IBM® DB2® OLAP Server™ Upgrade Guide for AS/400: Version 1.1 to 7.1™

Before using this information and the product that it supports, be sure to read the information in "Notices."

First Edition (July 2001)

About this book

This book describes the upgrade of DB2 OLAP Server for AS/400 from version 1.1 to version 7.1. Check for any FixPaks that might apply to your situation. To get the latest FixPaks, go to: http://www-4.ibm.com/software/data/db2/db2olap/fixpacks.html

Section 1: Common upgrade questions

This section addresses questions that clients ask when they upgrade to a new version of DB2 OLAP Server for AS/400.

General

1. **What versions of OS/400 does DB2 OLAP Server for AS/400 v7.1 require?**
   V4R4 or later.

DB2 OLAP Server

1. **Can I install DB2 OLAP Server/400 v7.1 on an AS/400 that contains DB2 OLAP Server/400 v1.1 or SCase STRATEGY 3.5, 3.0 or 2.5?**
   Yes. You may install DB2 OLAP Server/400 v7.1 over the top of DB2 OLAP Server/400 v1.1 or SCase STRATEGY 3.5, 3.0, or 2.5.
2. **Can DB2 OLAP Server/400 v7.1 *client* software connect to an older version of DB2 OLAP Server/400 *server* (for example, v1.1)?**
   No. Install DB2 OLAP Server/400 *server software* v7.1 before DB2 OLAP Server/400 v7.*1 client software.* This software includes DB2 OLAP Server Application Manager, OLAP spreadsheet add-ins, and OLAP Builder client (when used with DB2 OLAP Server/400)
3. **Can I open a DB2 OLAP Server/400 v7.1 database outline in with DB2 OLAP Server/400 v1.1 Application Manager?**
   If you open and save a version 7.1 database outline using DB2 OLAP Server/400 v1.1 Application Manager, DB2 OLAP Server/400 deletes any v7.1 features from the outline. If you need to open a v7.1 outline in an older Application Manager, open the outline in read-only mode to ensure that you do not lose the version 7.1 features. To open the outline in read-only mode, uncheck Lock file in the application desktop window.
4. **Can I revert to DB2 OLAP Server/400 v1.1 database files?**
   No. You cannot use v7.1 database files with older DB2 OLAP Server/400 versions. If you need to revert to an older version, delete the v7.1 database files and restore older database files from a recent backup.

OLAP Builder

1. **Can OLAP Builder v7.1 connect to an earlier version of Warehouse Manager Server (part of DB2 OLAP Server/400)?**
   No.
2. **Can OLAP Builder v7.1 open my existing OLAP Builder definitions?**
   Yes, but only after you upgrade your server to v7.1. Then OLAP Builder v7.1 can open distribution sets and definitions created with previous versions of OLAP Builder.

Section 2: Upgrade philosophy

It is recommended that you first upgrade your existing deployed Production Environment to the DB2 OLAP Server/400 v7.1 software without using new features. If you encounter problems during the upgrade process, it will be easier for you or IBM Support to isolate the source of the problem. By introducing one type of change at a time, it will be more likely that you can identify any problems that occur as related to the specific change.

> **Warning:** Disaster recovery backups could prevent data loss. You should always save server and DB2 OLAP Server/400 (Essbase) information before you install over an earlier version of DB2 OLAP Server/400 (for example, V1.1). Then if there are problems with the installation, you can restore your data from a backup.
>
> In v1.1, this information is in the *IBM DB2 OLAP Server AS/400 Administrator's Guide Version 1.1*, Chapter 4, section titled "Save Server Information."

Server upgrade methods

There are four ways to upgrade your DB2 OLAP Server/400 Production Environment. Below is an explanation of each method. It is recommended that you use Method A.

- *Method A:* Duplicate your Production Environment into a Test Environment. Install DB2 OLAP Server /400 v7.1 to the Test Environment, and verify. Then install DB2 OLAP Server/400 v7.1 "over the top" of your Production Environment (Recommended).
- *Method B:* Install DB2 OLAP Server/400 v7.1 "over the top" of your Production Environment.
- *Method C:* Install DB2 OLAP Server/400 v7.1 to a Test Environment. Duplicate your Production Environment to the Test Environment using Save/Restore, and verify. Install DB2 OLAP Server/400 v7.1 "over the top" of your Production Environment. The difference between this and Method A is that data and object migration is done through Save/Restore rather than the installation process.
- *Method D:* Install DB2 OLAP Server/400 v7.1 to a Test Environment. Duplicate your Production Environment to a Test Environment. The Test Environment becomes your Production Environment.

These methods are described briefly below:

Method A: Duplicate your Production Environment into a Test Environment. Install DB2 OLAP Server/400 v7.1 to the Test Environment, and verify. Then install DB2 OLAP Server/400 v7.1 "over the top" of your Production Environment.

This is the recommended method for the DB2 OLAP Server/400 v7.1 upgrade.

With this method, most problems that might occur related to the upgrade will occur in a Test Environment without impacting your Production data warehouse or your end users.

Follow these general steps: (To begin this process, see Section 8)
1. Duplicate and move all or a portion of your v1.1 Production Environment into a Test v1.1 Environment, and verify that this Test Environment behaves similar to your Production Environment.
2. Install DB2 OLAP Server/400 v7.1 "over the top" of this Test library, and verify that there are no problems.
3. Install DB2 OLAP Server/400 v7.1 to your existing Production library.

Of course, it will take time to set up and upgrade a Test Environment prior to the actual upgrade. However, if you have difficulties during the test phase, you will have handled (or will know how to handle) these difficulties before you begin your Production upgrade.

Method B: Install DB2 OLAP Server/400 v7.1 "over the top" of your Production Environment.
In this method, the new DB2 OLAP Server/400 release is installed "over the top" of the existing Production Environment.

Please be aware that although extensive testing is done to ensure that upgrading to a new release in this manner should not cause problems, unfortunately every possible customer environment cannot be tested. For instance, we can not predict that a particular OS/400 PTF or Cumulative PTF package that was unavailable when we tested the software results in an incompatibility with the software. Or, you may have other software packages or software written internally that conflicts with the software.

In most cases, this method may not be the ideal way to upgrade your DB2 OLAP Server/400 applications. However, if using DB2 OLAP Server/400 is not mission-critical to your organization today, and only a small number of end users may be impacted with this upgrade, then you may consider this method.
If you choose this approach, we still recommended that you use this document, since the last phase of the recommended method is equivalent to this method.

<u>Method C:</u> Install DB2 OLAP Server/400 v7.1 to a Test Environment. Duplicate your Production Environment to the Test Environment using Save/Restore, and verify. Install DB2 OLAP Server 400 v7.1 "over the top" of your Production Environment.
Customers who cannot afford to be "down" typically use this approach.

You will follow these steps:
1. Install DB2 OLAP Server/400 v7.1 software on a test machine or library without affecting the Production Environment.
2. Save/Restore several components of the Production Environment to the new Test Environment.
3. After any problems are resolved, install DB2 OLAP Server/400 v7.1 "over the top" of your Production Environment.

This can reduce the risks of using Method B directly, but several risks remain. As components are migrated to the Test Environment, the conversion to DB2 OLAP Server/400 v7.1 formats will be different than how they will be converted when the Production Environment is upgraded.

<u>Method D:</u> Install DB2 OLAP Server/400 v7.1 to a Test Environment. Duplicate your Production Environment to a Test Environment. The Test Environment becomes your Production Environment.
With this method, you install DB2 OLAP Server/400 v7.1 into a separate library, and this new library eventually becomes the Production library. This method can work well, but you may spend a significant amount of time moving your components to the new environment and making adjustments to be sure they all work properly in the new library. You may find that something was moved or configured incorrectly sometime later at an inopportune time.

Section 3: Documenting your upgrade

As you upgrade, it is recommended that you document:
- The actual steps that you take on both of your AS/400s and your PCs
- Problems that occur
- How you resolved problems

Documenting is useful for several reasons:
- If you reach a point where you cannot proceed without help, documentation will be useful for when you contact IBM Support for assistance
- Support in understanding the background of the problem.
- If you need to restart steps due to unforeseen circumstances, or if you have multiple installations to upgrade, documenting your process assures that the next time the process is done, you don't forget the steps you took the first time.

> **Hint:** When you perform OS/400 operations, use a PC with terminal emulation (for example, Client Access/400) so you can simply cut and paste AS/400 commands and results into your word processor. This avoids the need to retype the command, and you can cut and paste back to the emulator if you need to redo the command in a later session.

> **Hint:** In Windows, to capture a bitmap image of the active window, you can use the key combination **Alt + Print-Scrn.** To capture the entire display screen, press **Ctrl + PrtScn**. The bitmap can then be pasted into your word processor.

Section 4: DB2 OLAP Server/400 v7.1 prerequisites

Before you upgrade to DB2 OLAP Server/400 v7.1, verify that your current hardware and software meets the environment requirements to deploy DB2 OLAP Server/400 v7.1. For these requirements, see the *IBM DB2 OLAP Setup and User's Guide Version 7,* Chapter 2.

DB2 OLAP Server v1.1 FixPak requirements

To avoid problems not related to migration, install the latest FixPaks onto your current DB2 OLAP Server/400 version. To get the latest FixPaks, go to the DB2 OLAP Server FixPak Web site: http://www.ibm.com/software/data/db2/db2olap/fixpacks.html .

If you are using SQL Drill-Through, you must be at the latest DB2 OLAP Server (Essbase) client FixPak level before upgrading your PCs.

Section 5: Server and client compatibility

In general, DB2 OLAP Server/400 v1.1 end-user application clients will connect to v7.1 servers, while publisher and administrative applications may not.

> **Warning:** If you are running DB2 OLAP Server/400 v1.1 and will not upgrade users simultaneously: Because the DB2 OLAP Server/400 v7.1 server is a consolidated server, PCs running DB2 OLAP Server/400 v1.1 will *not* be able to access the v7.1 server without the latest FixPaks. Apply the latest ODBC and other FixPaks from the DB2 OLAP Server FixPak Web site: http://www.ibm.com/software/data/db2/db2olap/fixpacks.html . For more information, see Section 10, Step 6: "DB2 OLAP Server/400, V7.1 onto PCs."

Terms to know:
- **Administrative users**: those who use Warehouse Manager, Warehouse Builder, and Essbase Application Manager.
- **Publishers**: those who write, send, or share ShowCase queries, reports, or Analyzer views or models.
- **End users**: those who access ShowCase queries, reports, or Analyzer views or models written by publishers.

DB2 OLAP Server/400 (Essbase)

If you are using DB2 OLAP Server/400, it is recommended that the server and client be at the same level. In general, older clients can connect to newer servers, but be aware that if you use an older client with a newer server, you cannot access new functions or features.

Section 6: Establishing a DB2 OLAP Server/400 Test Environment

To verify that your DB2 OLAP Server/400 upgrade will not impact your end users, it is recommended that you establish a Test Environment separate from your Production Environment. Then perform the upgrade in the Test Environment prior to upgrading your Production Environment. This section will guide you in setting up the Test Environment.

Preparing for a DB2 OLAP Server/400 Test Environment

To protect your data, it is recommended that you back up any `.dbq` and `.rpt` files before upgrading to DB2 OLAP Server/400 v7.1.

This section will help you create your Test Environment using these general steps: (To begin this process, see Step 1 below.)

1. Install your current version of DB2 OLAP Server/400 (for example, v1.1) into a Test Environment.
2. Populate the Test Environment with copies of your Production objects.
3. Install DB2 OLAP Server 400 v7.1 into the Test Environment.

To create an isolated environment, ideally you must separate hardware and software installations. For PCs that connect to DB2 OLAP Server/400, it is recommended that you designate one or more Test PCs for your Test Environment, separate from those used for *production* work. If your Production PCs are running different operating systems (Windows 95, 98, 2000, or NT), you may want a separate PC for each OS. Alternatively, you may use a boot manager to allow for more than one operating system on a single PC.

If your machine resources prohibit you from allocating a separate AS/400 for your Test Environment, DB2 OLAP Server/400 allows for multiple installations of both the house Warehouse Manager Server and the DB2 OLAP Server (Essbase) on the same machine without conflict with other servers.

Should I establish a Test Environment on my production AS/400 or a separate AS/400?

Advantages to using the same AS/400 (but not the same installation library) for both Production and Test:
- Environmental configuration settings are more likely to match. OS/400 PTA levels, work management configurations, OS/400 system values, etc., will be common in both Test and Production environments.
- You don't need to duplicate the source tables for queries, reports, or Warehouse Builder definitions on another machine.

Disadvantages to using the same machine for both environments:
> The Test Environment will consume resources such as DASD or processor, which might compromise the Production Environment.

Advantages to using different machines for both environments:
> If you use DB2 OLAP Server/400, moving your entire set of DB2 OLAP Server/400 cubes is a simple save and restore operation. Transferring your cubes from one environment to the other is more difficult when switching to a different DB2 OLAP Server/400 installation library, and separate machines allow both DB2 OLAP Server/400 installations to use the same library name.

Step 1: Create a DB2 OLAP Server/400 Test Environment

Configure your DB2 OLAP Server/400 (Essbase) PI address
If you plan to install your Test Environment on the same AS/400 as your Production server, you must establish unique PI addresses for each DB2 OLAP Server/400 server. When you installed DB2 OLAP Server/400, you were prompted to enter the PI address that the DB2 OLAP Server/400 server would use for client requests. If you specified *ALL, you will not be able to install multiple DB2 OLAP Server/400 servers on the same OS/400 until you change this setting to a single, specific IP address.

To determine if your current DB2 OLAP Server/400 Server is configured with *ALL, at an AS/400 command line, use the following commands:

1. Type *DB2 OLAP Server-library*/SETENVVARS (where *DB2 OLAP Server-library* is the name of your current DB2 OLAP Server/400 library), and press Enter.
2. Type WRKENVVAR, and press Enter.

If the entry for ESSBASE_IP_ADDR reads '0.0.0.0,' then the DB2 OLAP Server/400 server is configured with *ALL. In this case, you must reconfigure your Production DB2 OLAP Server/400 server to use a specific IP address. To do this, specify an IP address using the *DB2 OLAP Server-library*/CFGENVVARS command. The value must be unique for each DB2 OLAP Server/400 library.

Install DB2 OLAP Server/400 v1.1 into a test library

If you are installing your Test server and Production server on separate AS/400s, install DB2 OLAP Server/400 into a library whose name matches the DB2 OLAP Server/400 library on your Production server. To install a new library, press F6. See the graphic below for an example.

> *Important: If you are installing the Test server on the same AS/400 as your Production server, you must choose a DB2 OLAP Server/400 library name different from your Production DB2 OLAP Server/400 library name. However, choose a name that contains the **same number of characters** as your Production server library. For additional information, see "Transfer Objects from Production to Test."*

Before proceeding, complete the following steps:

- Copy and review the DB2 OLAP Server/400 configuration file from your Production server to your Test server (The file name is CFG, and the member name is ESSBASE in your DB2 OLAP Server/400 installation library. If you are using Relational Storage Manager (RSM), you must copy the RSM member instead.)
- To compare environment variable settings to ensure they correspond, at an AS/400 command line:
  1. Type *DB2 OLAP Server/400_library*/SETENVVARS (where *DB2 OLAP Server/400_library* is the name of your current DB2 OLAP Server/400 library), and press Enter.
  2. Type WRKENVVAR, and press Enter.
- After installing the Test server libraries, apply the latest v1.1 FixPaks to each server. To get the latest FixPaks, go to the DB2 OLAP Server FixPak Web site:
  http://www.ibm.com/software/data/db2/db2olap/fixpacks.html

Tips

- Do not create any DB2 OLAP Server/400 applications at this time. In a subsequent step, you will transfer some or all of your existing Production DB2 OLAP Server/400 applications to the Test server.
- If you are using DB2 OLAP Server/400 Integrated Security, you can use the same groups in both servers if both Test and Production servers are on the same machine. If you are installing DB2 OLAP Server/400 on a separate Test AS/400 system, you must create the necessary groups.

> *Note: DB2 OLAP Server/400 add-in for Lotus requires the Lotus Millennium version. Later you can install Lotus Millennium and load the Essbase Lotus add-in file.*

Step 2: Create a Warehouse Manager Test Environment

Install DB2 OLAP Server/400 v1.1 Warehouse Manager into a test library

As you install DB2 OLAP Server/400 v1.1 into your Test Environment, choose installation options that match the options in your Production Environment.

For Warehouse Manager, you can use side-by-side comparisons of Warehouse Manager Client screens to ensure that settings are compatible after installation. Adjust the settings in the Test Environment to match settings in your Production Environment as appropriate. All the CFG settings should match.

Step 3: Transfer objects from production to test

The following sections explain how to copy some or all of your Production server objects to your Test Environment.

Transferring DB2 OLAP Server/400 (Essbase) objects from production to test

To transfer your DB2 OLAP Server 400 applications (or a subset of them) from your Production server to your Test server, you will use the SAV and RST commands. If you choose to transfer only a subset of your applications, you can omit some applications on either the SAV command or the RST command.

If you use a regular backup image in the transfer, you will likely subset on the RST command; otherwise, it will save time to subset on the SAV command. This will also minimize the size of the save image.

You can find more detail on saving and restoring DB2 OLAP Server/400 in the *IBM DB2 OLAP Server AS400 Administrator's Guide Version 7.1* in Chapter 5 in the section "Backing Up OLAP Files."

To transfer the objects:
1. Shut down the Production DB2 OLAP Server/400 (Essbase) server.
2. At an AS/400 command line, use a SAV command such as the following to save some or all of your applications from your Production DB2 OLAP Server/400 server:
   SAV DEV *(pathname to save device or save file)*
   OBJ(('/ESSBASE') ← Essbase installation library
   ('/ESSBASE/app/App1' *OMIT) ← Application which will not be transferred.
   ('/ESSBASE/app/App2' *OMIT) ← Application which will not be transferred.
)
3. At this point, you may restart your Production DB2 OLAP Server/400 (Essbase) server.
4. If you have created any applications in your Test server, delete them via Application Manager or ESSCMD.
5. Shut down the Test DB2 OLAP Server/400 (Essbase) Server.

   *Note: If you are not transferring all of your applications, and you used the *OMIT option in the previous SAV step, do not use the lines containing the *OMIT option in this step.*

   Use an RST command such as the following to restore some or all of your applications:
   RST DEV *('pathname to save device or save file')*
   OBJ(('/ESSBASE' *INCLUDE '/ESSTEST') ← Where ESSTEST is the new directory
   ('/ESSBASE/app/App1' *OMIT) ← Application which will not be loaded.
   ('/ESSBASE/app/App2' *OMIT) ← Application which will not be loaded.
)
6. If the installation library names for your Test and Production servers are the same (that is, if you used different AS/400s for your Test and Production environments), go to step 10.
7. Use the "Change Essbase Library" (CHGESSLIB) utility available at the SPSS/ShowCase STRATEGY Upgrade Information Web site to update the Test server installation library. This can be found at the following Web address: http://support.showcasecorp.com/upgradeinfo/4.0/chgesslib.html
8. Start the Test DB2 OLAP Server/400 (Essbase) server.
9. If you restored all of your applications, go to Step 13.
10. If you restored a subset of your applications, continue with the next step.
11. At this point, the DB2 OLAP Server/400 (Essbase) security file that was transferred still has information concerning the applications that were not transferred. Using ESSCMD/400, ESSCMD, or Application Manager, delete any applications from your Test DB2 OLAP Server/400 (Essbase) Server that you did not restore. You will receive an error message; however, the reference to the application should be deleted.
12. Open each rule file to verify that the source tables and views referenced in the SQL statements correctly correspond to the tables in your Test Environment data warehouse.
13. If you used non-SQL references, you may need to update ESSCMD scripts to reference the Test Environment tables or files.

Transferring Warehouse Manager objects from production to test

Use the following steps to transfer all or a subset of your objects from the Production Warehouse Manager Server to the Test server:
1. Ensure all end users have disconnected from the Warehouse Manager Server.

2. End the Warehouse Manager Server.
   IMPORTANT: If you are using TCP/IP, end the server with the *server_library* /ENDSCSVR command (where *server_library* is the name of your Warehouse Manager Server library, for example, SCSERVER.)

   If you are using APPC, there is no AS/400 command to verify that no more connections are being made.

3. Save the information in the Production server using the server_library /SAVSRVRINF command (where *server_*library is the name of your Warehouse Manager Server library).*
4. Restart your ShowCase TCP/IP for your Production server by issuing the *server_library* /STRSCSVR command.
5. End the Test servers. If you are using TCP/IP, use the *server_library* /ENDSCSVR command.
6. Restore the information to the Test server using the *server_library* /RSTSRVRINF command (from the Test library).*
7. Start the Test server using the *server_library* /STRSCSVR command.

* For information on the SAVSRVRINF and RSTSRVRINF commands, see your current *version's IBM DB2 OLAP Server AS/400 Administrator's Guide*.

   IMPORTANT: If you have OLAP Builder definitions, you may need to adjust the libraries and/or table names used within the transferred Test definitions, so that the target tables generated by the Test Environment are distinct from the target tables generated by the Production Environment. The convenient way to do this is to establish a Test library for each target library referenced in your definitions.

To make this adjustment, open OLAP Builder, connect to the Test server, and with no objects open, choose **Tools --> Definition Properties**. For more information on using this window, consult OLAP Builder online Help.

Step 4: Install DB2 OLAP Server 400 v1.1 on test PCs

At this point, install your current version of DB2 OLAP Server/400 (for example, v1.1) on one or more Test PCs, and configure ODBC connections to the Test servers. If you need additional information, refer to the documentation that accompanied DB2 OLAP Server/400 v1.1:

   In v1.1, PC installation information is in the *IBM DB2 OLAP Server Using DB2 OLAP Server Version 1.1,* Chapter 6. Information on configuring connections to the servers is in "Setting up an ODBC Data Source."

   Note: Apply FixPaks at the same level as on your Production PCs. To get the latest FixPaks, go to the DB2 OLAP Server FixPak Web site: http://www.ibm.com/software/data/db2/db2olap/fixpacks.html

Step 5: Verify DB2 OLAP Server/400 v1.1 Test Environment

You should now have a working Test Environment, ready to perform tests to assure that your DB2 OLAP Server/400 v1.1 Test Environment behaves similarly to your Production Environment. It is important that you verify this Test Environment before testing the upgrade. Otherwise, if you upgrade first, and problems occur, it will be difficult to determine if the problem is a result of the Test DB2 OLAP Server/400 v1.1 Environment setup or the DB2 OLAP Server/400 v7.1 upgrade.

If your Test and Production environments are on the same machine, consider using a Test user profile without access to the Production data warehouse to assure the Test Environment is correctly adjusted to refer to the test data warehouse.

If you have not yet made use of a DB2 OLAP Server/400 feature in a Production Environment, verify that security settings are in place and operational. You can adjust them in DB2 OLAP Server/400 Application Manager.

Verifying Warehouse Manager environment

Exercise a reasonable amount of DB2 OLAP Server/400 deployment, including OLAP Builder distributions, models, etc. In addition to opening these objects, verify that you can create new objects and change existing objects.
   Can you run build sets?

Verifying DB2 OLAP Server/400 (Essbase) environment
- Can you start and end the applications and databases as usual?
- Can you load data as usual? (You should not have to modify load rules or outlines.)
- Does your CALC behave properly in accuracy and performance?

Section 7: Saving the Test Environment

Saving the Test Environment assures that you can restart if problems occur during your Test upgrade. To determine how to properly back up your Test DB2 OLAP Server/400 server environment, consult the documentation that accompanied your DB2 OLAP Server/400 v1.1 software:

> In v1.1, see "Save Server Information." in the *IBM DB2 OLAP Server AS/400 Administrator's Guide Version 1.1*.

Section 8: Upgrading the Test or Production Environment (Method B)

Now you are ready to test run the *Method B* upgrade process with your Test Environment. If problems arise, you should first resolve them and then re-test to avoid introducing other problems.

This section describes how to upgrade from DB2 OLAP Server/400 v1.1 to DB2 OLAP Server/400 v7.1. If you are following *Method A*, you will be using this section twice: once for the Test Environment and once for your Production Environment.

If you have not already done so, apply appropriate DB2 OLAP Server/400 server FixPaks to your DB2 OLAP Server/400 v1.1 environment. To get the latest FixPaks, go to the DB2 OLAP Server FixPak Web site:
http://www.ibm.com/software/data/db2/db2olap/fixpacks.html

Step 1: Shut down servers

Shut down all the AS/400 DB2 OLAP Server/400 servers:
- To shut down the v1.1 Warehouse Manager server: (if you are using TCP/IP), use the AS/400 command
  server_library/ENDSCTCP
  where *server_library* is the library where you installed Warehouse Manager Server (for example, SCSERVER).

- To shut down the v1.1 DB2 OLAP Server/400 (Essbase) server: use the AS/400 command
  server-library/ENDESSSVR
  where *server_library* is the name of your current DB2 OLAP Server/400 (Essbase) library.
- Prompt and supply a user ID and password.

Step 2: Backup server information

> **Warning:** Disaster recovery backups could prevent data loss. You should always save server and DB2 OLAP Server/400 information before you install over DB2 OLAP Server/400 v1.1. Then if there are problems with the installation, you can restore your data from a backup.

If you have not already done so, see the documentation that accompanied your DB2 OLAP Server/400 v1.1 software to properly back up your server environment.
> In v1.1, this information is in the *IBM DB2 OLAP Server AS/400 Administrator's Guide Version 1.1*, Chapter 4, section titled "Save Server Information."

Step 3: Install DB2 OLAP Server/400 v7.1 servers

After shutting down the servers, install DB2 OLAP Server/400 v7.1 into the existing Warehouse Manager and DB2 OLAP Server/400 libraries.
> For detailed information on installing DB2 OLAP Server/400 servers, see the *IBM DB2 OLAP Server and Starter Kit OLAP Setup and User's Guide Version 7,* Chapter 5, section titled "Installing the AS/400 Components."

If you install both DB2 OLAP Server/400 and Warehouse Manager servers, you must either install both at the same time, or install DB2 OLAP Server/400 first. The DB2 OLAP Server/400 v7.1 Warehouse Manager Server cannot connect with a DB2 OLAP Server/400 v1.1 server, and both OLAP Builder and the Warehouse Manager server need this connection. After installing, check for any available DB2 OLAP Server/400 v7.1 server FixPaks.

To get the latest FixPaks, go to the DB2 OLAP Server FixPak Web site:
http://www.ibm.com/software/data/db2/db2olap/fixpacks.html

> *Note: Do not install PC client software at this time.*

Now you are ready to start your server. For information on starting the server, see the *IBM DB2 OLAP Server AS/400 Administrator's Guide Version 7.1*, Chapter 1.

Step 4: Update DB2 OLAP Server/400 ESSCMD scripts

With DB2 OLAP Server/400 v1.1, OS/400 *native* thread support replaced the older *CPA* thread support. As a result, the syntax for specifying files for the OUTPUT command within the `ESSCMD` environment changed. `ESSCMD` scripts executed from the PC are not affected. For information on the ESSCMD API Toolkit, see the *IBM DB2 OLAP Server AS/400 Administrator's Guide Version 7.1*, Chapter 5, section titled "Using ESSCMD API Toolkit."

Step 5: Remove DB2 OLAP Server/400 v1.1 from PCs

Before installing DB2 OLAP Server/400 v7.1, it is recommended that you remove previous versions of DB2 OLAP Server/400 client applications because installing DB2 OLAP Server/400 v7.1 into the same folder as v1.1 will not fully replace the older versions.

*If you choose not to remove your previous version, you must install DB2 OLAP Server/400 v7.1 into a different folder. If you remove v1.1 **after** you have installed v7.1 over the older version, you will remove v7.1 files.*

Step 6: Install DB2 OLAP Server/400 v7.1 onto PCs

Your installation method depends on (1) your current DB2 OLAP Server/400 version and (2) when your user groups (administrative users, end users, and publishers) will install DB2 OLAP Server/400 v7.1.

Remember, if you want to install v7.1 into the same folder as your current version, you must remove the previous version before installing DB2 OLAP Server/400 v7.1.

Terms to know:

Administrative users: those who use Warehouse Manager, OLAP Builder, and DB2 OLAP Server/400 Application Manager.
Publishers: those who write, send, or share ShowCase queries, reports, or Analyzer views or models.
End users: those who access ShowCase queries, reports, or Analyzer views or models written by publishers.

If you are running DB2 OLAP Server/400 v1.1 and will upgrade all users simultaneously
Follow instructions in the *IBM DB2 OLAP Server and Starter Kit OLAP Setup and User's Guide Version 7*, Chapter 5, section titled "Installing the Workstation Clients."

If you are running DB2 OLAP Server/400 v1.1 and cannot upgrade users simultaneously
You will follow these general steps: (To begin this process, see Step 1 below.)
1. Install DB2 OLAP Server/400 v7.1 on administrative PCs.
2. Apply the latest ODBC and other client FixPaks from the DB2 OLAP Server FixPak Web site. Without these FixPaks, the client PCs may not be able to connect to a v7.1 server and/or may display unpredictable behavior.
3. Install DB2 OLAP Server/400 v7.1 client on end-user PCs when possible. Note that the older clients cannot access the new v7.1 server features.
4. Install DB2 OLAP Server/400 v7.1 client on publisher PCs when possible. Note that the older clients cannot access the new v7.1 server features.

Upgrading publisher PCs before end-user PCs will result in those users generating DB2 OLAP Server/400 v7.1 objects not accessible by DB2 OLAP Server/400 end users who share the objects. See below for detailed installation instructions.

1. **Install DB2 OLAP Server/400 v7.1 on administrative PCs.**
   Follow instructions in the *IBM DB2 OLAP Server and Starter Kit OLAP Setup and User's Guide Version 7*, Chapter 5, section titled "Installing the Workstation Clients."
   Before proceeding, be sure that these administrative PCs can properly connect to the DB2 OLAP Server/400 v71 servers and perform administrative operations.

2. **Apply the latest v7.1 client FixPaks to end user and publisher PCs.**
   Because the DB2 OLAP Server/400 v7.1 server is a consolidated server, PCs running DB2 OLAP Server/400 v1.1 will be unable to access the v7.1 server without the latest FixPak. To get the latest FixPaks, go to the DB2 OLAP Server FixPak Web site:
    http://www.ibm.com/software/data/db2/db2olap/fixpacks.html.

   The FixPaks may include one or more of the following patches: DB2 OLAP Server/400 (Essbase), OLAP Builder, Warehouse Manager, and others.

3. **Install DB2 OLAP Server/400 v7.1 onto end user PCs**
   Follow instructions in the *IBM DB2 OLAP Server and Starter Kit OLAP Setup and User's Guide Version 7*, Chapter 5, section titled "Installing the Workstation Clients."

4. **Install DB2 OLAP Server/400 v7.1 onto publisher PCs**
   Follow instructions in the *IBM DB2 OLAP Server and Starter Kit OLAP Setup and User's Guide Version 7*, Chapter 5, section titled "Installing the Workstation Clients."

Step 7: Verify the DB2 OLAP Server/400 v7.1 upgrade

Test that all features of DB2 OLAP Server/400 work correctly in your environment.

If you have just completed the "Test" upgrade using your Test Environment, review your work. Make sure that you understand any difficulties you encountered during the Test upgrade and how to resolve them when you upgrade the Production Environment. Once you have a complete upgrade plan, upgrade your Production Environment, beginning at "Section 10: Upgrading the Test or Production Environment (Method B).".

Section 9: Migrating the free trial edition to DB2 OLAP Server 7.1

1. Save your Essbase apps and related information. See the AS/400 Administrator's Guide, "Backing Up OLAP Files" in Chapter 5.
2. Save your Warehouse Builder information. See the AS/400 Administrator's Guide, "Backing Up a Warehouse Manager Library" in Chapter 4, particularly the "Save Server Information" section. (In step 6 of this section, specify *DIST.)
3. Save all the RSM files that may be in your ARBORLIB.
```
SAVOBJ OBJ(*ALL)
       LIB(DB2OLAPSVR)
       DEV(*SAVF)
       OBJTYPE(*FILE)
       SAVF(ESSQSYS)
```
   where
   `DB2OLAPSVR` is the ARBORLIB
   `ESSQSYS` is a save file available for holding the information
4. Uninstall the IBM OLAP 7.1 Try & Buy Essbase and ShowCase Servers from the 400. See the AS/400 Administrator's Guide, "Removing a Warehouse Manager Library" in Chapter 4. You can use the same UNINSTSC command documented here to uninstall Essbase.
5. Install the servers from the IBM OLAP 7.1 GA CD-ROM. See the Installation Guide, "Installing ShowCase STRATEGY to the Server."
6. Apply all server patches that are available for the IBM OLAP 7.1 GA.
7. Restore your Warehouse Builder information. See the Administrator's Guide, "Restoring a Warehouse Manager Library" in Chapter 4.
8. Restore your Essbase apps and related information. See the AS/400 Administrator's Guide, "Restoring OLAP Files" in Chapter 4. (Step 2 only).
9. Restore the RSM files that were in the ARBORLIB.
```
RSTOBJ OBJ(*ALL)
       SAVLIB(DB2OLAPSVR)
       DEV(*SAVF)
       SAVF(ESSQSYS)
       MBROPT(*ALL)
```
   where
   `DB2OLAPSVR` is the ARBORLIB

   `ESSQSYS` is a save file available for holding the information

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AS/400	Notes
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DB2 OLAP Server	OS/390
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