Features - Media Management

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Overview - Media Management

Media management involves interaction among the CommServe, MediaAgents, client programs, storage devices and media. The sections that follow describe these entities as it relates to media management.

THE COMM SERVE STORAGE MANAGER

The following media-related software modules reside on the CommServe:

- The CommVault Media & Library Manager, a service that processes media-related communications between the CommServe and client programs.
- An IEEE-standards compliant media management engine. This software accesses the media management database and communicates with storage devices through Comm Vault Media Mount Manager in the MediaAgent. (discussed below).

In addition, the CommServe maintains a database containing the CommServe and MediaAgent related information.

THE MEDIAAGENT

The primary task of the MediaAgent™ is to oversee the transfer of data between client programs and media. Each MediaAgent communicates locally to one or more storage units via some local bus (e.g. SCSI) adapter and includes the following software modules:

- The CommVault Media Mount Manager, a service that routes requests for media operations from the CommServe to the media management engine.
- Library Controller manages the hardware operations of the media changer within a storage device (e.g., mounting, unmounting, importing, and exporting media). If the library is directly attached to a MediaAgent then there is one library controller per media changer. If the library is attached to multiple MediaAgents in a SAN environment, one or more Library Controllers associated with the MediaAgents can be configured to control the same media changer.

CLIENT PROGRAMS

In the context of media management, a client program is any software module that can request media-related information or operations. Client programs include software residing on the CommServe, MediaAgents, and Clients computers. In fact, most components in the software access the media management subsystem. Requests for media management can be initiated by a user or by an internal operation. When a client program needs media-related information or operations, it sends a request to the CommServe, which routes the request to other modules within the media management system, as necessary.

COMMCELL CONSOLE TREE LEVELS FOR MEDIA MANAGEMENT

In the CommCell Browser the Media Management information is available under Storage Resources. Each of the libraries configured in the library are displayed. The tree structure varies, depending on the library type - tape/optical library, stand-alone drive or disk libraries. This arrangement is reflected in the following sample tree structure in the CommCell Browser:

| MediaAgents: | See MediaAgents. |
| Libraries: Library Operations and Library Properties |
| Master Drive Pools and Drive Pools: | See Master Drive Pools and Drive Pools |
| Drives: Drive Operations and Drive Properties |
| Resource View: | See Resource View. |
| Media By Location: | See Media By Location |
| Media By Groups: | See Media By Groups |
| Disk Library and Mount Path: | See Disk Libraries |
| Stand-Alone Drives: | See Stand-Alone Drives. (Removable Disk Drives are also displayed as stand-alone drives.) |
Use CommCell Console Control Panel to establish advanced media management parameters.

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# System Requirements - MediaAgent

The following requirements are for the MediaAgent:

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<thead>
<tr>
<th>OPERATING SYSTEM</th>
<th>PROCESSOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIX</td>
<td>Power PC (Includes IBM System p)</td>
</tr>
<tr>
<td>AIX 7.1 64-bit</td>
<td>Power PC (Includes IBM System p)</td>
</tr>
<tr>
<td>AIX 6.1 64-bit</td>
<td>RS/6000 43P Model 150 - 375 MHz or higher; Dual Processors recommended</td>
</tr>
<tr>
<td>AIX 5.3 32-bit and 64-bit with technology level 7 (or higher) and runtime library xIC,rte 8.0.0.0 or higher</td>
<td>RS/6000 43P Model 150 - 375 MHz or higher; Dual Processors recommended</td>
</tr>
<tr>
<td>HP-UX</td>
<td>Itanium</td>
</tr>
<tr>
<td>HP-UX 11i v3 (11.31) 64-bit</td>
<td>HP-UX -PA RISC 300 MHz or higher; Dual Processors recommended</td>
</tr>
<tr>
<td>HP-UX 11i v3 (11.31) 64-bit</td>
<td>HP-UX -PA RISC 300 MHz or higher; Dual Processors recommended</td>
</tr>
<tr>
<td>HP-UX 11i v2 (11.23) 64-bit</td>
<td>HP-UX -PA RISC 300 MHz or higher; Dual Processors recommended</td>
</tr>
<tr>
<td>HP-UX 11i v2 (11.23) 64-bit</td>
<td>HP-UX -PA RISC 300 MHz or higher; Dual Processors recommended</td>
</tr>
<tr>
<td>HP-UX 11i v1 (11.11) 64-bit with a minimum of OS patch level of December 2008 patch bundle or higher (contact Hewlett Packard to obtain the patch)</td>
<td>HP-UX -PA RISC 300 MHz or higher; Dual Processors recommended</td>
</tr>
<tr>
<td>HP-UX 11i v1 (11.11) 32-bit with a minimum of OS patch level of December 2008 patch bundle or higher (contact Hewlett Packard to obtain the patch)</td>
<td>HP-UX -PA RISC 300 MHz or higher; Dual Processors recommended</td>
</tr>
<tr>
<td>LINUX ORACLE LINUX</td>
<td>Intel Pentium, x64 or compatible processors</td>
</tr>
<tr>
<td>Oracle Linux 5.x with glibc 2.5.x</td>
<td>Intel Pentium, x64 or compatible processors</td>
</tr>
<tr>
<td>RED FLAG LINUX</td>
<td>Intel Pentium or compatible 650 MHz processor minimum recommended; Dual 1 GHz or higher processors recommended</td>
</tr>
<tr>
<td>Red Flag Linux AS 4.1 32-bit with glibc 2.3.x</td>
<td>Intel Pentium or compatible 650 MHz processor minimum recommended; Dual 1 GHz or higher processors recommended</td>
</tr>
<tr>
<td>RED HAT ENTERPRISE LINUX AS/ES</td>
<td>Power PC (Includes IBM System p)</td>
</tr>
<tr>
<td>Red Hat Linux AS 4.0 with glibc 2.3.x</td>
<td>Intel Pentium or compatible 650 MHz processor minimum recommended; Dual 1 GHz or higher processors recommended</td>
</tr>
<tr>
<td>Red Hat Enterprise Linux AS/ES 4.0 with glibc 2.3.x</td>
<td>Intel Pentium or compatible 650 MHz processor minimum recommended; Dual 1 GHz or higher processors recommended</td>
</tr>
<tr>
<td>Red Hat Enterprise Linux AS/ES 4.0 with glibc 2.3.x</td>
<td>Itanium</td>
</tr>
<tr>
<td>Red Hat Enterprise Linux AS/ES 4.0 with glibc 2.3.x</td>
<td>x64</td>
</tr>
<tr>
<td>Red Hat Enterprise Linux AS 5.x with glibc 2.5</td>
<td>x64</td>
</tr>
<tr>
<td>RED HAT ENTERPRISE LINUX/CENTOS</td>
<td>Power PC (Includes IBM System p)</td>
</tr>
<tr>
<td>Red Hat Enterprise Linux/CentOS Server 5 with glibc 2.5.x</td>
<td>Intel Pentium, Itanium, x64, Power PC (Includes IBM System p) or compatible processors</td>
</tr>
<tr>
<td>Red Hat Enterprise Linux/CentOS 6.x with glibc 2.12.x</td>
<td>Intel Pentium, Itanium, x64, Power PC (Includes IBM System p) or compatible processors</td>
</tr>
<tr>
<td>Red Hat Enterprise Linux/CentOS 5.x with glibc 2.5.x</td>
<td>Intel Pentium, Itanium, x64, Power PC (Includes IBM System p) or compatible processors</td>
</tr>
<tr>
<td>Red Hat Enterprise Linux/CentOS 5 Advanced Platform with glibc 2.5.x</td>
<td>Intel Pentium or compatible 650 MHz processor minimum recommended; Dual 1 GHz or higher processors recommended</td>
</tr>
<tr>
<td>Red Hat Enterprise Linux/CentOS 5 Advanced Platform with glibc 2.5.x</td>
<td>Itanium, x64 or compatible processors</td>
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<tr>
<td>SUSE LINUX (SLES)</td>
<td>Intel Pentium or compatible 650 MHz processor minimum recommended; Dual 1 GHz or higher processors recommended</td>
</tr>
<tr>
<td>SuSE Linux 11.x with glibc 2.9.x and above</td>
<td>x64</td>
</tr>
<tr>
<td>SuSE Linux 11.x with glibc 2.9.x and above</td>
<td>Power PC (Includes IBM System p)</td>
</tr>
<tr>
<td>SuSE Linux 11.x with glibc 2.9.x and above</td>
<td>Itanium</td>
</tr>
<tr>
<td>SuSE Linux 11.x with glibc 2.9.x and above</td>
<td>Intel Pentium or compatible 650 MHz processor minimum recommended; Dual 1 GHz or higher processors recommended</td>
</tr>
<tr>
<td>OS</td>
<td>System Requirements</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td><strong>SuSE Linux 11.x</strong></td>
<td>Intel Pentium, x64 or compatible processors</td>
</tr>
<tr>
<td><strong>SuSE Linux 10 Enterprise</strong></td>
<td>Intel Pentium or compatible 650 MHz processor minimum recommended; Dual 1 GHz or higher processors recommended</td>
</tr>
<tr>
<td><strong>SuSE Linux 10 Enterprise</strong></td>
<td>Itanium</td>
</tr>
<tr>
<td><strong>SuSE Linux 10 Enterprise</strong></td>
<td>Power PC (Includes IBM System p)</td>
</tr>
<tr>
<td><strong>SuSE Linux 10 Enterprise</strong></td>
<td>x64</td>
</tr>
<tr>
<td><strong>UBUNTU</strong></td>
<td></td>
</tr>
<tr>
<td>Ubuntu 10.04 LTS</td>
<td>Intel Pentium, x64 or compatible processors</td>
</tr>
<tr>
<td><strong>SOLARIS</strong></td>
<td></td>
</tr>
<tr>
<td>Solaris 9 4/04 64-bit</td>
<td>Ultra5 station or higher; Dual Processors recommended</td>
</tr>
<tr>
<td>Solaris 9 4/04 32-bit</td>
<td>Ultra5 station or higher; Dual Processors recommended</td>
</tr>
<tr>
<td>Solaris 8</td>
<td>Ultra5 station or higher; Dual Processors recommended</td>
</tr>
<tr>
<td>Solaris 11.x</td>
<td>x64</td>
</tr>
<tr>
<td>Solaris 11.x</td>
<td>Ultra5 station or higher; Dual Processors recommended</td>
</tr>
<tr>
<td>Solaris 10.x with a minimum</td>
<td>Ultra5 station or higher; Dual Processors recommended</td>
</tr>
<tr>
<td>Solaris 10.x 64-bit</td>
<td>x64</td>
</tr>
<tr>
<td><strong>TRU64</strong></td>
<td></td>
</tr>
<tr>
<td>Tru64 OSF1 Release 5.1B-3</td>
<td>Compaq® (DEC) AlphaServer DS Series computer or higher recommended</td>
</tr>
<tr>
<td><strong>WINDOWS</strong></td>
<td></td>
</tr>
<tr>
<td><strong>WINDOWS 2012</strong></td>
<td></td>
</tr>
<tr>
<td>Microsoft Windows Server 2012 Editions</td>
<td>All Windows-compatible processors supported</td>
</tr>
<tr>
<td><strong>WINDOWS 8</strong></td>
<td></td>
</tr>
<tr>
<td>Microsoft Windows 8 Editions*</td>
<td>All Windows-compatible processors supported</td>
</tr>
<tr>
<td>*Tape Libraries/Drives are not supported.</td>
<td></td>
</tr>
<tr>
<td><strong>WINDOWS 7</strong></td>
<td></td>
</tr>
<tr>
<td>Microsoft Windows 7 Editions*</td>
<td>All Windows-compatible processors supported</td>
</tr>
<tr>
<td>*Tape Libraries/Drives are not supported.</td>
<td></td>
</tr>
<tr>
<td><strong>WINDOWS 2008</strong></td>
<td></td>
</tr>
<tr>
<td>Microsoft Windows Server 2008 32-bit and x64 Editions*</td>
<td>All Windows-compatible processors supported</td>
</tr>
<tr>
<td>*Web Server Editions not supported</td>
<td></td>
</tr>
<tr>
<td><strong>WINDOWS VISTA</strong></td>
<td></td>
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<tr>
<td>Microsoft Windows Vista Editions*</td>
<td>All Windows-compatible processors supported</td>
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<tr>
<td>*Tape Libraries/Drives are not supported.</td>
<td></td>
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<tr>
<td><strong>WINDOWS 2003</strong></td>
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<tr>
<td>Microsoft Windows Server 2003 32-bit, 64-bit and x64 Editions* with a minimum of Service Pack 1</td>
<td>All Windows-compatible processors supported</td>
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<tr>
<td><strong>WINDOWS XP</strong></td>
<td></td>
</tr>
<tr>
<td>Microsoft Windows XP Editions* with a minimum of Service Pack 3</td>
<td>All Windows-compatible processors supported</td>
</tr>
<tr>
<td>*Tape Libraries/Drives are not supported.</td>
<td></td>
</tr>
</tbody>
</table>
HARD DRIVE

WINDOWS

130 MB for the MediaAgent software and log file growth/ 298 MB recommended

Enough additional local disk space to accommodate the index cache (with a minimum of 256 MB). It is recommended that the index cache is configured to be written on a partitioned drive, used exclusively for holding index cache. For information on calculating the space requirements for index cache, see Calculating the Storage Space Required for the Index Cache Directory.

An undersized index cache can result in degraded backup and restore performance. A severely undersized index cache can render backups and restores on that MediaAgent inoperable.

732 MB of free disk space on the drive in which the Operating System and \temp directory resides, to copy temporary files during the install or upgrade process.

UNIX

256 MB for the MediaAgent software and log file growth

MEMORY

4 GB RAM minimum required; 32 GB RAM recommended if MediaAgent is used with Deduplication. For granular details on MediaAgent sizing, refer to the Deduplication Building Block Guide.

Virtual memory should be set to twice the amount of available physical memory.

A MediaAgent that is also a Catalog Server requires an additional hard disk space of 4% of the total data protected by all MediaAgents using the Catalog Server.

PERIPHERALS

DVD-ROM drive

SCSI bus adapter for each attached media library

Sufficient hard disk space when backing up to disk drives
Swap space = 2*RAM size

Media library or stand-alone drive attached to local SCSI adapter(s), backup device available through Storage Area Network (SAN), or magnetic disk partitions for backup data.

Contact your software provider, for a list of supported storage devices (libraries, drives, media and SAN devices) and compatible SCSI cards.

AIX LPAR SUPPORT

Data protection on Logical Partitioning (LPAR) is supported.

MISCELLANEOUS

NETWORK

TCP/IP Services configured on the computer.

DRIVERS

Drivers for SCSI Adapters (Supplied by your SCSI Adapter provider)
Drivers for media drives (Supplied by your media drive provider)

.NET FRAMEWORK

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

MICROSOFT VISUAL C++

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

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:

<table>
<thead>
<tr>
<th>File Name</th>
<th>Content of the File</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>&lt;directory&gt;/file_name.te</code></td>
<td>The content of the file should be as follows:</td>
</tr>
<tr>
<td>where: <code>&lt;directory&gt;</code> is <code>/usr/share/selinux/devel</code></td>
<td><code>policy_module(&lt;name&gt;,&lt;version&gt;)</code></td>
</tr>
<tr>
<td><code>&lt;file_name&gt;</code> 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.</td>
<td><code>##############################</code></td>
</tr>
<tr>
<td>For example: When you are creating a policy module for backup_IDA application, you can use the following file name: backup_IDA.te</td>
<td>where: <code>&lt;name&gt;</code> is the name of the policy module. You can give any unique name to the policy module, such as a process or application name.</td>
</tr>
<tr>
<td><code>&lt;version&gt;</code> 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.</td>
<td><code>policy_module(backup_IDA,1.0.0)</code></td>
</tr>
</tbody>
</table>

| `<directory>/file_name.fc` | The content of the file should be as follows: |
| where: `<directory>` is `/usr/share/selinux/devel` | 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. |
| `<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. | `/opt/<software installation directory>/Base/libCTreeWrapper.so -- gen_context (system_u:object_r:texrel_shlib_t,s0)` |
| For example: When you are creating a policy module for backup_IDA application, you can use the following file name: backup_IDA.fc | `/opt/<software installation directory>/Base/libCVMAGuiImplgso -- 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
```

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.

**NOTES ON MEDIAAGENT INSTALLATION**

The MediaAgent should not be installed on a compressed drive.

On Unix 64-bit computers, you can opt to install either the 32-bit version or 64-bit version of the agent. See Install the MediaAgent or Linux File System Features - Media Management.
Deployment to run the appropriate install.
For information on installing the MediaAgent software on the Microsoft Virtual Server, see Considerations for backing up the Microsoft Virtual Server.
(If CommServe, MediaAgent and Client software are installed on the same computer.)

Contact your software provider, for a list of supported storage devices (libraries, drives, media and SAN devices) and compatible SCSI cards.

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.
Install the MediaAgent - Windows

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Configuration of Other Installation Options
Schedule Automatic Update
Verify Summary of Install Options
Setup Complete
Post-Install Considerations

INSTALL REQUIREMENTS
The following procedure describes the steps involved in installing the Windows MediaAgent on both clustered and non-clustered environment. The Windows MediaAgent is installed on a computer that satisfies the minimum requirements specified in System Requirements - MediaAgent.

Review the following Install Requirements before installing the software:

GENERAL
- The MediaAgent can only be installed after the CommServe® software has already been installed. Also, keep in mind that the CommServe® software must be running (but not necessarily on the same computer) before you can install the MediaAgent.
- This version of the software is intended to be installed where the CommServe Server is in 9.0.0.
- Ensure that you have an available license on the CommServe for the MediaAgent. Also, if you wish to install the NDMP Remote Server, make sure that you have an appropriate license.
- Do not install the MediaAgent on a compressed drive.
- Close all applications and disable any programs that run automatically, including anti-virus, screen savers and operating system utilities. Some of the programs, including many anti-virus programs, may be running as a service. Stop and disable such services before you begin. You can re-enable them after the installation.
- Ensure the account under which the CommVault Communications Service (GxCVD) runs has Full permissions to all files and folders on drives where backups will occur. By default the iDataAgent uses the System account, which should have access to all objects on the client.
- Verify that you have the software installation disc that is appropriate to the destination computer's operating system. Make sure that you have the latest software installation disc before you start to install the software. If you are not sure, contact your software provider.

NETWORK
- If your MediaAgent computer has multiple Network Interface Cards and IP addresses, make certain that all network communication paths are working. Also, make sure that the network interface to be used in the MediaAgent installation is set as the first one to be bound on the network. For more information on Network Interface Cards, see Network Requirements.

CLUSTER SPECIFIC
- The MediaAgent can be installed from the active node in the cluster group using the following procedure. The software can also be automatically installed on all available passive nodes when the software is installed in the cluster group, or you can choose to install any passive node(s) separately.
- Check the following on the cluster computer in which you wish to install the software:
  - Cluster software is installed and running.
  - Active and passive nodes are available.
  - Disk array devices configured with access to the shared array.
  - Public Network Interface Card is bound first, before the private Network Interface Card. (Does not apply to NetWare Cluster.)

BEFORE YOU BEGIN
- Log on to the computer that will serve as the MediaAgent as a local Administrator or as a member of the Administrators group on that computer.
- On a clustered computer, ensure that you are logged on to the active node as the Domain User with administrative privileges to all nodes on the cluster.

INSTALL PROCEDURE
GETTING STARTED

1. Place the Software Installation Disc for the Windows platform into the disc drive.
   After a few seconds, the installation program is launched.
   If the installation program does not launch automatically:
   • Click the Start button on the Windows task bar, and then click Run.
   • Browse to the installation disc drive, select Setup.exe, click Open, then click OK.

NOTES
• If you are installing on Windows Server Core editions, mount to Software Installation Disc through command line, go to the AMD64 folder and run Setup.exe.

2. Choose the language you want to use during installation. Click the down arrow and select the desired language from the drop-down list, and click Next to continue.

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

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

4. Read the license agreement, then select I accept the terms in the license agreement.
   Click Next to continue.

CLUSTER SELECTION

If you are installing in clustered environment, follow the steps below. For non-clustered environment, skip to Select Components for Installation.
5. Select Configure a Virtual Server.
   Click Next to continue.
6. Select the disk group in which the cluster group resides. Click Next to continue.

SELECT COMPONENTS FOR INSTALLATION

7. Select the component(s) to install.

NOTES

- Your screen may look different from the example shown.
- Components that either have already been installed, or which cannot be installed, will be dimmed. Hover over the component for additional details.
- If you wish to install the agent software for restore only, select Install Agents for Restore Only checkbox. See Installing Restore Only Agents for more information.
- The Special Registry Keys In Use field will be highlighted when GalaxyInstallerFlags registry key is enabled. Move the mouse pointer over this field to see a list of registry keys that have been created in this computer.

Click Next to continue.

To install the MediaAgent, under Common Technology Engine expand the MediaAgent Modules and select MediaAgent.

Optionally you can also select the following MediaAgent components at this time:

- NDMP Remote Server - Select this option if your MediaAgent has a library attached and is used by a NAS NDMP client to backup data. (Requires that you have an appropriate license on the CommServe.)

CONFIGURATION OF OTHER INSTALLATION OPTIONS

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

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

If firewall configuration is not required, click Next to continue.
9. Enter the fully qualified domain name of the CommServe Host Name. This should be TCP/IP network name. e.g., computer.company.com.

**NOTES**
- The CommServe client name is the name of the computer. This field is automatically populated.
- Do not use space and the following characters when specifying a new name for the CommServe Host Name: "/\!*@#$%^&()+=<>/?,\[\]{}:;'"
- If a computer has already been installed, this screen will not be displayed; instead, the installer will use the same Server Name as previously specified.
- If you do not specify the CommServe Host Name, a window will be prompted to continue in decouple mode. Click Yes to continue to Decoupled Install. Click No to specify a CommServe Name and continue with the installation.

Click Next to continue.

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

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

Click Next to continue.

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

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

Click Next to continue.

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

**NOTES:**
- If Windows Firewall is enabled on the computer, this option is selected by default and must be enabled to proceed with the installation.
- If Windows Firewall is disabled on the computer, you can select this option to add the programs and services to enabled CommCell operations across the firewall, if the firewall is enabled at a later time.
You can either select this option during install or add the programs and services after installation. For adding the programs and services after installation, see Configure Windows Firewall to Allow CommCell Communication.

Click Next to continue.

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

**NOTES**
- Do not install the software to a mapped network drive.
- Do not use the following characters when specifying the destination path:
  - / : * ? " < > | #
  - It is recommended that you use alphanumeric characters only.
- If you intend to install other components on this computer, the selected installation directory will be automatically used for that software as well.
- If a component is already installed in this computer, this screen may not be displayed. The software will be automatically installed in the same location that was previously specified.

Click Browse to change directories.
Click Next to continue.

**SCHEDULE AUTOMATIC UPDATE**

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

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

Click Next to continue.

15. Select Yes to stop Removable Storage Services on the MediaAgent.

**NOTES**
- This prompt will not appear if Removable Storage Services are already disabled on the computer.

Click Next to continue.