

Features - Microsoft Data Protection Manager

TABLE OF CONTENTS

OVERVIEW

NEW FEATURES

SYSTEM REQUIREMENTS

SUPPORTED FEATURES

GETTING STARTED - DATA PROTECTION MANAGER DEPLOYMENT

GETTING STARTED - DATA PROTECTION MANAGER CONFIGURATION

GETTING STARTED - DATA PROTECTION MANAGER BACKUP

GETTING STARTED - DATA PROTECTION MANAGER RESTORE

Overview - Microsoft Data Protection Manager

TABLE OF CONTENTS

Introduction

Key Features

- Point-In-Time Recovery
- System State
- Database Backup and Restore Options
- Backup and Recovery Failovers
- Efficient Job Management and Reporting
- Block Level Deduplication

Terminology

INTRODUCTION

DPM server creates and maintains replicas or full copies of a selected data sources and then synchronizes the replica with the changes that occur on the protected servers on a recurring schedule. The replica is created only once, and thereafter it is updated with the changes from the protected server. During the data replication, DPM uses Volume Shadow Copy Services (VSS) to produce snapshots of the data on the protected servers, enabling multiple point-in-time recovery points to be stored on the DPM server.

The Microsoft Data Protection Manager iDataAgent enables you to selectively back up and/or restore data that resides on the DPM Server. To provide flexible data management, the DPM iDataAgent allows backup and/or restoration of data in-place or out-of-place.

As a replica is created by DPM Server for every unique volume being protected, you need to create a subclient for each replica created. For example, if the DPM Server has 25 clients and one volume protected per client, then you need 25 separate subclients to protect them.

KEY FEATURES

The Microsoft Data Protection Manager iDataAgent offers the following key features:

POINT-IN-TIME RECOVERY

In the event of a serious system failure, such as the breakdown of hardware, software, or operating systems, the Microsoft Data Protection Manager iDataAgent provides point-in-time recovery of files at any given time.

SYSTEM STATE

The Windows File System system iDataAgent gets installed along with Microsoft Data Protection Manager iDataAgent. The system state is made up of many components and services that are critical to recovery of the Windows operating system. The system state is backed up and restored as part of Windows File System iDataAgent.

DATABASE BACKUP AND RESTORE OPTIONS

The SQL Server iDataAgent gets installed along with Microsoft Data Protection Manager iDataAgent. It provides the flexibility to backup the SQL database from different environments. You can perform a full or incremental backup of the entire instance, individual databases or files and file groups, and the transaction logs at any point of time.

Both the system and user-defined databases can be backed up. You can comprehensively backup all the databases in an instance or schedule backups for the individual databases. You can also auto-discover new databases to comprehensively manage the backup of all databases in your environment.

The SQL Server iDataAgent provides the ability to recover tables, databases or entire applications from the CommCell Console. There is no mounting, no recovery wizards, no extra steps needed – the software takes care of it all. This includes the following abilities:

- Restore full or partial databases
- Restore and replay transaction logs
- Perform offline and other recovery states
- Point-in-time recovery options simplified with automated log playback

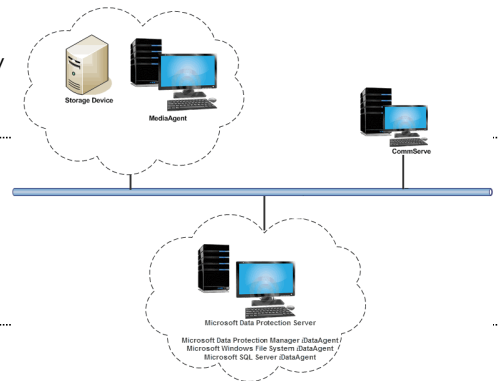
BACKUP AND RECOVERY FAILOVERS

In the event that a MediaAgent used for the backup or recovery operation fails, it is automatically resumed on alternate MediaAgents. In such cases, the backup or restore job will not restart from the beginning, but will resume from the point of failure. This is especially useful for backups and restores of large amount of file system data.

WHERE TO GO NEXT

Install the Microsoft Data Protection Manager iDataAgent

Walks you through the process of installing the Data Protection Manager iDataAgent.



In the event, that a network goes down, the backup and recovery jobs are resumed on alternate data paths. Similarly, in the event of a device failure, the jobs are automatically switched to alternate disk and tape drives.

EFFICIENT JOB MANAGEMENT AND REPORTING

You can view and verify the status of the backup and recovery operations from the Job Controller and Event Viewer windows within the CommCell Console. You can also track the status of the jobs using reports, which can be saved and easily distributed. Reports can be generated for different aspects of data management. You also have the flexibility to customize the reports to display only the required data and save them to any specified location in different formats. For example, you can create a backup job summary report to view at-a-glance the completed backup jobs. In addition, you can also schedule these reports to be generated and send them on email without user intervention.

BLOCK LEVEL DEDUPLICATION

Deduplication provides a smarter way of storing data by identifying and eliminating the duplicate items in a data protection operation.

Deduplication at the data block level compares blocks of data against each other. If an object (file, database, etc.) contains blocks of data that are identical to each other, then block level deduplication eliminates storing the redundant data and reduces the size of the object in storage. This way dramatically reduces the backup data copies on both the disk and tapes.

TERMINOLOGY

The Microsoft Data Protection iDataAgent documentation uses the following terminology:

CLIENT	The computer in which the iDataAgent is installed and contains the data to be secured.
BACKUPSET	A group of subclients which includes all of the data backed up by the iDataAgent.
SUBCLIENT	The DPM Server data to be backed up.
METADATA	The DPM server metadata to be backed up.



New Features - Microsoft Data Protection Manager

NEW COMMCELL FEATURES SUPPORTED FOR MICROSOFT DATA PROTECTION MANAGER

DEPLOYMENT

CUSTOM PACKAGE

The Custom Package feature is now extended to almost all products in the Calypso suite. Using Custom Packages, you no longer have to push the entire software DVD through a network, which is especially useful for reducing WAN/LAN payload while installing remote clients.

It is also possible to create Custom Packages using a customized `.xml` file.

When used in conjunction with the Install Software from the CommCell Console and Automatic Updates features, WAN bandwidth can be drastically reduced during remote site installations. [Learn more...](#)

INSTALL FROM THE COMMCELL CONSOLE

The software installation for this component can be initiated and managed from the CommCell Console, which facilitates the building of your CommCell and eliminates the need to manually install the software. Additionally, the installation of this component can be scheduled to occur at a time suitable for your environment. For more information, see [Install Software from the CommCell Console](#).

UNINSTALL FROM THE COMMCELL CONSOLE

This component can be uninstalled using the CommCell Console. The Uninstall Software utility allows you to quickly see a list of the software packages installed on the selected computer, from which you can then select the components to uninstall. With this, you can easily manage removing software components from client computers and MediaAgents in your CommCell without having to directly access each computer. For more information, see [Uninstall Components using the CommCell Console](#).

System Requirements - Microsoft Data Protection Manager

System Requirements | **Supported Features**

The following requirements are for the Microsoft Data Protection Manager *iDataAgent*:

APPLICATION

Microsoft Data Protection Manager Server 2006 Editions up to the latest Service Pack
Microsoft Data Protection Manager Server 2007 Editions up to the latest Service Pack
Microsoft Data Protection Manager Server 2010 Editions up to the latest Service Pack

OPERATING SYSTEM

WINDOWS SERVER 2008

Microsoft Windows Server 2008 32-bit and x64 Editions*

*Core Editions not supported

WINDOWS SERVER 2003

Microsoft Windows Server 2003 Editions with a minimum of Service Pack 1

HARD DRIVE

111 MB minimum of hard disk space for software/ 498 MB recommended

100 MB of additional hard disk space for log file growth

727 MB of temp space required for install or upgrade (where the temp folder resides)

MEMORY

32 MB RAM minimum required beyond the requirements of the operating system and running applications

PROCESSOR

All Windows-compatible processors supported

PERIPHERALS

DVD-ROM drive

Network Interface Card

MISCELLANEOUS

When you select the Microsoft Data Protection Manager *iDataAgent* for installation, the appropriate Windows File System *iDataAgent* and the SQL Server *iDataAgent* are automatically selected. The Windows File System *iDataAgent* is mandatory, however, the SQL Server *iDataAgent* is optional. It is recommended that you install the SQL Server *iDataAgent* to fully protect the Data Protection Manager database for disaster recovery purposes.

For System Requirements and install information specific to these agents, refer to:

- System Requirements - Microsoft Windows File System *iDataAgent*
- System Requirements - Microsoft SQL Server *iDataAgent*

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.

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.

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

Supported Features - Microsoft Data Protection Manager

System Requirements | Supported Features

The following table lists the features that are supported by this Agent.

FEATURE	SUB-FEATURE	SUPPORT	COMMENTS
ADVANCED BACKUP/ARCHIVE OPTIONS	Data tab - Catalog	✓	
	Data tab - Create New Index	✓	
	Data tab - Verify Synthetic Full		
	Job Retry tab	✓	
	Media tab - Allow other Schedule to use Media Set		
	Media tab - Mark Media Full on Success	✓	
	Media tab - Reserve Resources Before Scan		
	Media tab - Start New Media	✓	
	Startup tab	✓	
	VaultTracking tab	✓	
ADVANCED FILE SYSTEM IDATAAGENT OPTIONS	Automatic File System Multi-Streaming		
	On Demand Data Protection Operation		
	Restore by Jobs	✓	
	Restore Data Using a Map File		
ALERTS AND MONITORING	Global Alerts	✓	
	Job-Based Alerts*	✓	
AUTOMATIC UPDATES	Automatic Updates	✓	
	Comments		
BACKUP/ARCHIVE OPTIONS	Differential Backup	✓	
	Full Backup	✓	
	Incremental Backup	✓	
	Other Backup Types		
	Synthetic Full Backup	✓	
	Comments		
BACKWARD COMPATIBILITY	Version 7	✓	
	Version 8	✓	
	Version 9		
	Comments		
BROWSE	Browse from Copy Precedence	✓	
	Browse the Latest Data	✓	
	Exclude Data Before	✓	
	Find	✓	
	Full Backup Transparent Browse	✓	
	Image Browse	✓	
	No Image Browse	✓	
	Page Size		
	Specify Browse Path	✓	
	Specify Browse Time	✓	
	Subclient Browse	✓	
	Use MediaAgent	✓	
	View All Versions	✓	
Comments			
CLUSTERING	Netware cluster		
	Unix Cluster		
	Windows - Microsoft Cluster (MSCS)		
	Windows - Non-Microsoft Cluster		

	Comments		
COMMAND LINE INTERFACE	Command Line Interface	✓	
	Comments		
COMMAND LINE INTERFACE - SPECIFIC COMMANDS	Qcreate - Backup set/SubClient		
	Qcreate - Instance		
	Qdelete - Backup set/Subclient		
	Qdelete - Client/Agent		
	Qlist globalfilter		
	Qmodify - instance		
	Qoperation - Backup	✓	
	Qoperation - move		
	Qoperation - Restore		
	Comments		
COMMCELL MIGRATION	CommCell Migration	✓	
	Comments		
CONTENT INDEXING	Offline Content Indexing		
	Comments		
DATA AGING	Basic Retention Rules	✓	
	Extended Retention Rules	✓	
	Unique Data Aging Rules		
	Comments		
DATA CLASSIFICATION ENABLER	Data Classification Enabler		
	Comments		
DATA COMPRESSION	Client Compression	✓	
	Hardware Compression	✓	
	MediaAgent Compression	✓	
	Comments		
DATA ENCRYPTION	Data Encryption Support	✓	
	Third-party Command Line Encryption Support		
	Comments		
DATA MULTIPLEXING	Multiplexing	✓	
	Comments		
DEDUPLICATION	MediaAgent Deduplication	✓	
	Source Deduplication	✓	
	Comments		
ERASE BACKUP/ARCHIVED DATA	Erase Data by Browsing		
	Erase Stubs		
	Comments		
GLOBAL FILTERS	Global Filters		
	Comments		
INSTALLATION	Custom Package	✓	
	Decoupled Install		
	Remote Install	✓	
	Restore Only Agents		
	Silent Install	✓	
	Comments		
INSTALLING 32-BIT COMPONENTS ON A MICROSOFT WINDOWS X64 PLATFORM	Install 32-bit On x64		
	Comments		
JOB RESTART - DATA PROTECTION	Not Restartable		
	Restarts from the Beginning		
	Restarts from the Beginning of the Database		
	Restarts from the Point-of-Failure	✓	
	Comments		
JOB RESTART - DATA RECOVERY	Not Restartable		
	Restarts from the Beginning		

	Restarts from the Beginning of the Database		
	Restarts from the Point-of-Failure	✓	
	Comments		
LIST MEDIA	List Media Associated with a Specific Backup Set or Instance	✓	
	List Media Associated with Index	✓	
	List Media Associated with Specific Files and/or Folders	✓	
	List Media Associated with Specific Jobs	✓	
	Comments		
MULTI INSTANCING	Multi Instance	✓	
	Comments		
PRE/POST PROCESSES	Pre/Post Process with Data Protection and Recovery	✓	
	Comments		
RESTORE/RECOVER/RETRIEVE DESTINATIONS	Cross-Application Restores (Different Application version)		
	Cross-Platform Restores - Different Operating System	✓	
	Cross-Platform Restores - Same Operating System - Different Version	✓	
	In-place Restore - Same path/ destination - Same Client	✓	
	Out-of-place Restore - Different path/ destination	✓	
	Out-of-place Restore - Same path/ destination - Different Client		
	Restore Data Using a Map File		
	Restore to Network Drive /NFS-Mounted File System		
	Comments	✓	See Restore Destinations for this iDataAgent.
RESTORE/RECOVER/RETRIEVE OPTIONS	Automatic Detection of Regular Expressions	✓	
	Filter Data From Recover Operations	✓	
	Rename/ Redirect Files on Restore		
	Restore Data Using Wildcard Expressions	✓	
	Restore Data with Pre/Post Processes	✓	
	Restore from Copies	✓	
	Skip Errors and Continue	✓	
	Use Exact Index	✓	
	Use MediaAgent	✓	
	Comments		
RESTORE/RECOVER/RETRIEVE OVERWRITE OPTIONS	Overwrite Files	✓	
	Overwrite if file on media is newer	✓	
	Restore only if target exists	✓	
	Unconditional Overwrite	✓	
	Unconditionally overwrite only if target is a DataArchiver stub		
	Comments		
SCHEDULE POLICY	Agent Specific Data Protection Schedule Policy	✓	
	All Agent Types Schedule Policy	✓	
	Comments		
STORAGE POLICIES	Incremental Storage Policy*	✓	
	Standard Storage Policies	✓	
	Comments		
STORAGE POLICY COPIES	Data Verification	✓	
	Job Based Pruning	✓	
	Manual Retention	✓	
	Mark Job Disabled	✓	
	Selective Copy	✓	
	Comments		
SUBCLIENT POLICIES	SubClient Policy		
	Comments		
UPGRADE	Netware - Local		

	Unix - Remote (Push)		
	Unix/Linux/Macintosh - Local		
	Unix/Linux/Macintosh - Silent		
	Upgrade from CommCell Console	✓	
	Windows - Local	✓	
	Windows - Remote (Push)		
	Windows - Silent		
	Comments		
USER ADMINISTRATION AND SECURITY	Backup Set/Archive Set	✓	
	Subclient	✓	
	Comments		

Additional features are listed below:

Activity Control	Auxiliary Copy
CommCell Console	Deconfiguring Agents
GridStor	Languages
Log Files	MediaAgent
Operation window	QR Volume Creation Options
Robust Network Layer	Scheduling
SnapProtect Backup	Snapshot Engines
VaultTracker Enterprise	VaultTracker
Report Output Options	Restore/Recover/Retrieve - Other Options
Cloud Storage	Job Restart - Data Collection

Getting Started - Data Protection Manager Deployment

◀ Previous Next ▶

WHERE TO INSTALL

Install the software on a client computer that you want to protect and satisfies the minimum requirements specified in the System Requirements.

Follow the steps given below to install the Data Protection Manager.

INSTALLATION

The software can be installed using one of the following methods:

METHOD 1: INTERACTIVE INSTALL

Use this procedure to directly install the software from the installation package or a network drive.

METHOD 2: INSTALL SOFTWARE FROM COMMCCELL CONSOLE

Use this procedure to install remotely on a client computer.

METHOD 1: INTERACTIVE INSTALL

1. Run **Setup.exe** from the **Software Installation Package**.
2. Select the required language.
Click **Next**.

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

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

4. Select **I accept the terms in the license agreement**.
Click **Next**.

RELATED TOPICS

Download Software Packages

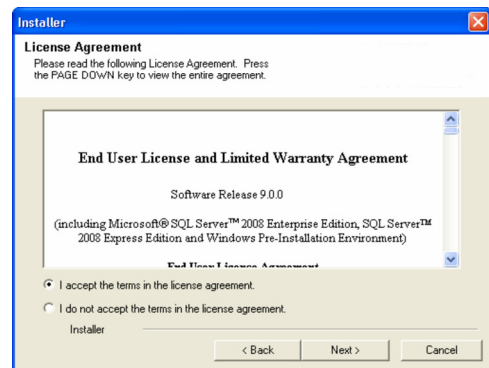
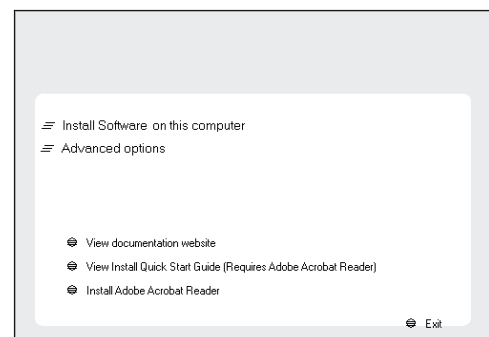
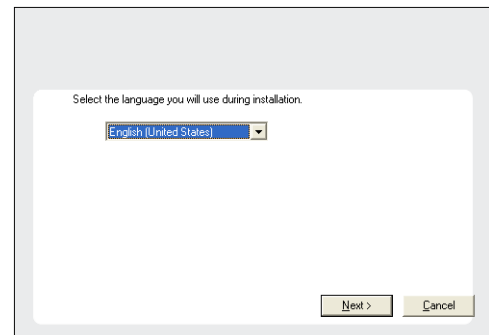
Download the latest software package to perform the install.

System Requirements

Verify that the computer in which you wish to install the software satisfies the System Requirements.

Firewall

Provides comprehensive information on firewall.

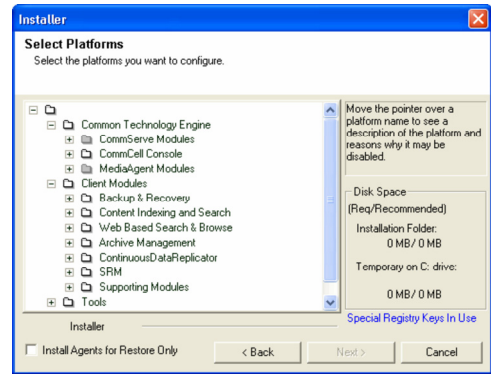


- Expand **Client Modules | Backup & Recovery** and select **Data Protection Manager**.

When you select the Microsoft Data Protection Manager iDataAgent for installation, the Windows File System iDataAgent and the SQL Server iDataAgent are automatically installed.

The Windows File System iDataAgent is mandatory, however the SQL Server iDataAgent is not mandatory, but it is recommended that you install it or create a new instance (if it is already installed) to protect the Data Protection Manager database for disaster recovery purposes.

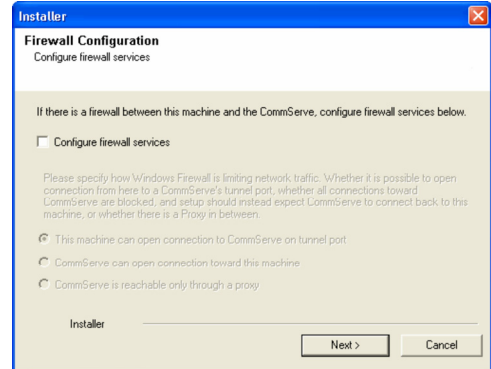
Click **Next**.



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

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

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

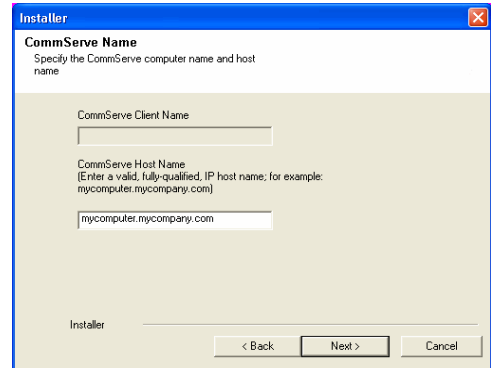


- Enter the fully qualified domain name of the **CommServe Host Name**.

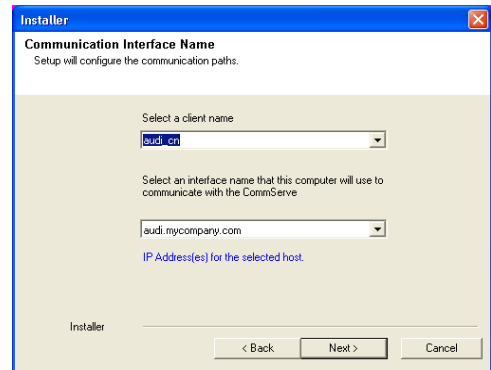
Click **Next**.

Do not use space and the following characters when specifying a new name for the CommServe Host Name:

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



- Click **Next**.



- Select **Add programs to the Windows Firewall Exclusion List**, to add CommCell programs and services to the Windows Firewall Exclusion List.

Click **Next**.

This option enables CommCell operations across Windows firewall by adding CommCell programs and services to Windows firewall exclusion list.

It is recommended to select this option even if Windows firewall is disabled. This will allow the CommCell programs and services to function if the Windows firewall is enabled at a later time.

10. Verify the default location for software installation.

Click **Browse** to change the default location.

Click **Next**.

- 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.

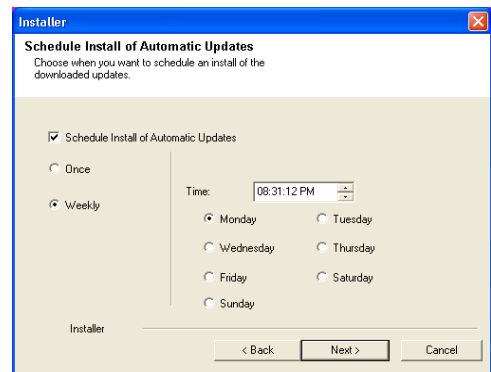
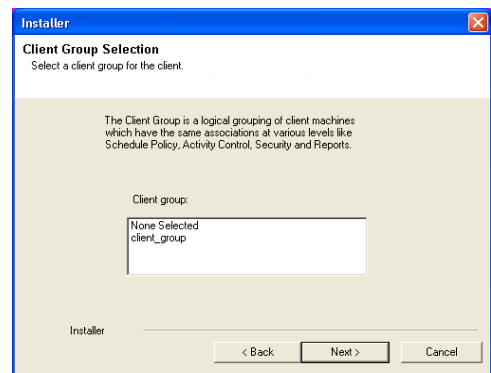
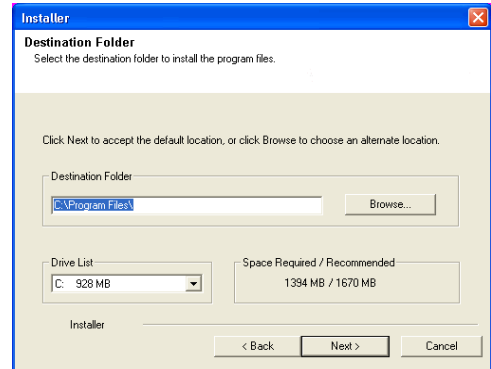
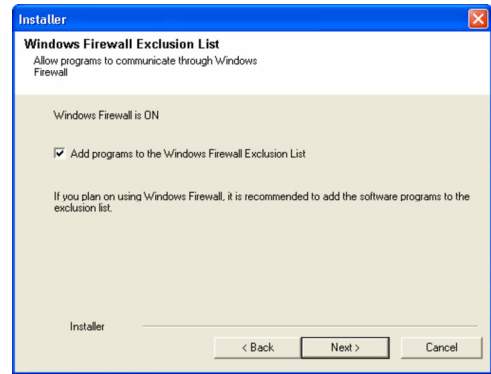
11. Select a Client Group from the list.

Click **Next**.

This screen will be displayed if Client Groups are configured in the CommCell Console.

12. Click **Next**.

13. Click **Next**.



- 14. Select a **Storage Policy** from the drop-down list.
Click **Next**.

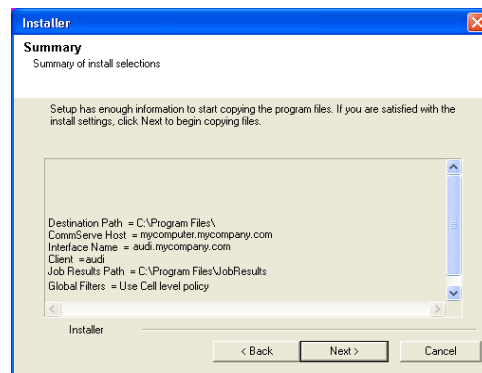
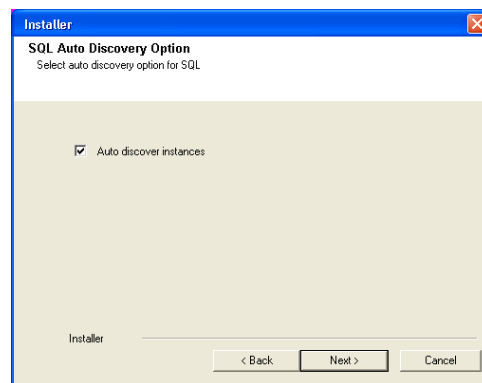
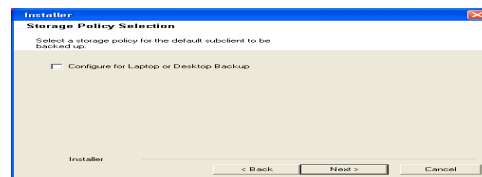
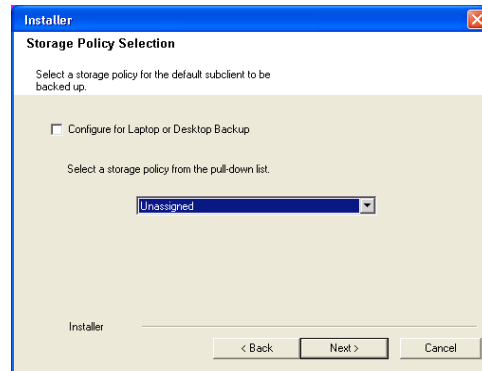
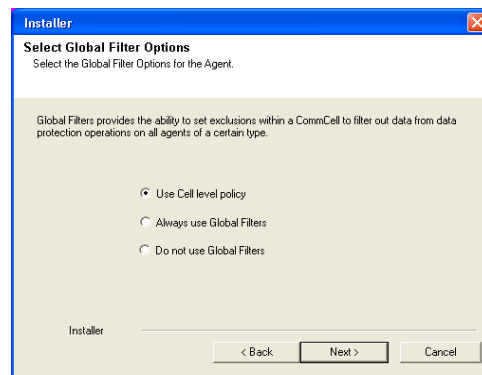
If you do not have Storage Policy created, this message will be displayed.
Click **OK**.

You can create the Storage Policy later in step 19.

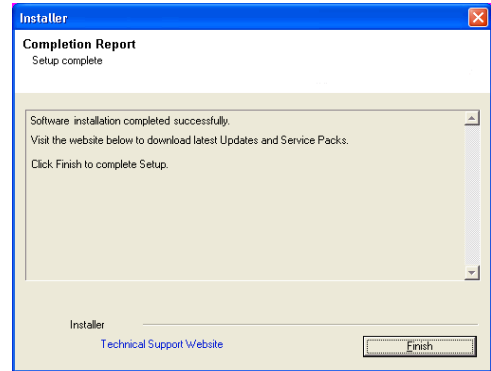
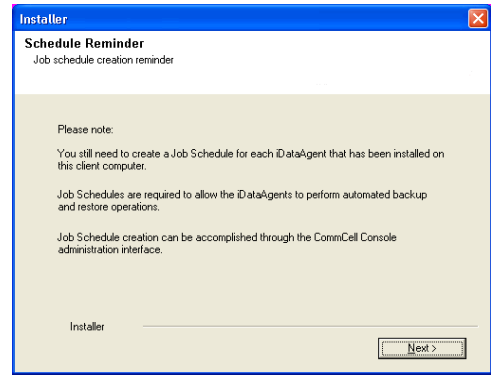
- 15. Click **Next**.
When **Auto Discover Instances** is enabled, new instances are automatically discovered every 24 hours.

- 16. Click **Next**.

- 17. Click **Next**.



18. Click **Finish**.



If you already have a storage policy selected in step 14, Click **Next >** button available at the bottom of the page to proceed to the **Configuration** section.

If you do not have Storage Policy created, continue with the following step.

19. Create a Storage Policy:

1. From the CommCell Browser, navigate to **Policies**.
2. Right-click the **Storage Policies** and then click **New Storage Policy**.
3. Follow the prompts displayed in the Storage Policy Wizard. The required options are mentioned below:

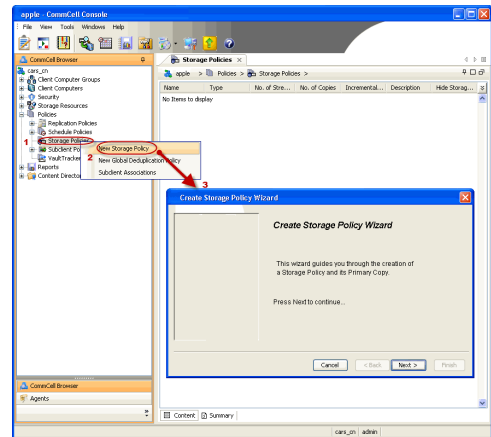
- Select the Storage Policy type as **Data Protection and Archiving** and click **Next**.
- Enter the name in the **Storage Policy Name** box and click **Next**.
- From the **Library** list, click the name of a disk library to which the primary copy should be associated and then click **Next**.

Ensure that you select a library attached to a MediaAgent operating in the current release.

- From the **MediaAgent** list, click the name of a MediaAgent that will be used to create the primary copy and then click **Next**.
- For the device streams and the retention criteria information, click **Next** to accept default values.
- Select **Yes** to enable deduplication for the primary copy.
- From the **MediaAgent** list, click the name of the MediaAgent that will be used to store the Deduplication store.

Type the name of the folder in which the deduplication database must be located in the Deduplication Store Location or click the Browse button to select the folder and then click **Next**.

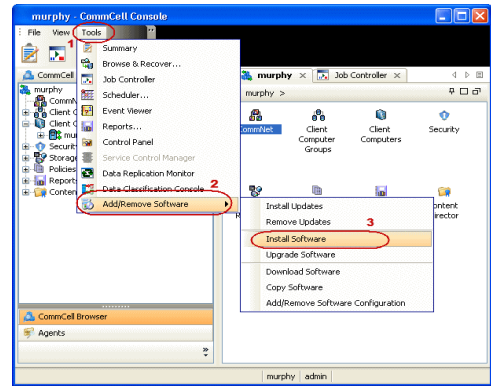
- Review the details and click **Finish** to create the Storage Policy.



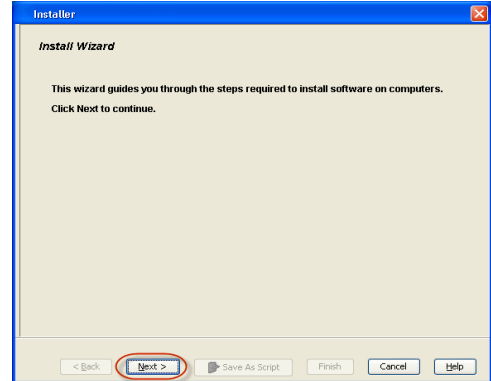
METHOD 2: INSTALL SOFTWARE FROM COMMCELL CONSOLE

1. From the CommCell Browser, select **Tools | Add/Remove Software | Install Software**.

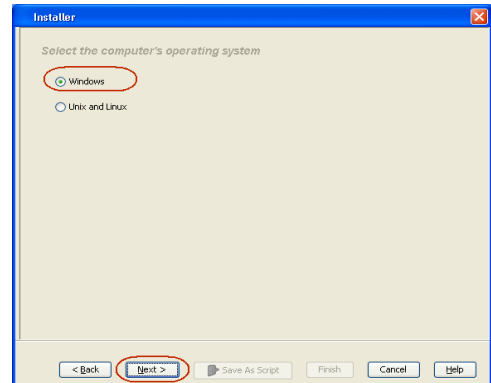
2. Click **Next**.



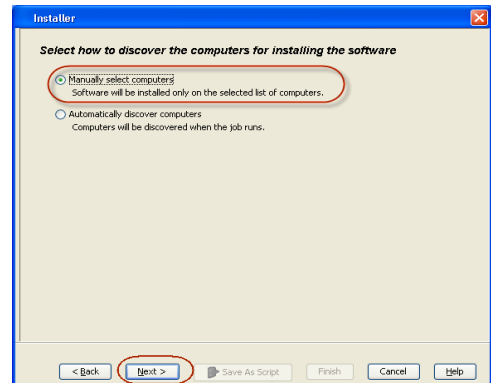
3. Select **Windows**.
Click **Next**.



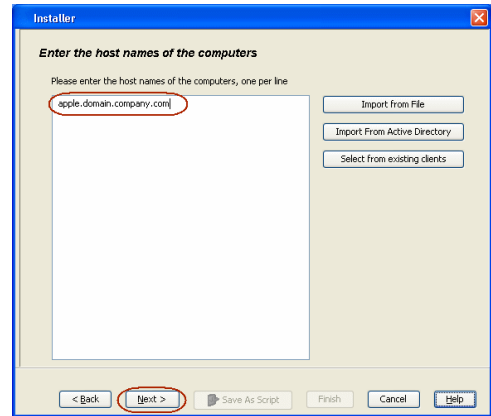
4. Select **Manually Select Computers**.
Click **Next**.



5. Enter the fully qualified domain name of the computer on which SQL Server resides.
For example: apple.domain.company.com
Click **Next**.

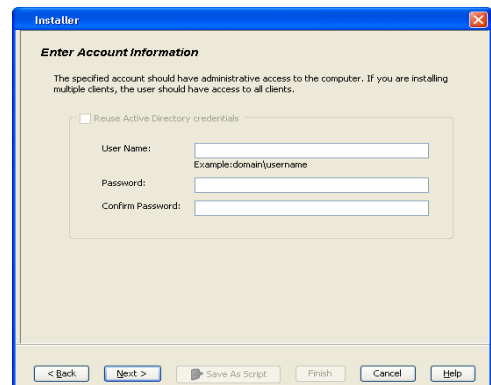
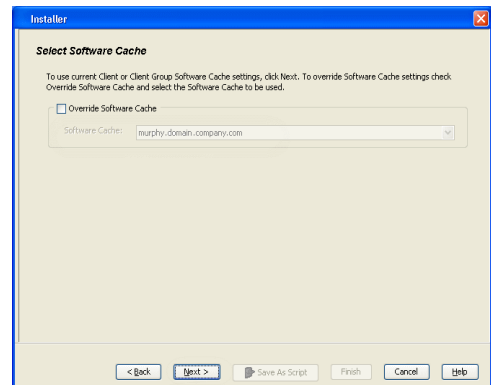


6. Click **Next**.



7. Specify **User Name** and **Password** that must be used to access the client computer. Click **Next**.

The user must be an Administrator or a member of the Administrator group on that computer.

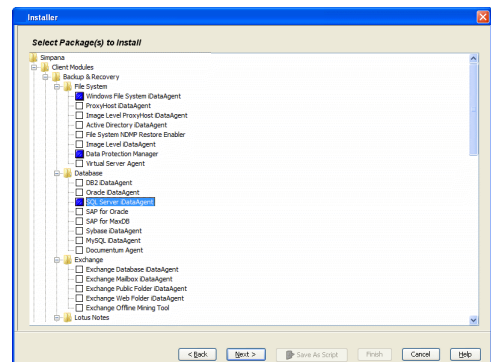


8. Select **Data Protection Manager**.

When you select the Microsoft Data Protection Manager iDataAgent for installation, the Windows File System iDataAgent and the SQL Server iDataAgent are automatically installed.

The Windows File System iDataAgent is mandatory, however the SQL Server iDataAgent is not mandatory, but it is recommended that you install it or create a new instance (if it is already installed) to protect the Data Protection Manager database for disaster recovery purposes.

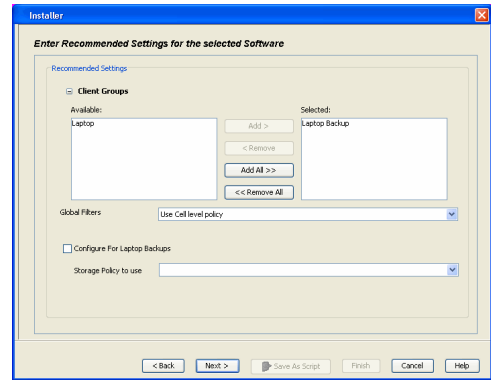
Click **Next**.



- 9.
- Select **Client Group** from **Available** and click **Add**.
 - From **Storage Policy to use** list, click storage policy.
 - Click **Next**.

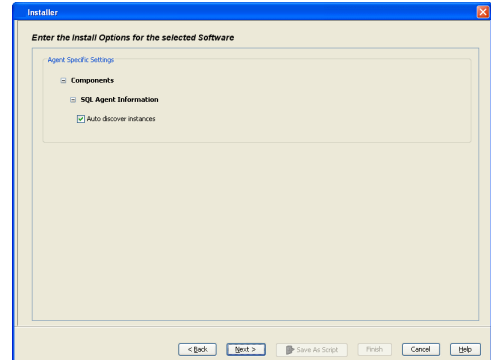
10. Click **Next**.

When **Auto Discover Instances** is enabled, new instances are automatically discovered every 24 hours.

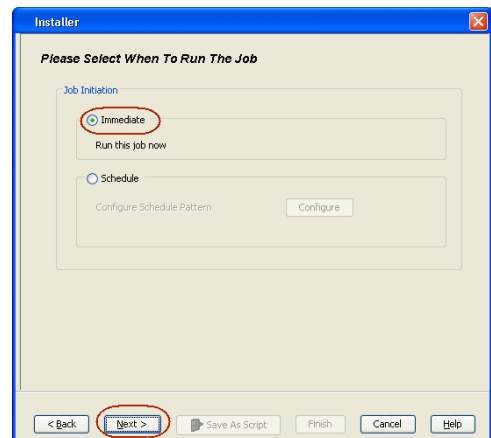
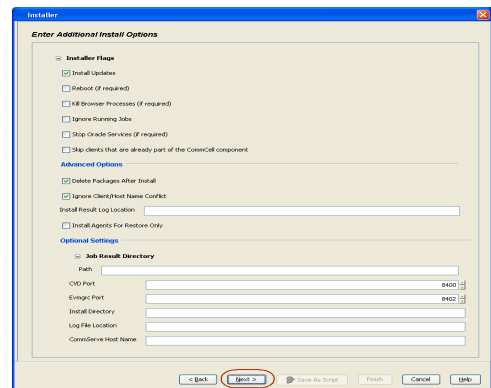


11. Click **Reboot (if required)** and then click **Next**.

When **Reboot (if required)** is selected, the install program will automatically reboot the client computer if a reboot is required during installation.

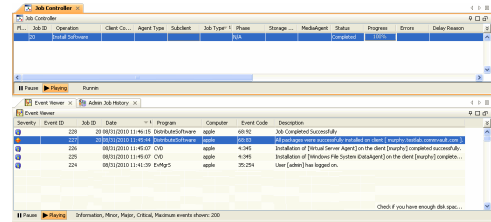
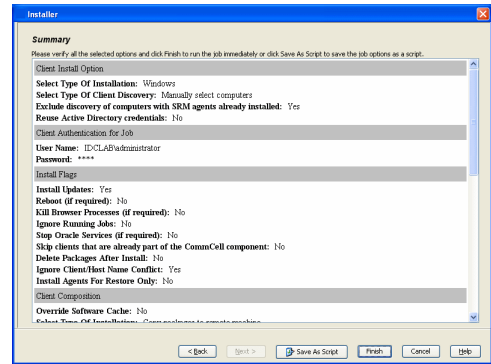


12. Click **Immediate**.
Click **Next**.



13. Click **Finish**.

14. You can track the progress of the job from the **Job Controller** or **Event Viewer** window.



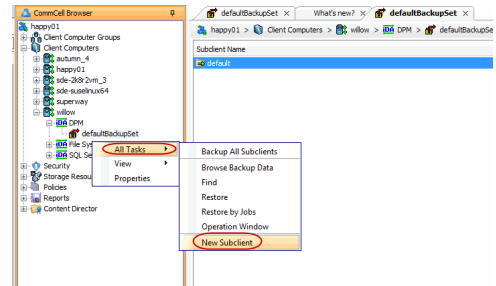
Getting Started - Data Protection Manager Configuration

◀ Previous Next ▶

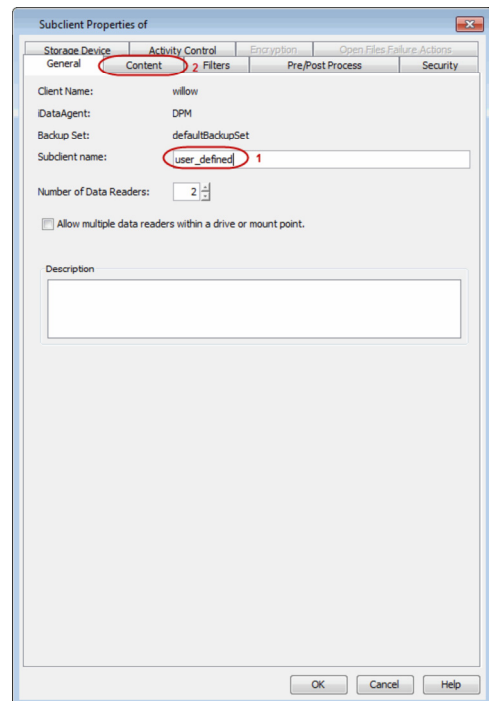
CONFIGURATION

Once installed, follow the steps given below to create a new subclient and assign a storage policy with the newly created subclient:

- From the CommCell Browser, navigate to **Client Computers** | **<Client>** | **DPM**.
 - Right-click the **defaultBackupSet** | **All Tasks** and click **New Subclient**.



- Enter the **Subclient Name**.
 - Click the **Content** tab.

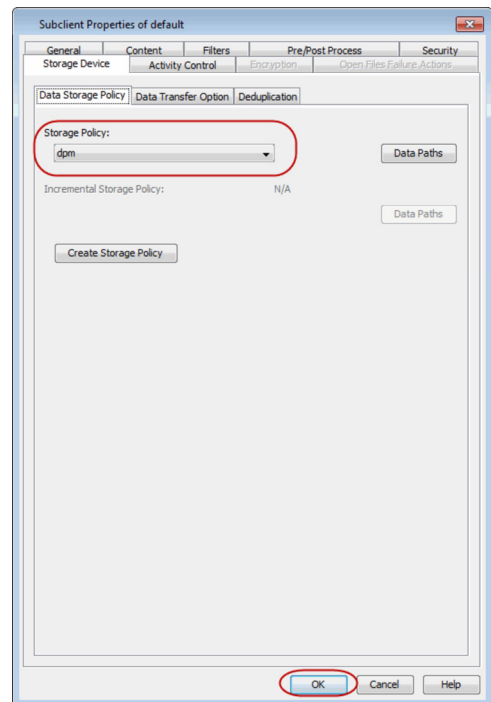
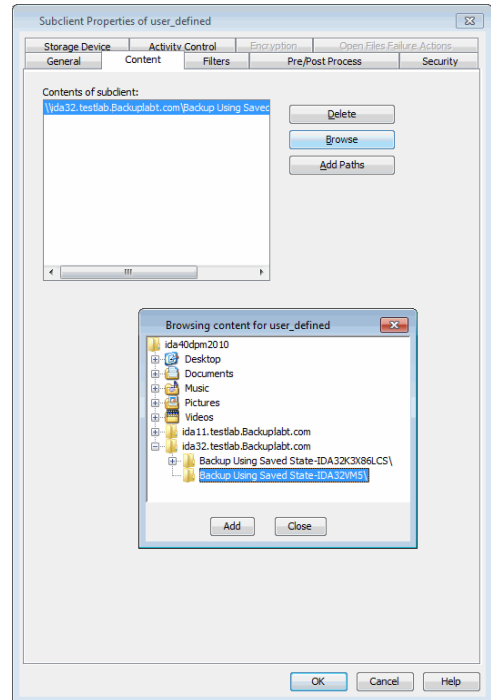


- Click **Add Path** and enter content path, then click **OK**.

4.
 - Click the **Storage Device** tab.
 - In the **Storage Policy** box, select a Storage Policy name.
 - Click **OK**.

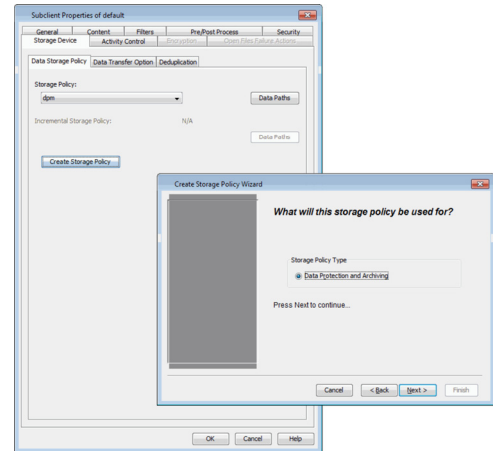
Click **Next** ► to continue.

If you do not have Storage Policy created, follow the step given below to create a storage policy.



5.
 1. Click **Create Storage Policy**.
 2. Follow the prompts displayed in the Storage Policy Wizard. The required options are mentioned below:
 - Select the Storage Policy type as **Data Protection and Archiving** and click **Next**.
 - Enter the name in the **Storage Policy Name** box and click **Next**.
 - From the **Library** list, click the name of a disk library to which the primary copy should be associated and then click **Next**.
Ensure that you select a library attached to a MediaAgent operating in the current release.
 - From the **MediaAgent** list, click the name of a MediaAgent that will be used to create the primary copy and then click **Next**.

- For the device streams and the retention criteria information, click **Next** to accept default values.
 - Select **Yes** to enable deduplication for the primary copy.
 - From the **MediaAgent** list, click the name of the MediaAgent that will be used to store the Deduplication store.
- Type the name of the folder in which the deduplication database must be located in the Deduplication Store Location or click the Browse button to select the folder and then click **Next**.
- Review the details and click **Finish** to create the Storage Policy.

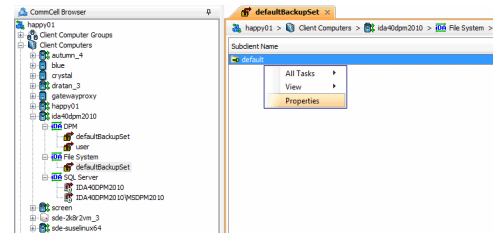


As the Data Protection Manager iDataAgent works in conjunction with the Microsoft Windows File system iDataAgent and Microsoft SQL Server iDataAgent, you need to configure the Microsoft Windows File system iDataAgent and Microsoft SQL Server iDataAgent as well in order to perform concurrent backup and restores that can be used for Disaster Recovery in future.

Use the following steps to configure the Microsoft Windows File system iDataAgent:

Once installed, follow the steps given below to assign a storage policy with the default subclient:

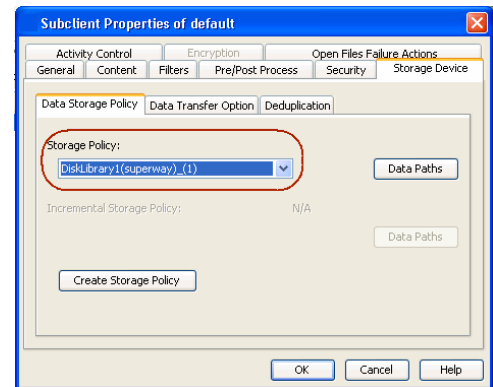
1.
 - From the CommCell Browser, navigate to **Client Computers | <Client> | File System | defaultBackupSet**.
 - Right-click the default subclient and then click **Properties**.



2.
 - Click the **Storage Device** tab.
 - In the **Storage Policy** box, select a Storage Policy name.
 - Click **OK**.

Click **Next** ➤ to continue.

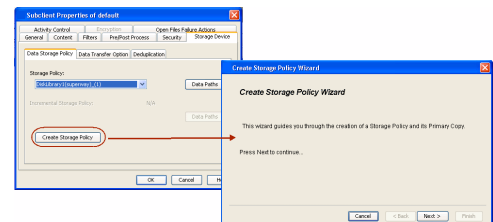
If you do not have Storage Policy created, follow the step given below to create a storage policy.



3.
 1. Click **Create Storage Policy**.
 2. Follow the prompts displayed in the Storage Policy Wizard. The required options are mentioned below:
 - Select the Storage Policy type as **Data Protection and Archiving** and click **Next**.
 - Enter the name in the **Storage Policy Name** box and click **Next**.
 - From the **Library** list, click the name of a disk library to which the primary copy should be associated and then click **Next**.

Ensure that you select a library attached to a MediaAgent operating in the current release.

- From the **MediaAgent** list, click the name of a MediaAgent that will be used to create the primary copy and then click **Next**.
- For the device streams and the retention criteria information, click **Next** to accept default values.
- Select **Yes** to enable deduplication for the primary copy.
- From the **MediaAgent** list, click the name of the MediaAgent that will be used to store the Deduplication store.

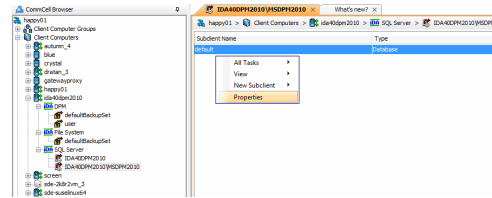


Type the name of the folder in which the deduplication database must be located in the Deduplication Store Location or click the Browse button to select the folder and then click **Next**.

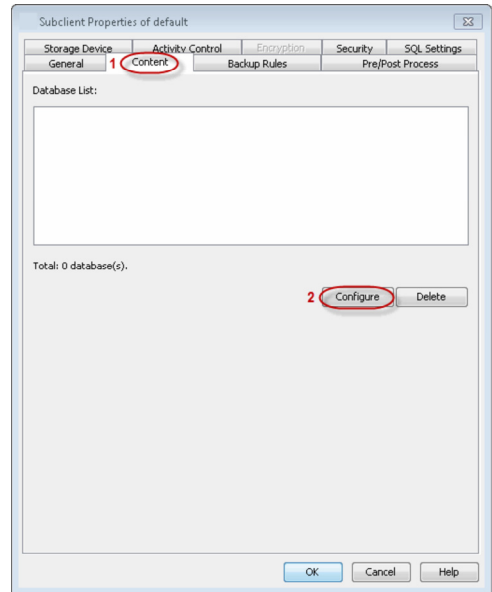
- o Review the details and click **Finish** to create the Storage Policy.

Use the following steps to configure the Microsoft SQL Server iDataAgent:

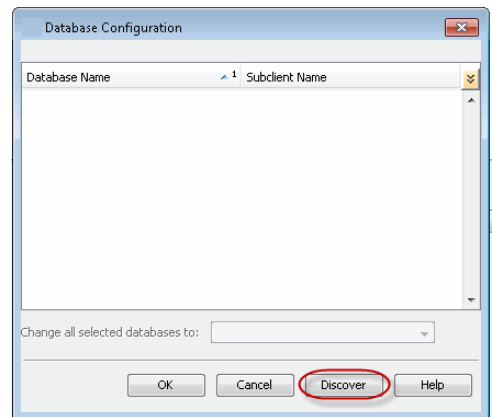
1.
 - From the CommCell Browser, navigate to **Client Computers | <Client> | SQL Server | <Instance>**.
 - Right-click the default subclient and then click **Properties**.



2.
 - Click the **Content** tab.
 - Click **Configure**.



3. Click **Discover**.



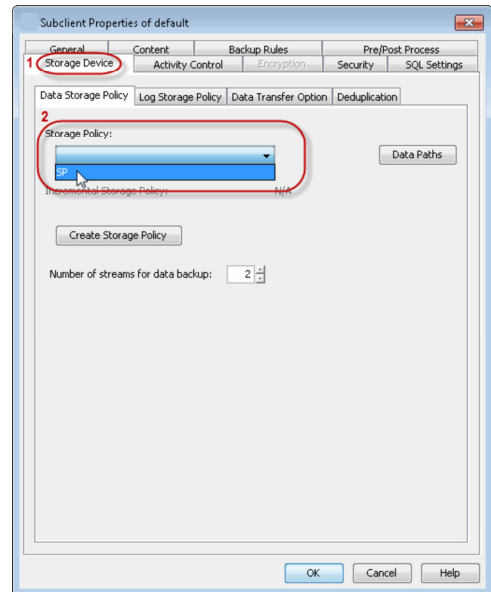
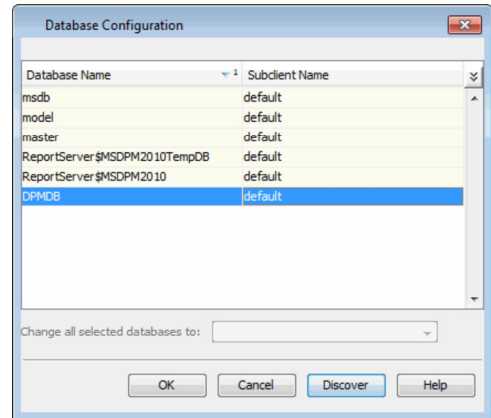
4.
 - Hold down CTRL and click each database listed in the **Database Name** list.

Ensure you have at least one user-created database selected as depicted in the image on the right.

- In the **Change all selected databases to** list, click **default**.
- Click **OK**.

5.
 - Click the **Storage Device** tab.
 - In the **Storage Policy** box, select a Storage Policy name.
 - Click **OK**.

Click **Next** ► to continue. If you do not have Storage Policy created, follow the step given below to create a storage policy.



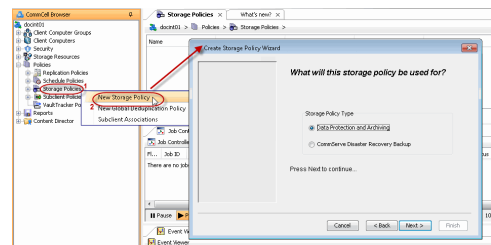
6. Create a Storage Policy:
 1. From the CommCell Browser, navigate to **Policies**.
 2. Right-click the **Storage Policies** and then click **New Storage Policy**.
 3. Follow the prompts displayed in the Storage Policy Wizard. The required options are mentioned below:
 - Select the Storage Policy type as **Data Protection and Archiving** and click **Next**.
 - Enter the name in the **Storage Policy Name** box and click **Next**.
 - From the **Library** list, click the name of a disk library to which the primary copy should be associated and then click **Next**.

Ensure that you select a library attached to a MediaAgent operating in the current release.

 - From the **MediaAgent** list, click the name of a MediaAgent that will be used to create the primary copy and then click **Next**.
 - For the device streams and the retention criteria information, click **Next** to accept default values.
 - Select **Yes** to enable deduplication for the primary copy.
 - From the **MediaAgent** list, click the name of the MediaAgent that will be used to store the Deduplication store.

Type the name of the folder in which the deduplication database must be located in the Deduplication Store Location or click the Browse button to select the folder and then click **Next**.

 - Review the details and click **Finish** to create the Storage Policy.

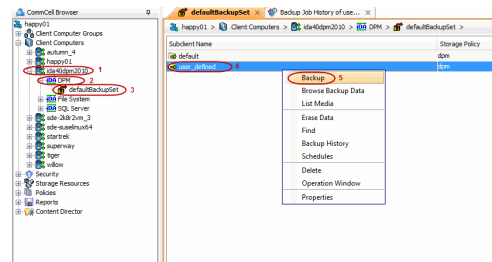


Getting Started - Data Protection Manager Backup

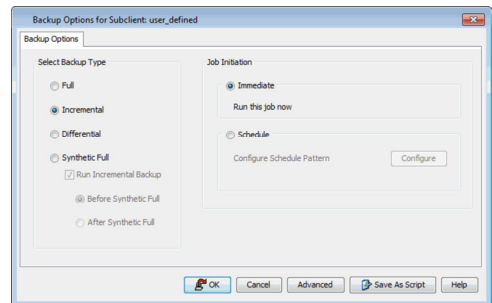
◀ Previous Next ▶

WHAT GETS BACKED UP	WHAT DOES NOT GET BACKED UP
<ul style="list-style-type: none"> Replicas of selected data source created by DPM server. Individual files and folders protected by the Data Protection Manager. 	<ul style="list-style-type: none"> Data Protection Manager protection groups are not backed up. The following data backed up on the Data Protection Manager Server does not get backed up using the Data Protection Manager iDataAgent <ul style="list-style-type: none"> File System data System State data <p style="text-align: center;">Use the Microsoft Windows File System iDataAgent to back up the database that contains the DPM metadata.</p> Data Protection Manager Server Metadata is not backed up by the Data Protection Manager iDataAgent. <p style="text-align: center;">Use the SQL Server iDataAgent to back up the database that contains the DPM metadata.</p>

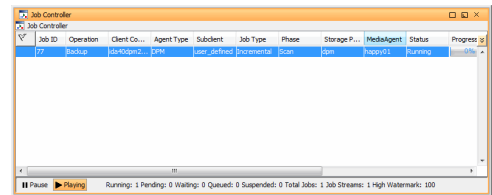
- From the CommCell Browser, navigate to **Client Computers | <Client> | DPM | <BackupSet>**.
 - Right-click the subclient you created while configuring the agent and click **Backup**.



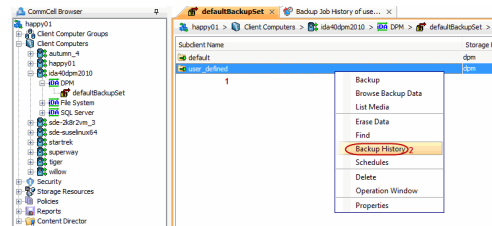
- Click **OK**.



- You can track the progress of the job from the **Job Controller** window of the CommCell console.



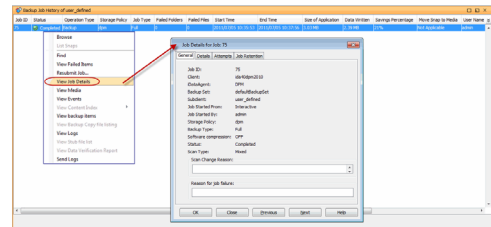
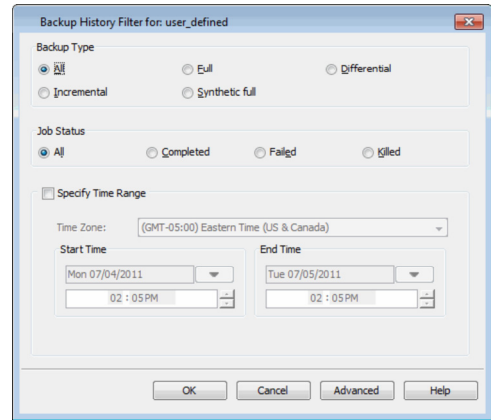
- Once the job is complete, view the job details from the **Backup History**. Right-click the **Subclient** and select **Backup History**.



- Click **OK**.

6. Right-click the job to:

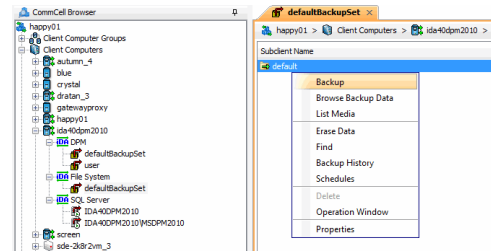
- Browse the data that was backed up.
- Find a Files or Directories that were backed up.
- View items that failed, if any, during the job.
- Resubmit the job.
- View job details.
- View media associated with the job.
- View events associated with the job.
- View backup items.
- View or send the log file that is associated with the job.



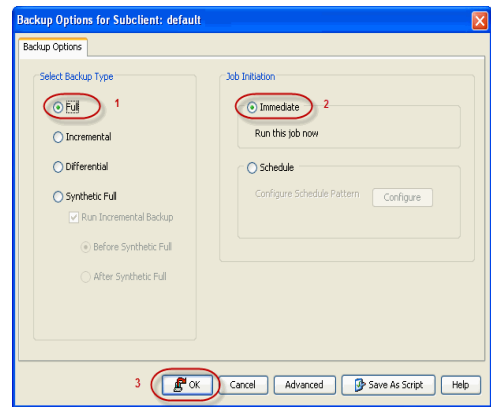
You must also backup the File System Data and System State of the data backed up by DPM Server using the Microsoft Windows File System iDataAgent.

Use the following steps to backups the file system data and system state data of DPM Server using the Microsoft Windows File System iDataAgent:

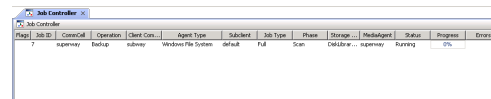
1.
 - From the CommCell Browser, navigate to **Client Computers | <Client> | File System | defaultBackupSet**.
 - Right-click the default subclient and click **Backup**.



2.
 - Click **Full** as backup type and then click **Immediate**.
 - Click **OK**.

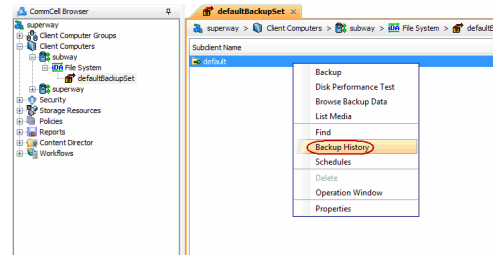


3. You can track the progress of the job from the **Job Controller** window of the CommCell console.



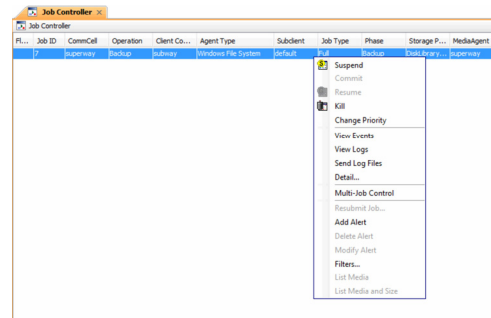
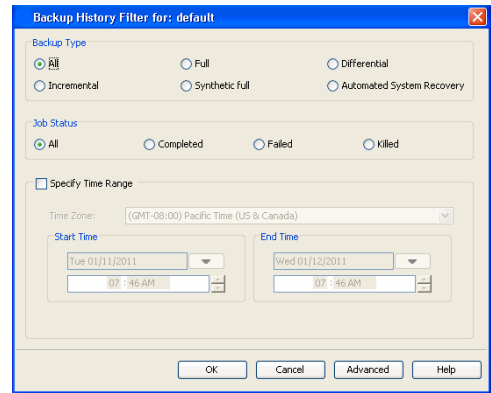
4. Once the job is complete, view the job details from the **Backup History**. Right-click the **Subclient** and select **Backup History**.

5. Click **OK**.



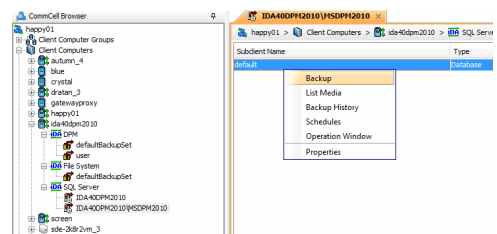
6. You can view the following details about the job by right-clicking the job:

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

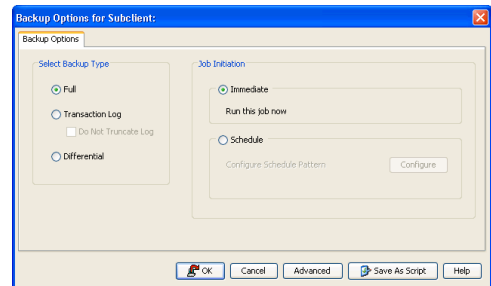


Also, the SQL Server metadata of DPM Server needs to be backed using the Microsoft SQL Server iDataAgent.

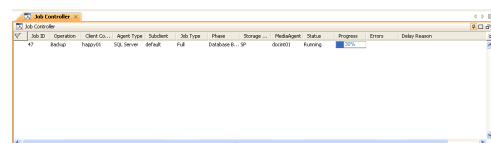
- From the CommCell Browser, navigate to **Client Computers | <Client> | SQL Server | <Instance>**.
 - Right-click the default subclient and click **Backup**.



- Click **Full** as backup type and then click **Immediate**.
 - Click **OK**.



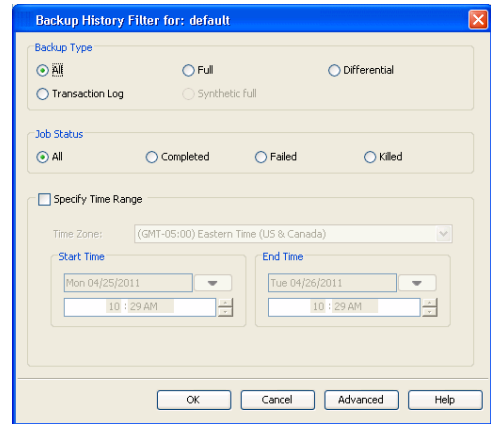
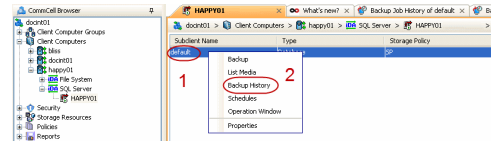
3. You can track the progress of the job from the **Job Controller** window of the CommCell console.



4. Once the job is complete, view the job details from the **Backup History**. Right-click

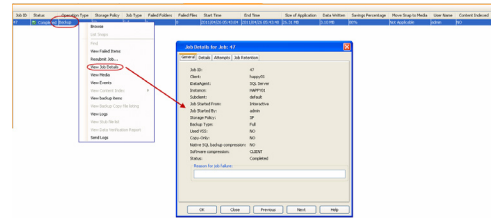
the **Subclient** and select **Backup History**.

5. Click **OK**.



6. Right-click the job to:

- Browse the databases that were backed up.
- View items that failed, if any, during the job.
- Resubmit the job.
- View job details.
- View media associated with the job.
- View events associated with the job.
- View backup items (you can view the database files that were backed up e.g., .mdf, .ldf).
- View or send the log file that is associated with the job.



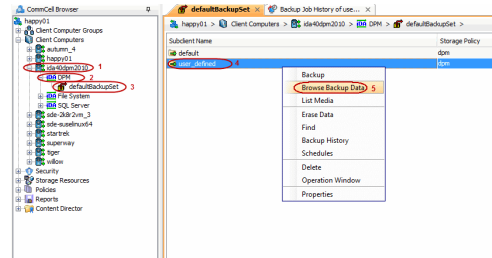
Getting Started - Data Protection Manager Restore



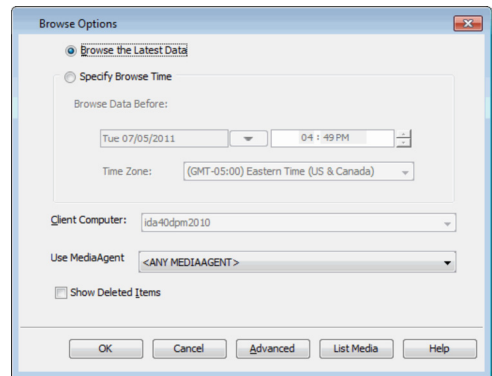
PERFORM A RESTORE

It is recommended that you perform a restore operation immediately after your first full backup to understand the process. The following section explains how restore DPM Server data to a new location.

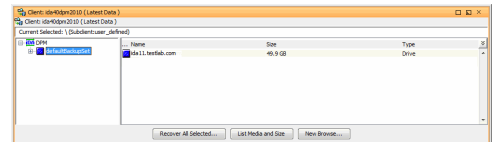
- From the CommCell Browser, navigate to **Client Computers | <Client> | DPM | defaultBackupSet**
 - Right-click the subclient you backed up and then click **Browse Backup Data**.



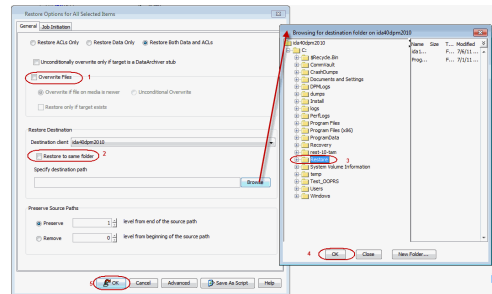
- Click **OK**.



- Select any folder with smaller data size.
 - Click **Recover All Selected**.

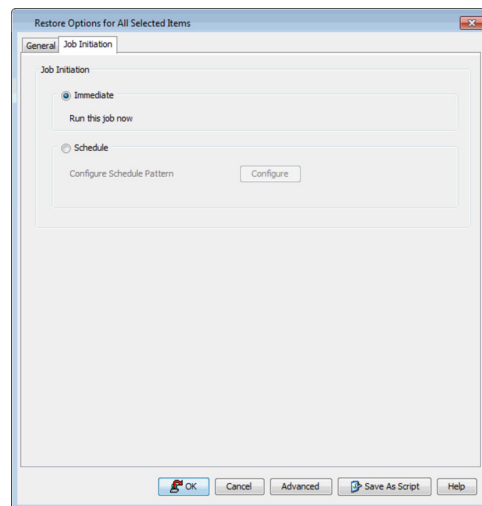


- Clear the **Overwrite Files** and **Restore to same folder** options.
 - Specify the destination path by clicking **Browse** button. This will ensure that the existing files are not overwritten.
 - Click **OK**.

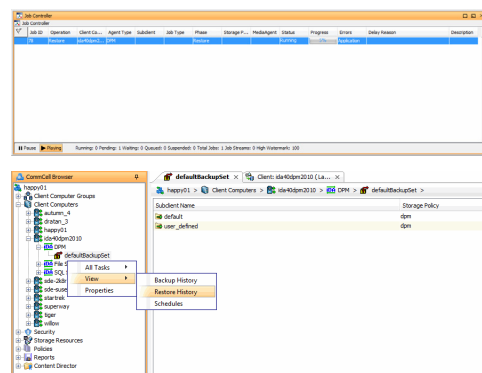


- Click the **Job Initiation** tab.
 - Select **Immediate** to run the job immediately.
 - Click **OK**.

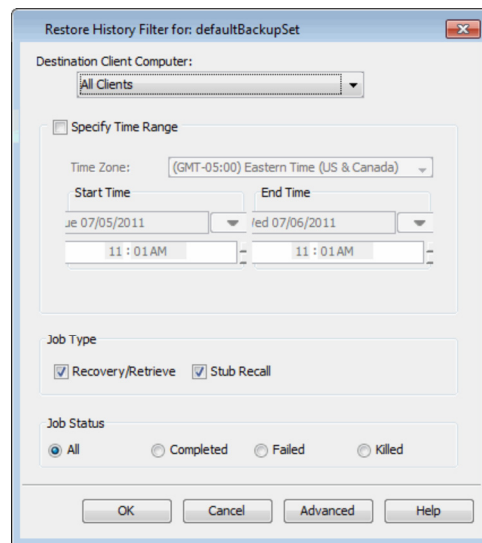
6. You can monitor the progress of the restore job in the **Job Controller** window of the CommCell Console.



7. Once the restore job has completed, right-click the **defaultBackupSet**, point to **View** and then click **Restore History**.

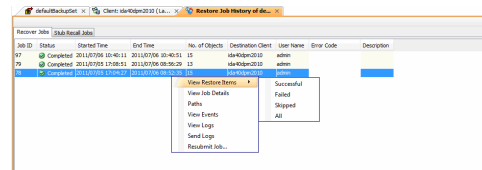


8. Click **OK**.

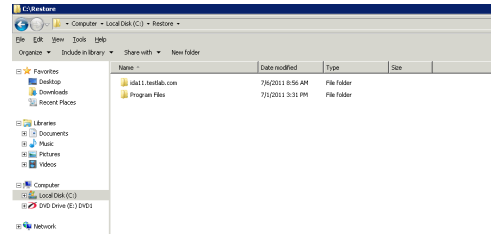


9. You can view the following details about the job by right-clicking the job:

- View Restore Items
You can view them as **Successful**, **Failed**, **Skipped** or **All**.
- View Job Details
- View Events of the restore job.
- View Log files of the restore job



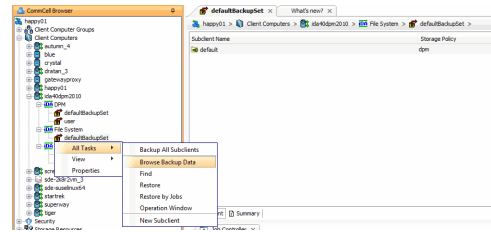
10. Once the DPM Server data is restored, verify that the restored files/folders are available in the restore destination provided during step 4.



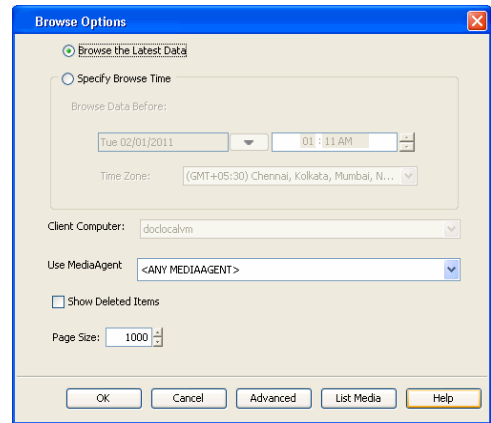
You must also restore the File System Data and System State data of the DPM Server backed up by the Microsoft Windows File System iDataAgent and the SQL Server metadata of DPM backed up by Microsoft SQL Server iDataAgent

Use the following steps to restore the file system data backed up by the Microsoft Windows File System iDataAgent:

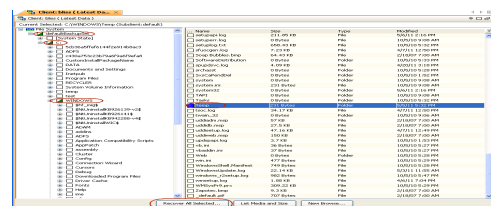
1.
 - From the CommCell Browser, navigate to **Client Computers** | **<Client>** | **File System** | **defaultBackupSet**
 - Right-click the default subclient and then click **Browse Backup Data**.



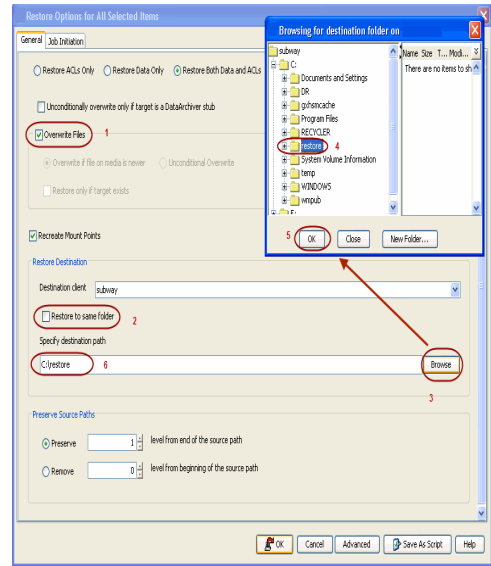
2. Click **OK**.



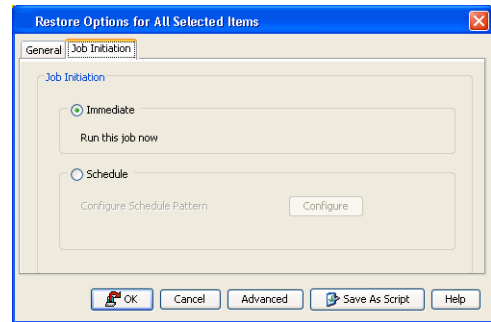
3.
 - Expand the **defaultBackupSet** and navigate to **Windows** folder.
 - Select the **Temp** folder.
 - For the first restore job, select any folder with smaller data size.
 - Click **Recover All Selected**.



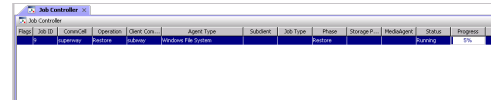
4.
 - Clear the **Overwrite Files** and **Restore to same folder** options.
 - Specify the destination path by clicking **Browse** button.
 - This will ensure that the existing files are not overwritten.
 - Click **OK**.



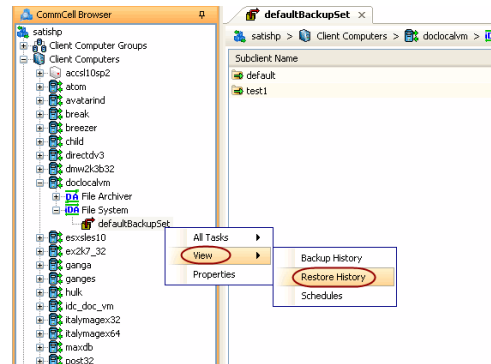
5.
 - Click the **Job Initiation** tab.
 - Select **Immediate** to run the job immediately.
 - Click **OK**.



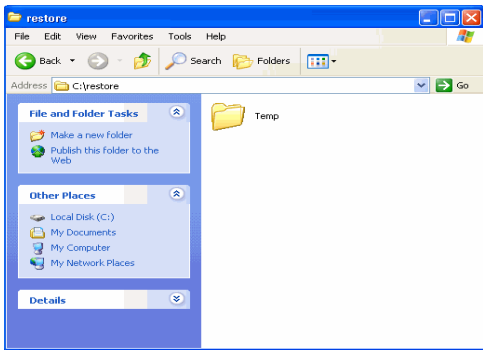
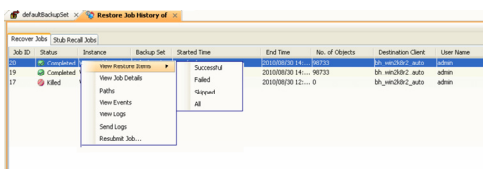
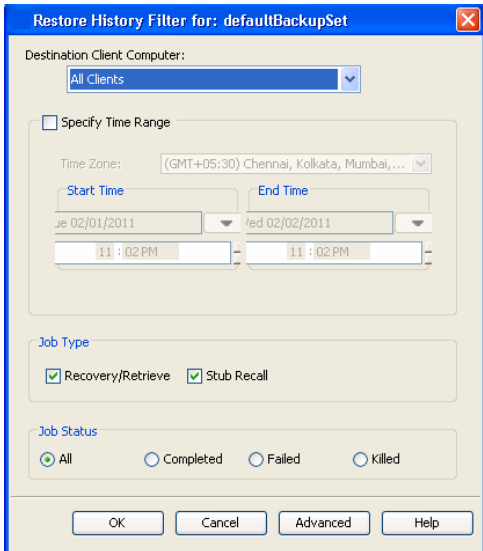
6. You can monitor the progress of the restore job in the **Job Controller** window of the CommCell Console.



7. Once the restore job has completed, right-click the **defaultBackupSet**, point to **View** and then click **Restore History**.



8. Click **OK**.



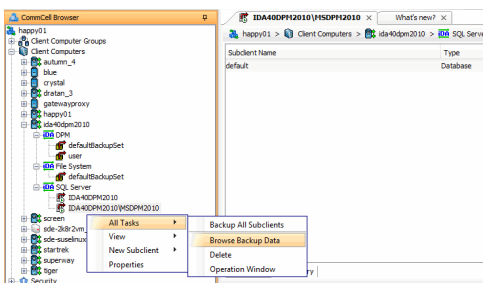
9. You can view the following details about the job by right-clicking the job:

- View Restore Items
You can view them as **Successful, Failed, Skipped** or **All**.
- View Job Details
- View Events of the restore job.
- View Log files of the restore job

10. Once the File System is restored, verify that the restored files/folders are available in the restore destination provided during step 4.

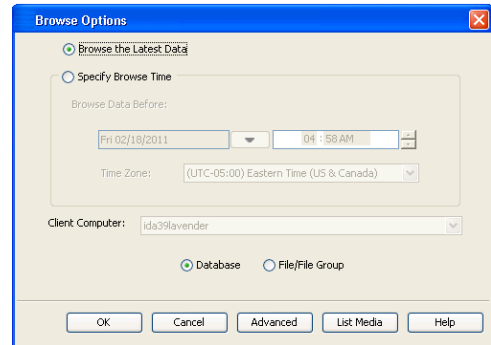
Use the following steps to restore the SQL Server Metadata backed up by the Microsoft SQL Server iDataAgent:

1.
 - From the CommCell Browser, navigate to **Client Computers | <Client> | SQL Server**.
 - Right-click the instance and then click **All Tasks | Browse Backup Data**.

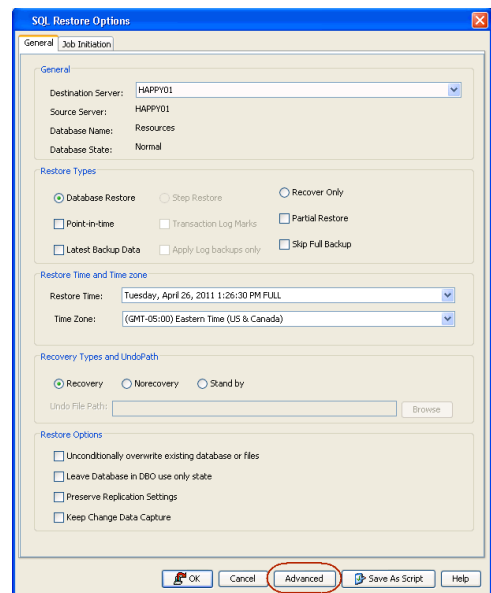
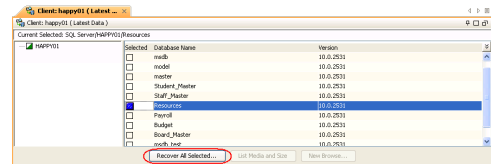


2. Click **OK**.

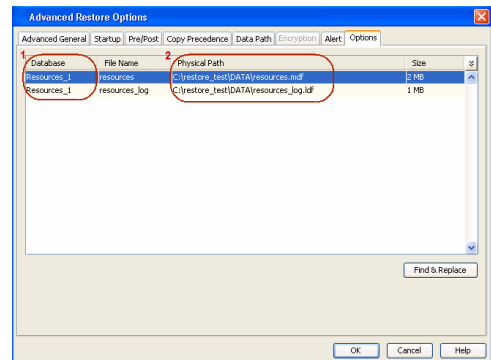
3.
 - In the right pane of the Browse window, select the database you want to restore.
 - Click **Recover All Selected**.



4. Click **Advanced**.



5.
 - Click the **Options** tab.
 - Rename the database name under the **Database** column.
 - Change the path of the database and log files under the **Physical Path** column.
 - Click **OK**.



6. Click **OK**.

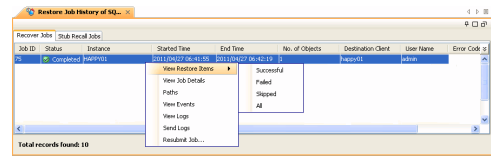
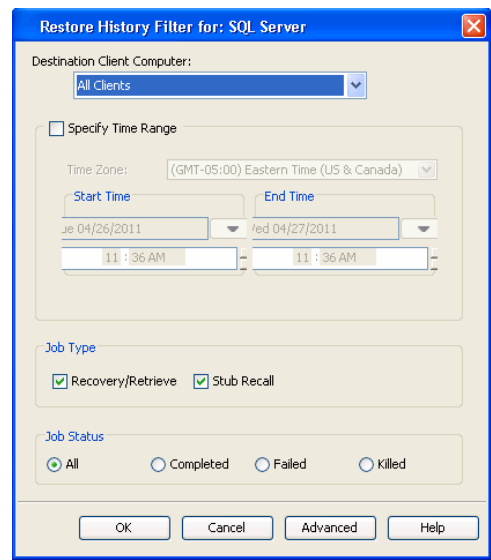
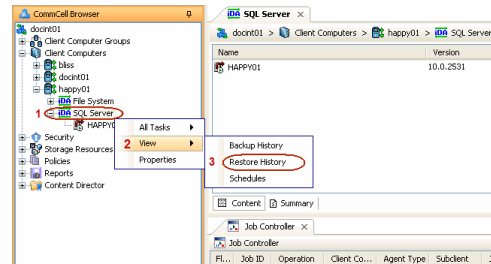
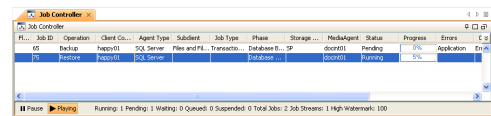
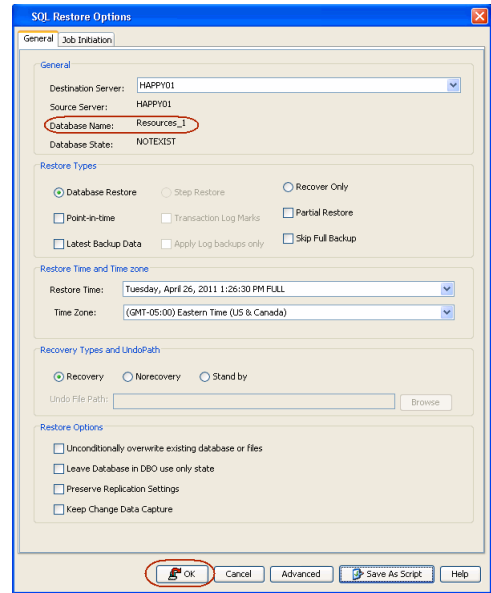
7. You can monitor the progress of the restore job in the **Job Controller**.

8. Once the restore job has completed, right-click the agent and click **View | Restore History**.

9. Click **OK**.

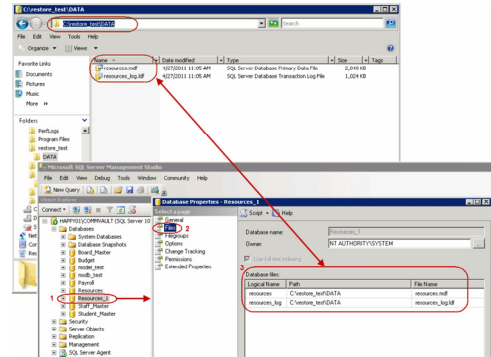
10. You can view the following details about the job by right-clicking the job:

- View Restore Items
You can view them as **Successful, Failed, Skipped** or **All**.
- View Job Details
- View Events of the restore job.
- View Log files of the restore job
- View Job Path



- Send Logs
- Resubmit Job

11. Once the database is restored, verify that the restored database and log files are available in the restore destination provided during step 5.



CONGRATULATIONS - YOU HAVE SUCCESSFULLY COMPLETED YOUR FIRST BACKUP AND RESTORE.

If you want to further explore this Agent's features read the **Advanced** sections of this documentation.

