases where there are frequent stub recalls and there is no need to update the Job History immediately after each stub recall.

PRUNING RECOVERY HISTORY INFORMATION

You can prune recovery history information based on the number of days established in the **Days to keep the archiver restore job histories** option from the Media Management Configuration (Data Aging) dialog box available in the **Control Panel**.

RECOVERY/RETRIEVE HISTORY CONSIDERATIONS

- Keep in mind that stub recall job history cannot be viewed for File Archiver for Windows recall jobs initiated from the physical node of a cluster in cases where only the driver is loaded on that node. However, browse recovery jobs which are initiated from the virtual server can still be viewed in job history. To obtain statistics on stub recall jobs in this scenario, we recommend running the Stub Recall Summary Report.
- When viewing the Recovery History of Stub Recalls (via the **Stub Recall Jobs** tab), it will be displayed as originating from the **defaultArchiveSet** and the first **Partition** even if a user-defined Archive Set or other partition were used during the recall. Partitions are applicable to Domino Mailbox Archiver.

Back to Top

Recovery History - How To

Topics | How To | Related Topics

View Recovery/Retrieve Job History

View Job History Details

View the Events of a Job History

View the Items Recovered for a Data Recovery Operation

View the Log Files of a Job History

VIEWING RECOVERY/RETRIEVE JOB HISTORY

To view the job history of recovery/retrieve operations:

- From the CommCell Browser, right-click the agent whose recovery/retrieve history you want to view, click View, then click Job History -> Recovery, or click View Retrieve History.
- 2. From the Recovery/Retrieve History Filter select the desired options, then click **OK**.
- 3. The system displays the Recovery/Retrieve Job History window using the options you selected.
- 4. Click OK.

VIEW JOB HISTORY DETAILS

Required Capability: See Capabilities and Permitted Actions

- To view the details of a job history:
- 1. From the CommCell Browser, right-click the entity (e.g., subclient, client computer, etc.) whose job history you want to view, click **View**, and then click job history.
- 2. From the Job History Filter dialog box, select the filter options that you want to apply and click \mathbf{OK} .
- 3. From the Data Management Job History window, right-click the job whose job details you want to view, and then click View Job Details.
- 4. The Job Details dialog box appears, displaying detailed job history in General, Details, Phase Details and Attempts tabs for the selected job.
- 5. Click **OK**.



If viewing the details of a job with a pending or failed status, the **Reason for Job Delay** field will contain an Error Code, which, if clicked, will launch the customer support website displaying troubleshooting article(s) related to the specific issue.

VIEW THE EVENTS OF A JOB HISTORY

Required Capability: See Capabilities and Permitted Actions

To view the events associated with a job:

 From the CommCell Browser, right-click the entity (e.g., subclient, client computer, etc.) whose job history you want to view, click View, and then click Job History.

- 2. From the Job History Filter dialog box, select the filter options that you want to apply and click **OK**.
- 3. From the Data Management Job History window, right-click the job whose job details you want to view, and then click View Events.
- 4. The All Found Events window gets displayed. If no events where found for the back up, a message is displayed to that effect.
- 5. Click Close.

VIEW THE ITEMS THAT RESTORED/RECOVERED FOR A DATA RECOVERY OPERATION

- To view the list of files that were restored/recovered for a data recovery operation:
- 1. From the CommCell Browser, right-click the entity whose data recovery operation history you want to view, click **View**, and then click to view a job history.
- 2. From the Job History Filter window, select the filter options, if any, that you want to apply, and then click **OK**.
- 3. From the Job History window, right-click the job whose list of restored files you want to view, and then select **View Restore Files List** (for DataArchiver Agents select **Show Recovered Objects List**). The **Restored Files** window (for DataArchiver Agents it is the **Recovered Objects** window) displays those items that were restored/recovered. If no items failed, a message is displayed to that effect.
- 4. Click Close.

VIEW THE LOG FILES OF A JOB HISTORY

Required Capability: See Capabilities and Permitted Actions

- To view the log files of a Job History:
- 1. From the CommCell Browser, right-click the entity whose job history you want to view, and then click to view a job history.
- 2. From the job history filter window select the filter options, if any, that you want to apply, and then click **OK**.
- 3. From the job history window, right-click the job whose log files you want to view, and then click View Logs.
- 4. The contents of the log file related to the selected job history are displayed in the \mathbf{Log} File for \mathbf{Job} \mathbf{n} window.

Back to Top