Quick Start Guide - Oracle *i*DataAgent

Overview - Oracle *i*DataAgent

WHERE TO GO NEXT

Install the Oracle *i*DataAgent
Walks you through the process of installing the Oracle *i*DataAgent.

INTRODUCTION

The Oracle *i*DataAgent provides an unique, simplified end-to-end backup and recovery solution for Oracle data in your enterprise. In addition to complete protection of the entire Oracle database, it provides more granular backup and recovery of specific data files and logs. The product can be used to perform both full system rebuilds and granular recovery of the data.

KEY FEATURES

FULL RANGE OF BACKUP AND RECOVERY OPTIONS

The Oracle *i*DataAgent provides the flexibility to backup the Oracle database in different environments. This is very essential since the Oracle database is always subject to constant changes.

You can perform a full or incremental backup of the entire database or individual datafiles/ tablespaces, or archive logs at any point of time. The following section describes the backups that can be performed in different environments.

OFFLINE BACKUP

When the database is shutdown and not available for use, you can perform a full backup of the database without the logs. This is especially used when the data is consistent and there are no transactions in the database.

ONLINE BACKUP

In cases, when you cannot bring down the database to perform an offline backup, you can use the online backup method. Here, you can perform full or incremental backups when the database is online and in ARCHIVELOG mode. This is very useful when you want to perform a point-in-time restore of the database.

You also have the facility the backup only the archive logs when the database is online. These logs can be applied to an online backup to recover the database to the current point-in-time.

You can also protect the non-database files and profiles using the appropriate File System *i*DataAgent.
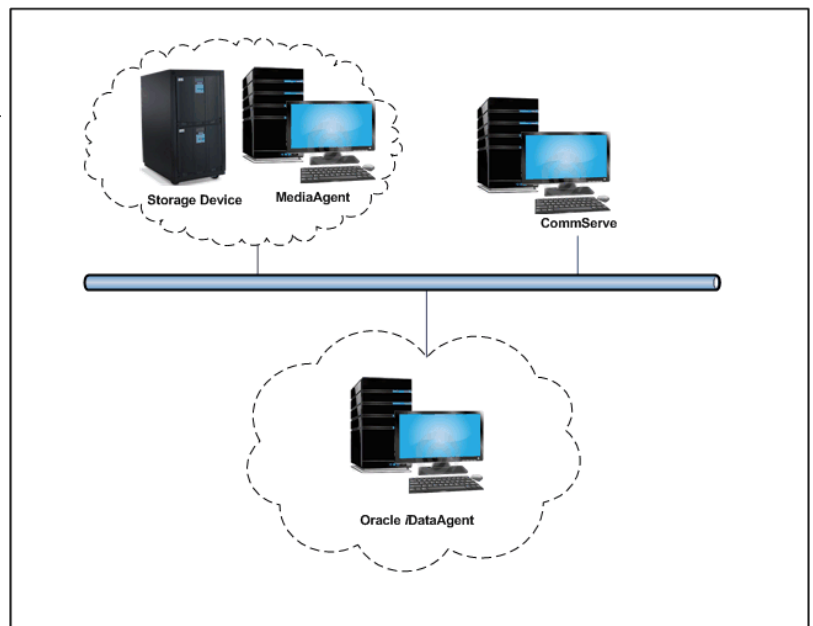
SELECTIVE ONLINE FULL BACKUP

This *i*DataAgent allows you to backup and store copies of valid data from a source copy of a specific storage policy to all or one active secondary copy within a storage policy providing for a better tape rotation. An online full backup job is copied to a selective copy, if the full backup job cycle completes successfully thereby allowing you to select, store and protect your valuable data on a secondary copy for future restores in a more viable and economic mode.

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.

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 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.

ADD-ON COMPONENTS

SNAPPROTECT BACKUP

SnapProtect backup enables you to create a point-in-time snapshot by temporarily quiescing the data, taking a snapshot, and then resuming live operations. SnapProtect backup works in conjunction with hardware snapshot engines.

TERMINOLOGY

The Oracle iDataAgent documentation uses the following terminology:

CLIENT	The computer in which the iDataAgent is installed and contains the data to be secured.
INSTANCE	The Oracle database to be used for the backup and restore operations.
SUBCLIENT	The Oracle data to be backed up.

Back to Top

New Features - Oracle *i*DataAgent

NEW FEATURES FOR ORACLE *i*DATAAGENT

SUPPORT FOR BACK UP AND RESTORE OF ORACLE 12C, INCLUDING CONTAINER AND PLUGGABLE DATABASES

Oracle 12c is now supported, including backing up and restoring container databases (CDB) and pluggable databases (PDB).

DATA PROTECTION OPERATIONS

- For Oracle and Oracle RAC *i*DataAgents, you can now assign tags to a specific backup operation in order to facilitate restore based on the assigned tag. For more information, Learn more...

- Oracle RMAN scripts for backup and restore operations can now be viewed and edited from the CommCell Console. Learn more...

- For archive log backups, you now have the facility to disable the log switch of current log files.

  Learn more...

- Oracle instances can now be automatically or manually discovered for backups. Learn more....

- Multiple copies of data or log backups are now supported from the CommCell Console.

  Learn more...

DATA RECOVERY OPERATIONS

- You can now restore the control file and SP file from a specific backup piece from the CommCell Console. Learn more...

- Oracle archive log files can be restored based on tags from the CommCell Console. Learn more...

- Oracle RMAN scripts for backup and restore operations can now be viewed and edited from the CommCell Console. Learn more...

- When performing table level restore, you now have the facility to select the dependent and referenced tables of the selected tables for the restore operation. You can also choose to include triggers, constraints, indexes, grants, stored procedures, or other external parameters (such as COMPRESSION or PARALLEL) on the selected tables for the restore operation. Learn more...

- You can resubmit Oracle restore jobs from the Job History window without the need to reconfigure the job with the same options. If required, you can also modify the existing configuration and resubmit the job. Learn more...

- During Oracle restore operations, the restore and recover processes are run as separate RMAN run blocks and hence when resumed, the job is restarted from the last failed RMAN run block. Learn more...

SNAPPROTECT

ADDITIONAL SNAPPROTECT SUPPORT FOR THE ORACLE *I*DATAAGENT

- SnapProtect can now be utilized to perform ASM (Automatic Storage Management) and RMAN backups.

  In addition, SnapProtect now supports RMAN based Movement to Tape allowing you to use Recovery Manager (RMAN) for the movement to media operation.

- Table Level restores of SnapProtect data is now supported.

Learn more...

ADDITIONAL SNAP ENGINE SUPPORT FOR SNAPPROTECT

The following Snapshot Engines are now supported for SnapProtect:

- Data Replicator
- Dell EqualLogic
- HP StorageWorks EVA
- IBM XIV
- EMC Celerra

SNAP TEST TOOL

Snap Test tool is now available to test basic snap engine operations. See SnapProtect - Snaptest Tool, for more information.

MULTI-STREAMING FOR SNAPPROTECT

Multi-stream backups are now supported for SnapProtect. You can now use multi-stream when moving data to media.

VOLUME MANAGER SUPPORT

SnapProtect Volume Manager support has been extended to support more configurations for e.g., Multiple Physical Volumes containing one Logical Volume. See Supported Volume Managers, for a complete list of volume managers supported for SnapProtect.

ADDITIONAL SNAPPROTECT SUPPORT FOR UNIX

SnapProtect support on Unix has been extended to include the following platforms, file system, and volume manager types:

- HP-UX
- Sun Volume Manager
- Solaris Local Zones
- Zettabyte File System (ZFS)

COMMAND LINE INTERFACE

Oracle third party command line operations can now be executed from the Oracle Enterprise Manager application.

NEW COMMCELL FEATURES SUPPORTED FOR ORACLE IDATAAGENT

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.

SCHEDULE POLICY

A data protection schedule policy can now be created for this specific agent. For more information, see Agent-Specific Data Protection Schedule Policy.

Back to Top

System Requirements - Oracle *i*DataAgent

System Requirements | Supported Features

The following requirements are for the Oracle *i*DataAgent:

APPLICATION/OPERATING SYSTEM		PROCESSOR
ORACLE 12C DATABASE (ENTERPRISE OR STANDARD EDITION) ON:		
LINUX	**ORACLE LINUX**	
	Oracle Linux 6.x with glibc 2.12.x	x64
	Oracle Linux 5.x with glibc 2.5.x	x64
	RED HAT ENTERPRISE LINUX/CENTOS	
	Red Hat Enterprise Linux/CentOS 6.x with glibc 2.12.x	x64, Power PC or compatible processors
	Red Hat Enterprise Linux/CentOS 5.x with glibc 2.5.x	x64, Power PC or compatible processors
SOLARIS	Solaris 11.x	x64, Sparc5 (or higher recommended)
	Solaris 10.x	x64, Sparc5 (or higher recommended)
WINDOWS	**WINDOWS 2008**	
	Microsoft Windows Server 2008 Editions with a minimum of Service Pack 1*	
	*Core Editions not supported	
ORACLE 10G/11G (R1, R2 OR HIGHER) DATABASES (ENTERPRISE OR STANDARD EDITION) ON:		
AIX	AIX 7.1	Power PC (Includes IBM System p)
	AIX 6.1	Power PC (Includes IBM System p)
	AIX 5.3	Power PC (Includes IBM System p)
HP-UX	HP-UX 11i v3 (11.31)	Itanium
	HP-UX 11i v3 (11.31)	PA-RISC
	HP-UX 11i v2 (11.23)	PA-RISC
	HP-UX 11i v2 (11.23)	Itanium
LINUX	**ORACLE LINUX**	
	Oracle Linux 6.x with glibc 2.12.x	Intel Pentium, x64 or compatible processors
	Oracle Linux 5.x with glibc 2.5.x	Intel Pentium, x64 or compatible processors
	Oracle Linux 4.x with a minimum of glibc 2.3.4	Intel Pentium, x64 or compatible processors
	RED FLAG LINUX	
	Red Flag Linux 4.x with a minimum of glibc 2.3.4	Intel Pentium or compatible processors
	RED HAT ENTERPRISE LINUX/CENTOS	
	Red Hat Enterprise Linux/CentOS 6.x with glibc 2.12.x	Intel Pentium, Itanium, x64, Power PC (Includes IBM System p) or compatible processors
	Red Hat Enterprise Linux/CentOS 5.x with glibc 2.5.x	Intel Pentium, Itanium, x64, Power PC (Includes IBM System p) or compatible processors
	Red Hat Enterprise Linux/CentOS 4.x with a minimum of glibc 2.3.4	Intel Pentium, Itanium, x64, Power PC (Includes IBM System p) or compatible processors
	SUSE LINUX (SLES)	
	SuSE Linux 11.x with glibc 2.9.x and above	Intel Pentium, Itanium, x64, Power PC (Includes IBM System

		p) or compatible processors
	SuSE Linux 10.x with glibc 2.4.x	Intel Pentium, Itanium, x64, Power PC (Includes IBM System p) or compatible processors
Z-LINUX	**RED HAT ENTERPRISE LINUX**	
	Red Hat Enterprise Linux 6.x	s390x 64-bit
	Red Hat Enterprise Linux 5.x	s390x 64-bit
	Red Hat Enterprise Linux 4.x	s390x 64-bit
	SUSE LINUX (SLES)	
	SuSE Linux 11.x Enterprise Server	s390x 64-bit
	SuSE Linux 10.x Enterprise Server	s390x 64-bit
SOLARIS	Solaris 11.x	x64, Sparc5 (or higher recommended)
	Solaris 10.x	x64, Sparc5 (or higher recommended)
WINDOWS	**WINDOWS 2008**	
	Microsoft Windows Server 2008 Editions with a minimum of Service Pack 1* *Core Editions not supported	All Windows-compatible processors supported
	Microsoft Windows Server 2008 Editions with a minimum of Service Pack 1* *Core Editions not supported	
	WINDOWS 2003	
	Microsoft Windows Server 2003 Editions with a minimum of Service Pack 1	All Windows-compatible processors supported

CLUSTER - SUPPORT

The software can be installed on a Cluster if clustering is supported by the above-mentioned operating systems.

For information on supported cluster types, see Clustering - Support.

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.

MEMORY

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

AIX, HP-UX, LINUX, SOLARIS AND TRU64
64 MB RAM per stream/drive minimum required beyond the requirements of the operating system and running applications

Swap space = 2*RAM size

EXPRESS DATABASE EDITION SUPPORT

Express Editions of Oracle 10g/11g (R2) Databases are supported on all operating systems supported by the Oracle application server.

ORACLE EXADATA DATABASE MACHINE SUPPORT

Oracle Exadata Database Machine is supported on the following Oracle Database versions:
- Oracle 11g (11.1.0.7)
- Oracle 11g R2 (11.2.0.1 or higher)

SOLARIS ZONES/CONTAINERS SUPPORT

Data Protection of data residing on global and non-global zones is supported.

For a comprehensive list of supported components, see Unix Virtualization.

AIX LPAR/WPAR SUPPORT

Data protection on Logical Partitioning (LPAR) and Workload Partitioning (WPAR) is supported.

PERIPHERALS

DVD-ROM drive

Network Interface Card

MISCELLANEOUS

The File System iDataAgent will be automatically installed during installation of this software, if it is not already installed. For System Requirements and install information specific to the File System iDataAgents, refer to:

- System Requirements - Microsoft Windows File System iDataAgent
- System Requirements - AIX File System iDataAgent
- System Requirements - HP-UX File System iDataAgent
- System Requirements - Linux File System iDataAgent
- System Requirements - Solaris File System iDataAgent
- System Requirements - Tru64 File System iDataAgent

The operating system must have been installed with at least the `user level software` option selected.

NETWORK

TCP/IP Services configured on the computer.

SELINUX

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

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

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

File Name	Content of the File

`<directory>/<file_name>.te`
 	
where:
 	
`<directory>` is `/usr/share/selinux/devel`
 	
`<file_name>` is the name of the Unix file, created to save the policy module statement. It is a good idea to use the same name for policy module and the file.
 	
For example: When you are creating a policy module for backup_IDA application, you can use the following file name: `backup_IDA.te`
	The content of the file should be as follows:
	
	policy_module(<name>,<version>)
	
	#############################
	
	where:
	
	`<name>` is the name of the policy module. You can give any unique name to the policy module, such as a process or application name.
	
	`<version>` is the version of the policy module. It can be any number, such as 1.0.0.
	
	For Example: While creating a policy module for the backup_IDA application, you can use the following content.
	
	`policy_module(backup_IDA,1.0.0)`

`<directory>/<file_name>.fc`
 	
where:
 	
`<directory>` is `/usr/share/selinux/devel`
 	
`<file_name>` is the name of the Unix file, created to save the policy module statement. It is a good idea to use the same name for policy module and the file.
 	
For example: When you are creating a policy module for backup_IDA application, you can use the following file name: `backup_IDA.fc`
	The content of the file should be as follows:
	
	Note that the following list of files is not exhaustive. If the process fails to launch, check `/var/log/messages`. Also, if required, add it to the following list of files.
	
	`/opt/<software installation directory>/Base/libCTreeWrapper.so -- gen_context (system_u:object_r:texrel_shlib_t,s0)`
	
	`/opt/<software installation directory>/Base/libCVMAGuiImplgso -- gen_context (system_u:object_r:texrel_shlib_t,s0)`
	
	`/opt/<software installation directory>/Base/libdb2locale.so.1 -- gen_context (system_u:object_r:texrel_shlib_t,s0)`
	
	`/opt/<software installation directory>/Base/libdb2osse.so.1 -- gen_context (system_u:object_r:texrel_shlib_t,s0)`
	
	`/opt/<software installation directory>/Base/libDb2Sbt.so -- gen_context (system_u:object_r:texrel_shlib_t,s0)`

/opt/<software installation directory>/Base/libdb2trcapi.so.1 -- gen_context (system_u:object_r:texrel_shlib_t,s0)
/opt/<software installation directory>/Base/libDrDatabase.so -- gen_context (system_u:object_r:texrel_shlib_t,s0)
/opt/<software installation directory>/Base/libIndexing.so -- gen_context (system_u:object_r:texrel_shlib_t,s0)
/opt/<software installation directory>/Base/libSnooper.so -- gen_context (system_u:object_r:texrel_shlib_t,s0)

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

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

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

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

SELinux is now configured to work with this application.

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 - Oracle *i*DataAgent

| 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	✔	
	Comments	✔	Includes several additional options in the **Backup Archive Logs**, **Delete Archive Logs**, **Custom RMAN Script**, and **Oracle Options** tabs.
ADVANCED FILE SYSTEM IDATAAGENT OPTIONS	Automatic File System Multi-Streaming		
	On Demand Data Protection Operation	✔	
	Restore by Jobs		
	Restore Data Using a Map File		
	Comments	✔	For **On Demand Data Protection Operations**, see On Demand Instances.
ALERTS AND MONITORING	Global Alerts	✔	
	Job-Based Alerts*	✔	
	Comments		
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		

Feature	Item	Support	Comments
	Comments	✔	Additionally, Browse Database Tables is supported.
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		b>Qcreate backupset and **Qdelete backupset** are not supported.
COMMCELL MIGRATION	CommCell Migration	✔	
	Comments	✔	CommCell Migration is not supported with SnapProtect backup when using Data Replicator snapshot engine.
CONTENT INDEXING	Offline Content Indexing		
	Comments		
DATA AGING	Basic Retention Rules	✔	
	Extended Retention Rules	✔	
	Unique Data Aging Rules	✔	
	Comments	✔	**Extended Retention Rules** are supported for offline/selective online fulls.
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	✔	Decoupled Install is supported on Unix; not supported on Windows.

			To install this agent as restore only, see Restoring Oracle, SAP for Oracle, SAP for MaxDB as Restore Only
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	✔	Third-party command line operations and selective online full backup jobs are **Not Restartable**. Offline backup jobs **Restart from the Beginning**.
JOB RESTART - DATA RECOVERY	Not Restartable		
	Restarts from the Beginning		
	Restarts from the Beginning of the Database		
	Restarts from the Point-of-Failure	✔	
	Comments	✔	Third-party command line operations are **Not Restartable**.
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	✔	Supported on Unix; not supported on Windows. Multi Instancing is not supported for SnapProtect Backup.
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 Advanced Restore - Oracle iDataAgent for this *i*DataAgent.
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	✔	**Incremental Storage Policy** does not support Transaction Log backups for this agent.
STORAGE POLICY COPIES	Data Verification	✔	
	Job Based Pruning	✔	
	Manual Retention	✔	
	Mark Job Disabled	✔	
	Selective Copy	✔	
	Comments	✔	**Selective Copy** is supported for Selective Online and Offline Fulls.
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 Deployment on Windows - Oracle *i*DataAgent

WHERE TO INSTALL

Install the Oracle *i*DataAgent on the Oracle server. This computer should satisfy the minimum requirements specified in the System Requirements.

PLANNING YOUR INSTALLATION

The Oracle *i*DataAgent installation may require a system reboot if a pending rename operation from a previously installed application is found in the operating system, hence, plan your installation at a convenient time.

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 COMMCELL CONSOLE

Use this procedure to install remotely on a client computer.

BEFORE YOU BEGIN

Download Software Packages
Download the latest software package to perform the install.

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

METHOD 1: INTERACTIVE INSTALL

1. Log on to the client computer as Administrator or as a member of the Administrator group on that computer.

2. Run **Setup.exe** from the **Software Installation Package**.

   If you are installing on Windows Server Core editions, navigate to Software Installation Package through command line, and then run **Setup.exe**.

3. Select the required language.

   Click **Next**.

4. 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.

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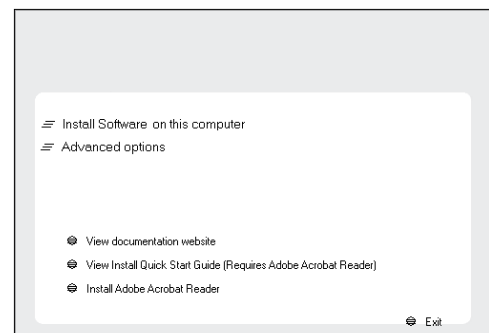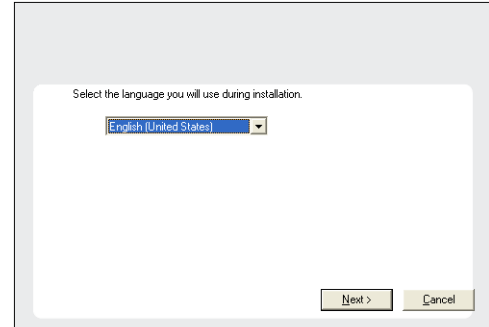
   Click **Next**.

6. Expand **Client Modules** | **Backup and Recovery** | **Database** and then click **Oracle** *i***DataAgent**.
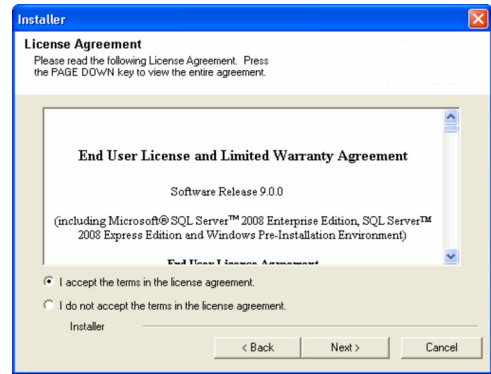
    Click **Next**.

7. 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**.
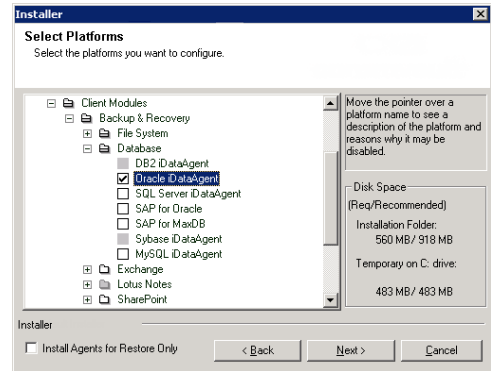
8. Enter the fully qualified domain name of the **CommServe Host Name**.

    Click **Next**.

    > Do not use space and the following characters when specifying a new name for the CommServe Host Name:
    >
    > \|`~!@#$%^&*()+=<>/?,[]{}:;'"
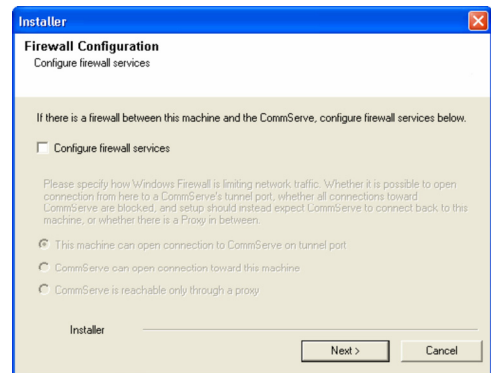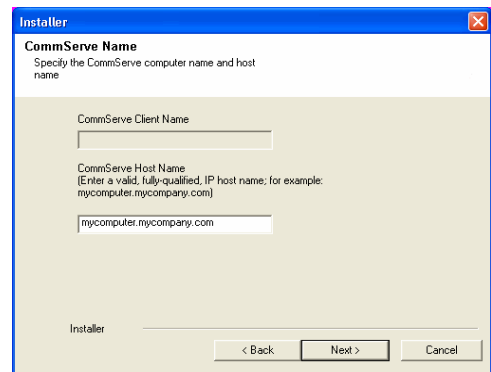
9. Click **Next**.

10. 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.

11. 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.

12. Select a Client Group from the list.

Click **Next**.

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

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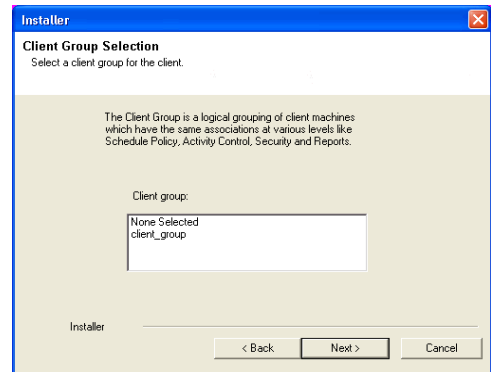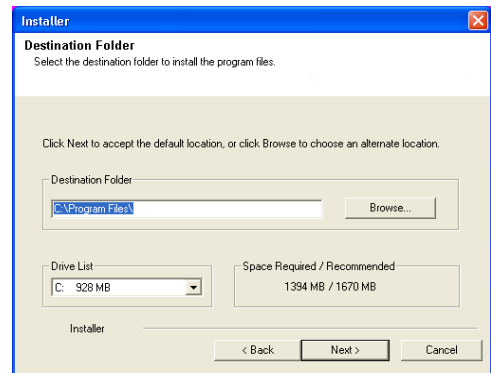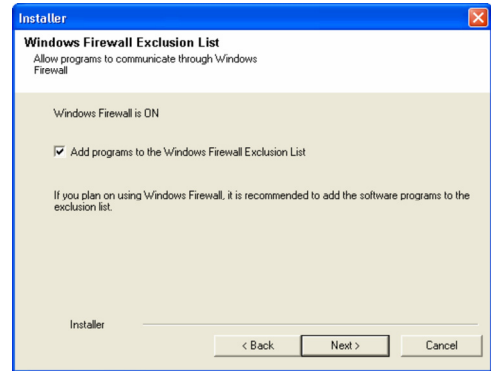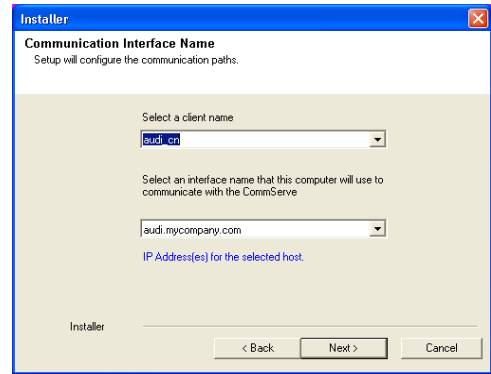
14. Click **Next**.
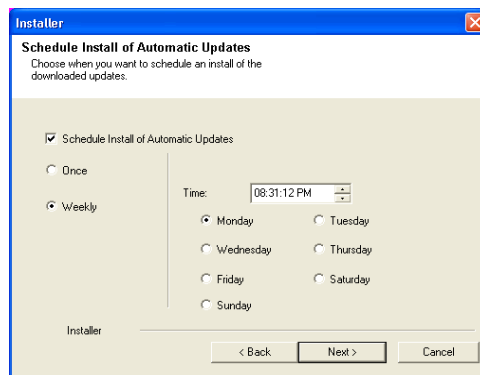
15. Select a **Storage Policy** from the drop-down list.
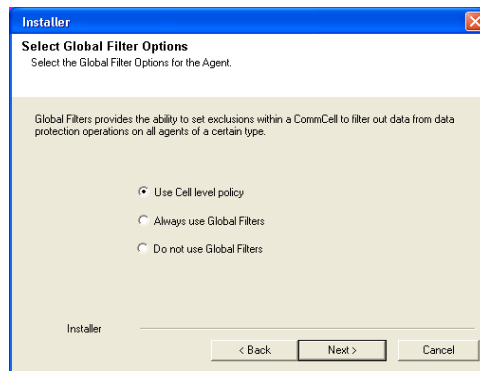
    Click **Next**.

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

    Click **Next**.

    > You can create the Storage Policy later in step 22.
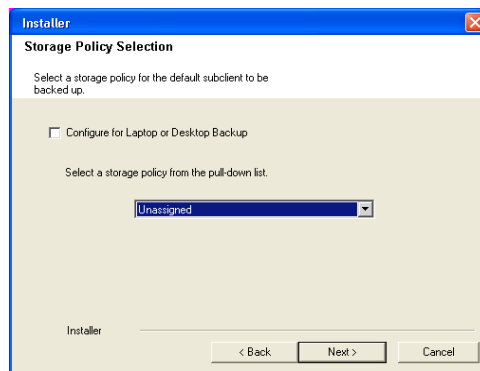
16. Click **Next**.

    > Stop the Oracle services by clicking the **Service Control Manager** button.
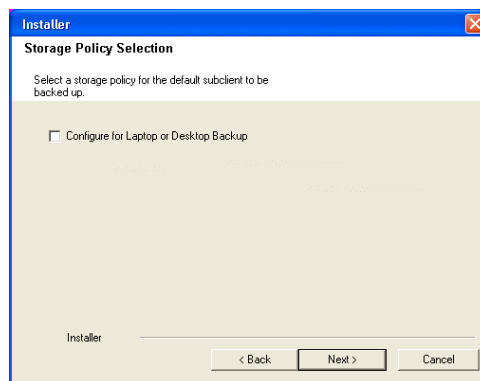
17. Click **Next**.

Click **Search ORASBT.dll** button to search for any existing ORASBT.dll file. If found, rename or delete the ORASBT.dll file.

18. Click **Next**.

19. Click **OK**.

20. Click **Next**.

21. Click **Finish**.
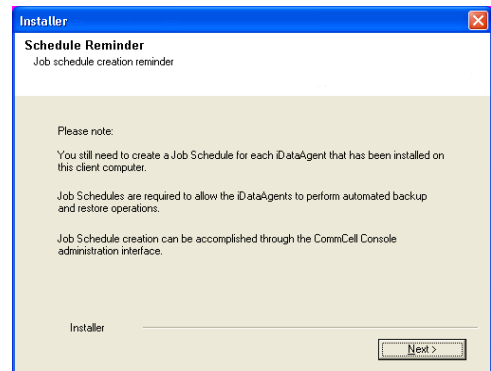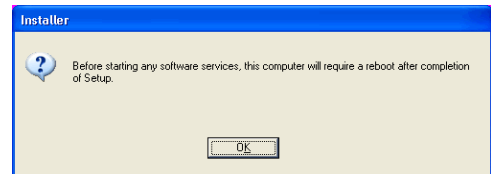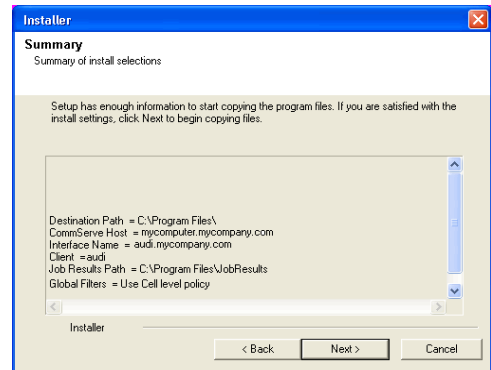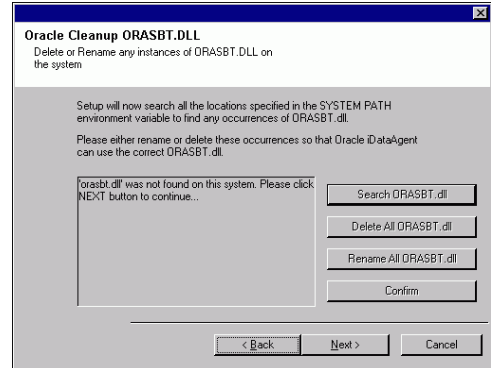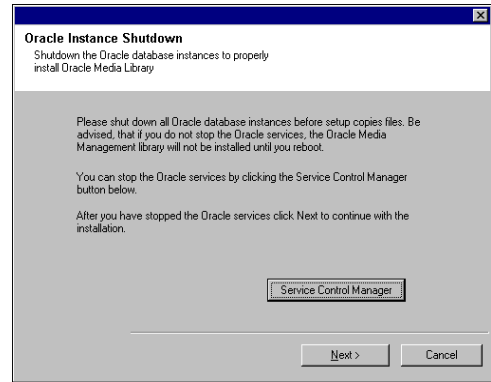
If you already have a storage policy selected in step 15, proceed to the **Configuration** section.

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

22. To create a storage policy, you must have configured a library in the CommCell.
   - If you do not already have a library configured, go to Disk Library Creation.
   - If you have a library configured, go to Storage Policy Creation.

DISK LIBRARY CREATION:

1. From the CommCell Console, click the **Backup Target** button on **EZ Operations Wizard**.

2. Click **Disc Library (For backup to disc)** and click **Next**.

3. Click **Use Local Disk**.

   Type the name of the folder in which the disc library must be located in the **Enter backup destination folder** box or click the **Browse** button to select the folder.

   Click **Next**.

   If you click the **Use Network Share** option you will be prompted for the credentials (user name and password) to access the share.

4. Click **Next**.

5. Click **Finish**.

This will create a library and Storage Policy. Click the Next button available at the bottom of the page to continue.

STORAGE POLICY CREATION:

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.

This will create a storage policy. Click the Next button available at the bottom of the page to continue.

METHOD 2: INSTALL SOFTWARE FROM COMMCELL CONSOLE

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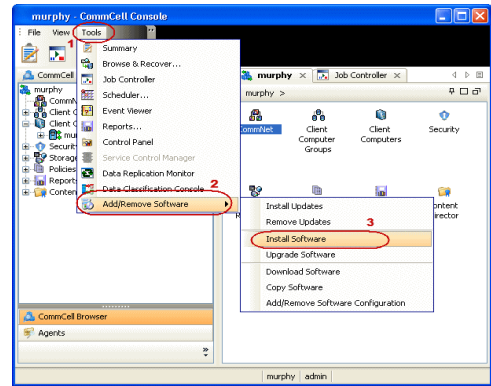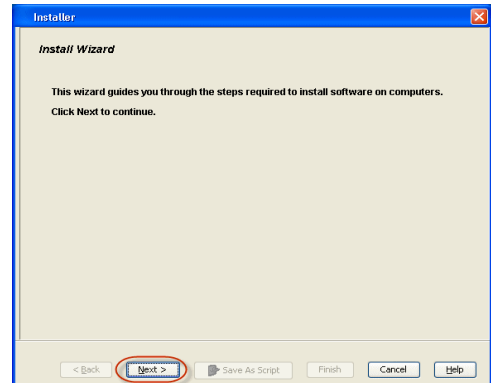
2.	Click **Next**.

3.	Select **Windows**.

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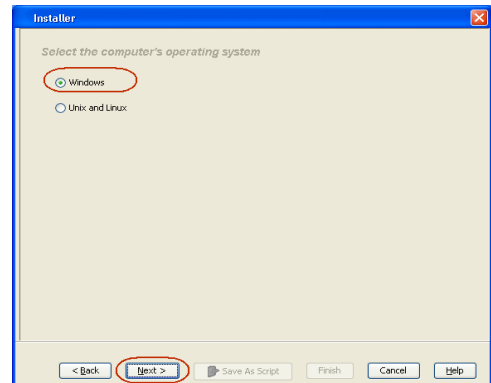
4.	Select **Manually Select Computers**.
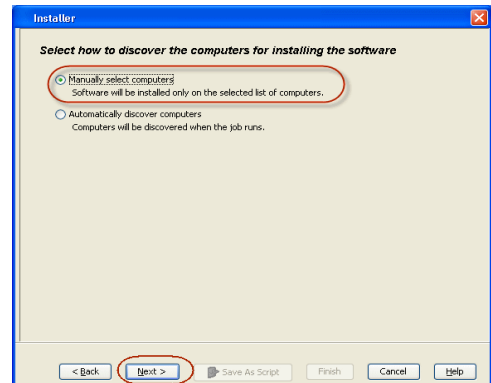
	Click **Next**.

5.	Enter the fully qualified domain name of the computer on which SQL Server resides.

	For example: `apple.domain.company.com`
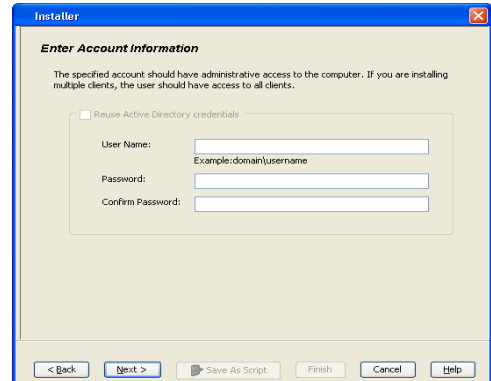
	Click **Next**.

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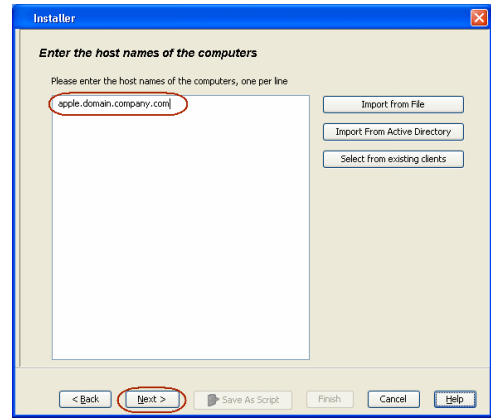
7. Specify **User Name** and **Password** that must be used to access the client computer. Click **Next**.

The user must be an Administrator or a member of the Administrator group on that computer.
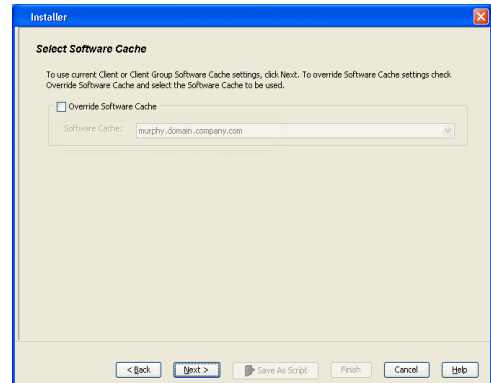
8. Select **Oracle *i*DataAgent**.
Click **Next**.

9. From **Storage Policy to use** list, click storage policy.
Click **Next**.
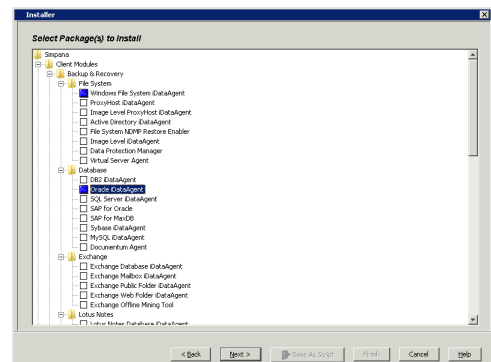
10. Click **Next**.

> 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 and resume the installation.

12. Click **Immediate**.

Click **Next**.

13. Click **Finish**.
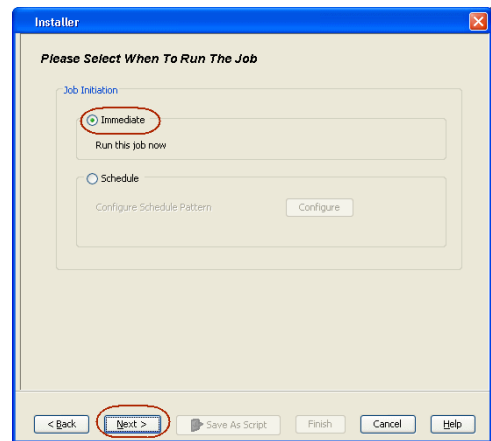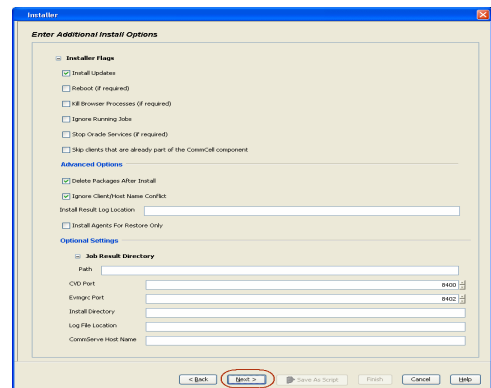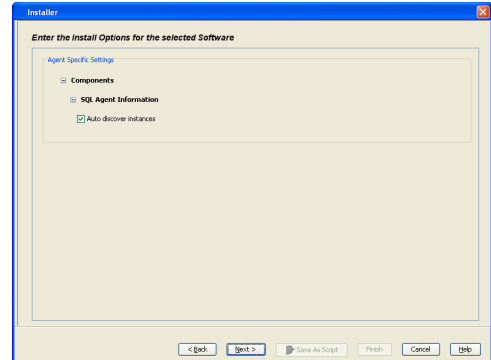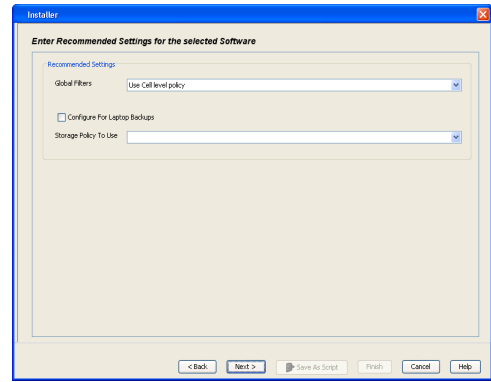
14. You can track the progress of the job from the **Job Controller** or **Event Viewer** window.
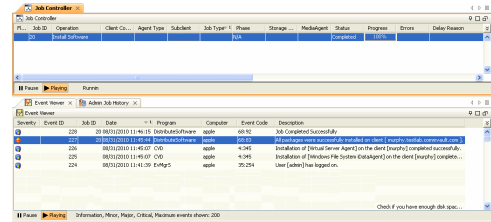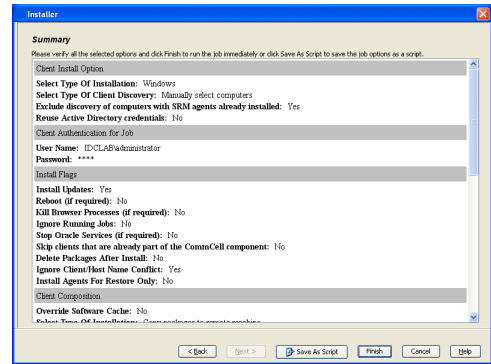
ADDITIONAL INSTALLATION METHODS

Custom Package
Create a compact software package for quick deployment to multiple clients

Remote Install
Deploy the software from CommCell Console on multiple clients.

Installing Restore only Agents
Setup a client in the CommCell for restore purposes

Silent Install
Deploy the software silently on multiple clients.

Getting Started Deployment on a Windows Cluster - Oracle *i*DataAgent

SKIP THIS PAGE IF YOU ARE NOT INSTALLING THIS AGENT ON A WINDOWS CLUSTER.

Click Next ▶ to continue with the deployment.

WHERE TO INSTALL

Install the Oracle *i*DataAgent on the Oracle server that you want to protect and is part of a Cluster which satisfies the minimum requirements specified in the System Requirements.

BEFORE YOU BEGIN

Download Software Packages
Download the latest software package to perform the install.

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

PLANNING YOUR INSTALLATION

The Oracle *i*DataAgent installation may require a system reboot if a pending rename operation from a previously installed application is found in the operating system, hence, plan your installation at a convenient time.

INSTALLING THE ORACLE IDATAAGENT IN WINDOWS CLUSTERED ENVIRONMENT

1. Log on to the active node as the Domain User with administrative privileges to all nodes on the cluster.

2. Run **Setup.exe** from the **Software Installation Package**.

3. Select the required language.

   Click **Next**.

4. 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.

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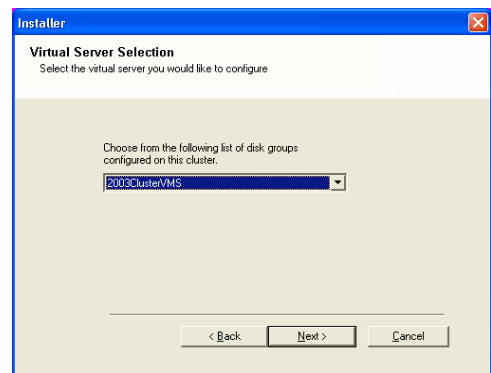
   Click **Next**.

Quick Start Guide - Oracle iDataAgent
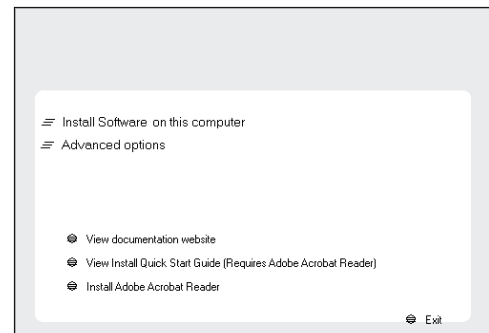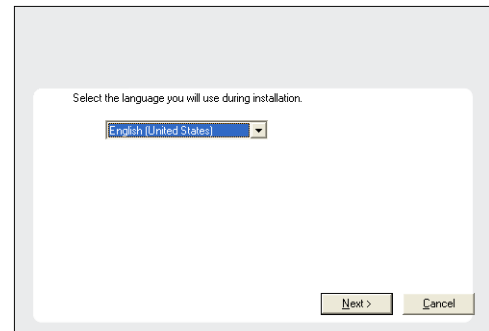
6. Select **Configure a Virtual Server**.
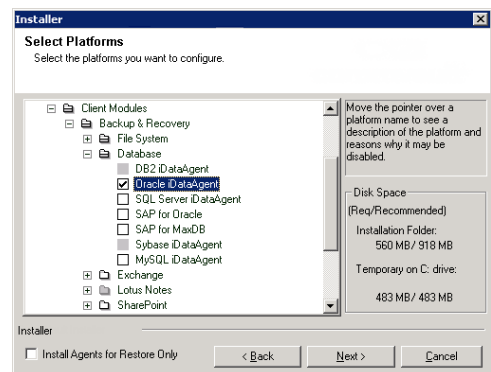
Click **Next**.
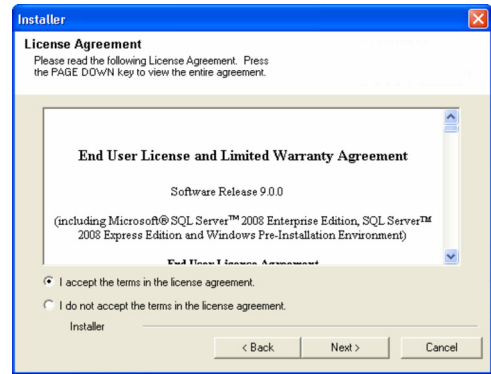
7. Select the disk group in which the virtual server resides.

Click **Next**.
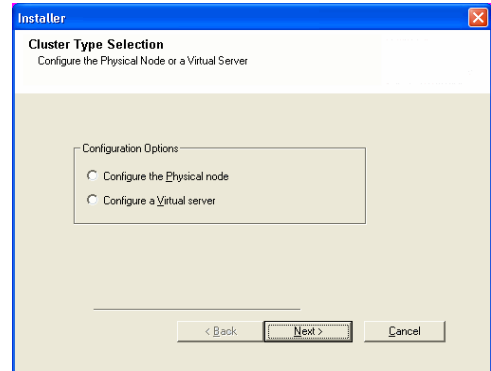
8. Expand **Client Modules | Backup and Recovery | Database** and select **Oracle iDataAgent**.

Click **Next**.

9. 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**.

Page 25 of 55

10. 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:
>
> \|`~!@#$%^&*()+=<>/?,[]{}:;'"

11. Specify the name of the **Cluster Group Client**.

Click **Next**.

12. Select the name of the **Physical Machine** from drop-down list.

Click **Next**.

13. 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.
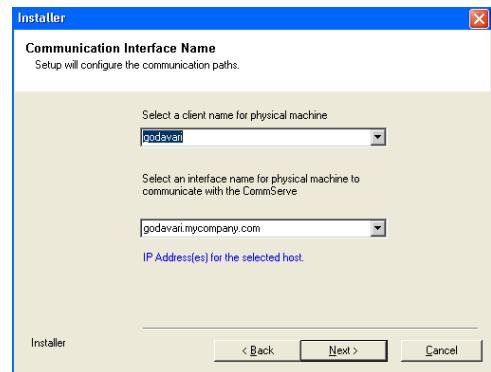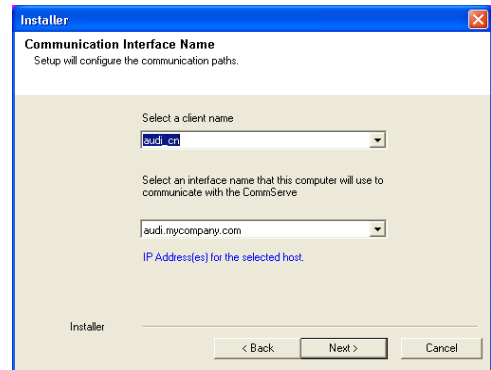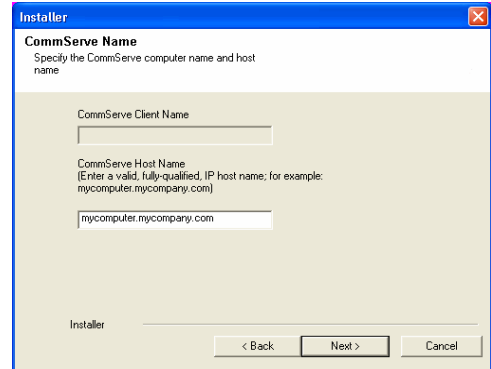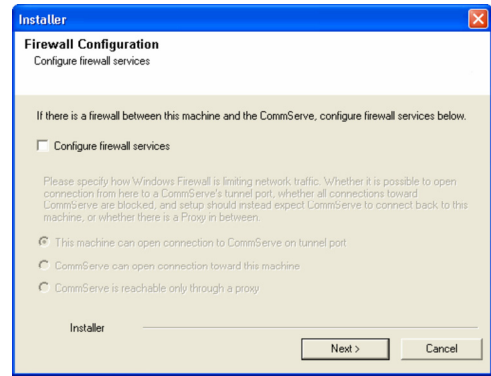
14. Verify the default location for software installation.

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.

15. Verify the default location for Job Results Path.
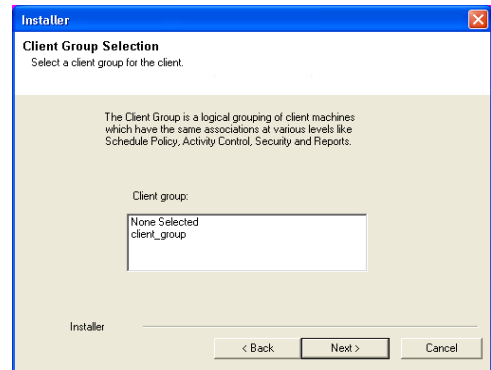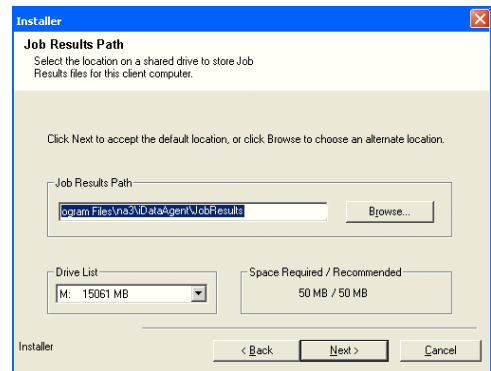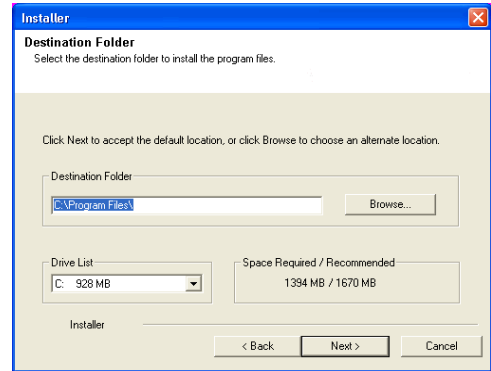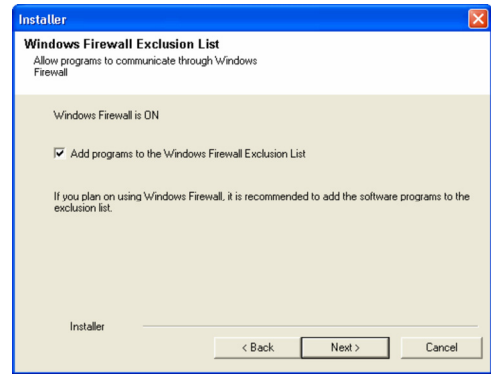
Click **Browse** to change the default location.

Click **Next**.

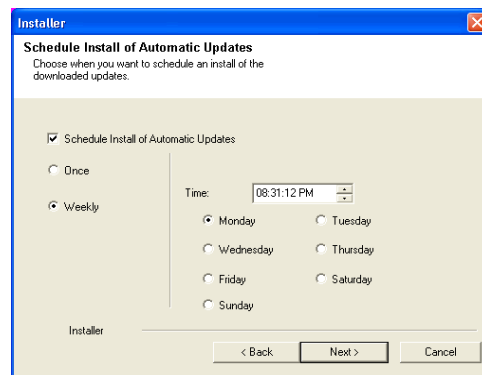**16.** Select a Client Group from the list.

Click **Next**.

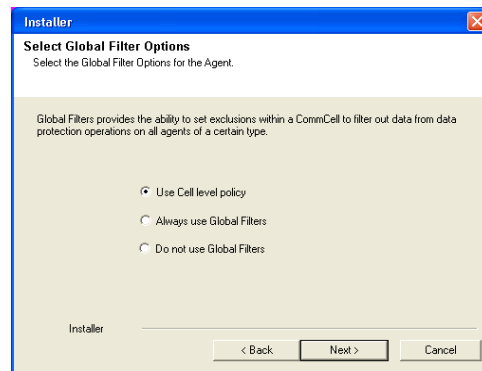This screen will be displayed if Client Groups are configured in the CommCell Console.

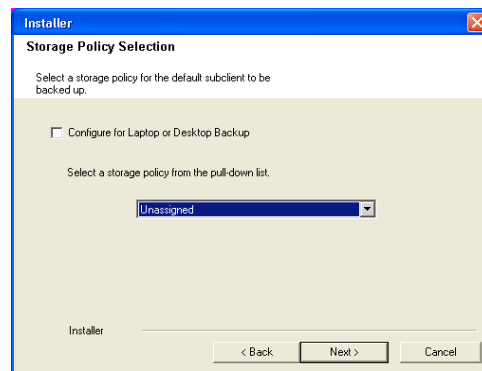

17. Click **Next**.

18. Click **Next**.

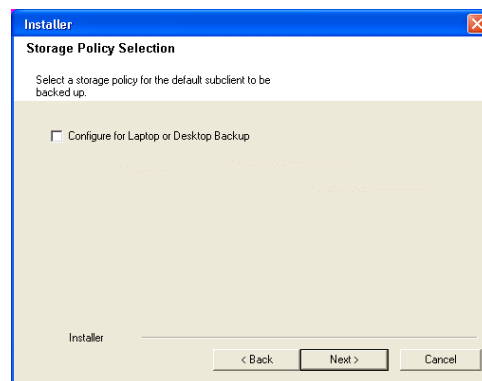**19.** Select a **Storage Policy** from the drop-down list.

Click **Next**.

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

Click **Next**.

You can create the Storage Policy later in step 31.

20. Click **Next**.

Stop the Oracle services by clicking the **Service Control Manager** button.

21. Click **Next**.

Click **Search ORASBT.dll** button to search for any existing ORASBT.dll file. If found, rename or delete the ORASBT.dll file.
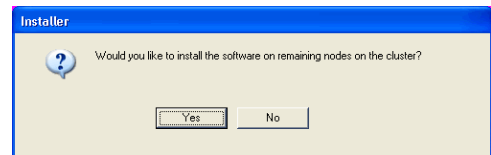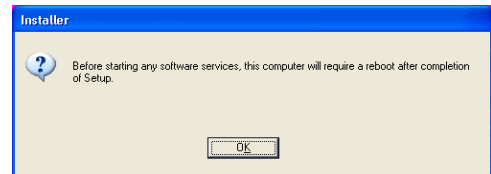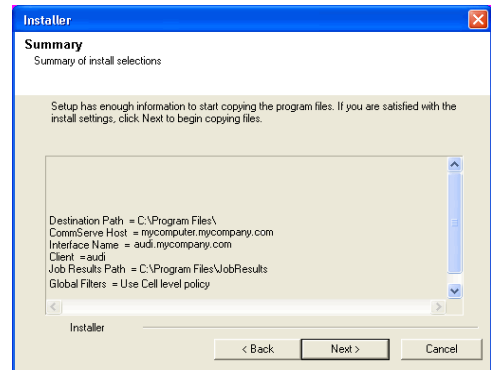
22. Click **Next**.

23. Click **OK**.

24. Click **Yes**.

**25.** Select cluster nodes from the **Preferred Nodes** list and click the arrow button to move them to the **Selected Nodes** list.

Once you complete your selections, click **Next**.

- The list of **Preferred Nodes** displays all the nodes found in the cluster; from this list you should only select cluster nodes configured to host this cluster group server.
- Do not select nodes that already have multiple instances installed.
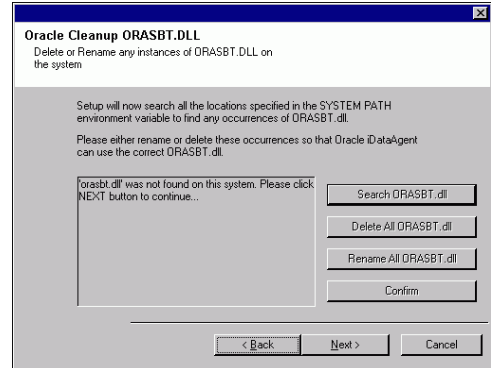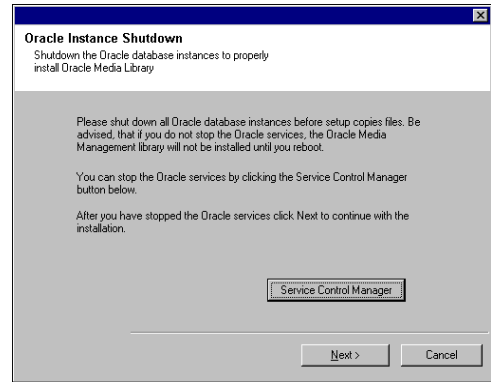
26. Specify **User Name** and **Password** for the **Domain Administrator account Information** to perform the remote install on the cluster nodes you selected in the previous step.
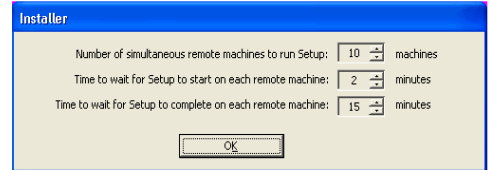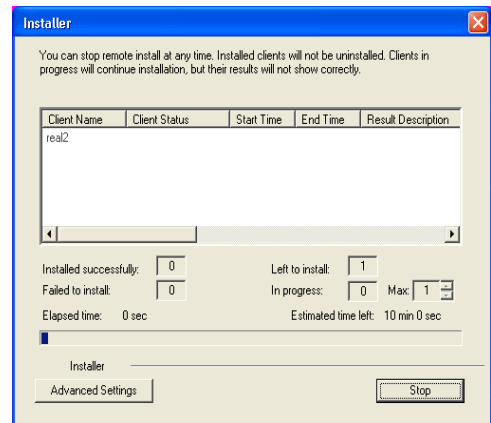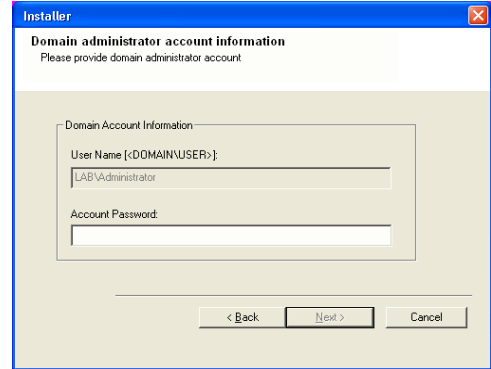
Click **Next**.
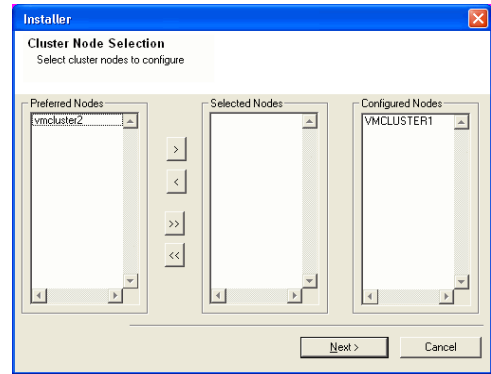
27. The progress of the remote install for the cluster nodes is displayed; the install can be interrupted if necessary.

Click **Stop** to prevent installation to any nodes after the current ones complete.

Click **Advanced Settings** to specify any of the following:

- Maximum number of nodes on which Setup can run simultaneously.
- Time allocated for Setup to begin executing on each node, after which the install attempt will fail.
- Time allocated for Setup to complete on each node, after which the install attempt will fail.

    If, during the remote install of a cluster node, setup fails to complete or is interrupted, you must perform a local install on that node. When you do, the install begins from where it left off, or from the beginning if necessary. For procedures, see Manually Installing the Software on a Passive Node.

28. Read the summary for remote installation to verify that all selected nodes were installed successfully.

Click **Next**.

- If any node installation fails, you must manually install the software on that node once the current installation is complete. See Manually Installing the Software on a Passive Node for step-by-step instructions.
- The message displayed on your screen will reflect the status of the selected nodes, and may look different from the example.
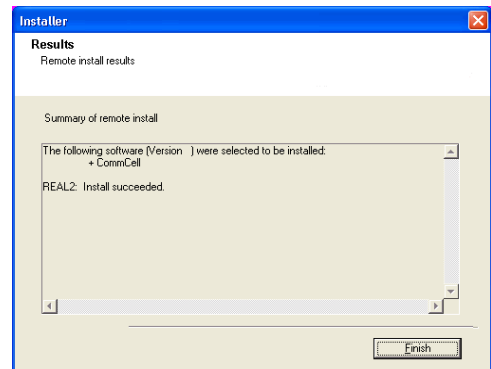
29. Click **Next**.

30. Click **Finish**.

If you already have a storage policy selected in step 19, proceed to the **Configuration** section.

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

31. To create a storage policy, you must have configured a library in the CommCell.
- If you do not already have a library configured, go to Disk Library Creation.
- If you have a library configured, go to Storage Policy Creation.

DISK LIBRARY CREATION:
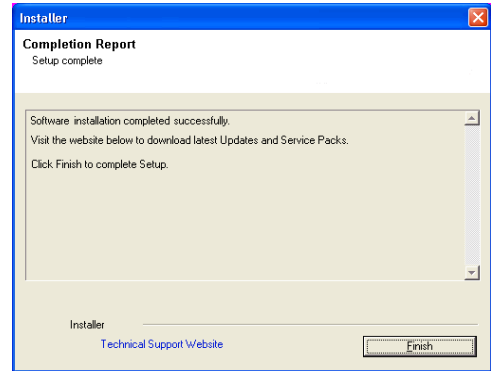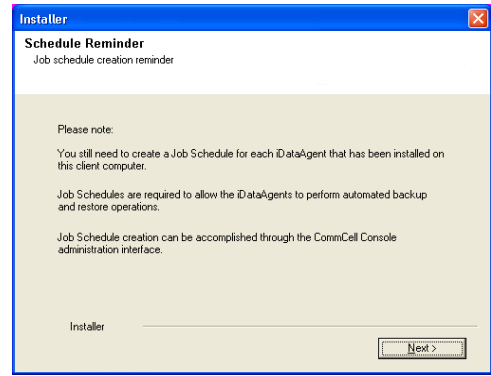
1. From the CommCell Console, click the **Backup Target** button on **EZ Operations Wizard**.

2. Click **Disc Library (For backup to disc)** and click **Next**.

3. Click **Use Local Disk**.

   Type the name of the folder in which the disc library must be located in the **Enter backup destination folder** box or click the **Browse** button to select the folder.

   Click **Next**.

   If you click the **Use Network Share** option you will be prompted for the credentials (user name and password) to access the share.

4. Click **Next**.

5. Click **Finish**.

This will create a library and Storage Policy. Click the ⌈Next ▶⌋ button available at the bottom of the page to continue.

STORAGE POLICY CREATION:

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.

This will create a storage policy. Click the Next ➤ button available at the bottom of the page to continue.

Getting Started Deployment on a UNIX Computer - Oracle *i*DataAgent

SKIP THIS PAGE IF YOU ARE NOT INSTALLING THIS AGENT ON A UNIX COMPUTER.

Click Next ▶ to continue with the deployment.

WHERE TO INSTALL

Install the software on a UNIX computer on which Oracle Database application resides, and satisfies the minimum requirements specified in the System Requirements.

For Solaris, software can be installed on one of the following:

- Unix computer hosting the global zone on which Oracle Database application resides, and satisfies the minimum requirements specified in the System Requirements.

- Unix computer in a non global zone on which Oracle Database application resides, and satisfies the minimum requirements specified in the system requirements.

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 COMMCELL CONSOLE

Use this procedure to remotely install the software on a client computer.

BEFORE YOU BEGIN

Download Software Packages
Download the latest software package to perform the install.

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

METHOD 1: INTERACTIVE INSTALL

1. Logon to the client computer as **root** or as a sudo user.

   If you are installing the software using a sudo user account, make sure that sudo user account is configured on this computer. For more information, see FAQ - Install.

2. Use the following options depending upon on your environment:

   - On Global Zone or Unix machine, run the following command to mount the cd:

     `mount -t iso9660,udf /dev/cdrom /mnt/cdrom`

     Run the following command from the Software Installation Package or mount point:

     `./cvpkgadd`

   - On a Non-Global Zone, run the following commands to mount the cd:

     `mkdir` <Non-Global Zone root location>/<Non-Global Zone local directory>

     `mount -F lofs` <Global zone software Install package mount point> <Non-Global Zone root location>/<Non-Global Zone local directory>

     Connect to Non-Global Zone terminal

     Run the following command from the Software Installation Package or mount point:

     `./cvpkgadd`

3. The product banner and other information is displayed.

   Press **Enter**.

4. Read the license agreement. Type **y** and press **Enter**.

5. Press **Enter**.

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

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

```
1) Install data protection agents on this computer

2) Advance options

3) Exit this menu

Your choice: [1]
```

6.
- If your computer is 32-bit, or if you want to install 32-bit binaries on 64-bit computer, press **Enter**.
- If your computer is 64-bit, and want to install 64-bit binaries, type **2**, and then press **Enter**.
    - This prompt is displayed only when you are installing on AIX, HP-UX, or Solaris computers.
    - You can determine this by verifying whether all the components that you wish to install in this computer are supported in 64-bit in System Requirements
    - Note that when the first component is installed using 64-bit binaries, you cannot subsequently install another component using 32-bit. (Or vice-versa.)

```
32 or 64?

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

1) All platforms(32 bit)

2) FS and MS only(64 bit)

Your choice: [1]
```

7. Press **Enter**.

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

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

Most users should select "Install on a physical machine"
here.

1) Install on a physical machine

2) Install on a virtual machine

3) Exit

Your choice: [1]
```

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

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

The interface names and IP addresses depend on the computer in which the software is installed and may be different from the example shown.

```
We found one network interface available on your machine.
We will associate it with the physical machine being
installed, and it will also be used by the CommServe to
connect to the physical machine. Note that you will be
able to additionally customize Datapipe Interface Pairs
used for the backup data traffic later in the Calypso Java
GUI.

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

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

9. Press **Enter**.

```
Please specify the client name for this machine.

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

Physical Machine Client name: [angel]
```

10. Type the number associated with the **Oracle *i*DataAgent** and press **Enter**.

```
Install Calypso on physical machine 172.19.99.62

Please select the Calypso module(s) that you would like to
install.

[ ] 1) MediaAgent [1301] [CVGxMA]

[ ] 2) UNIX File System iDataAgent [1101] [CVGxIDA]

[ ] 3) Oracle iDataAgent [1204] [CVGxOrIDA]

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

Enter number(s)/one of "a,n,r,q,d,>,<,?" here:3
```

11. A confirmation screen will mark your choice with an "**X**".

Type **d** for **Done**, and press **Enter**.

```
Install Calypso on physical machine 172.19.99.62

Please select the Calypso module(s) that you would like to
install.

[ ]  1) MediaAgent [1301] [CVGxMA]

[ ] 2) UNIX File System iDataAgent [1101] [CVGxIDA]

[X] 3) Oracle iDataAgent [1204] [CVGxOrIDA]

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

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

12. Press **Enter**.

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

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

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

- Select **Download from the software provider website** to download the latest software scripts. Make sure you have internet access.
- Select **Use the one in the installation media** to install the software scripts from the package or share from which the installation is currently being performed.
- Select **Use the copy I already have by entering its unix path**, to specify the path if you have the software script in an alternate location.

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

1) Download from the software provider website.

2) Use the one in the installation media

3) Use the copy I already have by entering its unix path

Your choice: [1] 2

14. Press **Enter**.

Keep Your Install Up to Date - Latest Service Pack

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

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

Do you want to download the latest service pack now? [no]

15. Press **Enter** to accept the default path.

Please specify where you want us to install Calypso binaries.

- If you want to specify a different path, type the path and then press **Enter**.
- If you want to install the software binaries to an NFS shared drive, specify the directory on which you have mounted the NFS file system and then press **Enter**.

It must be a local directory and there should be at least 176MB of free space available. All files will be installed in a "calypso" subdirectory, so if you enter "/opt", the files will actually be placed into "/opt/calypso".

  In order to make sure that the client computer has `read/write` access to NFS shared drive, review the steps described in Installing Software Binaries to an NFS Shared Drive.

Installation Directory: [/opt]

  Do not use the following characters when specifying the path:

  !@#$%^&*():/?\

16. Press **Enter** to accept the default location.

Please specify where you want to keep Calypso log files.

- Enter a path to modify the default location and press **Enter**.
- All the modules installed on the computer will store the log files in this directory.

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

Log Directory: [/var/log]

17. Type **Yes** and press **Enter**.

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

  If you do not want to assign a group to software, type **no**, press **Enter** and proceed to step 19.

We highly recommend now that you create a new user group and enter its name in the next setup screen. If you choose not to assign a dedicated group to Software processes, you will need to specify the access permissions later.

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

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

18. Type the **Group name** and then press **Enter.**

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

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

Group name: oinstall

REMINDER

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

19. Type **d** for done with the selection and press **Enter**.

Access Permissions for Other Users.Installer will assign

This screen is displayed if you do not assign any group to the software and type **no** in step 17.

```
full access rights to root user and its belonging group
for all installed Calypso files and its processes.For any
other users, you can specify the access permissions now.
However, since you chose not to assign a dedicated group
in previous step, make sure you specify sufficient access
rights for other users if you are also planning to install
Calypso agents involving third party software protection.

[X] 1) Allow read permission to other users
[X] 2) Allow write permission to other users
[X] 3) Allow execute permission to other users

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

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

20. This prompt is relevant only when you install on Solaris. Press **Enter** to accept the default value for **Number of Streams**.

    You can type the **Number of Streams** that you plan to run at the same time and then press **Enter**.

```
Number of Streams

IMPORTANT : Please read install document "Configure Kernel
Parameters - Unix/Macintosh" from "Books Online" before
you start configuring kernel parameters. Please enter the
total number of streams that you plan to run at the same
time. We need to make sure that you have enough semaphores
and shared memory segments configured in /etc/system.

Number of streams [10]
```

21. Press **Enter** if you do not want the changes to be updated automatically.

- If you want the changes to be made automatically, type **Yes** and then press **Enter**.
- You will come across this prompt when you install the software on the earlier versions of Solaris.

```
We now need to modify the /etc/system configuration file
on this computer. It is done to make sure that there will
be enough shared memory and semaphores available for
Calypso programs. Please review the changes below and
answer "yes" if you want us to apply them to
the /etc/system file. Otherwise, the installation will
proceed, the changes will be saved to some other file, and
you will have to apply them manually.

set shmsys:shminfo_shmmni=8570 (was 7930)
set shmsys:shminfo_shmseg=8420 (was 7780)
set semsys:seminfo_semmns=10320 (was 9680)
set semsys:seminfo_semmni=8570 (was 7930)
set semsys:seminfo_semmsl=8570(was 7930)
Do you want us to apply these changes now? [no]
```

22. Press **Enter**.

```
Changes saved into /etc/system.gal.1744

Press <ENTER> to continue.
```

23. Press **Enter**.

You will see this prompt if you have accepted the default **no** and pressed **Enter** in step 21.

```
Although a 'no' answer can be selected to this question
during install, the user should make sure the min
requirements (below) for shared memory are met, otherwise
the backups may fail (the message in logs is 'could not

start the pipeline').

set shmsys:shminfo_shmmax=4199304
set shmsys:shminfo_shmmin=1
set semsys:shminfo_shmmni=640
set semsys:shminfo_shmseg=640
set semsys:seminfo_semmns=640
set semsys:seminfo_semmni=640
set semsys:seminfo_semmsl=640
set maxusers=256
Press <ENTER> to continue.
```

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

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

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

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

Please enter the port numbers.

Port Number for CVD : [8400]

Port Number for EvMgrC: [8402]
```

25. If you do not wish to configure the firewall services, press **Enter**.

    If this computer is separated from the CommServe by firewall(s), type **Yes** and then press **Enter**.

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

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

26. Type the fully qualified CommServe host name and press **Enter**.

    Ensure that the CommServe is accessible before typing the name; otherwise the installation will fail.

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

CommServe Host Name: mycommserve.company.com
```

27. Press **Enter**.

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

28. Type the number associated with the Client Group and press **Enter**.

This screen will be displayed only if Client Groups are configured for the CommCell.

29. A confirmation screen will mark your choice with an "**X**".

Type **d** for done with the selection, and press **Enter** to continue.

30. Enter the number associated with the storage policy you want use and press **Enter**.

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

You may not be prompted for user input.

You can create the Storage Policy later in step 31.

31. Type **3** to the **Exit** option and press **Enter**.

The installation is now complete.

If you already have a storage policy selected in step 30, proceed to the Configuration section.

If you do not have Storage Policy created, follow the procedure given below.

32.

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**.

```
to set the filters.

1) Use Cell level policy

2) Always use Global filters

3) Do not use Global filters

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

Client Group(s) is currently configured on CommServe
cs.company.com. Please choose the group(s) that you want
to add this client client.company.com to.

[ ] 1) Unix

[ ] 2) DR

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

Enter number(s)/one of "a,n,r,q,d,>,<,?" here: 1

Client Group(s) is currently configured on CommServe
cs.company.com. Please choose the group(s) that you want
to add this client client.company.com to.

[X ] 1) Unix

[ ] 2) DR

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

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

Please select one storage policy for this IDA from the
list below:

1) SP_StandAloneLibrary2_2

2) SP_Library3_3

3) SP_MagLibrary4_4

Storage Policy: [1]

There seem to be no Storage Policies configured on the
CommServe. Before you can run any backups of this IDA, you
will need to install a MediaAgent, create a Storage Policy
and assign it to all subclients..

Adjusting modes and permissions of files

Successfully installed Calypso

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

Currently you have Calypso installed on physical node
angel.company.com.

Now you have a choice of either adding another package to
the existing installation or configure Calypso on a
virtual machine for use in a cluster.

1) Add another package to angel.company.com

2) Install Calypso on a virtual machine

3) Exit

Your choice: [1] 3
```
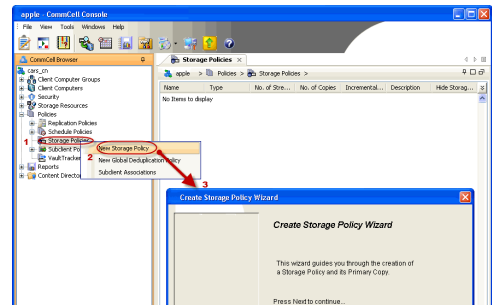
Ensure that you select a library attached to a MediaAgent operating in the current release.

○ 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.**
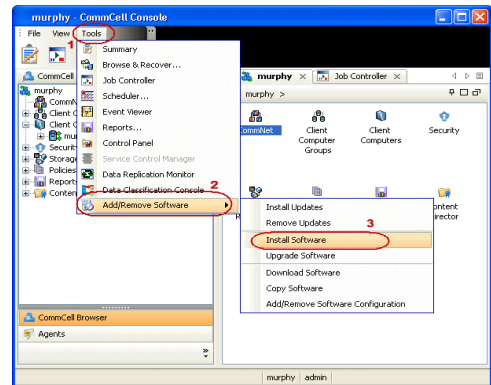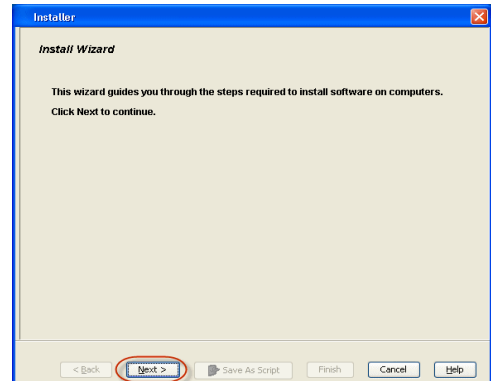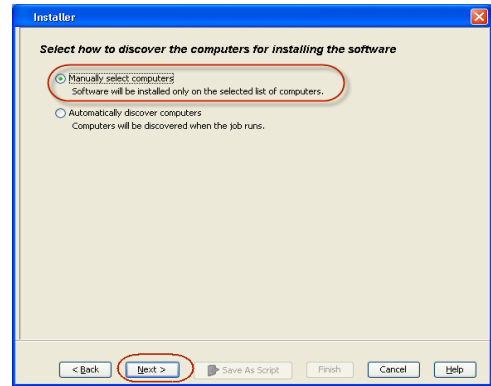
2. Click **Next**.

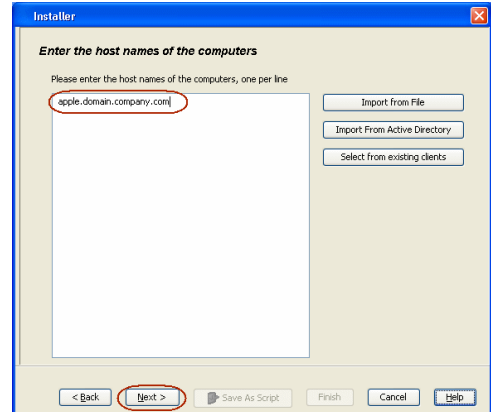3. Select **Unix and Linux**.

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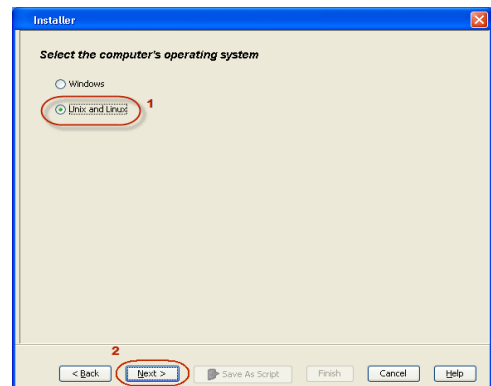
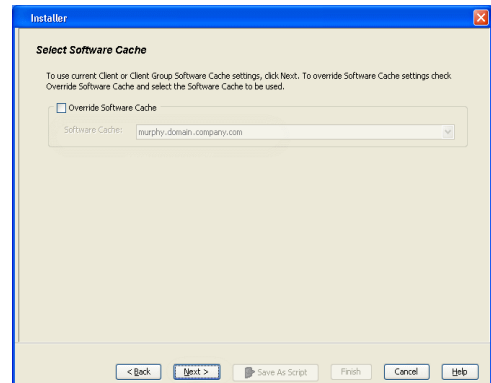4. Select **Manually Select Computers**.

   Click **Next**.

5. Enter the fully qualified domain name of the computer in which you wish to install.

For example: `apple.domain.company.com`

The **Oracle iDataAgent** will be installed on this client computer.
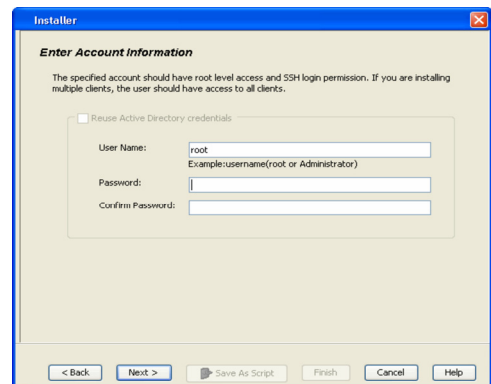
Click **Next**.

6. Click **Next**.

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

Click **Next**.

8. Select **Oracle iDataAgent**.

Click **Next**.

9.
- Select **Client Group** from **Available** and click **Add**.

    Do not add more than one Client Group.

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

    Select the **Configure for Laptop or Desktop Backup** option to install **Backup Monitor** utility. This utility allows you to view the backup job summary from the client computer without opening the CommCell Console. See Monitor - Laptop User for more information.

10.
- In the **Unix Group** box, type the Unix group name to which the oracle user belongs to.
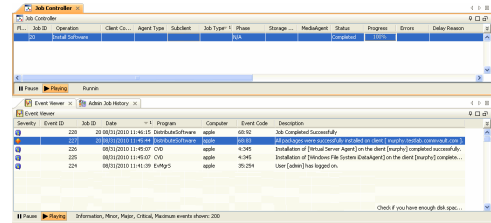- Click **Next**.

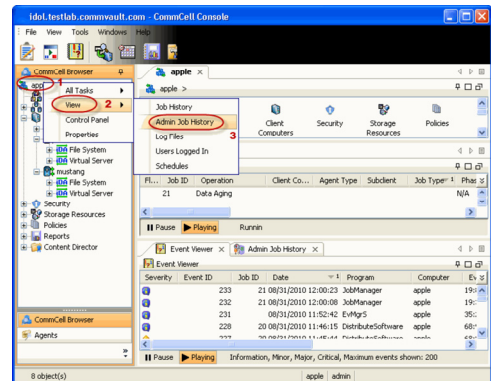11. Select **Immediate**.

    Click **Next**.
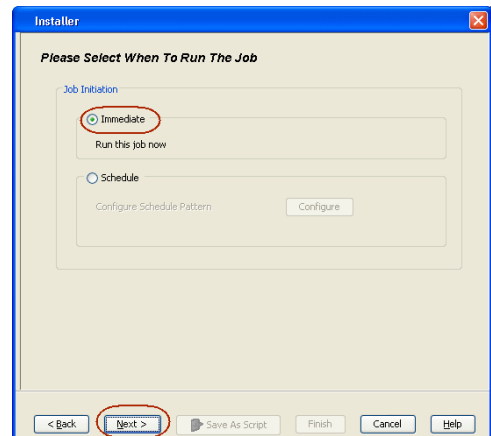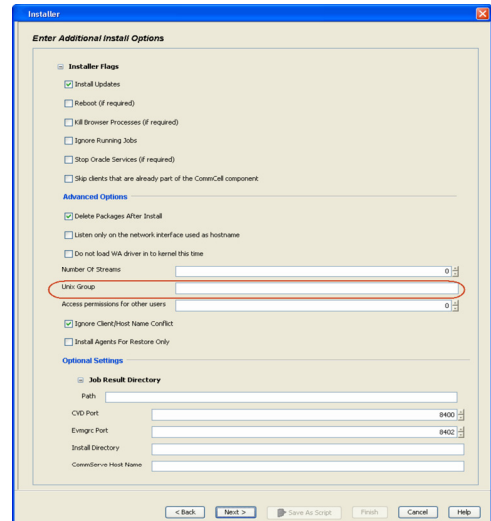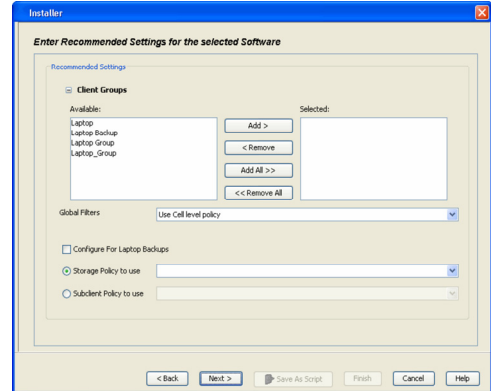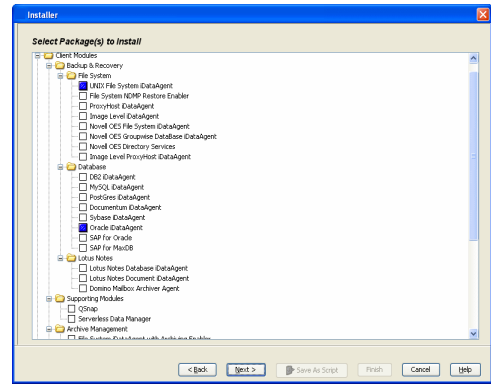
12. Click **Finish**.
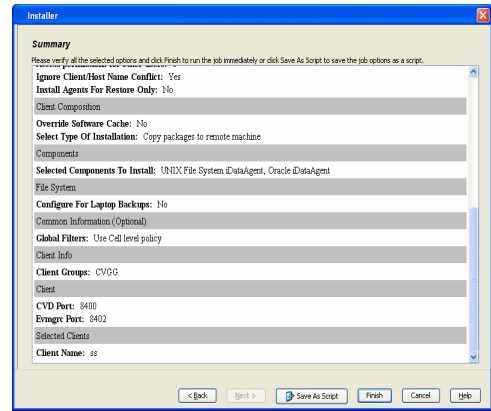
13. You can track the progress of the job from the **Job Controller** or **Event Viewer** window.

14. Once the job is complete, right-click the **CommServe** computer, click **View** and then click **Admin Job History**.

15. Select **Install/Upgrade/Remove Software**.

Click **OK**.
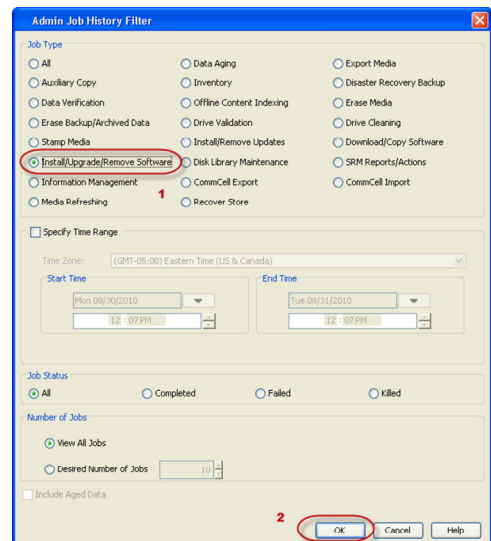
16. You can view the following details about the job by right-clicking the job:
- Items that succeeded during the job
- Items that failed during the job
- Details of the job
- Events of the job
- Log files of the job

ADDITIONAL INSTALLATION METHODS

Custom Package
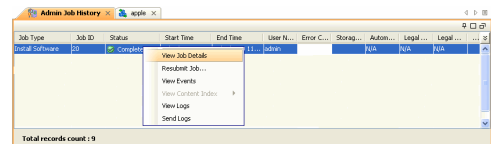Create a compact software package for quick deployment to multiple clients

Decoupled Install
Install the software first and later register the client in the CommCell.

Remote Install
Deploy the software from CommCell Console on multiple clients.

Installing Restore only Agents
Setup a client in the CommCell for restore purposes

Silent Install
Deploy the software silently on multiple clients.

Getting Started Deployment on a UNIX Cluster - Oracle *i*DataAgent

SKIP THIS PAGE IF YOU ARE NOT INSTALLING THIS AGENT ON A UNIX CLUSTER.

Click Next ▶ to begin Configuration.

WHERE TO INSTALL

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

BEFORE YOU BEGIN

Download Software Packages
Download the latest software package to perform the install.

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

INSTALLING THE ORACLE IDATAAGENT IN UNIX CLUSTERED ENVIRONMENT

1. Logon to the active node as **root**.

2. If your are installing the software from CD, run the following command to mount the CD:

    `mount -t iso9660,udf /dev/cdrom /mnt/cdrom`

    Run the following command from the Software Installation Package or mount point:

    `./cvpkgadd`

3. The product banner and other information is displayed.

    Press **Enter**.

4. Read the license agreement. Type **y** and press **Enter**.

5. Press **Enter**.

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

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

    1) Install data protection agents on this computer

    2) Advance options

    3) Exit this menu

    Your choice: [1]
    ```

6. ● If your computer is 32-bit, or if you want to install 32-bit binaries on 64-bit computer, press **Enter**.
    ● If your computer is 64-bit, and want to install 64-bit binaries, type **2**, and then press **Enter**.

    - ● This prompt is displayed only when you are installing on AIX, HP-UX, or Solaris computers.
    - ● You can determine this by verifying whether all the components that you wish to install in this computer are supported in 64-bit in System Requirements
    - ● Note that when the first component is installed using 64-bit binaries, you cannot subsequently install another component using 32-bit. (Or vice-versa.)

    ```
    32 or 64?

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

    1) All platforms(32 bit)

    2) FS and MS only(64 bit)

    Your choice: [1]
    ```

7. Type **2**, and press **Enter** to install on a computer which is part of a Cluster.

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

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

    Most users should select "Install on a physical machine"
    here.

    1) Install on a physical machine
    ```

```
2) Install on a virtual machine

3) Exit

Your choice: [2]
```

8.	Type the name of the computer that you want to configure or its corresponding IP address and press **Enter**.	Please enter the hostname or IP address of the virtual machine being installed. It can be either short or long; the only requirement is that it must be resolvable by the name services configured on this machine

WARNING: You should follow this path ONLY if this host participates in a cluster and you really want to install Calypso on the virtual machine. This is NOT how most people will use Calypso.

If you got into this screen by mistake, hit ^C and restart cvpkgadd.

Virtual Machine Host Name:devm.mycompany.com |
| 9. | Press **Enter**. | Virtual Machine Client Name

Please specify the client name for this machine.

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

Virtual Machine Client Name: [devm] |
| 10. | Specify the network interface that you want to associate with the physical machine and press **Enter**.

This prompt appears only when the Unix File System *i*DataAgent is not installed on the physical node. | Even though it is a virtual machine that you are installing now, we still have to ask you to provide hostname and client name for the physical node.

Network interfaces with the following IPs are available on your system. Please select the one that you want to be associated with Calypso physical machine. The interface should be static, and should not get disabled in case of cluster failover.

1) mackrel71
2) mackrel
3) mackrel1

Interface number: [1] 2 |
| 11. | Verify the name of the physical interface and make any required changes. Then press **Enter**. | Please verify the physical interface name below. Make it as complete (with fully qualified domain name) as possible.

Physical Hostname: [mackrel] |
| 12. | Enter a node name for the physical machine and press **Enter**. | Even though you are installing Calypso on a machine, we still need to ask you to provide a node name for the physical machine.

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

Physical Machine Node Name: [mackrel] |
| 13. | Type the number associated with the **Oracle *i*DataAgent** and press **Enter**. | Install Calypso on physical machine 172.19.99.62

Please select the Calypso module(s) that you would like to install.

[ ] 1) MediaAgent [1301] [CVGxMA]

[ ] 2) UNIX File System iDataAgent [1101] [CVGxIDA]

[ ] 3) Oracle iDataAgent [1204] [CVGxOrIDA]

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

Enter number(s)/one of "a,n,r,q,d,>,<,?" here:3 |
| 14. | A confirmation screen will mark your choice with an "**X**".

Type **d** for **Done**, and press **Enter**. | Install Calypso on physical machine 172.19.99.62

Please select the Calypso module(s) that you would like to install.

[ ] 1) MediaAgent [1301] [CVGxMA]

[ ] 2) UNIX File System iDataAgent [1101] [CVGxIDA]

[X] 3) Oracle iDataAgent [1204] [CVGxOrIDA]

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

Enter number(s)/one of "a,n,r,q,d,>,<,?" here:d |
| 15. | Press **Enter**. | Do you want to use the agents for restore only without consuming licenses? [no] |
| 16. | Type the appropriate number to install the latest software scripts and press **Enter**.

● Select **Download from the software provider website** to download the latest software scripts. Make sure you have internet access. | Installation Scripts Pack provides extra functions and latest support and fix performed during setup time. Please specify how you want to get this pack.

If you choose to download it from the website now, please |

- Select **Use the one in the installation media** to install the software scripts from the package or share from which the installation is currently being performed.
- Select **Use the copy I already have by entering its unix path**, to specify the path if you have the software script in an alternate location.

Enter a node name for the physical machine and press **Enter**.

17. Press **Enter**.

18. Press **Enter** to accept the default path.

- If you want to specify a different path, type the path and then press **Enter**.
- If you want to install the software binaries to an NFS shared drive, specify the directory on which you have mounted the NFS file system and then press **Enter**.

In order to make sure that the client computer has `read/write` access to NFS shared drive, review the steps described in Installing Software Binaries to an NFS Shared Drive.

Do not use the following characters when specifying the path:

!@#$%^&*():/?\

19. Press **Enter** to accept the default location.

- Enter a path to modify the default location and press **Enter**.
- All the modules installed on the computer will store the log files in this directory.

20. Type **Yes** and press **Enter.**

If you do not want to assign a group to software, type **no**, press **Enter** and proceed to step 22.

21. Type the **Group name** and then press **Enter.**

22. Type **d** for done with the selection and press **Enter**.

This screen is displayed if you do not assign any group to software and type **no** in step 20.

---

make sure you have internet connectivity at this time. This process may take some time depending on the internet connectivity.

1) Download from the software provider website.

2) Use the one in the installation media

3) Use the copy I already have by entering its unix path

Your choice: [1] 2

Keep Your Install Up to Date - Latest Service Pack

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

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

Do you want to download the latest service pack now? [no]

Please specify where you want us to install Calypso binaries.

It must be a local directory and there should be at least 176MB of free space available. All files will be installed in a "calypso" subdirectory, so if you enter "/opt", the files will actually be placed into "/opt/calypso".

Installation Directory: [/opt]

Please specify where you want to keep Calypso log files.

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

Log Directory: [/var/log]

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

We highly recommend now that you create a new user group and enter its name in the next setup screen. If you choose not to assign a dedicated group to Software processes, you will need to specify the access permissions later.

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

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

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

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

Group name: oinstall

REMINDER

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

Access Permissions for Other Users
Installer will assign full access rights to root user and its belonging group
for all installed Calypso files and its processes.
For any other users, you can specify the access permissions now. However, since you chose not to assign a dedicated group in previous step, make sure you specify sufficient access rights for other users if you are also planning to install Calypso agents involving third party software protection.

```
[X] 1) Allow read permission to other users
[X] 2) Allow write permission to other users
[X] 3) Allow execute permission to other users

a=all n=none r=reverse q=quit d=done >=next <=previous ?
=help]
Enter number(s)/one of "a,n,r,q,d,>,<,?" here: d
```

<table>
<tr>
<td>23.</td>
<td>This prompt is relevant only when you install on Solaris. Press Enter to accept the default value for Number of Streams.

You can type the Number of Streams that you plan to run at the same time and then press Enter.</td>
<td><pre>Number of Streams

IMPORTANT : Please read install document "Configure Kernel
Parameters - Unix/Macintosh" from "Books Online" before
you start configuring kernel parameters. Please enter the
total number of streams that you plan to run at the same
time. We need to make sure that you have enough semaphores
and shared memory segments configured in /etc/system.

Number of streams [10]</pre></td>
</tr>
<tr>
<td>24.</td>
<td>Press Enter if you do not want the changes to be updated automatically.

● If you want the changes to be made automatically, type Yes and then press Enter.
● You will come across this prompt when you install the software on the earlier versions of Solaris.</td>
<td><pre>We now need to modify the /etc/system configuration file
on this computer. It is done to make sure that there will
be enough shared memory and semaphores available for
Calypso programs. Please review the changes below and
answer "yes" if you want us to apply them to
the /etc/system file. Otherwise, the installation will
proceed, the changes will be saved to some other file, and
you will have to apply them manually.

set shmsys:shminfo_shmmni=8570 (was 7930)
set shmsys:shminfo_shmseg=8420 (was 7780)
set semsys:seminfo_semmns=10320 (was 9680)
set semsys:seminfo_semmni=8570 (was 7930)
set semsys:seminfo_semmsl=8570(was 7930)
Do you want us to apply these changes now? [no]</pre></td>
</tr>
<tr>
<td>25.</td>
<td>Press Enter.</td>
<td><pre>Changes saved into /etc/system.gal.1744

Press <ENTER> to continue.</pre></td>
</tr>
<tr>
<td>26.</td>
<td>Press Enter.

You will see this prompt if you have accepted the default no and pressed Enter in step 24.</td>
<td><pre>Although a 'no' answer can be selected to this question
during install, the user should make sure the min
requirements (below) for shared memory are met, otherwise
the backups may fail (the message in logs is 'could not
start the pipeline').

set shmsys:shminfo_shmmax=4199304
set shmsys:shminfo_shmmin=1
set semsys:shminfo_shmmni=640
set semsys:shminfo_shmseg=640
set semsys:seminfo_semmns=640
set semsys:seminfo_semmni=640
set semsys:seminfo_semmsl=640
set maxusers=256
Press <ENTER> to continue.</pre></td>
</tr>
<tr>
<td>27.</td>
<td>Type a network TCP port number for the Communications Service (CVD) and press Enter.

Type a network TCP port number for the Client Event Manager Service (EvMgrC) and press Enter.</td>
<td><pre>Every instance of Calypso should use a unique set of
network ports to avoid interfering with other instances
running on the same machine.

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

Please enter the port numbers.

Port Number for CVD : [8400]

Port Number for EvMgrC: [8402]</pre></td>
</tr>
<tr>
<td>28.</td>
<td>If you do not wish to configure the firewall services, press Enter.

If this computer is separated from the CommServe by firewall(s), type Yes and then press Enter.

For firewall options and configuration instructions, see Firewall Configuration and continue with the installation.</td>
<td><pre>Is there a firewall between this client and the CommServe?
[no]</pre></td>
</tr>
<tr>
<td>29.</td>
<td>Type the fully qualified CommServe host name and press Enter.

Ensure that the CommServe is accessible before typing the name; otherwise the installation will fail.</td>
<td><pre>Please specify hostname of the CommServe below. Make sure
the hostname is fully qualified, resolvable by the name
services configured on this machine.

CommServe Host Name: mycommserve.company.com</pre></td>
</tr>
<tr>
<td>30.</td>
<td>Press Enter.</td>
<td><pre>Commcell Level Global Filters are set through Calypso
GUI's Control Panel in order to filter out certain
directories or files from backup Commcell-widely. If you
turn on the Global filters, they will be effective to the
default subclient. There are three options you can choose
to set the filters.

1) Use Cell level policy

2) Always use Global filters

3) Do not use Global filters

Please select how to set the Global Filters for the</pre></td>
</tr>
</table>

31. Type the number associated with the **Unix File System *i*DataAgent** and press **Enter**.

```
default subclient? [1]

Client Group(s) is currently configured on CommServe
cs.company.com. Please choose the group(s) that you want
to add this client client.company.com to.

[ ] 1) Unix

[ ] 2) DR

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

Enter number(s)/one of "a,n,r,q,d,>,<,?" here: 1
```

32. A confirmation screen will mark your choice with an "**X**".

Type **d** for **Done**, and press **Enter**.

```
Client Group(s) is currently configured on CommServe
cs.company.com. Please choose the group(s) that you want
to add this client client.company.com to.

[X ] 1) Unix

[ ] 2) DR

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

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

33. Enter the number associated with the storage policy you want use and press **Enter**.

```
Please select one storage policy for this IDA from the
list below:

1) SP_StandAloneLibrary2_2

2) SP_Library3_3

3) SP_MagLibrary4_4

Storage Policy: [1]
```

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

You may not be prompted for user input.

You can create the Storage Policy later in step 35.

```
There seem to be no Storage Policies configured on the
CommServe. Before you can run any backups of this IDA, you
will need to install a MediaAgent, create a Storage Policy
and assign it to all subclients..

Adjusting modes and permissions of files

Successfully installed Calypso
```
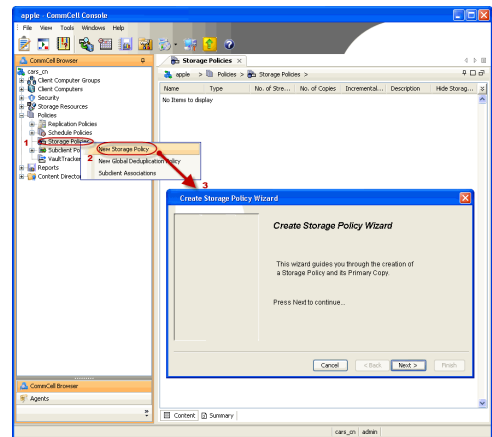
34. Type **4** to the **Exit** option and press **Enter**.

The installation is now complete.

```
Calypso is currently configured on virtual machine
devmc.company.com.

Now you have an option of installing Calypso on physical
machine, another virtual machine or you can add a new
package to devmc.company.com.

1) Add a new package to hpuxmc1.company.com
2) Install Calypso on the physical machine
3) Install Calypso on another virtual machine
4) Exit

Your choice: [4]
```

If you already have a storage policy selected in step 33, proceed to the Configuration section.

If you do not have Storage Policy created, follow the procedure given below.

35.

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 Configuration - Oracle *i*DataAgent
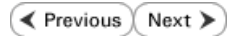
Once the Oracle *i*DataAgent is installed, configure the instance and subclient as follows:

1.
- From the CommCell Browser, navigate to **Client Computers | <*Client*>**.
- Right-click **Oracle** and then click **Properties**.
- Select the **Enable Instance Discovery** check box.

2.
- From the CommCell Browser, navigate to **Client Computers | <*Client*>**.
- Right-click **Oracle**, point to **All Tasks** and then click **Discover Instance**.

3. Click **Yes**.

4.
- From the CommCell Browser, navigate to **Client Computers | <*Client*>|Oracle**.
- Right-click the **<*Instance*>** and then click **Properties**.

Automatic instance discovery will not detect the manually created databases. If Instances are not discovered, create an instance manually. See Enabling Automatic Instance Discovery and Manually Adding an Instance for more information.

5. On Windows clients:
- Click **Change**.
- In the **User Account** box, enter the user name to access the Oracle application.
- In the Password box, enter the password for the user account.
- In the Confirm Password box, re-confirm the password.
- Click **OK.**

Skip this step if you have a Unix client.
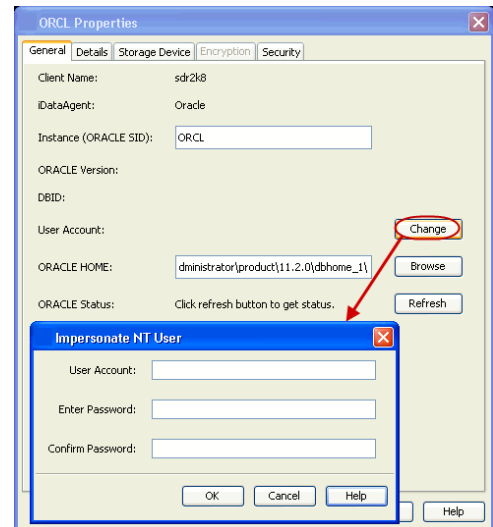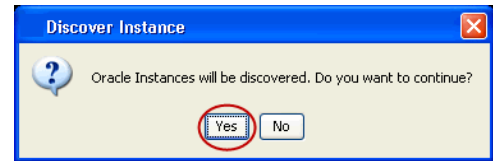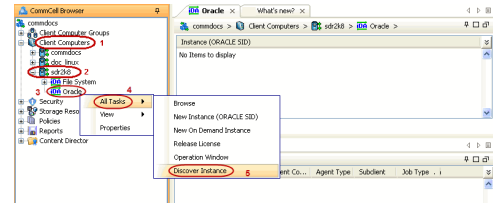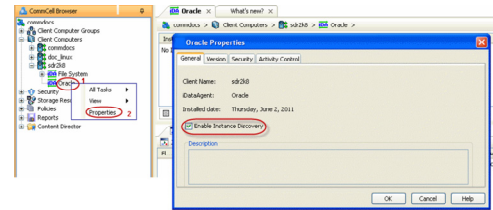
6.
- Click the **Storage Device** tab.
- In the **Storage Policy used for user command backup of data** box, select a storage policy name.

If you do not have a storage policy created, go to step 10 to create a storage policy.

Quick Start Guide - Oracle iDataAgent

7.
- Click the **Logs Backup** tab.
- In the **Storage Policy used for all Archive Log backups** box, select a storage policy name.
- Click **OK**.

If you do not have a storage policy created, go to step 10 to create a storage policy.
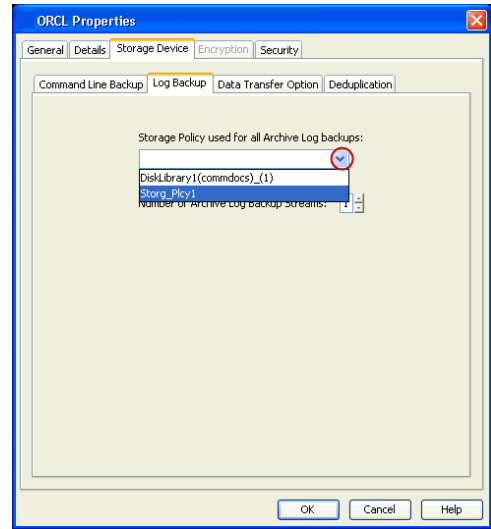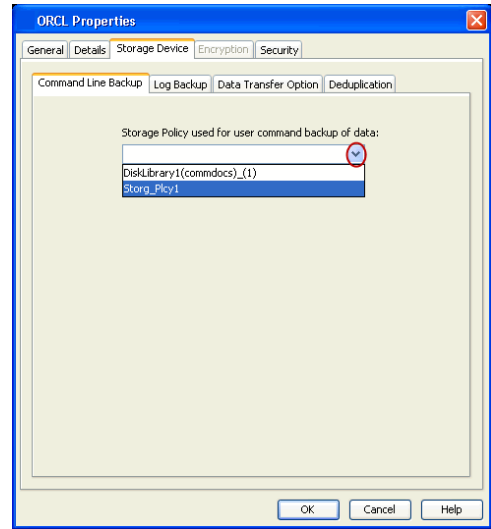
8.
- From the CommCell Browser, navigate to **Client Computers | <Client> | Oracle | <Instance>.**
- Right-click the default subclient and then click **Properties**.
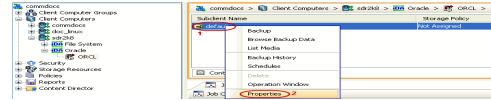
9.
- Click the **Storage Device** tab.
- In the **Data Storage Policy** list, select a Storage Policy name.
- Click **OK** to convert the next backup as a full backup.
- Click **OK**.

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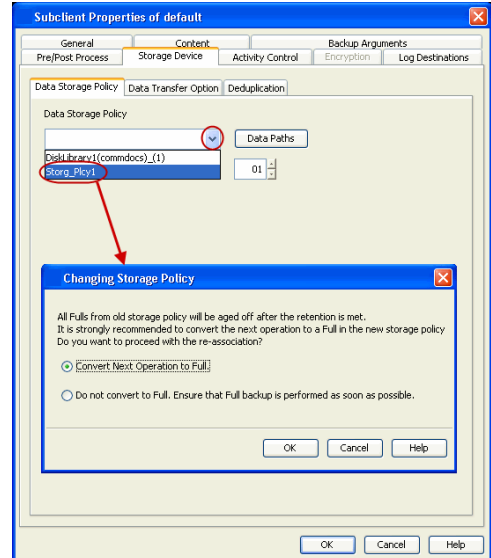
10. Create a Storage Policy:

    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.

◀ Previous Next ▶

Getting Started Backup - Oracle *i*DataAgent

WHAT GETS BACKED UP	WHAT DOES NOT GET BACKED UP
Oracle database files that include datafiles (*.dbf) and control files (*.ctl)	Oracle application files associated with the Oracle installation.
Archived redo logs	Use the File System *i*DataAgent to back up the above mentioned components.
Oracle Managed Files (OMF)	
Parameter files (SP File)	

1.
   - From the CommCell Browser, navigate to **Client Computers | <Client> | Oracle | <Instance>**.
   - Right-click the default subclient and click **Backup**.
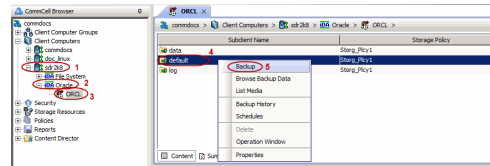
2.
   - Click **Full** as backup type and then click **Immediate**.
   - Click **OK**.
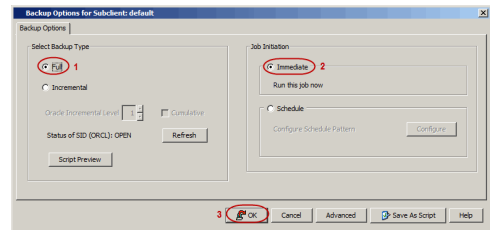
3.
   You can track the progress of the job from the **Job Controller** window of the CommCell console.
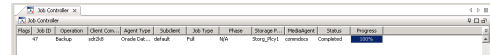
4.
   Once the job is complete, view the job details from the **Backup History**. Right-click the **Subclient** and select **Backup History**.

5.
   Click **OK**.
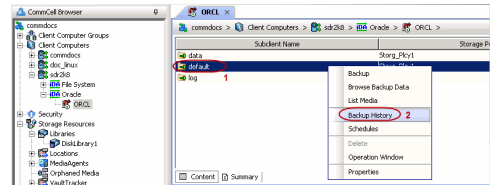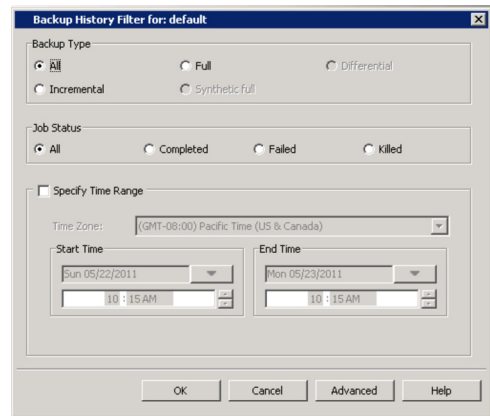
6.
   Right-click the job to:
   - Browse the database that was backed up.
   - View RMAN Logs.
   - Resubmit the job.
   - View job details.
   - View media associated with the job.
   - View events associated with the job.
   - View or send the log file that is associated with the job.
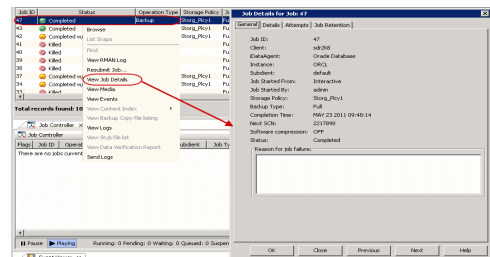
Getting Started Restore - Oracle *i*DataAgent

As restoring your backup data is very crucial, it is recommended that you perform a restore operation immediately after your first full backup to understand the process. The following section explain the steps for restoring a database.

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

2. Click **OK**.

3.
- In the right pane of the Browse window, click the **<Instance>** and select all the entities.
- Click **Recover All Selected**.

4. Click **Advanced**.

5.
- Click the **Options** tab.
- In the **Reset Logs** box, select **None**.
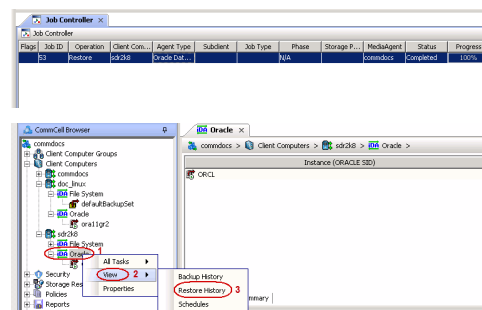- Select the **Switch Database mode for Restore** checkbox.
- Click **OK**.
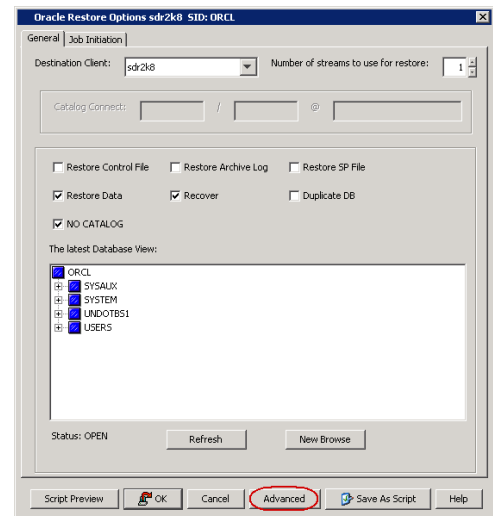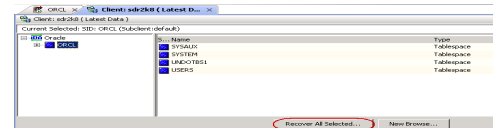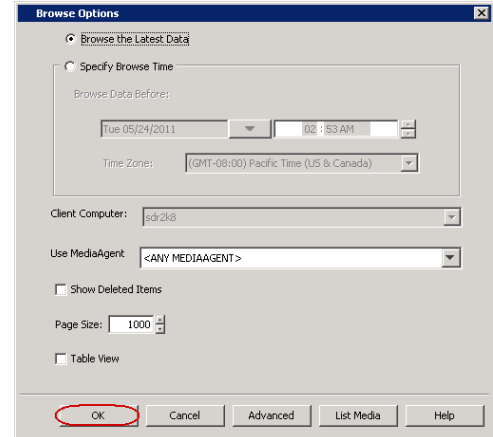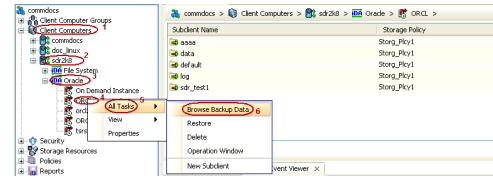
6.   Click **OK**.
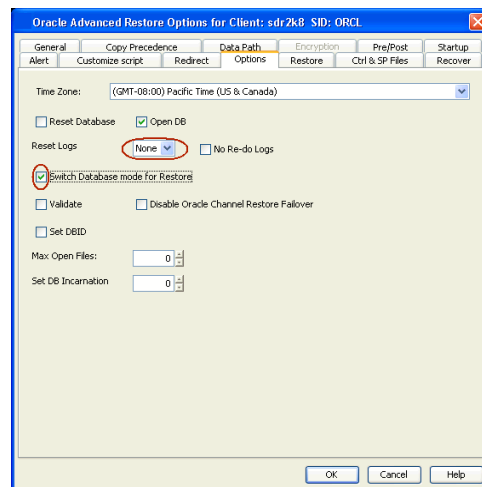
7.   You can monitor the progress of the restore job in the **Job Controller**.
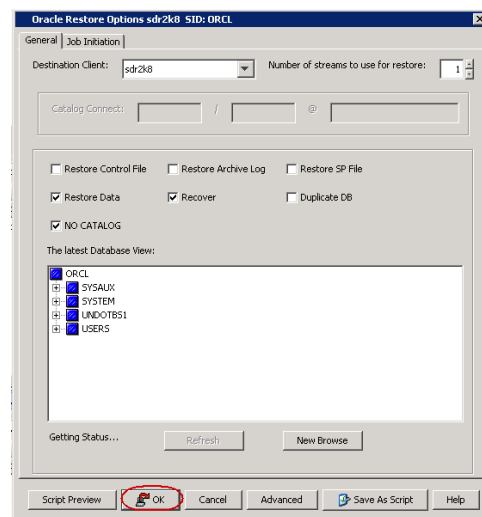
8.   Once the restore job has completed, right-click the agent and click **View** | **Restore History**.

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 number of objects
- View Rman Logs

11. Once the database is restored, verify that the restored database and log files are available in the original location.
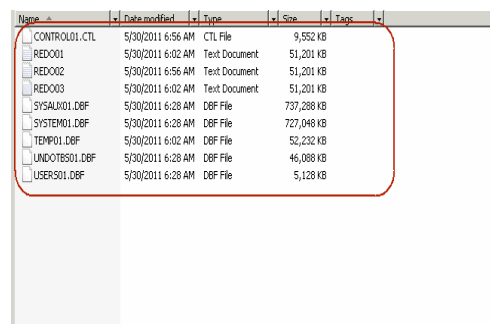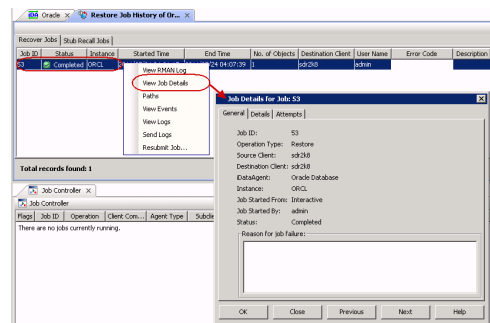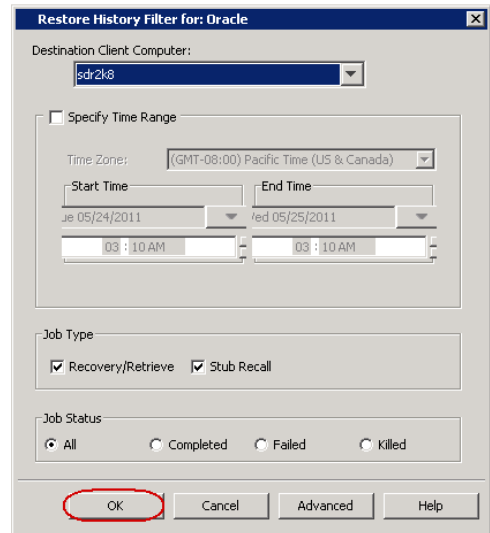
CONGRATULATIONS - YOU HAVE SUCCESSFULLY COMPLETED YOUR FIRST BACKUP AND RESTORE.

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