

Upgrading from OmniBack II A.03.50

The OmniBack II A.03.50 release version can be directly upgraded to Data Protector A.05.10 for UNIX and Windows platforms.

Licenses

The existing OmniBack II A.03.50 licenses will remain valid after the upgrade to Data Protector A.05.10. However, some license types are not available for repurchasing, they are replaced by new licenses. For details about licensing, refer to Chapter 5, "Data Protector Licensing," on page 273.

Upgrade Sequence

For information about the upgrade sequence, refer to "Upgrade Overview" on page 189.

IDB Disk Space Requirements

A considerable amount of disk space is required for the upgrade since the old database is left on the system. That is why it is important to calculate the disk space requirements and verify that enough disk space is available.

To get the estimate of the required disk space, the following needs to be taken into account:

- The old OmniBack II A.03.50 IDB is kept throughout the upgrade process and remains unchanged.
- The new IDB will be roughly the size of the A.03.50 IDB, except that the fileversion part will be half the size of the fileversion part in the A.03.50 IDB.
- During the upgrade, the OmniBack II A.03.50 and the Data Protector A.05.10 IDBs need to be accommodated on the Cell Manager system. Once the upgrade (including the IDB detail part upgrade) is completed and the Data Protector cell is operational, the OmniBack II A.03.50 IDB can no longer be accessed.

To calculate the disk space needed for the new IDB, proceed as follows:

1. Check the size of the `/var/opt/omni/db` directory on HP-UX systems and the `<Data_Protector_home>\db` directory on Windows systems.
2. Using the `omnidbut11 -extendinfo` command, check the size and location of the extension files (`fvers` and `fnames`).

If all extension files are located in the `db` directory, the size of the `db` directory is the total size of OmniBack II A.03.50 database.

If some extension files are located elsewhere, sum up the size of these files and calculate the size of OmniBack II A.03.50 database as follows:

$$\text{OldDatabaseSize} = \text{dbSize} + \text{extSize}$$

3. Subtract the size of all `fvers` extension files (`fversSize`) from the total database size to get the size of the database without file versions:

$$\text{BaseSize} = \text{OldDatabaseSize} - \text{fversSize}$$

During the core part upgrade, the IDB is upgraded without filenames and file versions. To calculate the size of the database, upgraded during the core part upgrade (`CUDatabaseSize`), subtract the size of `fnames` and `fvers` files from the total database size:

$$\text{CUDatabaseSize} = \text{OldDatabaseSize} - \text{fversSize} - \text{fnamesSize}$$

4. The size of `fvers` extension files, divided by two, is the space required for `dcbf` directories:

$$\text{DCBFSize} = \frac{\text{fversSize}}{2}$$

5. Add this number to the base database size to calculate the initial size of the A.05.10 IDB after the upgrade:

$$\text{NewDatabaseSize} = \text{BaseSize} + \text{DCBFSize}$$

6. To ensure proper usage of the disk space by Data Protector, configure the `dcbf` directories using the GUI after the core part upgrade has been finished:

- Specify the location for `dcbf` directories.
- Specify the appropriate maximum size for each `dcbf` directory.

Example

To calculate the initial size of the A.05.10 IDB on HP-UX, follow the procedure described below:

1. Suppose that the size of the `db` directory is 9.8 GB.
2. Run the `omnidbut11 -extendinfo` command to get the size and location of the extension files (`fvers` and `fnames`):

```
/var/opt/omni/db/cdb/fvers.dat 2.5 GB
```

```
/var/opt/omni/db/cdb/fvers.dat1 2,5 GB  
/var/opt/omni/db/cdb/fvers.dat2 2 GB  
/var/opt/omni/db/cdb/fnames.dat2 2 GB  
/disk/fnames.dat1 1,4 GB
```

3. The `fnames.dat1` file is not located in the `db` directory, so add its size to the size of `db` directory to get the total size of OmniBack II A.03.50 database (`OldDatabaseSize`):

$$9,8\text{GB} + 1,4\text{GB} = 11,2\text{GB}$$

4. Calculate the size of the database without file versions (`BaseSize`):

$$11,2\text{GB} - 7\text{GB} = 4,2\text{GB}$$

The size of the database, upgraded during the core part upgrade (`CUDatabaseSize`), is:

$$11,2\text{GB} - 7\text{GB} - 3,4\text{GB} = 0,8\text{GB}$$

5. Calculate the size needed for `dcbf` directories (`DCBFSize`):

$$(2,5\text{GB} + 2,5\text{GB} + 2\text{GB}) / 2 = 3,5\text{GB}$$

6. Calculate the initial size of the A.05.10 IDB (`NewDatabaseSize`):

$$4,2\text{GB} + 3,5\text{GB} = 7,7\text{GB}$$

Time Requirements

The IDB core part upgrade procedure lasts from 30 minutes to two hours depending on the database size and the system speed and load. The IDB detail part upgrade takes 3-6 hours per gigabyte of data, it can be done later, even after the cell is upgraded and some backups are performed. For the above described example, the detail part upgrade would take 18-36 hours.

Upgrading the HP-UX Cell Manager and Installation Server

Prerequisite

Stop all OmniBack II services before the upgrade procedure by running the `/opt/omni/sbin/omnisv.sh -stop` command.

NOTE

You must have root permissions to perform the upgrade.

Upgrading the HP-UX Cell Manager

The HP-UX Cell Manager is upgraded automatically when the `omnisetup.sh` command is run. This command removes the existing package set using the `swremove` utility and installs the OMNI-CORE, OMNI-CC, OMNI-CS, OMNI-DA, and OMNI-MA packages using the `swinstall` utility. If the Installation Server is present, it is upgraded as well. The detailed steps you need to follow when upgrading the HP-UX Cell Manager are described in "Step-by-Step Upgrade Procedure" on page 196.

Database Upgrade The old database remains in the `/var/opt/omni/db` folder. However, old `/var/opt/omni/db/catalog` is moved to `/var/opt/omni/db/catalog.OLD`. The new database is installed in the `/var/opt/omni/db40` folder. The database upgrade consists of:

1. Upgrading of the core part of the IDB.
2. Upgrading of the detail part of the IDB.

IDB Core Part Upgrade

The IDB core part upgrade procedure, which transfers vital data from the old to the new database, is started unconditionally as a part of the upgrade when the `omnisetup.sh` command is run. The entire MMDB, as well as the session information part, is transferred. However, session messages, filenames, and file versions are not transferred during the core part upgrade.

After the database core part upgrade, all the Data Protector functionality is available, except for browsing of single files and directories. Refer to Table 4-1 on page 195.

IDB Detail Part Upgrade

The IDB detail part upgrade procedure is started by running the `/opt/omni/bin/xomnidbupg` command. The process goes over all detail catalogs and imports the data into the A.05.10 IDB. During the upgrade, the session messages are also imported. At the same time, the obsolete sessions (which media have either been overwritten or exported) are removed. The catalogs belonging to unprotected objects (the objects that

do not have protected copies) are also skipped from the upgrade. The number of skipped (not upgraded) objects is reported in the upgrade.log file residing in the /var/opt/omni/log directory.

During the detail part upgrade, you can perform backup, restore, and media management operations; however, some limitations need to be considered. Refer to Table 4-1 on page 195 for details.

The upgrade will be suspended while backup, restore or media management operations are running.

The detail part upgrade wizard displays the progress status, as well as time and size estimates.

The detail part upgrade procedure is recoverable. If the system fails at any stage or if Data Protector shuts down, the upgrade is resumed automatically when the services are restarted.

The following table presents the Data Protector functionality available after the upgrade.

Table 4-1

Upgrade of the A.03.50 IDB - Core and Detail Part

IDB Upgrade	What Is Upgraded	Data Protector Behavior
Upgrade of the core part	The IDB without file versions, filenames and session messages	All functionality available except for browsing of single files and directories.
Upgrade of the detail part	The whole IDB except for obsolete sessions and the catalogs that belong to unprotected objects	All functionality available except for filename purge. Browsing of objects that reside on tapes that have not been upgraded yet, will not work or will work partially. Tapes with detail catalogs that have not been upgraded yet will not be allocated for appended backups.

MC/ServiceGuard The upgrade procedure for the Cell Manager, configured on MC/SG, is different from the upgrade procedure for the Cell Manager not running in the MC/SG environment. The detailed steps you need to follow are described in “Upgrading the Cell Manager Configured on MC/ServiceGuard” on page 265.

Upgrading the HP-UX Installation Server

In the following cases, the HP-UX Installation Server is upgraded automatically when the omnisetup.sh command is run:

- If it is installed together with the Cell Manager.
- If it is installed without client components.

If the Installation Server is installed with client components, it will be removed by the omnisetup.sh command. In this case, install a new Installation Server depot using the omnisetup.sh -IS command, and then reimport the upgraded Installation Server. For details, refer to “Importing an Installation Server to a Cell” on page 157.

Step-by-Step Upgrade Procedure

Prerequisite

It is recommended that the kernel parameter maxdsiz (Max Data Segment Size) be set to at least 131072000 bytes (128 MBytes). After setting this parameter, recompile the kernel and restart the machine.

To upgrade the HP-UX Cell Manager and Installation Server to Data Protector A.05.10, follow the procedure described below:

1. Insert and mount the HP-UX installation CD-ROM to a mount point, for example:

```
mkdir /cdrom
mount /dev/cd0 /cdrom
```

If you want to have on your local disk the DP_DEPOT directory, where the installation files are stored, run the following command:

```
mkdir <directory>
cp -r /cdrom/DP_DEPOT <directory>
```

To copy the whole CD-ROM to your local disk, run:

```
cp -r /cdrom <cd_image_dir>
```

2. Run the ./omnisetup.sh command. To run this command from the CD-ROM, execute:

```
cd /cdrom/LOCAL_DP_AGENT_INSTALL  
./omnisetup.sh
```

If you have copied the DP_DEPOT directory to your local disk as `<directory>/DP_DEPOT`, go to the directory where the `omnisetup.sh` command is stored, and run:

```
./omnisetup.sh -source <directory>
```

If you have copied the whole CD-ROM to `<cd_image_dir>`, run the `omnisetup.sh` command without any parameters:

```
cd <cd_image_dir>/LOCAL_DP_AGENT_INSTALL  
./omnisetup.sh
```

Refer to the `omnisetup.sh` man page for a description of the `omnisetup.sh` command.

3. After the A.03.50 version of OmniBack II is detected, the IDB core part upgrade is automatically started. If you want to perform a clean installation (the database of the previous version will be deleted), uninstall the old version and restart the installation.

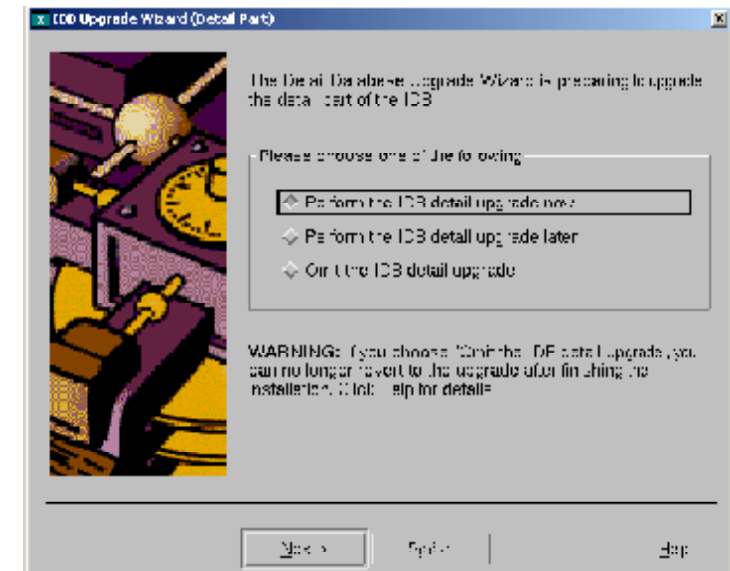
As soon as the installation script finishes, the IDB core part is upgraded. If you want to verify that the core part upgrade finished successfully, run the `/opt/omni/sbin/omnidbutil -upgrade_info` command, which displays the current upgrade status.

Once the core part of the IDB is upgraded, you can start using Data Protector. To proceed with the upgrade, perform the detail part upgrade following the steps described below:

1. Start the Data Protector Database Upgrade Wizard (Detail Part) by running the `/opt/omni/bin/xomnidbupg` command.
2. Select Perform the IDB detail upgrade now and click Next. Refer to Figure 4-1 on page 198.

Figure 4-1

The Database Upgrade Wizard



The upgrade wizard checks the A.03.50 database and disk space. When this is done, click Next.

3. Add extension files and DC binary files if you need more space than currently allocated, and then click Next to proceed.
4. Data Protector gives you the estimated time required for performing the upgrade. You can also monitor the progress of the upgrade session if you check the I would like to monitor the upgrade session option.

Click Finish to start the detail part upgrade.

The progress of the detail part upgrade can be monitored in the Data Protector GUI. In the Monitor context, click the detail part upgrade session to get the information about the session.

Upon completion of the task, a dialog box indicating the status is displayed.