# HP Data Protector 7.00
# Getting Started Guide

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# 1 Installation

**NOTE:**

This guide applies to the full Data Protector product. If you have a Single Server Edition, some of the platforms and features mentioned do not apply.

This guide is designed to help you get started quickly. Using the default settings, you can quickly and easily install the software, create a backup, and do a restore.

## Installing on Windows systems

**NOTE:** For full installation details, see the *HP Data Protector Installation and Licensing Guide* in the `Docs` directory of the top level of the Windows installation DVD-ROM.

### Prerequisites

- Management server (Cell Manager):
  - 256 MB of RAM (512 MB recommended)
  - 190 MB of disk space +2% of the size of planned backup data
- Backup client (Disk Agent):
  - 64 MB of RAM (128 MB recommended)
  - 10 MB of disk space
- Device server (Media Agent):
  - 64 MB of RAM (128 MB recommended)
  - 20 MB of disk space
- Original user interface (GUI):
  - 256 MB of RAM
  - 150 MB of disk space
- Java user interface (Java GUI):
  - 1000 MHz Intel Pentium or equivalent (2.6 GHz Intel Pentium IV or equivalent recommended)
  - 512 MB of RAM (1 GB recommended)
  - 40 MB of disk space (60 MB recommended)
  - For a Java GUI Client, a supported Java Runtime Environment (JRE) (for details, see the *HP Data Protector Product Announcements, Software Notes, and References*)
- Guides
  - 85 MB for guides in PDF format

If you plan to install all the components on the same system, the system must have 305 MB of disk space and at least 256 MB of RAM (512 MB recommended).

These figures are the requirements for the components only. They do not include space allocation for the operating system, its paging file, and other applications.

## Installing Cell Manager

For details of supported platforms, see the latest support matrices at http://support.openview.hp.com/selfsolve/manuals.

### Prepare for installation

1. On the system that is to be your Data Protector Cell Manager:
   a. For a standalone tape drive, connect the tape drive to the Data Protector Cell Manager and power it on.
   b. Enable TCP/IP protocol and hostname resolution.

      *To check if they are enabled:*

      1) Verify that name resolution is working properly by finding the name of the computer:
         - Open Command Prompt (on Windows systems) or Terminal (on UNIX systems).
         - Run: `hostname`

         The name of your computer will be displayed.

      2) Verify name resolution and reachability:
         - Run: `nslookup Hostname`
         - Trigger a reverse DNS lookup, by running: `nslookup IPAddress`

         The network is set up properly when you get the same hostname and IP address from both commands.

         If you have problems with your network, see the *HP Data Protector Troubleshooting Guide*.

   c. Assign a static IP address.
   d. Deactivate the Windows tape device and changer drivers (recommended). Only use these drivers in exceptional cases, for example, when other applications access this tape device.
2. Log on to the system as Administrator (on Windows systems) or root (on UNIX systems).
3. Set up a separate operating system account for use with Data Protector, such as `dpadmin`.

   On Windows systems, ensure that:

   - The user is a member of Administrators and Backup Operators user groups.
   - The user has logon rights as service (Windows advanced rights).

   This user account is needed solely to provide the required services. It will not be used to log on to an individual's system.

   The account should be used as the Data Protector service account in server and client installations. In a Windows domain, you only need to set up the account on the Primary Domain Controller.

### Install Data Protector

1. Insert the Windows installation DVD-ROM and start the wizard:
   - 32-bit systems: `\i386\setup.exe`
   - 64-bit AMD64/Intel EM64T systems: `\x8664\setup.exe`
   - 64-bit Itanium systems: `\ia64\setup.exe`
2. Select **Cell Manager** and follow the wizard using the default values.
3. In the **Account information** window, enter the user name and password for the user account you created in step 3 of the installation preparation procedure.

### Run Data Protector

**Start > Programs > HP Data Protector > Data Protector Manager**

For further information, see the documentation in the `Docs` directory in the top-level directory of the DVD-ROM.

## Installing clients

See http://support.openview.hp.com/selfsolve/manuals and search for "Data Protector". Select version 7.00 to find out about supported platforms with this release.

### Prerequisites

- Cell Manager installed
- Administrator rights and password
- TCP/IP protocol and node name resolution enabled

**RAM and disk space**—minimum and recommended

| Client system component | RAM (MB) | Disk space (MB) |
|---|---|---|
| Original GUI | 256[1] | 150[2] |
| Java GUI[3] | 512 (1,000 recommended) | 40 (60 recommended) |
| Disk Agent | 64 (128 recommended) | 10 |
| Media Agent | 64 (128 recommended) | 20 |
| Integration Modules | 64 (128 recommended) | 20 |
| English Documentation (Guides, Help) | n/a | 100 |

[1] Depends on the number of elements that need to be displayed at a time.

[2] The page file alone needs to be able to grow to about 3 times the physical memory

[3] The Java GUI also requires at least a 1 GHz Pentium III processor (2.6 GHz Pentium IV recommended)

### Installing remotely, from the Cell Manager GUI

1. Log on to the system as Administrator.
2. Click **Start > Programs > HP Data Protector > Data Protector Manager**.
3. In the Data Protector Manager, switch to the **Clients** context.
4. In the Scoping Pane, right-click **Clients** and select **Add Clients** to start the wizard.
5. Follow the wizard instructions.

### Installing locally, on the intended system

1. Log on to the system as Administrator.
2. Verify network connection between the Cell Manager system and the client system by running the following command: `ping CellManagerHostname`
3. Run:
   - 32-bit systems: `\i386\setup.exe`
   - 64-bit AMD64/Intel EM64T systems: `\x8664\setup.exe`
   - 64-bit Itanium systems: `\ia64\setup.exe`
4. Select **Client**.
5. Follow the wizard instructions.
6. In the Cell Manager system dialog box, enter the name of your Cell Manager.

# Installing on UNIX systems

**NOTE:** For full installation details, see the *HP Data Protector Installation and Licensing Guide* in the `/DOCS/C` directory of the UNIX installation DVD-ROM.

## Installing Cell Manager

**NOTE:** For supported platforms, see http://support.openview.hp.com/selfsolve/manuals.

The following is an example of a Cell Manager installation with backup device locally attached using the default configuration.

**NOTE:** On all UNIX platforms, only the Java GUI is supported. This requires 75–200 MB of disk space, depending on which Help languages are installed. For English, only 75 MB is required. The disk space figures below include the Java GUI, Disk Agent, and Media Agent.

### Prerequisites (HP-UX)

- A supported Java Runtime Environment (JRE) (for details, see the *HP Data Protector Product Announcements, Software Notes, and References*)
- HP-UX 11.x
- 256 MB of RAM (512 MB recommended)
- 350–550 MB of disk space +2% of the size of planned backup data

### Prerequisites (Linux)

- A supported Java Runtime Environment (JRE) (for details, see the *HP Data Protector Product Announcements, Software Notes, and References*)
- 256 MB of RAM (512 MB recommended)
- 300–550 MB of disk space +2% of the size of planned backup data

### Procedure

*On your Data Protector Cell Manager:*

1. Mount the UNIX installation DVD-ROM to a mount point, for example:

   ```
   mkdir/cdrom
   mount/dev/dsk/c0t0d0/cdrom
   ```

2. Run `omnisetup.sh`. To run the command from the DVD-ROM:

   ```
   cd /cdrom/LOCAL_INSTALL
   ./omnisetup.sh -CM
   ```

3. Follow the instructions when prompted.

Install clients either from the Cell Manager or locally.

### Running Data Protector

Enter `/opt/omni/bin/xomni` to start the Data Protector GUI.

## Installing clients

See http://support.openview.hp.com/selfsolve/manuals and search for "Data Protector". Select version 7.00 to find out about supported platforms with this release.

### Prerequisites

- root permissions on every target system
- ksh shell

**RAM and disk space**—minimum and recommended

| Client system component | RAM (MB) | Disk space (MB) |
|---|---|---|
| Java GUI | 512 (1,000 recommended) | 40 (60 recommended) |
| Disk Agent | 64 (128 recommended) | 10 |
| Media Agent | 64 (128 recommended) | 20 |
| Integration Modules | 64 (128 recommended) | 20 |
| English Documentation (Guides, Help) | n/a | 95 |

### Remote installation

Distribute the software to clients using the Data Protector user interface. Cross-platform client installation is supported.

1. Enter `/opt/omni/bin/xomni` to start the Data Protector GUI.
2. In the Data Protector Manager, switch to the **Clients** context.
3. In the Scoping Pane, right-click **Clients** and select **Add Clients** to start the wizard.
4. Follow the instructions. For details on each wizard page, see the *HP Data Protector Help*.

After the Media Agent is installed, check your configuration files (`/kernel/drv/st.conf`). For specifics, see Installing Data Protector clients in the *HP Data Protector Installation and Licensing Guide*.

Finally, connect a backup device to the system.

### Local installation

1. Insert the UNIX installation DVD-ROM.
2. Mount the installation DVD-ROM to a mount point.
3. Change directory to *Mount_Point*`/LOCAL_INSTALL` and run:

   `omnisetup.sh [-source` *`directory`*`] [-server` *`name`*`] [-install` *`component list`*`]`

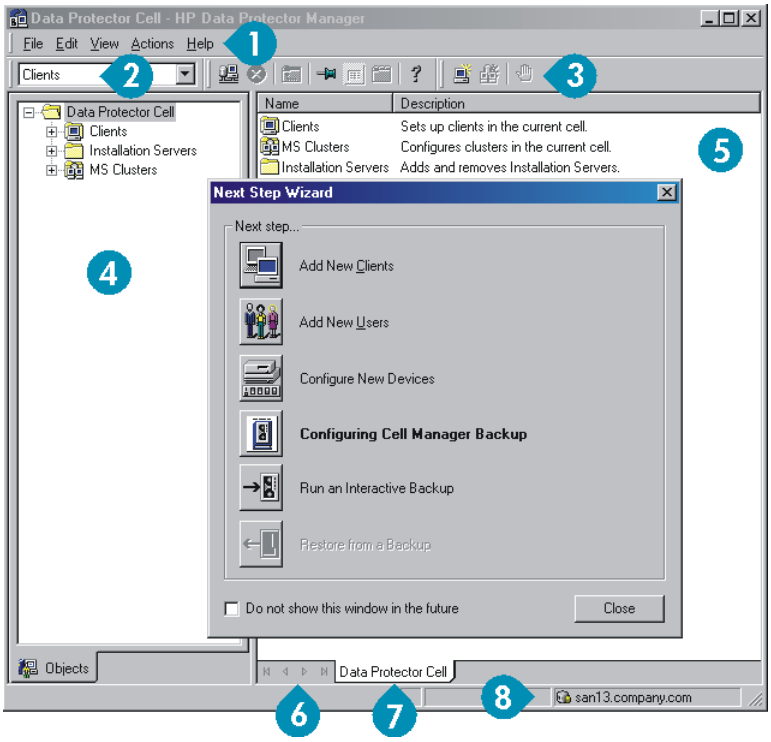
   For a list of Data Protector component codes, see the *HP Data Protector Installation and Licensing Guide*.
4. `omnisetup` informs you if the installation was completed and if the client was imported to the Data Protector cell. The CORE and CORE-INTEG components are automatically installed.

If you specified the name of the Cell Manager, the client will be imported to the cell. If not, import it using the Data Protector GUI.

## Next steps

**You can now run the Data Protector Manager.**

Start the Data Protector Manager. The Data Protector Manager will open, displaying the Clients context and Next Step wizard:




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | Menu bar | 2 | Context list | 3 | Tool bar | 4 | Scoping pane |
| 5 | Results area | 6 | Navigation tabs | 7 | Results tabs | 8 | Status bar |

**NOTE:** The Java GUI looks slightly different from this.

# Configuring backup devices

## Configuring a file library device

These instructions are for a simple file library device configuration on a local or shared drive using mostly default options. For other possibilities see the *HP Data Protector Help* index: "configuring backup devices".

*Before you start:* On Windows, disable the compression option.

1. Create a directory on a local or shared disk.

   *Example:* `C:\FileLibrary`
2. Start Data Protector Manager.
3. Select **Devices & Media** from the Context List.
4. Right-click **Devices** and select **Add Device** to open the device definition pane.
5. Enter details:

| | |
|---|---|
| **Device name** | *Example:* `File Library Device 01` |
| **Description** | optional |
| **Client** | Select the client to which the device is connected. |
| **Device type** | Select **File Library**. |

   Click **Next**.
6. Specify the directory for the file library device you created in step 1 and click **Add**.

7. Click **Next**. In the Results Area, select the media type: **File**.
8. Click **Finish**.

## Configuring a standalone drive

### Autoconfiguration

1. Select **Devices & Media** from the Context List.
2. Right-click **Device**.
3. Select **Autoconfigure Devices**.
4. Select your system from the list and click **Finish**.

Your device is configured automatically.

### Manual configuration

Follow the instruction for a file library device above, up to step 4. Then:

1. Enter details:

| | |
|---|---|
| **Device name** | *Example:* `LTO-3 Tape Drive` |
| **Description** | optional |
| **Client** | Select the client to which the device is connected. |
| **Device type** | Select **Standalone**. |

   Click **Next**.
2. Enter the SCSI address by expanding the field and selecting one of the options. Click **Add**.
3. Click **Next**. In the Results Area, select the correct media type, such as **LTO**.
4. Click **Finish**.

## Formatting media

Data Protector writes its own header on each tape so it can be recognized later. This can be done manually, as described in this section, or automatically. Before tapes can be used with Data Protector they need to be formatted. Skip this section if you want Data Protector to format the tape automatically.

△ **CAUTION:** Formatting deletes all data on the media.

1. In the Devices & Media Context expand **Pools**.
2. Right-click the appropriate media pool.
3. Select **Format**.
4. In the Results Area select the drive and click **Next**.
5. Keep default settings and click **Next**.
6. Click **Force Operation** and **Default Medium Size** then **Finish**. Data Protector formats the media.

# 2 Backing up your system

The following steps show how to create a backup specification and perform a simple backup.

1. In the Context List, click **Backup**.
2. In the Scoping Pane, expand **Backup** and then click **Backup Specifications**.
3. In the Results Area, right-click the **Filesystem** item and select **Add Backup**.
4. Select the **Blank Filesystem Backup** template and click **OK**.
5. In the Source page that appears in the Results Area, browse for and select the checkboxes next to the directories and files that you want to back up, then click **Next**. If you do not have a tape device connected, select just a few small directories.
6. Use the default backup specifications options or select the desired backup options and click **Next**.
7. Use the predefined schedule options or select the desired backup options and then click **Next**. For an example, see "Defining a schedule for a simple backup routine" (page 11).
8. The backup specification summary is displayed in the Results Area. Click **Next**.
9. Click **Save As** to save the backup specification for later use.
10. Click **Start Backup** to run the backup.
11. When the Start Backup window opens, click **OK** to start the backup using the default specifications.
12. The Backup window shows you the progress of the backup session. The Session Information window will tell you when the backup is finished.

## Defining a schedule for a simple backup routine

As an example, suppose you want to define a schedule with a full backup every Friday and incremental backups on other weekdays, all at 21:00h and retained for 4 weeks, plus a full backup each month retained for 12 months.

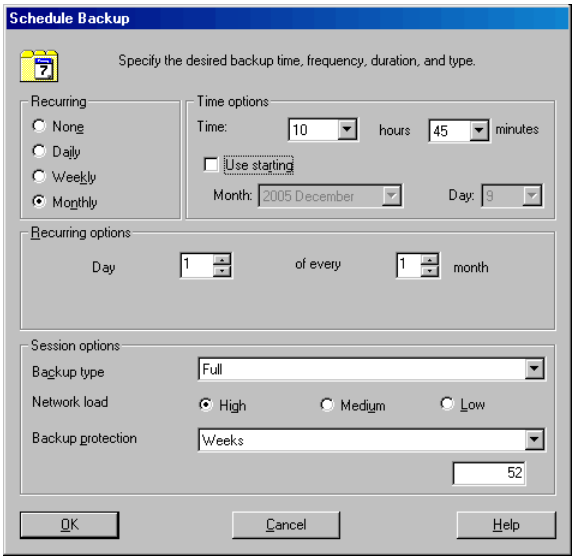
Data Protector has several predefined schedules. "Weekly full" is close to what is needed—full every Friday and Incr1 every weekday at 21:00h. Incr1 backups back up all changes since the last full backup.

*To create the defined schedule:*

1. When defining your backup specification, at step 3 in "Manual configuration" (page 10), go to the **Schedule** tab.
2. Click **Predefined**.
3. Select **Weekly full** and click **OK**.
4. Click **Add**.
5. Under **Recurring**, select **Monthly**.

   Under **Time options**, specify the time for the monthly backup.

   Under **Session options**, from the Backup protection drop-down list, select **Weeks** and enter the number of weeks in the box below (1 year = 52 weeks).




6. Click **OK**.
7. Click **Apply**.

# 3 Restoring from a backup

By default, the backup object is restored to the same path from which it was backed up. The following steps show how to perform a simple restore.

1. In the Context List, click **Restore**.
2. Browse the **Filesystem** item and select the client object that you want to restore. The Restore view appears in the Results Area.
3. Browse for and select the check-boxes next to the directories/files to be restored.
4. Select the **Destination** tab to choose where you want to restore to. If you do not select anything, the selected directories/files will be restored to the original path.
5. Click the **Start Restore** button. The restore wizard appears.
6. Follow the proposed defaults in the wizard (click **Next** and **Finish**).
7. The Start Restore Session window opens, showing you the progress of the selected objects being restored to the system.

# 4 More information

## Data Protector documentation map

### Documentation map

#### Abbreviations

Abbreviations in the documentation map that follows are explained below. The documentation item titles are all preceded by the words “HP Data Protector.”

| Abbreviation | Documentation item |
|---|---|
| CLI | Command Line Interface Reference |
| Concepts | Concepts Guide |
| DR | Disaster Recovery Guide |
| GS | Getting Started Guide |
| GRE-SPS | Granular Recovery Extension User Guide for Microsoft SharePoint Server |
| GRE-VMware | Granular Recovery Extension User Guide for VMware vSphere |
| Help | Help |
| IG-IBM | Integration Guide for IBM Applications: Informix, DB2, and Lotus Notes/Domino |
| IG-MS | Integration Guide for Microsoft Applications: SQL Server, SharePoint Server, and Exchange Server |
| IG-O/S | Integration Guide for Oracle and SAP |
| IG-OMU | Integration Guide for HP Operations Manager for UNIX |
| IG-OMW | Integration Guide for HP Operations Manager for Windows |
| IG-Var | Integration Guide for Sybase, Network Node Manager, and Network Data Management Protocol Server |
| IG-VirtEnv | Integration Guide for Virtualization Environments |
| IG-VSS | Integration Guide for Microsoft Volume Shadow Copy Service |
| Install | Installation and Licensing Guide |
| PA | Product Announcements, Software Notes, and References |
| Trouble | Troubleshooting Guide |
| ZDB Admin | ZDB Administrator's Guide |
| ZDB Concept | ZDB Concepts Guide |
| ZDB IG | ZDB Integration Guide |

#### Map

The following table shows where to find information of different kinds. Shaded squares are a good place to look first.

| | Help | GS | Concepts | Install | Trouble | DR | PA | Integration Guides: MS | O/S | IBM | Var | VSS | VirtEnv | OMU | OMW | ZDB: Concept | Admin | IG | GRE: Exchange | SPS | VMware | CLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Backup | X | X | X | | | | | X | X | X | X | X | X | | | X | X | X | | | | |
| CLI | | | | | | | | | | | | | | | | | | | | | | X |
| Concepts/ techniques | X | | X | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |
| Disaster recovery | X | | X | | | X | | | | | | | | | | | | | | | | |
| Installation/ upgrade | X | X | | X | | | X | | | | | | | X | X | | | | | | | |
| Instant recovery | X | | X | | | | | | | | | | | | | X | X | X | | | | |
| Licensing | X | | | X | | | X | | | | | | | | | | | | | | | |
| Limitations | X | | | | X | | X | X | X | X | X | X | X | | | | | X | | | | |
| New features | X | | | | | | X | | | | | | | | | | | | | | | |
| Planning strategy | X | | X | | | | | | | | | | | | | X | | | | | | |
| Procedures/ tasks | X | | | X | X | X | | X | X | X | X | X | X | X | X | | X | X | X | X | X | |
| Recommendations | | | X | | | | X | | | | | | | | | X | | | | | | |
| Requirements | | | | X | | | X | X | X | X | X | X | X | X | X | | | | | | | |
| Restore | X | X | X | | | | | X | X | X | X | X | X | | | | X | X | X | X | X | |
| Supported configurations | | | | | | | | | | | | | | | | X | | | | | | |
| Troubleshooting | X | | | X | X | | | X | X | X | X | X | X | X | X | | X | X | X | X | X | |

## Integrations

Look in these guides for details of the integrations with the following software applications:

| Software application | Guides |
|---|---|
| HP Network Node Manager (NNM) | IG-Var |
| HP Operations Manager | IG-OMU, IG-OMW |
| IBM DB2 UDB | IG-IBM |
| Informix Server | IG-IBM |
| Lotus Notes/Domino Server | IG-IBM |
| Microsoft Exchange Server | IG-MS, ZDB IG |
| Microsoft Hyper-V | IG-VirtEnv |
| Microsoft SharePoint Server | IG-MS, ZDB IG, GRE-SPS |
| Microsoft SQL Server | IG-MS, ZDB IG |
| Microsoft Volume Shadow Copy Service (VSS) | IG-VSS |
| Network Data Management Protocol (NDMP) Server | IG-Var |
| Oracle Server | IG-O/S, ZDB IG |
| SAP MaxDB | IG-O/S |
| SAP R/3 | IG-O/S, ZDB IG |
| Sybase Server | IG-Var |
| VMware vSphere | IG-VirtEnv, GRE-VMware |

Look in these guides for details of the integrations with the following families of disk array systems:

| Disk array family | Guides |
|---|---|
| EMC Symmetrix | all ZDB |
| HP P4000 SAN Solutions | ZDB Concept, ZDB Admin, IG-VSS |
| HP P6000 EVA Disk Array Family | all ZDB, IG-VSS |
| HP P9000 XP Disk Array Family | all ZDB, IG-VSS |

## Licensing

Data Protector comes with an instant-on license for 60 days after installation. Within this period you can request a permanent password from the HP Password Delivery Center (PDC) and install it.

The permanent password permits you to configure a Data Protector cell with regard to your backup policy, provided that you have purchased all required licenses.

To obtain a password, visit the password delivery homepage at http://www.webware.hp.com or consult the *HP Data Protector Installation and Licensing Guide, Data Protector licensing* section, for more information.

## For more information

For more information about HP Data Protector, visit http://www.hp.com/go/dataprotector or call your local HP reseller or HP sales office.