THE SCDB40 SAMPLE DATABASE

This supplement describes a sample database for IBM DB2 OLAP Server for AS/400. The database is named SCDB40 and is a fairly normalized database that represents an OLTP-type database.

When you install Warehouse Manager Server on the AS/400, you can install the sample database. Selecting this option creates a library called SCSAMPLE40, which contains the files for the SCSAMPLE40 sample database (which is described in the *AS*/400 Administrator's Guide) and some other files for creating other sample databases such as SCDB40.

Before you can use the SCDB40 sample database, you must do a small amount of setup on the AS/400. The files for the SCDB40 sample database are shipped in an AS/400 save file called SCDB within the SCSAMPLE40 library.



An AS/400 save file is an AS/400 object with type *FILE and with attribute *SAVF. A save file contains data that has been saved using one of the AS/400 save commands. To use the data from a save file, you must extract the data from the save file using one of the AS/400 restore commands.

To set up the SCDB40 sample database, do the following:

1. Install the SCSAMPLE40 database (library).

2. Run the following command on the AS/400 command line:

RSTLIB SAVLIB(SCDB40) DEV(*SAVF) SAVF(SCSAMPLE40/SCDB) MBROPT(*ALL) ALWOBJDIF(*ALL) RSTLIB(SCDB40)

This command extracts the files (tables) from the SCDB save file in the SCSAMPLE40 library and restores them into the SCDB40 library.

What's in the SCDB40 Sample Database

The database contains data for a fictitious company called The Outdoor Connection. The Outdoor Connection is a sporting goods company that sells through three channels: retail stores, specialty stores, and catalogs. Its primary product lines are skiing equipment, biking equipment, camping gear, and clothing. The Outdoor Connection is based in the United States. It also does business in Canada, Belgium, Germany, France, the United Kingdom, Japan, Australia, and New Zealand.



It is recommended that you do not modify the original sample database in any way. If it is necessary for you to customize the sample database, copy the database to a new library and make your modifications there.

The SCDB40 database represents an OLTP-type database. Its tables are mostly normalized, which means that data is stored in only one place. This requires that tables be joined to find detail information that may be stored as codes in other tables. For example, the ORDERMAST (Order Master) table contains an order number and a customer ID for each order. To find the details for the order, the ORDERMAST table must be joined to the ORDERDET (Order Detail) table. Likewise, to find information about the customer that placed the order, the ORDERMAST table must be joined to the CUSTMAST (Customer Master) table.

The ORDERMAST Table

The ORDERMAST (Order Master) table is the basis of all transaction information. It contains the "header" information for each order that is placed, including the order number, the location placing the order, the date of the order, the promised delivery date, the date shipped, etc. The table also includes a column that records the location to which each order is shipped. This accommodates the situations in which the order is shipped to a location other than that where the order originates.

This table contains 12,411 rows of data.

Column	Description	Heading	Data Type	Contents
ORDNUM	Order Number	Order Number	Decimal(8)	Order number
CUST_ID	Customer ID	Customer ID	Numeric(8)	Account ID of client
SHIP_TO	Shipping Destination	Ship To	Numeric(8)	Account ID of shipping destination
DATEREQ	Date Requested	Date Requested	Date	Date requested for delivery
DATEORD	Date Ordered	Date Ordered	Date	Date ordered
DATEPROM	Date Promised	Date Promised	Date	Date promised for delivery
DATESHIP	Date Shipped	Date Shipped	Date	Date shipped
DATEINV	Date Invoiced	Date Invoiced	Date	Date invoiced
DIST_ID	Distribution Center ID	Distribution Center ID	Char(8)	Distribution center code
REPCODE	Sales Rep Code	Rep Code	Char(4)	Account representative's code

 Table B-11: The EMPLOYEES Table

The ORDERDET Table

The ORDERDET (Order Detail) table contains the product-related specifics of each order. Such information includes the quantity ordered, quantity shipped, quantity backlogged, and quantity canceled for each product. In addition, the table is used to track the unit price, unit cost, extended price, and extended cost for each product ordered. Finally, for international sites, the table includes exchange rates. The rates are used to calculate the foreign extended price and foreign extended cost for each product based on the exchange rate at the time of the order.

This table contains 14,379 rows of data.

 Table B-12: The ORDERDET Table

Column	Description	Heading	Data Type	Contents
ORDNUM	Order Number	Order Number	Decimal(8)	Order number
PRODUCTID	Product ID (SKU)	Product ID	Numeric(8)	Product ID

Column	Description	Heading	Data Type	Contents
PRDLVL03	Product Level 3	Product Level 3	Char(8)	Third-tier product category
QTYORD	Quantity Ordered	Quantity Ordered	Decimal(15)	Quantity ordered
QTYSHP	Quantity Shipped	Quantity Shipped	Decimal(15)	Quantity shipped
QTYBACK	Quantity Backordered	Quantity Backordered	Decimal(15)	Quantity back- ordered
QTYCAN	Quantity Cancelled	Quantity Cancelled	Decimal(15)	Quantity cancelled
UNIT_PRICE	Unit Price	Unit Price	Decimal(15,4)	Unit retail price
UNIT_COST	Unit Cost	Unit Cost	Decimal(15,4)	Unit wholesale cost (cost of goods sold)
EXTPRICE	Extended Price	Extended Price	Decimal(15,4)	Extended retail total (the product of QTYORD and UNIT_PRICE)
EXTCOST	Extended Cost	Extended Cost	Decimal(15,4)	Extended wholesale total (the product of QTYORD and UNIT_COST)
MEASURE	Unit of Measure	Unit of Measure	Char(4)	Unit of measure code
CURR_CODE	Currency Code	Currency Code	Char(3)	Currency code
EXCHG_RATE	Exchange Rate	Exchange Rate	Decimal(15,7)	Exchange rate
FRGN_XPRIC	Foreign Extended Price	Foreign Ext Price	Decimal(15,4)	Foreign extended retail total
FRGN_XCOST	Foreign Extended Cost	Foreign Ext Cost	Decimal(15,4)	Foreign extended wholesale total

Table B-12: The ORDERDET Table (continued)

The CUSTMAST Table

The CUSTMAST (Customer Master) table contains information about The Outdoor Connection's clients. It includes name and address information, and it divides the clients into various geographical categories. The Outdoor Connection consists of three divisions (North America, Europe, and Asia/Pacific); 12 regions (East, West, South, Midwest, Canada, Belgium, Germany, France, United Kingdom, Japan, Australia, and New Zealand); 70 areas (one for each state and province, including the District of Columbia, plus one for each European and Asia/Pacific country); and three distribution facilities (Seattle, Kansas City, and New York). In addition, this table includes various other information, including a currency code for each client, a status code that indicates whether a client is active or inactive, and a sales representative code that identifies each client's sales representative.

This table contains 157 rows of data.

Column	Description	Heading	Data Type	Contents
CUST_ID	Customer ID	Customer ID	Numeric(8)	Account ID of client
CUSTNAME	Customer Name	Customer Name	Char(100)	Name of client
LNAME	Surname	Last Name	Char(50)	Surname of client contact
FNAME	Given Name	First Name	Char(50)	Given name of client contact
ADDRESS1	Address 1	Address 1	Char(100)	Address line 1
ADDRESS2	Address 2	Address 2	Char(100)	Address line 2
CITY	City	City	Char(50)	City name
STATE	State/Province Abbreviation	State/Province Abbreviation	Char(2)	State/province postal abbreviation
POSTALCODE	Postal Code	Postal Code	Char(16)	Postal code
COUNTY	County	County	Varchar(80)	County name
COUNTRY	Country Code	Country Code	Varchar(12)	Country code
PHONE	Phone Number	Phone Number	Char(24)	Phone number
E_ADDRESS	E-mail Address	E-mail Address	Char(100)	E-mail address of client contact
LOB	LOB	LOB Code	Char(8)	Line of business code
REPCODE	Sales Rep Code	Rep Code	Char(4)	Account representative's code
ENTRY_DATE	Entry Date	Entry Date	Date	Date added
ACTIVE	Active Code	Active	Char(1)	Active status (Y or N)
DIVSN_ID	Division ID	Division ID	Char(8)	Division code
REGION_ID	Region ID	Region ID	Char(8)	Region code
AREA_ID	Area ID	Area ID	Char(8)	Area code
DIST_ID	Distribution Center ID	Distribution Center ID	Char(8)	Distribution center code
CURR_CODE	Currency Code	Currency Code	Char(3)	Currency code

Table B-13: The CUSTMAST Table

The LOB Table

The LOB (Line of Business) table maps the line of business code to a description. A line of business can be considered a subclassification for the client. The database contains three lines of business: retail, specialty, and catalog.

This table contains 3 rows of data.

Column	Description	Heading	Data Type	Contents
LOB	LOB	LOB Code	Char(8)	Line of business code
LOBDESC	Line of Business Description	Line of Business	Char(80)	Line of business description

Table B-14: The LOB Table

The CURRENCY Table

The CURRENCY table contains exchange rates used to convert U.S. dollars into foreign currency amounts. The exchange rate is an unsigned percentage and can be mapped to a currency code for each country where The Outdoor Connection conducts business. It is assumed that all monetary amounts entered into the database are entered in U.S. dollars. Therefore, by definition, the exchange rate for U.S. dollars is 1.0. The exchange rate for other currencies is based on the amount that one U.S. dollar will buy. For example, \$1 US recently bought \$1.4575 CA. Therefore, the exchange rate for Canadian dollars is 1.4575. To convert an amount in the database into local values, multiply the amount by the exchange rate: ($10 \text{ US X } 1.4575 = 14.58 \text{ CA or } 10 \text{ US X } 0.6105 = \pounds6.11$).

This table contains 9 rows of data.

Table B-15: The CURRENCY Table

Column	Description	Heading	Data Type	Contents
CURR_CODE	Currency Code	Currency Code	Char(3)	Currency code
COUNTRY	Country Code	Country Code	Varchar(12)	Country code
CURR_DESC	Currency Description	Currency	Char(50)	Currency description
EXCHG_RATE	Exchange Rate	Exchange Rate	Decimal(15,7)	Exchange rate
EXCHG_DATE	Effective Date	Exchange Date	Date	Effective date of exchange rate

The CNTRYMAST Table

The CNTRYMAST (Country Master) table maps the country code to the country name. This table contains 9 rows of data.

 Table B-16: The CNTRYMAST Table

Column	Description	Heading	Data Type	Contents
COUNTRY	Country Code	Country Code	Varchar(12)	Country code

	Country Description	Country	Varchar(80)	Country name
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Table B-16: The CNTRYMAST Table (continued)

The STATEMAST Table

The STATEMAST (State Master) table maps the postal abbreviation for the U.S. state or Canadian province to the name of the state or province. The database contains 50 states, 12 provinces, and the District of Columbia.

This table contains 63 rows of data.

Table B-17: Th	e STATEMAST Table
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Column	Description	Heading	Data Type	Contents
STATE	State/Province Abbreviation	State/Province Abbreviation	Char(2)	State/province postal abbreviation
STATEDESC	State/Province Description	State/Province	Varchar(80)	State/province name

The PRODMAST Table

The PRODMAST (Product Master) table contains all of The Outdoor Connection's product information and groups products hierarchically. Each product has three levels associated with it. The first level identifies a product group (e.g.; clothing, biking, skiing, etc.), the second level identifies a type (e.g.; outerwear, shirts, pants, etc.), and the third level identifies a style (e.g.; black, red, yellow, etc.).

In addition, the PRODMAST table includes a unit price and a unit cost for each product. It also contains a currency code, which allows the unit price and cost to be converted for various countries. Finally, it includes a measures column with a unit type (e.g., *one* bicycle, *a pair* of skis, etc.) and a date that records when information for a given product was last changed.

This table contains 120 rows of data.

Table B-18: '	The PRC	DDMAST	Table
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Column	Description	Heading	Data Type	Contents
PRODUCTID	Product ID (SKU)	Product ID	Numeric(8)	Product ID
PRODUCT	Product Description	Product Description	Char(80)	Product description
PRDLVL01	Product Level 1	Product Level 1	Char(8)	First tier product category
PRDLVL02	Product Level 2	Product Level 2	Char(8)	Second tier product category
PRDLV03	Product Level 3	Product Level 3	Char(8)	Third tier product category

Column	Description	Heading	Data Type	Contents
PRDLVL04	Product Level 4	Product Level 4	Varchar(8)	Fourth tier product category
PRDLV05	Product Level 5	Product Level 5	Varchar(8)	Fifth tier product category
UNITPRICE	Unit Price	Unit Price	Decimal(15,4)	Unit retail price
UNITCOST	Unit Cost	Unit Cost	Decimal(15,4)	Unit wholesale cost (cost of goods sold)
CURR_CODE	Currency Code	Currency Code	Char(3)	Currency code
MEASURE	UOM Code	UOM Code	Char(4)	Unit of measure code
ENTRY_DATE	Entry Date	Entry Date	Date	Entry/update date

Table B-18: The PRODMAST Table (continued)

The PLVL01MAST Table

The PLVL01MAST (Product Level 1 Master) table maps the first product level code to the product level description. This level identifies four product groups: clothing, bicycles, skiing, and camping.

This table contains 4 rows of data.

 Table B-19: The PLVLO1MAST Table

Column	Description	Heading	Data Type	Contents
PRDLVL01	Product Level 1	Product Level 1	Char(8)	First tier product category
PRDDESC01	Product Description 1	Description Level 1	Char(80)	First tier product description

The PLVL02MAST Table

The PLVL02MAST (Product Level 2 Master) table maps the second product level code to the product level description. This level identifies four product types for each of the product groups. For example, the clothing product group contains product types of outerwear, pants, shirts, and sweaters.

This table contains 16 rows of data.

Column	Description	Heading	Data Type	Contents
PRDLVL02	Product Level 2	Product Level 2	Char(8)	Second tier product category
PRDDESC02	Product Description 2	Description Level 2	Char(80)	Second tier product description

 Table B-20: The PLVLO2MAST Table

The PLVL03MAST Table

The PLVL03MAST (Product Level 3 Master) table maps the third product level code to the product level description. This level identifies five product styles: black, blue, green, red, and yellow. The product style can be considered a subclassification for a product.

This table contains 5 rows of data.

 Table B-21: The PLVLO3MAST Table

Column	Description	Heading	Data Type	Contents
PRDLV03	Product Level 3	Product Level 3	Char(8)	Third tier product category
PRDDESC03	Product Description 3	Description Level 3	Char(80)	Third tier product description

The UOMMAST Table

The UOMMAST (Unit of Measure Master) table maps the unit of measure code to the measure description. The unit of measure identifies whether a product is sold as a single unit or in pairs.

This table contains 2 rows of data.

Table B-22: The UOMMAST Table

Column	Description	Heading	Data Type	Contents
MEASURE	UOM Code	UOM Code	Char(4)	Unit of measure code
MEASURE_DESC	Unit of Measure	Unit of Measure	Char(80)	Unit of measure description

The ORGMAST Table

The ORGMAST (Organization Master) table contains the geographic structure used in the database. Essentially, it maps the various divisions, regions, and areas to each other. Each division has several regions, and each region has several areas. This table also indicates which distribution facility serves each area or foreign region. The database contains three divisions, 12 regions, 70 areas, and three distribution facilities.

This table contains 70 rows of data.

Column	Description	Heading	Data Type	Contents
DIVSN_ID	Division ID	Division ID	Char(8)	Division code
REGION_ID	Region ID	Region ID	Char(8)	Region code
AREA_ID	Area ID	Area ID	Char(8)	Area code
DIST_ID	Distribution Center ID	Distribution Center ID	Char(8)	Distribution center code

Table B-23: The ORGMAST Table

The DIVSNMAST Table

The DIVSNMAST (Division Master) table maps each division code to a division name. The database contains three divisions: North America, Europe, and Asia/Pacific.

This table contains 3 rows of data.

Table B-24: The DIVSNMAST Table

Column	Description	Heading	Data Type	Contents
DIVSN_ID	Division ID	Division ID	Char(8)	Division code
DIVSN	Division	Division	Char(80)	Division name

The REGIONMAST Table

The REGIONMAST (Region Master) table maps each region code to a region name. The database contains three North American regions, four European regions, and three Asia/Pacific regions.

This table contains 12 rows of data.

 Table B-25: The REGIONMAST Table

Column	Description	Heading	Data Type	Contents
REGION_ID	Region ID	Region ID	Char(8)	Region code
REGION	Region	Region	Char(80)	Region name

The AREAMAST Table

The AREAMAST (Area Master) table maps each area code to an area name. The database contains 63 areas in the North American region, four areas in the European region, and three areas in the Asia/Pacific region.

This table contains 70 rows of data. The DISTMAST Table

 Table B-26: The AREAMAST Table

Column	Description	Heading	Data Type	Contents
AREA_ID	Area ID	Area ID	Char(8)	Area code

Column	Description	Heading	Data Type	Contents
AREA	Area	Area	Char(80)	Area name

Table B-26: The AREAMAST Table (continued)

The DISTMAST (Distribution Center Master) table maps each distribution center code to a distribution center name. The database contains three distribution centers: Seattle, Kansas City, and New York. Each distribution center can serve all divisions.

This table contains 3 rows of data.

 Table B-27: The DISTMAST Table

Column	Description	Heading	Data Type	Contents
DIST_ID	Distribution Center ID	Distribution Center ID	Char(8)	Distribution center code
DIST_LOC	Distribution Center	Distribution Center	Char(80)	Distribution center name

The DATETYPES Table

The DATETYPES table is used to demonstrate how DB2 OLAP Server for AS/400 STRATEGY handles date values stored as a data type other than DATE. Specifically, the DATEINV column has been replicated into several formats. You can use this table independently or join it to the ORDERMAST table on ORDNUM.

This table contains 12,411 rows of data.

Table B-28: The DATETYPES Table

Column	Description	Heading	Data Type
ORDNUM	Order Number	Order Number	Decimal(8)
DATEINV	Date Invoiced	Date Invoiced	Date
DATEINV_YY	Two Digit Year Value	YY	Decimal(2)
DATEINV_MM	Two Digit Month Value	MM	Decimal(2)
DATEINV_DD	Two Digit Day Value	DD	Decimal(2)
DATEINV_EXCELSRL	Five Digit Excel Serial Date	EXCELSRL	Decimal(5)
DATEINV_YYDDD	Five Digit YYDDD Date	YYDDD	Decimal(5)
DATEINV_YYMMDD	Six Digit YYMMDD Date	YYMMDD	Decimal(6)
DATEINV_YYDDMM	Six Digit YYDDMM Date	YYDDMM	Decimal(6)
DATEINV_DDMMYY	Six Digit DDMMYY Date	DDMMYY	Decimal(6)
DATEINV_MMDDYY	Six Digit MMDDYY Date	MMDDYY	Decimal(6)
DATEINV_CYYDDD	Six Digit CYYDDD Date	CYYDDD	Decimal(6)
DATEINV_CYYMMDD	Seven Digit CYYMMDD Date	CYYMMDD	Decimal(7)

Column	Description	Heading	Data Type
DATEINV_CYYDDMM	Seven Digit CYYDDMM Date	CYYDDMM	Decimal(7)
DATEINV_YYYDDD	Seven Digit YYYYDDD Date	YYYYDDD	Decimal(7)
DATEINV_YYYYMMDD	Eight Digit YYYYMMDD Date	YYYYMMDD	Decimal(8)
DATEINV_YYYYDDMM	Eight Digit YYYYDDMM Date	YYYYDDMM	Decimal(8)
DATEINV_MMDDYYYY	Eight Digit MMDDYYYY Date	MMDDYYYY	Decimal(8)
DATEINV_DDMMYYYY	Eight Digit DDMMYYYY Date	DDMMYYYY	Decimal(8)
DATEINV_CHAR	Eight Character YYYYMMDD Date	YYYYMMDD	Char(8)
DATEINV_HYF	Five Digit Infinium Date (EXCELSRL – 1)	HYF	Decimal(5)

Table B-28: The DATETYPES Table (continued)

The SALESPERF Table

The SALESPERF table is used to track a number of performance measurements. It includes sales projections as well as actual sales information. It also includes sales quota information for each sales representative. The table also allows you to determine actual and projected sales, as well as quotas, on a geographical basis.

This table contains 12,008 rows of data.

Table B-29: The SALESPERF Table

Column	Description	Heading	Data Type	Contents
PERIOD	Period	Period	Date	Time period
REPCODE	Sales Rep Code	Rep Code	Char(4)	Account representative's code
AREA_ID	Area ID	Area ID	Char(8)	Area code
PRODUCTID	Product ID (SKU)	Product ID	Numeric(8)	Product ID
PRJ_UNITS	Projected Unit Sales	Projected Units	Numeric(15,0)	Projected unit sales
ACT_UNITS	Actual Unit Sales	Actual Units	Numeric(15,0)	Actual units sold
PRJ_SALES	Projected Sales	Projected Sales	Numeric(15,4)	Projected sales amount
ACT_SALES	Actual Sales	Actual Sales	Numeric(15,4)	Actual sales amount

Table B-29:	The SALESPERF Table	

QUOTA	Quota	Quota	Numeric(15,4)	Sales quota
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The EMPMAST Table

The EMPMAST (Employee Master) table contains human resources information about The Outdoor Connection's employees. Specifically, it lists an employee's home address and phone number, e-mail address, gender, date of birth, and Social Security number (where applicable). It also contains the employee's compensation type and rate, hire date, and termination date and reason (where applicable). If an employee is part of the Sales organization, the table contains the employee's sales representative code, the representative code of the employee's manager, the date the employee entered the Sales organization, and a status code that indicates whether the employee is currently active or inactive in the sales organization.

This table contains 39 rows of data.

Column	Description	Heading	Data Type	Contents
EMP_ID	Employee ID	Employee ID	Numeric(8)	Employee number
LASTNAME	Surname	Last Name	Varchar(100)	Surname of employee
FIRSTNAME	Given Name	First Name	Varchar(100)	Given name of employee
ADDRESS1	Address 1	Address 1	Char(100)	Address line 1
ADDRESS2	Address 2	Address 2	Char(100)	Address line 2
CITY	City	City	Char(50)	City name
STATE	State/Province Abbreviation	State/Province Abbreviation	Char(2)	State/province postal abbreviation
POSTALCODE	Postal Code	Postal Code	Char(16)	Postal code
COUNTRY	Country	Country	Varchar(12)	Country code
PHONE	Phone Number	Phone Number	Char(24)	Phone number
E_ADDRESS	E-mail Address	E-mail Address	Char(100)	E-mail address of employee
SEX	Gender	Sex	Char(1)	Gender
DOB	Date of Birth	Date of Birth	Date	Date of birth
SSN	Social Security Number	Social Security No.	Char(11)	Social security number
COMPTYPE	Compensation Type	Comp Type	Char(1)	Compensation type (commission, salary, hourly)

Table B-30: The EMPMAST Table

Column	Description	Heading	Data Type	Contents
SALARY	Base Monthly Salary	Base Salary	Numeric(10,2)	Base monthly salary
HOURLY	Hourly Rate	Hourly Rate	Numeric(4,2)	Hourly wage
COMMISSION	Commission Rate	Commission	Numeric(4,4)	Commission percentage
CURR_CODE	Currency Code	Currency Code	Char(3)	Currency code
HIREDATE	Hire Date	Hire Date	Date	Hire date
TERMDATE	Termination Date	Termination Date	Date	Termination date
TERMTYPE	Termination Reason	Termination Reason	Char(20)	Reason for termination
REPCODE	Sales Rep Code	Rep Code	Char(4)	Sales rep code
MGRCODE	Manager Code	Manager Code	Char(4)	Sales manager code
ENTRY_DATE	Entry Date as Sales Rep	Entry Date	Date	Entry date into sales organization
ACTIVE	Active Sales Rep	Active	Char(1)	Active status of sales rep

Table B-30: The EMPMAST Table (continued)

Installing the Sample Library after Installation with RSTSMPLB

RSTSMPLB (Restore Sample Library) will install the sample databases if they were not previously installed. This command can also restore the sample database back to its original structure (if database files were altered or destroyed). To use, type RSTSMPLB at the command prompt and press **Enter**.

The command has two parameters.

- 1. CLRLIB (*YES, *NO) If *YES is chosen then the sample database library (if it exists) is cleared (all files within destroyed) before the sample files are restored. DB2 OLAP Server sample files are restored to their original version installed with this release.
- 2. PRVLGL (*YES,*NO) If *YES is chosen then all logical files on the system that are dependent on the DB2 OLAP Server for AS/400 sample files within the sample database library are preserved. Logical files that are dependent on files other than DB2 OLAP Server for AS/400 sample files within the sample library are not preserved.



If the user wants to preserve logical files not dependent on DB2 OLAP Server for AS/400 sample files, choose *NO for CLRLIB.