

External Data Connector (NetBackup)

TABLE OF CONTENTS

OVERVIEW

SYSTEM REQUIREMENTS

INSTALLATION

DISCOVER AND MIGRATE NETBACKUP CLIENTS

Overview

- How Discovery Works

- How Migration Works

Your First Discovery

- Run a Discovery Immediately

- Schedule a Discovery

Your First Migration

- Install CommCell Components

- Associate a Storage Policy

- Enable Data Protection and Recovery

- Enable Schedules and Schedule Policies

Viewing Job Information

DISCOVER AND MIGRATE NETBACKUP CLIENTS - ADVANCED

Overview

Components Created After Discovery

- Configuration Entities

- Job Entities

- Media Entities

Components Created After Migration

Discover Based on Specific Criteria

- Discover Clients by Agent Type

- Discover Clients by Client Name

Advanced Discovery Options

Decoupled Database Capture

- Install External Data Connector on the NetBackup Master Server

- Create an XML File Containing NetBackup Database Information

- Populate the XML File in the CommServe

Scripted Database Staging

- Create a New NetBackup Master Server in the CommCell

- Apply the Original NetBackup Master Server's Database to the New NetBackup Master Server

Troubleshooting

Related Reports

- CommCell Reports

- CommNet Reports

Overview - External Data Connector (NetBackup)

TABLE OF CONTENTS

Introduction

Key Features

Supported NetBackup Versions

Terminology

INTRODUCTION

External Data Connector (EDC) provides the facility to collect and merge vital information from NetBackup cells to a CommCell. NetBackup's vital configurations, such as policies, backup content, client computer names, data protection schedules, encryption and compression settings are automatically collected and merged to the CommCell.

After the merge has completed, CommCell Agents can be installed directly on the previous NetBackup clients using the CommCell Console. Backup content, schedules, and other settings will remain on the clients, which greatly reduces configuration time. Data Protection historical records are also captured and merged to the CommCell. Thus, various CommCell and CommNet reports can be run for the historical NetBackup data.

KEY FEATURES

External Data Connector provides the following key features:

COMPLETE DISCOVERY OF NETBACKUP CLIENT INFORMATION

When External Data Connector is installed on a NetBackup Master Server, all NetBackup client information can be easily incorporated into a CommCell by performing a simple **discovery** process. Your first discovery populates all information about each NetBackup client into the CommServe database, including client configuration, previous job history, schedules, and media information. All these details can be viewed using the CommCell Console graphical interface as soon as the first full discovery is performed.

Subsequent incremental discovery operations continue to update the CommServe with details on new or changed NetBackup client configurations. You can choose from a number of discovery options to further refine what information is populated into the CommServe, such as narrowing down discovery to specific NetBackup clients as well as including updated job and media details.

SEAMLESS MIGRATION OF NETBACKUP CLIENTS TO A COMMCELL

If desired, you can seamlessly migrate existing NetBackup client computers to a CommCell for future data protection and recovery operations using the wide variety of CommCell products and features available. CommCell software can be simultaneously installed to any number of client computers directly through the CommCell Console graphical interface. You can choose to keep the original configuration of the migrated client computers or modify them to suit new needs and requirements.

CUSTOMIZED REPORTING OF NETBACKUP JOB HISTORY

Once your NetBackup clients have been populated into the CommCell, you can create a variety of CommCell reports, which provide detailed information on job history, media details, and more. Reports can be created in HTML, XML, or PDF formats, and can be saved or sent in several ways. Optionally, reports can be further customized to display information in a **Native** format, which uses the terminology of native CommCell components, or a **NetBackup** format, which retains the terminology of the original NetBackup components.

If your NetBackup clients are integrated into more than one CommCell, CommNet reports can provide complete coverage of all clients in each CommCell.

DIRECT IMPORTING OF NETBACKUP DATABASES TO A COMMSERVE

Several methods are available for directly importing a NetBackup database to a CommServe, which is useful if you want to incorporate an entire NetBackup database into the CommCell at once. This can be accomplished with or without direct installation of External Data Connector on the NetBackup Server.

SUPPORTED NETBACKUP VERSIONS

After the discovery process is complete, NetBackup components, such as client computers, backup schedules, and media are mapped to the appropriate CommCell entity. The following versions of NetBackup are supported for these NetBackup component groupings:

NETBACKUP GROUPING	DESCRIPTION	SUPPORTED NETBACKUP VERSIONS*
Configuration	Clients, Policy Types, Policies, Policy Attributes (compression, encryption), Policy Schedules (frequency, calendar), Backup Types, Media Server.	5.1, 6.0, 6.5, 7.0, 7.1
Jobs	Backup and Admin Policy Job information is migrated for CommCell reporting purposes.	6.0, 6.5, 7.0, 7.1

Media	Lifecycle Policies, Storage Units, Robots, and Media Status are migrated for CommCell reporting purposes.	6.0, 6.5, 7.0, 7.1
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*Both Windows and Unix platforms are supported.

TERMINOLOGY

The External Data Connector documentation utilizes the following terminology:

- **Master Server** - The computer hosting the main data protection and recovery software engine. This computer is the equivalent of the CommServe computer.
- **Discovery** - The process in which External Data Connector collects information about the vendor's client computers and populates that information into the CommServe database.

System Requirements - External Data Connector

NetBackup	Tivoli Storage Manager	EMC Networker	Supported Features
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The following requirements are for External Data Connector:

NETBACKUP

After the discovery process is complete, NetBackup components, such as client computers, backup schedules, and media are mapped to the appropriate CommCell entity. The following versions of NetBackup are supported for these NetBackup component groupings:

NETBACKUP GROUPING	DESCRIPTION	SUPPORTED NETBACKUP VERSIONS*
Configuration	Clients, Policy Types, Policies, Policy Attributes (compression, encryption), Policy Schedules (frequency, calendar), Backup Types, Media Server.	5.1, 6.0, 6.5, 7.0, 7.1
Jobs	Backup and Admin Policy Job information is migrated for CommCell reporting purposes.	6.0, 6.5, 7.0, 7.1
Media	Lifecycle Policies, Storage Units, Robots, and Media Status are migrated for CommCell reporting purposes.	6.0, 6.5, 7.0, 7.1

*Both Windows and Unix platforms are supported.

HARD DRIVE

1 GB of minimum disk space is required for installing the software.

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

256 MB of free disk space is required for log directory.

PERIPHERALS

DVD-ROM drive

Network Interface Card

MISCELLANEOUS

NETWORK

TCP/IP Services configured on the computer.

.NET FRAMEWORK

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

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

Discover and Migrate

PERFORM A DISCOVERY

Once External Data Connector is installed on the NetBackup Server, information about each NetBackup client can be incorporated into your CommCell by performing a **discovery** operation. The discovery process collects information from the NetBackup master server and transfers this information to the CommServe database. Once complete, the CommServe creates CommCell entities that correspond to the original NetBackup entities. Discovery is performed at the subclient level and can be run on-demand or scheduled to run at a specified time.

- Discovery operations may fail if the NetBackup master server database password is entered incorrectly or NetBackup services are not running. To determine which failure occurred, right-click the failed discovery job in the Job Controller window and select **Job Details**. The **Description** field will display the job failure reason.
- If installing External Data Connector manually using the software installation discs, the client computer name and host name must be the same for discovery operations to complete successfully. This is not required if installing External Data Connector using the CommCell Console's **Install Software** feature.

RUN A DISCOVERY IMMEDIATELY

When run for the first time, the discovery process is performed in full, collecting information on every NetBackup client as well as the operations and settings associated with them. Subsequent discovery operations can later be performed incrementally, collecting only new or changed information.

1. From the CommCell Console, right-click on the **External Data Connector** node, select **New Instance**, and select the desired instance type.

If the **Advanced Option** was used to install the External Data Connector, you will not have to create an instance.

2. From the **General** tab of the **External Data Connector** dialog box, enter the following information:

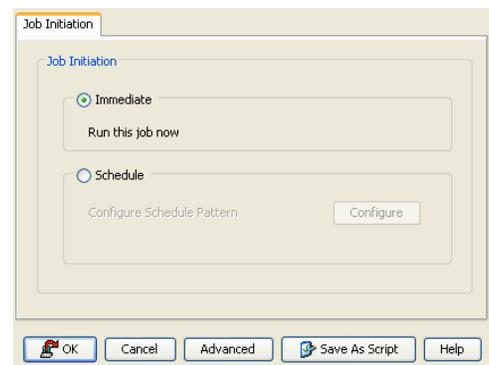
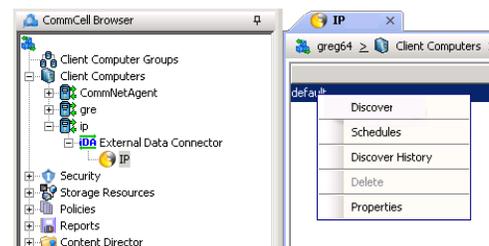
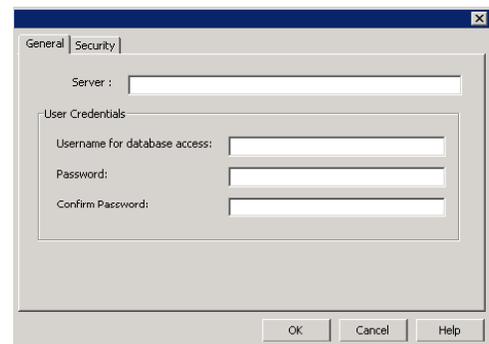
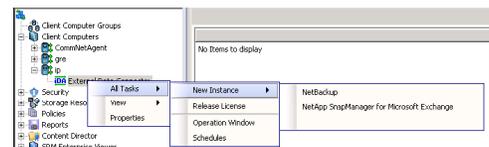
- The NetBackup **database** name.
- The **User Credentials** of the master server.

Click **OK**.

An instance, default backup set, and subclient are now created and ready for the discovery process.

3. Right-click the subclient for which you want to discover NetBackup data and click **Discover**.

4. From the **Job Initiation** tab of the **Discovery Options** dialog box, select **Immediate**.

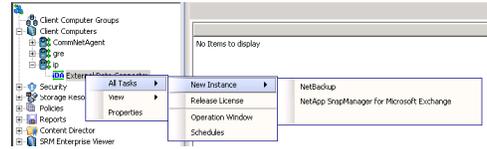


5. Click **OK**.

You can track the progress of the backup job from the **Job Controller** window. When the backup has completed, the Job Controller displays **Completed**.

SCHEDULE A DISCOVERY

1. From the CommCell Console, right-click on the **External Data Connector** node, select **New Instance**, and select the desired instance type.

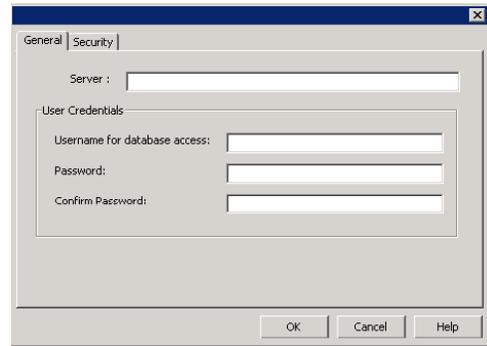


2. From the **General** tab of the **External Data Connector** dialog box, enter the following information:

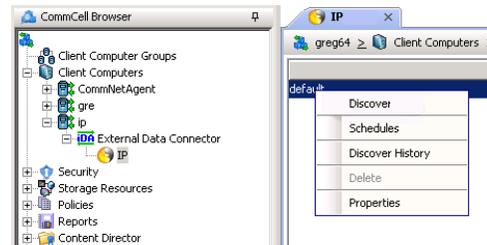
- The NetBackup **database** name.
- The **User Credentials** of the master server.

Click **OK**.

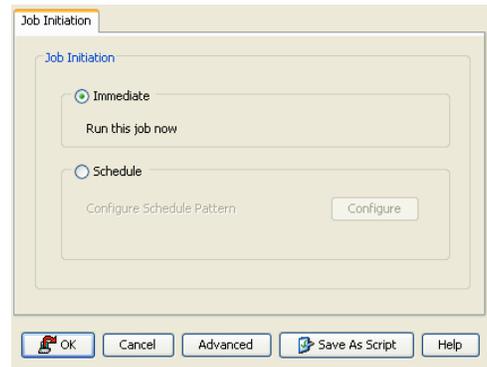
An instance, default backup set, and subclient are now created and ready for the discovery process.



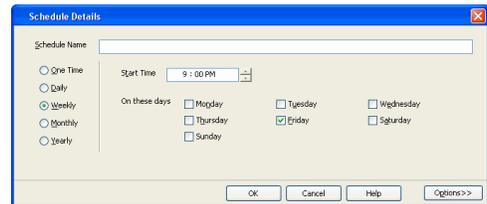
3. Right-click the subclient for which you want to discover NetBackup data and click **Discover**.



4. From the **Job Initiation** tab of the **Discovery Options** dialog box, select **Schedule**.



5. From the **Schedule Details** dialog box that appears, select the appropriate scheduling options.



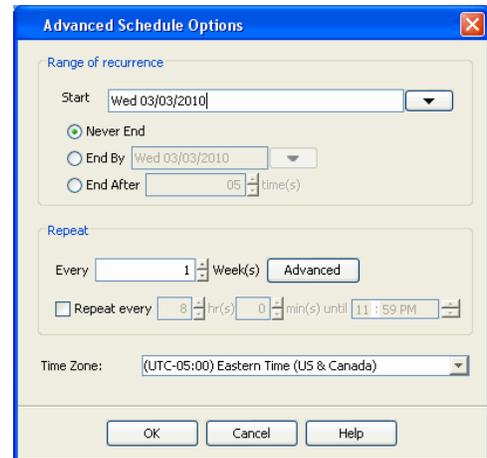
6. Click **Options** to view the **Advanced Schedule Options** dialog box.

Specify the following options:

- **Range of recurrence:** Specify the date on which you want this schedule to take effect.
- **Repeat:** Select the value for which you want to run the job repeatedly on the day in which the job is scheduled to run.
- **Time Zone:** Select a specific time zone from which the job schedule time will be based.

You can also confirm and/or edit (where applicable) your choices from the **Job Summary** tab. For a monthly or yearly schedule, you can select either a standard calendar or a custom calendar.

Click **OK** once all the desired options have been configured.



7. Click **OK**.

Your discovery operation will execute according to the specified schedule. You can track the progress of the backup job from the **Job Controller** window. When the backup has completed, the Job Controller displays **Completed**.

HOW DISCOVERY WORKS

The discovery process occurs in two phases:

1. Query of NetBackup client information
2. Merge of information to the CommCell

During the Query phase, information about the vendor's backup jobs, policies, and associated clients, schedules, libraries, and media are compiled in the form of .xml files for the data type selected during installation. This data is then transferred to the CommServe computer. Discovery jobs may be restarted from the beginning of the transfer phase if necessary.

During the Merge phase, External Data Connector maps each NetBackup component, such as client computers, backup schedules, and media, to the appropriate CommCell entity. In cases where there is no direct match between a NetBackup component and CommCell component, External Data Connector will incorporate as much information as possible into a CommCell entity that most closely resembles the original NetBackup entity.

PERFORM YOUR FIRST MIGRATION

Once a discovery job has been run, you can migrate NetBackup clients to the CommCell by installing the desired CommCell software components, such as the File System, Exchange, or SQL iDataAgents. After the software installation, the CommCell Console creates a new set of entities, such as backup sets, for the client computer which can be configured to perform future data protection operations. Once migrated, you can perform data protection and recovery operations for the client computer.

The migration process consists of the following phases:

1. Install CommCell Components onto the NetBackup client computers.
2. Associate a Storage Policy, which is the storage policy selected during the software installation.
3. Enable Data Protection and Recovery for the client computer.
4. Enable Schedules and Schedule Policies to activate the original schedules associated with the client's NetBackup jobs.

Once these phases are complete, you are ready to run backups and restores for the client computer. Refer to the documentation for your components for detailed information on protecting and recovering data.

Prior to running backups, ensure that the subclients created do not contain any duplicate content.

INSTALL COMMCELL COMPONENTS

The first step in migrating NetBackup clients to a CommCell is to install CommCell components on the NetBackup client computer. These installations can occur in two ways:

- using the Install Software from the CommCell Console feature, which allows you to directly install software on any number of client computers. This is the recommended method.
- using the software installation disk for the components you want to install.

Refer to the Installation documentation for complete details on installing CommCell components.

By default, all discovered NetBackup client computers migrate in a disabled state. This means that no CommCell licenses are consumed during the discovery process. When installing CommCell components onto the discovered client computers, the appropriate component license will be consumed during the installation process.

ASSOCIATE A STORAGE POLICY

Next, you must associate the storage policy you designated during the software installation to the appropriate subclient. To do so:

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.

ENABLE DATA PROTECTION AND RECOVERY

Next, data protection and recovery must be enabled for the client computer to begin running jobs. To do so:

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**.

ENABLE SCHEDULES AND SCHEDULE POLICIES

Finally, enable schedules and schedule policies if they are not currently enabled for your client.

VIEWING JOB INFORMATION

Once you have migrated your NetBackup clients to the CommCell and have run your first backups, you may want to view specific historical information about the jobs, such as the following:

- Items that failed during the job
- Items that succeeded during the job
- Details of the job
- Media associated with the job
- Events of the job
- Log files of the job.

This information can be viewed in the Job History window, which is accessible at the client computer, iDataAgent, instance, or subclient level in the CommCell Console.

The history depends on the entity from which the job history is viewed. For example, viewing job history from the subclient level will yield information for only the jobs performed in that subclient. Conversely, viewing job history from the backup set level will yield information for jobs run from all subclients within the backup set.

To view job history:

1. From the CommCell Browser, right-click the entity (client computer, iDataAgent, backup set or subclient) whose backup history you want to view, click **View**, and then click **View History**.
2. From the **Job History** filter window select the filter options, if any, that you want to apply, and then click **OK**. The system displays the **Job History** window.

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

To view the additional options discussed above, right-click the desired job choose the appropriate option.

3. Click **OK** to exit the **Job History** window.

YOU HAVE NOW FINISHED YOUR FIRST DISCOVERY AND MIGRATION

[◀ Previous](#) [Next ▶](#)

[Back to Top](#)

Advanced Options

◀ Previous Next ▶

TABLE OF CONTENTS

Components Created After Discovery

Configuration Entities
Job Entities
Media Entities

Components Created After Migration

Discover Based on Specific Criteria

Discover Clients by Agent Type
Discover Clients by Client Name

Advanced Discovery Options

Capture Metadata using Decoupled Install

Install External Data Connector on the NetBackup Master Server
Create an XML File Containing NetBackup Database Information
Populate the XML File in the CommServe

Troubleshooting

Related Reports

CommCell Reports
CommNet Reports

COMPONENTS CREATED AFTER DISCOVERY

Your first discovery and migration operations lay the framework for protecting and recovering NetBackup clients using the CommCell software. By default, all future discovery operations occur incrementally; that is, only new or changed NetBackup information is merged into the CommCell. Similarly, migration operations occur on-demand as needed. In both cases, the **Basic** topic can be used to perform future discovery and migration operations.

After the discovery process is complete, NetBackup components, such as client computers, backup schedules, and media are mapped to the appropriate CommCell entity. The following versions of NetBackup are supported for these NetBackup component groupings:

NETBACKUP GROUPING	DESCRIPTION	SUPPORTED NETBACKUP VERSIONS*
Configuration	Clients, Policy Types, Policies, Policy Attributes (compression, encryption), Policy Schedules (frequency, calendar), Backup Types, Media Server.	5.1, 6.0, 6.5, 7.0, 7.1
Jobs	Backup and Admin Policy Job information is migrated for CommCell reporting purposes.	6.0, 6.5, 7.0, 7.1
Media	Lifecycle Policies, Storage Units, Robots, and Media Status are migrated for CommCell reporting purposes.	6.0, 6.5, 7.0, 7.1

*Both Windows and Unix platforms are supported.

CONFIGURATION ENTITIES

The following table lists the NetBackup configuration entities that are discovered and how they are mapped to CommCell entities.

NETBACKUP COMPONENT	NOTES				
Clients	<p>Clients are brought in initially as deconfigured clients and are shown under Client Computer Group in CommCell Console.</p> <p>To display the discovered clients, deselect the Hide deconfigured clients option in the User Preferences dialog box.</p> <p>All NetBackup client computers discovered will, however, be initially grouped into a single Client Computer Group based on the instance from which the discovery operation was run.</p>				
Policy Type	<table border="0"> <thead> <tr> <th>NETBACKUP POLICY TYPE</th> <th>COMMCELL AGENT</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> ● MS-Exchange-Server ● MS-SharePoint ● MS-SQL-Server ● MS-Windows-NT ● Oracle ● Standard ● All other NetBackup Policies </td> <td> <ul style="list-style-type: none"> ● Exchange Database ● SharePoint Database ● SQL Server ● File System ● Oracle Database ● File System* ● Other External Agents </td> </tr> </tbody> </table> <p>*The File System iDataAgent used will correspond</p>	NETBACKUP POLICY TYPE	COMMCELL AGENT	<ul style="list-style-type: none"> ● MS-Exchange-Server ● MS-SharePoint ● MS-SQL-Server ● MS-Windows-NT ● Oracle ● Standard ● All other NetBackup Policies 	<ul style="list-style-type: none"> ● Exchange Database ● SharePoint Database ● SQL Server ● File System ● Oracle Database ● File System* ● Other External Agents
NETBACKUP POLICY TYPE	COMMCELL AGENT				
<ul style="list-style-type: none"> ● MS-Exchange-Server ● MS-SharePoint ● MS-SQL-Server ● MS-Windows-NT ● Oracle ● Standard ● All other NetBackup Policies 	<ul style="list-style-type: none"> ● Exchange Database ● SharePoint Database ● SQL Server ● File System ● Oracle Database ● File System* ● Other External Agents 				

		to the operating system (Windows or Unix) associated with the original NetBackup Policy.
Policies	<p>NetBackup policies are migrated to CommCell subclients under a single backup set for each client. The Backup Selections of a NetBackup policy becomes the content of the subclient.</p> <p>The Properties for subclients created by External Data Connector are read-only and cannot be changed.</p> <p>Also, note that when previously merged policies are deleted from the NetBackup server, the corresponding subclients are not automatically deleted from the CommServe during the next merge operation. Thus, any subclients associated with deleted policies must be manually removed from the CommServe.</p>	
Policy Attributes (Compression)	Policy attributes, such as compression, becomes a subclient property. The properties for subclients created by External Data Connector are read-only and cannot be changed.	
Policy Attributes (Encryption)	<p>NETBACKUP ENCRYPTION</p> <ul style="list-style-type: none"> • BF - CFB • AES-128-CFB • AES-256-CFB • DES and other Legacy types 	<p>COMMCELL ENCRYPTION</p> <ul style="list-style-type: none"> • BLOWFISH (128 Bit) • AES (128 Bit) • AES (256 Bit) • DES (192 Bit)
Policy Schedules (Frequency)	<p>These schedule frequencies are migrated to a CommCell Schedule Policy:</p> <ul style="list-style-type: none"> • Hourly • Daily • Monthly 	
Policy Schedules (Calendar)	<p>NETBACKUP CALENDAR</p> <ul style="list-style-type: none"> • Specific Dates • Recurring Week Days • Recurring Days of the Month 	<p>COMMCELL SCHEDULE*</p> <ul style="list-style-type: none"> • One Time • Monthly • Monthly <p>*NetBackup calendar schedules are migrated to a CommCell Schedule Policy.</p>
Backup Types	<p>NETBACKUP</p> <ul style="list-style-type: none"> • Full Backup • Incremental Backup • Cumulative Backup 	<p>COMMCELL</p> <ul style="list-style-type: none"> • Full • Incremental • Differential
Media Server	NetBackup Media Servers are migrated to CommCell MediaAgents with all configured properties.	

JOB ENTITIES

The following table lists the NetBackup job entities that are discovered and how they are mapped to CommCell entities.

NETBACKUP COMPONENT	NOTES
Policy Jobs	Backup and Admin Policy Job information is migrated for CommCell reporting purposes.

MEDIA ENTITIES

The following table lists the NetBackup media entities that are discovered and how they are mapped to CommCell entities.

NETBACKUP COMPONENT	NOTES
Lifecycle Policy	NetBackup lifecycle policies are migrated to CommCell storage policies. If the Lifecycle Policy had data retention settings configured, they are included in the CommCell Schedule Policy as well.
Storage Units	<p>NETBACKUP STORAGE UNIT</p> <ul style="list-style-type: none"> • Disk Storage • Disk Path Name • Media Manager <p>COMMCELL MEDIA</p> <ul style="list-style-type: none"> • Disk Library • Mount Path • Tape Library
Robots	Robot mappings are migrated to CommCell libraries.
Media Status	<p>NetBackup media that are in either of these states will display as FULL in the CommCell Properties of the media:</p> <ul style="list-style-type: none"> • FULL • FROZEN • SUSPENDED

COMPONENTS CREATED AFTER MIGRATION

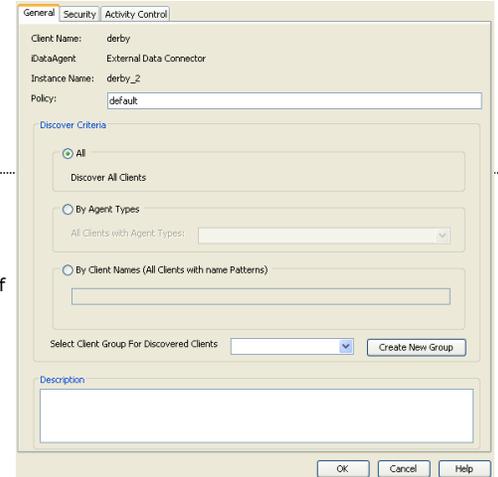
The following table illustrates the CommCell Agents that are created for NetBackup clients during the migration process:

NETBACKUP POLICY TYPE	CORRESPONDING COMMCELL AGENT	COMMCELL AGENT AS DISPLAYED IN THE COMMCELL CONSOLE

MS-Exchange-Server	Microsoft Exchange Database iDataAgent	Exchange Database
MS-SharePoint	Microsoft SharePoint Server iDataAgent	SharePoint Database
MS-SQL-Server	Microsoft SQL Server iDataAgent	SQL Database
MS-Windows-NT	Microsoft Windows File System iDataAgent	File System
Oracle	Oracle iDataAgent	Oracle Database
Standard	Microsoft Windows File System iDataAgent	File System
	Unix File System iDataAgent	Note that the File System iDataAgent used will correspond to the operating system (Windows or Unix) associated with the original NetBackup Policy.
All other NetBackup Policies	Other External Agent	Other External Agent

DISCOVER BASED ON SPECIFIC CRITERIA

In between your regular full or incremental discovery operations, it may be necessary to perform a discovery based on a specific set of criteria. The following sections describe the criteria-based discovery options available. All options are available in the **General** tab of the **EDC Policy Properties** dialog box, which is accessible by right-clicking the External Data Connector policy in the CommCell Browser and clicking **Properties**.



DISCOVER CLIENTS BY AGENT TYPE

If you only want to include clients that are configured with a specific application type, the **Discover Clients by Agent Type** can be used to identify clients with the desired application agent type to be included in the discovery process. This is especially useful if you need to generate an up-to-date report of the status of all clients running a specific application, such as an Exchange database, without having to collect information about clients running other applications.

The following Agent types are populated into Agent nodes in the CommCell Console following discovery:

- Microsoft Exchange
- Microsoft SharePoint Server
- Microsoft SQL Server
- Microsoft Windows File System
- Oracle
- Unix File System

Any other Agent types discovered will appear as **Others** in the Agent node.

DISCOVER CLIENTS BY CLIENT NAME

If you know the names of the client computers you wish to discover, you can do so by entering the desired client names using available expressions. This option is useful if you only want a specific subset of clients to be incorporated into the CommServe database, such as clients on which you may later install CommCell software. Wildcard expressions may be used to filter out clients with specific naming characteristics. (Refer to the Wildcards documentation for information on supported wildcard expressions.)

Note that if this option is selected, only the jobs and configuration settings associated with the defined clients will be included. As such, schedules not associated with the defined clients must also be filtered out prior to running the discovery operation.

ADVANCED DISCOVERY OPTIONS

By default, incremental discovery operations collect only client configuration information. However, several additional options are available if you require more comprehensive information about the discovered clients. The following sections describe the options available.

To configure these settings, perform the following steps:

1. In the CommCell Browser, right-click the default subclient for which you want to discover NetBackup data and click **Discover**.
2. From the **General** tab of the **Discovery Options** dialog box, click **Advanced**.
3. From the **Advanced Discovery Options** dialog box, select the desired options and click **OK**.

The following table describes the advanced operations available.

OPTION	DESCRIPTION
FORCE A FULL SYNC	This option forces a full discovery of all NetBackup clients. This option should be used if you want to ensure that all the latest client information from the NetBackup database is in sync with the CommServe database, especially in cases where significant change (such as the addition or removal of a large number of clients) has occurred.
	This option populates the CommServe database with NetBackup database information using a specified XML file. Use this

MERGE INFORMATION FROM A SPECIFIC FILE	option if you want to perform a full or incremental discovery of a NetBackup database without the need to communicate with the NetBackup Server itself.
GET ADVANCED CLIENT SETTINGS	This option populates NetBackup client settings above and beyond the jobs, schedules, and agents of the client. Use this option if you intend to migrate the client to the CommCell and wish to ensure client settings such as compression, encryption, and content filters, remain intact for future data protection and recovery operations. Note that encryption settings configured for the NetBackup client computer will be mapped as follows: BF - CFB - BLOWFISH (128 Bit) AES-128-CFB - AES (128 Bit) AES-256-CFB - AES (256 Bit) DES and other Legacy types - DES (192 Bit)
COLLECT STORAGE INFORMATION	Use this option to obtain information about the storage media associated with the discovered clients, such as libraries and drive pools. This option is applicable for information pertaining to backup jobs.
COLLECT JOBS INFORMATION	Use this option to obtain information about backup jobs that have run for the discovered client.

CAPTURE METADATA USING DECOUPLED INSTALL

This method uses External Data Connector to populate NetBackup Master Server database information into an XML file, which is then applied to an existing CommServe. This method does not require any direct connectivity between the NetBackup Master Server and the CommServe, which is useful if deploying a new CommServe is not desirable in a particular environment.

This method consists of three phases:

1. Install External Data Connector on the NetBackup Master Server
2. Create XML Files Containing NetBackup Database Information
3. Populate the XML Files in a CommServe

The following sections describe these phases in detail.

INSTALL EXTERNAL DATA CONNECTOR ON THE NETBACKUP MASTER SERVER

External Data Connector must first be installed on the NetBackup Master Server. To perform this installation in the absence of a CommServe, use the Decoupled Install feature.

CREATE AN XML FILE CONTAINING NETBACKUP DATABASE INFORMATION

Once External Data Connector is installed on the NetBackup Master Server, a bundle file containing the NetBackup database information must be created. This can be accomplished from the command line as follows:

1. From the command line, navigate to the `base` folder for the External Data Connector software.
2. On Windows, execute the following command:

```
CVForeignHandler -collectdata -vendor 1 -user "<External_Database_Admin_User_Name>" -password
"<External_Database_Admin_User_Password>" -vm "<Instance_Name>" -cn "<Client_Name>"
```

For example:

```
CVForeignHandler -collectdata -vendor 1 -user "<External_Database_Admin_User_Name>" -password
"<External_Database_Admin_User_Password>" -vm "Instance001" -cn "client1"
```

By default, this command will populate all contents of the NetBackup database into a `.zip` file in the `JobResults` folder.

3. On Linux and Unix, execute the following command:

```
../iDataAgent/CVForeignHandler -collectdata -vendor 1 -user "<External_Database_Admin_User_Name>" -password
"<External_Database_Admin_User_Password>" -vm "<Instance_Name>" -cn "<Client_Name>"
```

For example:

```
../iDataAgent/CVForeignHandler -collectdata -vendor 1 -user "<External_Database_Admin_User_Name>" -password
"<External_Database_Admin_User_Password>" -vm "Instance001" -cn "client2"
```

By default, this command will populate all contents of the NetBackup database into a `.gz` file in the `JobResults` folder. Optionally, if you have previously populated NetBackup database information and only want to include recently changed data, you can use the `-inc` argument at the end of the command string.

POPULATE THE XML FILE IN THE COMMSERVE

Once the XML file is created, it must be copied to the CommServe computer and populated into the CommServe database. To do so:

1. Copy the XML file into the desired location on the CommServe computer.
2. From the CommCell Console, initiate a **Discovery** operation.
3. From the **General** tab of the **Advanced Discovery Options** dialog box, select the following options:
 - o **Full Sync** to populate all information in the XML file.
 - o **Merge from folder** to identify the XML file that contains the NetBackup Master Server information. You can use the **Browse** option to navigate to the location of the XML file.
4. Click **OK**.

The NetBackup Master Server information will be populated into the CommServe database.

TROUBLESHOOTING

External Data Connector (EDC) Discovery may fail with the following condition:

- Schedules have no window defined.

This issue can be resolved by defining a schedule window.

RELATED REPORTS

A variety of reports are available that provide detailed information on previously run NetBackup jobs, as well as jobs run using the CommCell software after migration, as described below:

COMMCELL REPORTS

After your first discovery, you can run CommCell Reports to obtain information on all past NetBackup data protection and recovery jobs.

By default, all reports display information according to CommCell entities; that is, a NetBackup policy will appear as a subclient, and so on. However, several reports can be customized to display information according to the original NetBackup entity. While the details of the report remain the same in either case, this option is useful as a tool for new CommCell users who may not be familiar with CommCell components.

Refer to the Reports - Overview topic for complete details.

COMMNET REPORTS

In addition to the CommCell reports, you can also generate CommNet reports if your CommCell includes CommNet software. CommNet reports allow you to view and analyze data related to various aspects of different entities like CommCells, Clients, MediaAgents and libraries in the CommNet domain. Information is presented in a logically grouped, tabular format, with the ability to also plot the information as a bar chart or pie chart wherever possible. On all reports and summaries, and in addition to selected pie or bar charts, the exact chart details display in a data table.

Refer to the CommNet Reports topic for complete details.



[Back to Top](#)