ServerPac: Installing Your Order Order Number: SAMPLE

Customer Name: your\_num Customer Number: your\_num Profile Level: nnnnnn Offering Level: nnnnnn

> IBM CORP POUGHKEEPSIE,NY

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# **About this book**

This book describes your specific order. It starts at the point where the installation jobstream has been generated to create your new target system or subsystem.

If you have not generated the installation jobstream, see ServerPac: Using the Installation Dialog. This book helps you to:

- Receive a new ServerPac order from the order inventory
- · Define a working configuration for the order
- · Tailor the configuration for the target system
- Save the configuration when the order is installed.

The book you are reading helps you to:

- · Load code into libraries
- Perform customization required to IPL and run IVPs
- Perform the IPL
- Verify that the product-supplied IVPs are successful.

The "Product Information" appendix describes all the elements, features, and products that are included in your order. It tells you what jobs or procedures IBM has completed for you, and tells you where to turn for information if further customization steps are required.

You will need to use product publications to:

- Complete the activities that make the function of the target system equal to that of the system it is replacing
- Customize your system beyond that required to IPL and run product-supplied installation verification procedures.
- Exploit new function

IBM generates the book to match your order; like your order, this book is unique, but its organization is always the same.

## Who the book is for

This book is for the persons who are using the ServerPac method to install the products included in the ServerPac deliverable.

The intended audience is a system programmer (or team of system programmers) who understands the environment into which the code is being installed. This person has to know the layout of the existing system and the layout that is planned for the new system, including:

- Software and hardware that exist
- · Data set names
- Storage devices.

#### 1.0 General Information

# 1.1 Description

ServerPac is a software package consisting of installed products and operational data sets that make up a system that is ready to IPL once loaded to DASD. Use ServerPac to replace an existing system or operating environment, or to install a new one. ServerPac orders are installed using the CustomPac installation dialog, the same dialog that is used for all the CustomPac offerings.

# 1.2 Driving System Requirements

The latest release of OS/390 satisfies the driving system software requirements for WebSphere Application Server, as described in *WebSphere Application Server: Getting Started*, GA22-7331.

To use an earlier release of OS/390 as the driving system, you might need to apply PTFs. For that information, see the driving system requirements section in *WebSphere Application Server Program Directory*, GA22-7460, and the latest PSP information.

# 1.3 Planning the Installation

Your order is accompanied by hardcopy books, information in ServerPac data sets shipped with your order, online information that accompanies the dialog, and service information in softcopy form. It is important that you understand where to turn for help at any given moment of the installation. This section describes the following sources of information for planning purposes:

- Program Directories
- Preventive Service Planning (PSP) buckets

Planning books exist for other products in your order; refer to the libraries that accompany the products.

**Program Directories:** The data set CPAC.PGMDIR contains product program directories for your order. The \$INDEXPD member contains the index to these program directories. Member names for program directories begin with "Q."

To print one or more program directories, use the sample job shipped in data set CPAC.PROCLIB(PRINTPD). If you are installing a ServerPac for the first time, you must run the RESTORE job before you run the PRINTPD job.

**Software PSP Buckets:** The software preventive service planning (PSP) buckets include information about program temporary fixes (PTFs) that you might have to install, plus helpful installation information that is not yet in the product publications.

The PSP buckets are members of the data set named CPAC.PGMDIR; member names begin with "P." Member \$INDEXPS contains a list of features in this order and their related PSP buckets in data set CPAC.PGMDIR.

PSP subset IDs for the features and elements can be found in the "Product Information" appendix.

The information in CPAC.PGMDIR is updated by IBM periodically. You should always get a current copy of each PSP and review any entries that occur after the "PSP Review Date" that is shown near the beginning of each PSP, or in the "Product Information" appendix of this book.

For the latest preventive service planning information about ServerPac itself, specify the following values:

UPGRADE OS390R9 SUBSET SERVERPAC

You can obtain PSP information from:

- S/390 SoftwareXcel (ServiceLink) under IBMLink (only U.S.)
- Dial IBM (only Europe)
- INFO/ACCESS

Besides gathering information about software PSPs, you should also get the hardware PSPs for your processors and other hardware devices. Hardware PSPs can contain information about specific software service needed on the new release to work with the new hardware. Hardware PSPs might also contain information about ECs required to run with specific levels of software.

# 1.4 Information for Installing the Order

For instructions on installing your order, use these two books:

- IBM ServerPac for OS/390: Using the Installation Dialog, SC28-1244
- ServerPac: Installing Your Order, the book you are reading.

ServerPac: Using the Installation Dialog describes how to customize your order to your particular environment, establish the system layout, and increase data set sizes. After you complete the "Define SSAs" function of the installation dialog, you are ready to use ServerPac: Installing Your Order.

Figure 1 shows when you turn to the two ServerPac books:

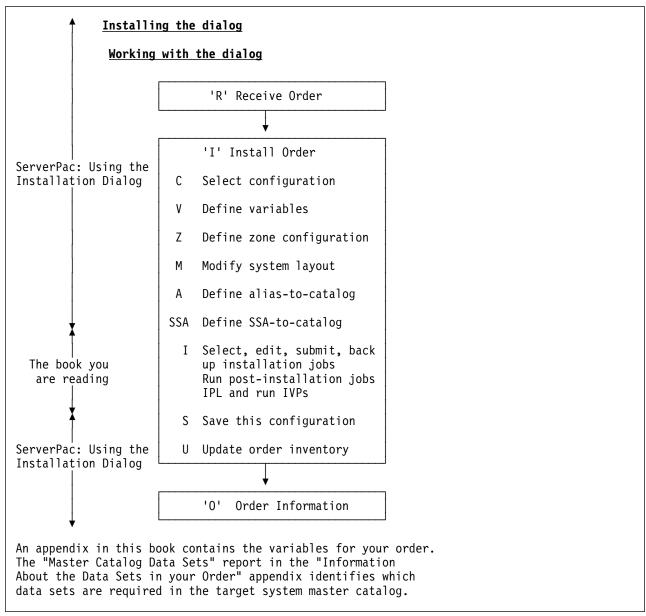


Figure 1. ServerPac Information: When to Use this Book

## 1.4.1 Viewing and Printing this Book

This book is provided on the RIM tape in the following formats:

- BookManager book, in SYS1.ordernum.INSTGUID.BOOK
- Flat text file, in SYS1.ordernum.SCPPLENU(LIST1403)
- LIST3820 file, in SYS1.ordernum.SCPPLENU(ORDERREF)

Use the UNLDBOOK and UNLDSCPP jobs to copy these data sets from the RIM tape to your work volume. These jobs are available through the installation dialog.

You can use the BookManager book and the flat file for online viewing, or print any of these files.

To print the LIST3820 file, you must have an Advanced Function Presentation (AFP) printer. To print the BookManager book, you must have OS/390 Softcopy Print installed and customized, and an AFP printer.

#### 1.4.2 The Product Libraries

In addition to the planning and installation publications, you receive softcopy product publications on a CD-ROM.

You can also find publications for all products that run on the OS/390 platform on the Internet:

- http://www.ibm.com/s390/os390/
- (Click on Library)

# 1.5 Zones Shipped with Your Order

Your order comes with three consolidated software inventory (CSI) data sets: global, target, and distribution (DLIB).

For orders that contain OS/390, the target and DLIB CSI data sets contain at least three zones each. This means you have a total of at least seven zones in your order (one global zone, three target zones, and three DLIB zones). There is one target and one DLIB zone for each of the following:

- OS/390 and all additionally ordered products that can reside in the same zone as OS/390
- JES3
- · JES2 and SDSF

Some products that can be ordered with OS/390 cannot reside in the same zone as OS/390. These products will reside in a fourth set of target and DLIB zones.

Similarly, for subsystem orders (those that do not contain OS/390), products that can reside in the same target and DLIB zones are placed together. If your order contains products that cannot reside in the same target and DLIB zones, they are placed in separate target and DLIB zones.

Figure 2 shows the SMP/E zones and CSI names (or VSAM cluster names) for your order.

```
GLOBAL SMPE.GLOBAL.CSI
MVST110 SMPE.MVS.TARGET.CSI
MVSD110 SMPE.MVS.DLIB.CSI
```

Figure 2. SMP/E Zones for your ServerPac System

The CSIs shipped with your order are unique data sets. If any of these CSIs have the same names as CSIs currently installed on your system, you must rename them in the Modify System Layout function of the installation dialog before you continue with the installation. If you have already run GENSKEL, you must re-run GENSKEL after changing the names in Modify System Layout.

Each zone name is followed by its CSI name (or VSAM cluster). Some CSIs can contain more than one zone. The names of the zones and the CSIs (or VSAM clusters) can be changed.

#### 1.6 Definition of Terms

**Driving system:** The system that is used to install this order.

**Target system:** The system being installed.

**Ready-to-Run:** The product requires no additional installation tasks; it is ready for installation verification.

**Customization:** The level of customization for this product is defined in the Product Information section.

#### 1.7 Features Contained in This Order

The following table contains the program number, level, and FMID or FMIDs for each feature in your order.

PGM#	Version	Features and their FMIDs	PSP
5655-A98	030200	WEBSPHERE APP SRV HEJS302 HJVA11G H28K510	PWASE302

#### 1.8 Service

This section describes the service that is installed with your order and the service you must apply once your system is installed.

#### 1.8.1 Service Included in Your Order

For ServerPac orders, service is integrated with product code, as follows:

- All products will incorporate the PTFs contained in the Extended Service Offering (ESO) packages that were available approximately two months before the OS/390 release became generally available. The PUT level of vour order is 0005.
- · All products will incorporate HIPER and PTF-in-error (PE) fixes that were available approximately one week before your order is built.
- All products will incorporate additional service that has been through OS/390 integration testing. These PTFs are identified through the SOURCEID OS390R9.
- On a monthly basis, ServerPac incorporates the RSU PTFs that were available approximately two months before the order was built. The RSU level of your order is 0005.

Information on the HOLDDATA for PTFs that were integrated in your order is in data sets CPAC.DOCLIB and CPAC.REPORTS. CPAC.DOCLIB contains separate members for each system HOLD reason type and members for base PTFs that had system HOLDs. CPAC.REPORTS has PTF cover letters for integrated service with system HOLDs (again, base PTFs with system HOLDs are separated.)

The Package Reports appendix on page 33 describes the reports that come with your order. The data set SYS1.ordernum.SCPPLENU(PACKRPT) contains those reports.

Your order also contains a service tape containing all unintegrated service that was available at the time your order was processed. For a description of the service tape that comes with your order, see 2.1.2, "Service Tape" on page 10.

#### 1.8.2 Service Level

The date service was selected for your order appears at the top of the consolidated software inventory (CSI) Report. To find the date, search in the data set SYS1.ordernum.SCPPLENU(PACKRPT) for "CSI."

#### 1.8.3 PSP Information with Your Order

The PSP buckets for each feature are documented in the table, "Features Contained in This Order."

#### 1.8.4 Maintenance after Installation

After you have installed your order, IBM suggests that you perform preventive maintenance using Recommended Service Upgrades (RSUs). An RSU contains a subset of available PTFs. It is limited to PTFs that meet the following criteria:

- Severity 1 or 2
- HIPER
- PE fix
- Security or integrity
- Special attention (recommended because of new function, serviceability, installability, or pervasiveness)

RSUs are designed to reduce the volume of maintenance that you need to apply. RSUs are available monthly. IBM recommends that you install the last quarterly-tested RSU and the most current HIPERs and PE fixes. The cutoff for the last quarterly RSU is approximately two months before the end of the current quarter. The SOURCEIDs assigned to these PTFs (such as, PUT9608, RSU9609, HIPER, and PRP) are preserved in the target and distribution zones.

You should also regularly review current HIPERs and PE fixes as part of your preventive maintenance policy. One way to do this is by using Enhanced HOLDDATA. Enhanced HOLDDATA is HOLDDATA with additional information to identify the reason for the HOLD and a fixing PTF. It can help you manage all products on the OS/390 platform, including previous releases of OS/390 and MVS/ESA. It is available electronically on ESO. Enhanced HOLDDATA provides holds for PTFs marked in error (PEs). In addition, product FMIDs are held for HIPER and Year 2000 APARs. Both electronic delivery and SMP/E processing can be automated to reduce PTF research time and the risk of installing PE service.

To take advantage of Enhanced HOLDDATA, use the SMP/E REPORT ERRSYSMODS command. The SMP/E report, when used with Enhanced HOLDDATA, identifies missing critical service that applies to your specific system. This allows you to identify missing PE and HIPER fixes for any target zone. Additionally, the report identifies whether a corrective PTF is available, whether the corrective PTF is already in RECEIVE status, and the reason indicator for a HIPER. Download Enhanced HOLDDATA through FTP. See:

http://service.boulder.ibm.com/390holddata.html

For more information about Enhanced HOLDDATA, see the ESO Memo to Users or the Enhanced HOLDDATA website at:

http://service.software.ibm.com/390holddata.html

The REPORT ERRSYSMODS continues to support non-enhanced HOLDDATA. See *OS/390 SMP/E Commands*, SC28-1805 for details about the REPORT ERRSYSMODS command.

#### 1.8.5 Service Distribution

Preventive and corrective service are delivered using processes such as Extended Service Offering (ESO), CBPDO, RefreshPac, and ServiceLink.

The S/390 Software Support Web site contains information about problem submission, problem review, open and closed APARs, documentation, and a pointer to ServiceLink. The Web address is:

http://service.software.ibm.com/390/

For ServerPac, you can order CBPDO or ESO service using a starting service date that is one week or more prior to the date printed on the cover of the book you are holding.

#### 1.8.5.1 System/390 Service Update Facility

S/390 Service Update Facility (SUF) is an Internet-based S/390 software service tool that makes ordering and receiving OS/390 software service quick and easy. SUF allows system programmers to order both corrective and preventive service via the Internet. Because SUF accesses the consolidated software inventory (CSI), the service is tailored; only the service missing from your system is sent.

OS/390 service, both corrective and preventive, can be delivered via the Internet or via standard physical media. Where available, Advanced Digital Delivery (satellite) is also an option. Year 2000 Service delivery enhancements are available with the latest SUF service upgrade. A common "GUI" interface is provided via the SUF Customer Application Server. This workstation server can support multiple system programmers supporting multiple S/390 servers.

For details regarding prerequisites, entitlement, and how to obtain SUF, visit the S/390 SUF home page: http://www.ibm.com/s390/products/suf

# 1.9 Support Procedures

To report any installation difficulties with your order, contact the SOFTWARE MANUFACTURING - TEST.

For product problems, you should continue to use the existing product support procedures.

# 2.0 Tape Layout

The distribution media consists of standard-labeled tapes or cartridges, where applicable.

# 2.1 Tape Files

The tapes in this package contain customized material for:

Order number	ordernum
Customer	nnnnn - nnnnnn

# 2.1.1 RIM Tape

The RIM tape (Related Installation Material) contains information pertinent to the installation of this order. The files are contained on one physical tape. The tape is in standard label format with a label of **R0191A**.

Table 1 (Page 1 of 2). Contents of Related Installation Material (RIM) Tape			
Tape File	Tape Data Set Name	Description	
1	SYS1.ordernum.SCPPCENU	CLISTs (FB format) used with the installation	
2	SYS1.ordernum.SCPPPENU	Panels used with the installation	
3	SYS1.ordernum.SCPPTENU	Tables used with the installation	
4	SYS1.ordernum.SCPPSENU	Skeleton jobs used with the installation	
5	SYS1.ordernum.SCPPMENU	Messages used with the installation	
6	SYS1.ordernum.DOCLIB	Documentation related to the installation	
7	SYS1.ordernum.LOADLIB	Package installation programs	
8	SYS1.ordernum.APAR.INFO	Product-related PE APAR descriptions	
9	Reserved	This file is reserved	
10	Reserved	This file is reserved	
11	Reserved	This file is reserved	
12	Reserved	This file is reserved	
13	Reserved	This file is reserved	
14	Reserved	This file is reserved	
15	Reserved	This file is reserved	
16	Reserved	This file is reserved	
17	Reserved	This file is reserved	
18	Reserved	This file is reserved	
19	Reserved	This file is reserved	

Table 1 (Page 2 of 2). Contents of Related Installation Material (RIM) Tape			
Tape File	Tape Data Set Name	Description	
20	Reserved	This file is reserved	
21	Reserved	This file is reserved	
22	SYS1.ordernum.VB.SCPPCENU	CLISTs (VB format) used with the installation	
23	SYS1.ordernum.SCPPEENU	VSAM data set holding dialog messages	
24	SYS1.ordernum.SCPPHENU	VSAM data set holding dynamic help information	
25	SYS1.ordernum.SCPPLOAD	Load data set for the installation dialog	
26	SYS1.ordernum.SCPPLENU	Browsable copies of this book, LIST3820 copy of this book, and the CSI report	
27	SYS1.ordernum.GLOBAL.CSI	Global CSI for this order	
28	SYS1.ordernum.MVS.TARGET.CSI	MVS target CSI for this order	
29	SYS1.ordernum.MVS.DLIB.CSI	MVS distribution (DLIB) CSI for this order	
30	Reserved	This file is reserved	
31	Reserved	This file is reserved	
32	Reserved	This file is reserved	
33	Reserved	This file is reserved	
34	Reserved	This file is reserved	
35	Reserved	This file is reserved	
36	Reserved	This file is reserved	
37	Reserved	This file is reserved	
38	SYS1.ordernum.INSTGUID.BOOK	This book in BookManager format.	

# 2.1.2 Service Tape

In addition to the RIM tape, this package includes a service tape. The files may span one or more physical tapes depending on the package size. The tape is in standard label format with a label of S0191A and consist of 2 files.

Table 2. Cor	Table 2. Contents of Service Tape			
Tape File	Tape Data Set Name	Description		
1	SYS1.ordernum.HOLDATA	Contains all HOLDDATA applicable to the service in this order.		
2	SYS1.ordernum.PTF	Contains all uninstallable PTFs and PTFs in their chains; PTFs that are available but not selected and considered reach-ahead service. See the PTF list of the AHEAD report in the document SYS1. ordernum. SCPPLENU(PACKRPT). (Note: The AHEAD report is present only if such PTFs were selected.)		

# 2.1.3 System and Distribution Tapes

The following table provides the tape information for the target and distribution libraries.

Table 3. System and Distribution Libraries		
Tape VOLSER	Description	
M191AA	Target and distribution libraries	
M191AB	Target and distribution libraries	

IBM recommends that you restore or make a copy of all tapes received as soon as possible to ensure that they are readable on your devices.

# 3.0 Preparing to Install

Now you are ready to file-tailor the jobs that create your system and submit them for execution.

# 3.1 File-Tailoring the Jobs for Submission

Before you submit the first job, you must file-tailor the jobs to create the JCL. There are two ways to do this:

- Use the "S" line command to select the jobs to be file-tailored, one at a time
- Use the GENSKEL primary command to tailor installation jobs in a single batch job.

The job generated by the GENSKEL command creates file-tailored installation jobs. GENSKEL file-tailors the jobs that apply to the particular choice you have made -- full system replacement or software upgrade. The output of the generated job is written to the data set with the low-level qualifier of SCPPBENU.

Although GENSKEL processing can take an hour or longer, it still saves time when compared to file-tailoring the jobs one at a time. Consider also that tailoring the jobs one at a time ties up the TSO/E session as each job is tailored in turn, while GENSKEL tailors all all of the jobs in batch without tying up the TSO/E session.

After the GENSKEL batch job runs successfully, you can start submitting the jobs to begin your installation. Use "S" to select documentation and "B" to bring up a generated job in edit mode. (Using "S" to submit a job will cause your JCL to be rebuilt.) After you review the job, submit it for execution. For more information about GENSKEL, see *ServerPac: Using the Installation Dialog*.

# 3.2 Using the Table of Jobs in Your Order

The table in this section lists all the jobs you can invoke through the installation dialog; some of the jobs are optional. In the product documentation that follows in this book, you will find descriptions of product-supplied jobs that are not in the table; these jobs are also optional.

Earlier, in the installation dialog, you determined whether to replace your entire system (full system replacement) or upgrade your system (software upgrade). That choice determines which jobs you will run. The second column of the table, labeled "M" for "Mode," identifies the jobs you should run. If you chose full system replacement, run the jobs identified by "F"; if you chose software upgrade, run the jobs identified by "S." All other jobs apply to both options.

In the column called "Description," "JOB" identifies job entries. "DOC" identifies documentation you find in this book and documentation you find in the online panels, depending on whether you chose full system replacement or software upgrade.

One good way to use the table is to treat it as a worksheet, noting the results of each job after it runs. Run the jobs in the order in which they are listed in the table. The order will depend somewhat on the particular scenario you have chosen. To obtain the return code from a job, you can issue the "O" line command near the job that has run. Sections that follow contain more information about the jobs. You can use this information to decide whether to run a particular job or omit optional jobs.

Before you submit a job, review the JCL. You are able to make any installation-specific changes to the JCL.

In each job, the NOTIFY parameter on the JOB card defaults to &SYSUID. To set NOTIFY to another value, use the Installation Variables function, described in *ServerPac: Using the Installation Dialog* to change the default.

In the table, SRC: DEFAULT JOBCARD indicates the default JOB card which you can edit to change values on the job cards for all jobs. The rest of the entries are marked as either JOB or DOC. DOC entries describe the job or jobs that follow it. JOB entries are the jobs themselves.

#### 3.2.1 Description of Pointer Lines

The table also includes "pointer" lines, marked by ===>, that act as both headings and dividers for the DOC and JOB entries. These pointer lines divide the table into sections that take you sequentially through the installation process.

Jobname	Description	Your Notes	
	SRC: DEFAULT JOBCARD		
	===> INSTALLATION JOBS		
	DOC: Running Installation Jobs		
	DOC: Installation Setup Jobs		
OFFLINIT	JOB: Initialize required DASD		
UNLODOC	JOB: Unload DOCLIB from tape to DASD		
UNLDSCPP	JOB: Unload SCPPLENU from tape to DASD		
UNLDBOOK	JOB: Unload InstGuid from tape to DASD		
	DOC: Define Catalogs and Restore		
DEFCAT	JOB: Define catalogs		
DEFSSA	JOB: Define system-specific aliases		
ALLOCDS	JOB: Allocate and catalog DS		
RESTORE	JOB: Restore data sets from tape		
ALTCAT	JOB: Rename DS to final name		
	DOC: Restore WAS HFS Filesystem		
RESTFSW	JOB: Restore WAS HFS Filesystem		
	DOC: Define New SMP/E Environment		
LOADCSI	JOB: Load SMP/E CSIs from RIM tape		
UPDCSI	JOB: Update new SMP/E zones		
UPDDDD	JOB: Update new SMP/E DDDEFs		
UCLIN	JOB: WAS-specific UCLIN		
RECHOLD	JOB: Receive service tape PTFs		
	DOC: Build post-apply links		
CALLJOB	JOB: Build post-apply links		
CALLLINK	JOB: Execute post-apply link		
	DOC: Java for OS/390		
HJVA11GL	JOB: Load Java into Subdirectories		

Table 4 (Page 2 of 2). Jobs used to install the ServerPac		
Jobname Description		Your Notes
	DOC: Installation cleanup tasks	
UPDDEF	JOB: Zone / DDDEF cleanup	
UPDBCK	JOB: Clean up DDDEFs	
DELDSN	JOB: Delete data set alias names	
DELCSI	JOB: Delete work system's CSI DS	
DELTRANS	JOB: Delete Transport Dataset	
DELSSA	JOB: Delete SSAs in driving sys MCAT	
	DOC: Apply/accept service tape PTFs	
APPRSU	JOB: Apply service tape PTFs	
ACCRSU	JOB: Accept service tape PTFs	

# 4.0 Running the Installation Jobstream

The jobs described in this section install your system. They perform the following:

- Initialize DASD and set up for the rest of the installation
- Define catalogs and restore data sets
- Set up the SMP/E environment.

# 4.1 Running the Installation Set-Up Jobs

This section describes the jobs that initialize DASD and set-up for the rest of the installation.

#### 4.1.1 Job OFFLINIT

The **OFFLINIT** job initializes all volumes you identify in the SUMP primary command in the Modify System Layout option of the installation dialog. For information about the SUMP command, see ServerPac: Using the Installation Dialog.

If, in the Modify System Layout panel, you specified that the volume has existing data, OFFLINIT does not initialize the volume. If no volumes are to be initialized, the OFFLINIT job contains a JCL jobcard parameter of TYPRUN=SCAN to ensure the job can execute successfully.

Warning: Any existing data on a volume will be lost.

Before you run this job, ensure that the devices have been varied offline. Use one of the following commands (where adr is the device number of the appropriate DASD):

From an MVS console: V adr, OFFLINE

From SDSF: /V adr, OFFLINE

After the job completes successfully, vary the devices back online. Use one of the following commands:

From an MVS console: V adr, ONLINE

From SDSF: /V adr, ONLINE

#### 4.1.2 Job UNLODOC

The UNLODOC job uses the IEBCOPY program to copy the DOCLIB data set from the RIM tape (file 6) to your work volume.

#### 4.1.3 Job UNLDSCPP

The UNLDSCPP job uses the IEBCOPY program to copy the SCPPLENU data set from the RIM tape (file 26) to your work volume.

#### 4.1.4 Job UNLDBOOK

The UNLDBOOK job uses the IEBGENER program to copy the INSTGUID.BOOK data set from the RIM tape (file 38) to your work volume.

# 4.2 Define Catalogs and Restore Data Sets

This section describes the jobs that define the catalog structure and restore the data sets associated with your order.

#### 4.2.1 Job DEFCAT

The **DEFCAT** job allocates and defines the target system's master catalog and user catalogs to the driving system master catalog. DEFCAT also imports and connects the user catalogs to the target system master catalog. If there is no master catalog to be allocated (as in the case of software upgrade), DEFCAT does not define one.

#### 4.2.2 Job DEFSSA

The **DEFSSA** job defines the aliases for all catalogs on the driving system and target system that are needed to install your order.

#### 4.2.3 Job ALLOCDS

The **ALLOCDS** job allocates and catalogs the data sets you defined through the Modify System Layout function of the installation dialog.

If you install your order on SMS-managed target system volumes, you have completed additional work at this point. For the information you need, see the topic on installing an order on SMS-managed volumes in *ServerPac: Using the Installation Dialog*.

#### 4.2.4 Job RESTORE

The **RESTORE** job copies the ServerPac data sets from the tapes delivered with your order to the appropriate DASD device. RESTORE also copies the ICKDSF module into the authorized link library that you specified in the "Installation Variables" function of the installation dialog.

RESTORE might run for several hours.

#### 4.2.5 Job ALTCAT

The **ALTCAT** job renames each allocated data set to its final data set name. A data set alias name is established for each data set in the respective catalog. The data set alias points to the final data set name.

If you install your order on SMS-managed target system volumes, you must have completed additional work at this point. For more information, see the topic on installing an order on SMS-managed volumes in *ServerPac: Using the Installation Dialog*.

# 4.3 Restore the WebSphere Application Server HFS Filesystem

This section describes the steps for restoring the WebSphere Application Server (WAS) HFS filesystem to your current system.

These steps require that you have a UNIX environment set up. For information on performing this task, see *OS/390 UNIX System Services Planning*, SC28-1890.

Also, SMS and RACF (or an equivalent security product) must be active.

The HFS file must reside on an SMS-managed volume.

#### 4.3.1 Job RESTFSW

The **RESTFSW** job does the following:

- 1. Creates the directory path (through MKDIR) and mounts the new filesystem to this path.
- 2. Restores the WebSphere Application Server (WAS) HFS filesystem.
- 3. Creates a BPXPRMWS member in your parmlib data set with the new WAS filesystem. You can add the "WS" prefix to your IEASYS00 member.
- 4. Creates a restore (/RESTORE) directory.
- 5. OPUTs the archived file system into the restore directory.
- 6. Invokes the pax utility to populate the /usr/lpp directories.
- 7. Deletes the restore directory and files.

If you already have a BPXPRMWS member in your PARMLIB data set, or if you want to create this member in a different parmlib data set, modify the RESTFSW job.

The RESTFSW job restores WebSphere into three directories:

/usr/lpp/WebSphere /usr/lpp/CB390 /usr/lpp/java

When you move this level into production, mount the filesystems at the following mountpoints:

/usr/1pp/WebSphere /usr/1pp/CB390 /usr/1pp/java

All steps should complete with condition code 0.

For WebSphere Application Server Enterprise Edition, the Component Broker element requires you to perform additional set-up and implementation tasks. For instructions, see *WebSphere Application Server: Component Broker Planning and Installation Guide* 

# 4.4 Set Up the SMP/E Environment

This section describes the jobs that you use to set up the SMP/E environment for your new system.

#### 4.4.1 Job LOADCSI

The **LOADCSI** job unloads the SMP/E CSIs from the RIM tape and copies them (through IDCAMS REPRO) to the new CSIs, which you allocated previously.

#### 4.4.2 Reviewing the Defaults for Your SMP/E Environment

Before continuing, review the SMP/E settings that were supplied with your order. For example:

- Verify that the maximum acceptable linkedit return code associated with the SMP/E UTILITY option is acceptable for your environment. By default, this value is set to 8 (in the SMP/E UTILITY entry). To determine the appropriate setting, see the program directories in your order.
- Verify the data sets in the SMP/E SYSLIB concatenation. The OS/390 data sets and the order in which they appear should match that described in the OS/390 Program Directory. (The applicable section is "SMP/E Customization" in the installing Wave 0 chapter.) Non-OS/390 data sets should come after the OS/390 data sets, in any order. DDNAMES added to the SYSLIB concatenation will also need a corresponding DDDEF entry in this zone. Verify/create DDDEF entries for produts installed in separate target and distribution zones whose DDNAME is being added to the SYSLIB concatenation at this time.

#### 4.4.3 Job UPDCSI

The **UPDCSI** job updates your new CSIs (global, target and DLIB) with the new global zone ZONEINDEX and new global zone OPTIONS, and replaces the TARGETZONE and DLIBZONE entries with the new values you entered in the Define Zone Configuration function of the installation dialog.

#### 4.4.4 Job UPDDDD

The **UPDDDD** job updates the new CSI data sets (global, target, and DLIB) with the DDDEFs for your newly-allocated SMP/E data sets. UPDDDD also removes the UNIT and VOLSER information for the data sets in your new system.

#### 4.4.5 Job RECHOLD

The **RECHOLD** job issues an SMP/E RECEIVE for the tape files on the service tape. For the contents of the service tape, see 2.1.2, "Service Tape" on page 10.

RECHOLD assigns a sourceid based on your order number to the sysmods processed by the RECEIVE command. This sourceid is in addition to the standard IBM-supplied sourceids (PUTyymm, RSUyymm); it is not later used by sample jobs APPRSU and ACCRSU to install service from the service tape.

RECHOLD might not access every tape specified on the VOL parameter.

#### 4.4.6 Job CALLJOB

Job CALLJOB will execute the REPORT CALLLIBS command for your new target zone. This command helps you to identify and relink load modules when implicitly-included modules in a particular library are updated. Specifically, the REPORT CALLLIBS command provides a report of those load modules that have a CALLLIBS subentry list in their LMOD entry (and therefore use the automatic library call option to include modules from a specified library implicitly). REPORT CALLLIBS also creates job CALLLINK to relink the load modules that have been reported on.

#### 4.4.7 Job CALLLINK

Job **CALLLINK** contains the generated SMPPUNCH output from Job CALLJOB. Refer to the SMP/E Reference for more information about the use of the REPORT CALLLIBS command and the generated output.

You cannot use line command B (BACKUP) to edit CALLLINK. Instead, use line command S to select the newly created CALLLINK job from the SCPPSENU skeleton library.

Before you run CALLLINK, ensure that the SYSLIB DD concatenation specifies valid data sets. All data sets associated with the SYSLIB DD must be defined with the proper DDDEFs in your target zone and must point to the correct level of the library. Failure to do this might have unpredictable results.

#### **Notes:**

- 1. If SMP/E doesn't find any CALLLIB subentries, the CALLJOB job doesn't generate the JCL for CALLLINK; in this case, you will find "\*\*\*NONE" under CALLLIBS DDNAME in the output of CALLJOB.
- 2. Return code 04 indicates the CALLLINK job ended successfully. If the return code exceeds 04, review the generated output for unresolved references in the SYSLIB concatenation.

#### 4.4.8 Additional IFREQ Processing

Your order contains products and integrated service that have requirements on FMIDs that are not in your order. If you have any of these FMIDs, you should install the required IFREQ maintenance.

The table below can help you identify the products in your order that require that you install PTFs. After you have identified a product, turn to the IFREQ package report. Search on "IFREQ" in the data set SYS1.ordernum.SCPPLENU(PACKRPT). That report lists:

- The products in your order (by FMID) that require that you install PTFs
- The requesting FMIDs or PTFs
- The PTFs to install.

Note that the IFREQ report reflects the IFREQ PTFs at the time of your order; you might find that you need to apply additional IFREQ PTFs after installing service or products.

List of functions requiring IFREQ service				
HBB6606	HBB6608	HCKVB00	НСРТ280	HDB5510
HDB6610	HDZ11E0	HIMW500	HIMW510	HIMW520
HIR2101	HIY6610	HIZ5510	HIZ6610	HLB4801
HLE6607	HLE6608	HLE6609	HMB3170	HMK6600
НОТ6607	HOT6608	HRSL170	HRSL180	HTCP370
H0A5202	JBB6607	JBB6609	JDB5517	JDB6617
JLB4802	JMK6601			

## 4.5 Java for OS/390

#### 4.5.1 Perform Post Installation Tasks

The AJVS390 tar file is in the Java HFS path "/usr/lpp/java". To load Java for OS/390 into the appropriate subdirectories under "/usr/lpp/java", you must extract the files from the AJVS390 tar file.

You can use sample job AJVISTAR (product-supplied in library SAJVSMP1) for this purpose. The AJVISTAR job uses the "oshell" command to issue the "cd" and "tar" commands to extract the Java for OS/390 files. Check the options on the "tar" command to ensure that they are appropriate for your installation. The AJVISTAR job is shown in the Installation Dialog as **HJVA11GL**. Customize and run the HJVA11GL job.

The HJVA11GL job must be run on a system that has OS/390 UNIX System Services active and must have access to the "/usr/lpp/java" path. Also, the userid, under which the job runs, must be defined to use OS/390 UNIX System Services and must have access permission to the "/usr/lpp/java" directory so that the subdirectories can be created.

For more information, see the instructions in the sample job.

If you changed the default path in which the Java for OS/390 tar file was installed, be sure to make the corresponding changes to the sample job.

The job is successful if return code zero is received and all of the files in the tar file are extracted.

#### 4.5.1.1 Using Java and WebSphere

To prevent "Error 500 - surrogate userid setup error" from the Web server, the extattr +p bit must be turned on for all DLL files in Java. To do this, follow the steps below.

1. Give a superuser ID Read access to the BPX.FILEATTR.PROGCTL Facility to enable this superuser ID the ability to update the HFS file attributes using the extattr command:

2. Go into the OMVS shell using the superuser ID (UID=0) that you just permitted to the BPX.FILEATTR.PROGCTL class above and enter:

```
cd /-PathPrefix-/usr/lpp/java/J1.1/lib/mvs/native_threads
extattr +p *.*
ls -E
```

Where "-PathPrefix-" is the high level path name where Java was installed.

More information can be found in the Redbooks for Java or on the WebSphere debugging page at:

```
http://www.ibm.com/software/webservers/httpservers/doc/v51/2tabcont.htm
```

Maintenance Note: If you apply maintenance to the JDK, the program control bits will be lost in the -PathPrefix-/usr/lpp/java/J1.1/lib/mvs/native\_threads directory. Therefore, you need to reissue the extattr command each time you apply maintenance.

# 5.0 Completing the Installation

This section identifies optional steps you can take after you have verified that your new target system installed successfully:

- Cleaning up your driver system after the installation.
- · Receiving additional service.

You should update the LINKLIST concatenation on your target system to remove data set CPAC.LINKLIB from the list.

# 5.1 Running the Cleanup Jobs

The purpose of these jobs is to clean up the catalog entries that are no longer needed. These jobs do such things as:

- Delete system-specific aliases (SSAs)
- Remove ServerPac-supplied data sets and indexes

You might not choose to run all the clean-up jobs; that depends on whether you keep the SSAs you defined through the installation dialog in your operating environment.

Run the cleanup jobs described in this section after you have finished installing the order and have verified that you have a stable system.

When the jobs complete:

- Jobs that use SSA data set names will not run
- Jobs that use the target system master catalog can no longer connect to the driving system

# 5.1.1 Cleanup Jobs

Run these jobs on the original driving system except job UPDBCK which must be run on the new target system:

#### **UPDDEF**

Run this job to update DD define statements to point to the true names of target and distribution library DD definition data sets rather than SSA names.

#### **UPDBCK**

Run this job on the new target system to remove SSAs that you no longer need from SMP/E DD definitions, such as SMPPTS.

#### **DELDSN**

Run this job to delete data set name aliases from target system catalogs.

#### **DELCSI**

Run this job to delete the path entries for CSI data sets run on the driver.

#### **DELTRANS**

Run this job to delete the transport data set, which is no longer required after the data set has been restored into the new file system on the target system.

#### **DELSSA**

Run this job to delete SSAs from driving and target system master catalogs.

# 5.2 Applying/Accepting PTFs from the Service Tape

You can use the sample jobs **APPRSU** and **ACCRSU** to install service from the service tape. You received this service earlier when you ran the RECHOLD job.

#### **Notes:**

- 1. These PTFs might include PTFs that were in error status at the time this order was manufactured, or were later found to be in error. Always get the current HOLDDATA before you install service.
- 2. You can use the SMP/E Dialogs Sourceid Query to determine the lat- est RSU level you have received via RECHOLD job.
- 3. When servicing your OS/390 order, your driving system must meet the requirements described in the *OS/390 Program Directory*, under "Driving System Wave 2." Failure to meet these minimum requirements might result in installation errors.
- 4. Ensure that the target system's MIGLIB library is APF-authorized. For information on authorizing the library, see *OS/390 MVS Programming: Authorized Assembler Services Reference ALE-DYN*, GC28-1764.
- 5. When installing a standalone Websphere Application Server system, you must run the APPRSU and ACCRSU jobs before running UPDDEF, UPDBCK, and DELDSN.

# **Appendixes**

# A.1 WebSphere Application Server for OS/390 3.02.00 Application Server

#### **Product Information**

Product No: 5655-A98

Release No: V3R2M0

FMIDs: HEJS302

UPGRADE ID: WASEE302

SUBSET ID: AS390

PSP Review Date: May 22, 2000

The Application Server is a feature of WebSphere Application Server for OS/390.

#### **Data Sets Supplied**

Target Library	Distribution Library	Optional Materials
EJS.SEJSSAMP EJS.SEJSSDCK	EJS.AEJSSAMP EJS.AEJSHFS EJS.AEJSEMOD	N/A

**Jobs or Procedures that have been Completed for You:** The following table describes installation activities that have been performed for you and any jobs that have been provided for you to run:

Table 5. Summary of Activity		
Activity	Description	
Jobs run during production	<ul> <li>The following jobs were performed during production of your order:</li> <li>The UCLIN was performed to define the HFS DDDEF entries for WebSphere Application Server</li> <li>Job EJSISMKD was performed to create the necessary directories for WebSphere Application Server for OS/390</li> </ul>	

**WebSphere Application Server for OS/390 3.02.00 Application Server Status:** WebSphere Application Server for OS/390 requires further customization. See *WebSphere Application Server Standard Edition Planning, Installing and Using, Version*, GC34-4806 for any step-by-step procedures for activating the Application Server functions.

# A.2 WebSphere Application Server for OS/390 3.02.00 Component Broker

#### **Product Information**

Product No: 5655-A98 Release No: V3R2M0 FMIDs: H28K510 **UPGRADE ID:** WASEE302 SUBSET ID: CB390

**PSP** Review Date: May 23, 2000

Component Broker is a feature of WebSphere Application Server for OS/390.

#### **Data Sets Supplied**

Target Library	Distribution Library	Optional Materials
CB390.SBBODBRM	CB390.ABBODBRM	N/A
CB390.SBBOEXEC	CB390.ABBOEXEC	
CB390.SBBOJCL	CB390.ABBOJCL	
CB390.SBBOMSG	CB390.ABBOMSG	
CB390.SBBOLD2	CB390.ABBOOBJ	
CB390.SBBOLOAD	CB390.ABBOEXP	
CB390.SBBOULIB	CB390.ABBOINC	
CB390.SBBOLPA	CB390.ABBOJAR	
CB390.SBBOMIG	CB390.ABBOJAR	
CB390.SBBODSD	CB390.ABBOSAMP	

Jobs or Procedures that have been Completed for You: The following table describes installation activities that have been performed for you and any jobs that have been provided for you to run:

Table 6. Summary of Activity		
Activity	Description	
Jobs run during production	The following jobs were performed during production of your order:  • The UCLIN was performed to define the HFS DDDEF entries for WebSphere Application Server  • Job BBOMKDIR was performed to create the necessary directories for WebSphere Application Server	

WebSphere Application Server for OS/390 3.02.00 Component Broker Status: Component Broker requires further customization. If you are an Enterprise Edition customer, then you should refer to the WebSphere Application Server Enterprise Edition for OS/390 Component Broker Planning and Installation Guide, GA22-7325 contains the step-by-step procedures to activate the functions of Component Broker.

# WebSphere Application Server for OS/390 3.02.00 Java

#### **Product Information**

Product No: 5655-A98
Release No: V3R2M0

Release No: V3R2M0
FMIDs: HJVA11G

UPGRADE ID: WASEE302

SUBSET ID: JAVA

PSP Review Date: May 24, 2000

WebSphere Application Server for OS/390 3.02.00 leverages the services of S/390 to extend existing IT infrastructure to meet the requirements for rapid and reliable e-business deployment. It provides a reliable foundation for building a presence on the internet and provides highly secure server functions to conduct business transactions. Java is part of the WebSphere Application Server for OS/390 3.02.00.

#### **Data Sets Supplied**

Target Library	Distribution Library	Optional Materials
JAVA.SAJVSMP1	JAVA.AAJVSMP1 JAVA.AAJVS390	N/A

**Jobs or Procedures that have been Completed for You:** The following table describes installation activities that have been performed for you and any jobs that have been provided for you to run:

Table 7. Summary of Activity		
Activity	Description	
Jobs run during pro- duction	<ul> <li>The UCLIN was performed to define the HFS DDDEF entries for Java.</li> <li>Job AJVMKDIR was performed to create the necessary directories for Java.</li> </ul>	

**WebSphere Application Server for OS/390 3.02.00 Java Status:** Java requires further customization. See the program directory.

# Appendix B. Variables used by this ServerPac

The following section describes the variables used by the installation dialogs for this ServerPac. You can use this list as a worksheet. You should note the **NEW CONTENT** of your variable in this sheet after inspecting your current installation for the correct references for e.g. the dataset names or high level qualifiers.

**Note:** The variable names in this table are only valid for ServerPac orders. For other CustomPac types, the variables below must be compared with those previously received. For this reason, keep this installation guide for future reference.

Table 8. Vari	ables used for ==> GEN SYST	EMPAC
Synonym	ASSEMBLER NAME	Specify the program name of the assembler used on
Name	A0NDD15	your system IEV90 Assembler H
CONTENT	ASMA90	ASMA90 High Level Assembler
NEW CONTENT		
Synonym	SMPTLIB PREFIX	Specify the prefix to be used for RELFILE
Name	A0NDD20	datasets This is required for the SMPTLIB DDDEF in the
CONTENT	SYS1.MVS	GLOBAL Zone
NEW CONTENT		
Synonym	SMPTLIB UNIT	Specify the IBM DASD device type where the
Name	A0NUN20	RELFILES will be allocated This is the DASD "family" name EG. 3390
CONTENT	3380	This is required for the SMPTLIB DDDEF in the
NEW CONTENT		debrie zone
Synonym	SMPTLIB VOLSER	Specify the volume serial of the DASD where the
Name	A0NVN20	RELFILES will be allocated This is required for the SMPTLIB DDDEF in the
CONTENT	MVSCAT	GLOBAL Zone
NEW CONTENT		

Table 9. Variab	Table 9. Variables used for ==> HFS INFORMATION	
Synonym	INSTALL DIRECTORY	This variable desigates the directory under
Name	A00PQ04	which HFS elements will be restored and file systems mounted. The directory path
CONTENT	/SERVICE	name is restricted to upper case and limited to 20 characters. In a multilevel directory
NEW CONTENT		path the lowest directory from the root will be automatically created. Higher directores will not be created. The default value is /SERVICE.

Table 10. Variables used for ==> WAS OS/390 Java		
Synonym	SBPXEXEC	Specify the full data set name, up to
Name	O137900	44 characters, of the SBPXEXEC library on your OS/390 system.
CONTENT	SYS1.SBPXEXEC	ie: SYS1.SBPXEXEC
NEW CONTENT		

Synonym	RIM LOAD LIB	Name of the Load library needed for the
Name	90GDD03	installation. You must change this entry to the OUTPUT7 DD
CONTENT	CPP.IL000191.LOADLIB	data set name of your order RECEIVE job.
NEW CONTENT		
Synonym	WORK DASD UNIT	Unit type of the target system's work
Name	90GDD04	volume.
CONTENT	3380	
NEW CONTENT		
Synonym	WORK DASD VOLSER	VOLSER name of the target system's work volume.
Name	90GDD05	
CONTENT	WORK01	
NEW CONTENT		
Synonym	UNIT VIO	Specify the Unit type to be used for VIO
Name	90GDD08	data sets.
CONTENT	VIO	
NEW CONTENT		
Synonym	ORDER HLQ	You must change this entry to the same value
Name	90GDQ01	as you used for the 'Order HLQ' on Panel CPP IE:
CONTENT	CPP.IL000191	If the DIALOG DATASETS are named: TSO1.DE000012.XCPPXENU
NEW CONTENT		this variable should be set to: TS01.DF000012

Synonym	ACCOUNT NUMBER	ACCOUNT NUMBER FIELD FOR THE JOB CARD IN ALL
Name	90GXX01	INSTALLATION JOBS.  NOTE - DO NOT SPECIFY PARENTHESIS AROUND
CONTENT	ACCTNUM	THIS FIELD.
NEW CONTENT		
Synonym	RACF GROUP	THE RACF 'GROUP=' PARAMETER FOR USE IN JOBCARD.
Name	90GXX02	GROUP IS 1-8 CHARACTERS. IF YOU DON'T HAVE RACF OPERATIONAL, DO NOT SPECIFY THIS
CONTENT	RACFGRP	PARAMETER.
NEW CONTENT		
Synonym	JES2/JES3	COMMENT STATEMENT THAT CAN BE CHANGED TO YOUR
Name	90GXX03	INSTALLATION'S JES CONTROL INFORMATION. THIS STATEMENT IS INSERTED AFTER THE 'JOB'
CONTENT	//*	STATEMENTS.
NEW CONTENT		
Synonym	JOB CLASS	SPECIFIES THE JOBCLASS IN WHICH ALL
Name	90GXX05	INSTALLATION JOBS WILL RUN.
CONTENT	A	
NEW CONTENT		

Synonym	MSGCLASS	Specifies the message class to be used on the job statement.  If output logging is to be used in the
Name	90GXX06	
CONTENT	X	installation dialog, this value must be
NEW CONTENT		a valid HELD output class
Synonym	ACCOUNT ADD-INFO	ADDITIONAL ACCOUNTING INFORMATION.
Name	90GXX07	
CONTENT	EXP	
NEW CONTENT		
Synonym	RACF PASSWORD	THE RACE 'PASSWORD=' PARAMETER IN JOBCARD.
Name	90GXX08	IF YOU DON'T HAVE RACF OPERATIONAL ON YOUR DRIVING SYSTEM, DO NOT SPECIFY THIS
CONTENT	RACFPWD	PARAMETER.
NEW CONTENT		
Synonym	PROGRAMMER NAME	PROGRAMMER NAME FIELD IN THE JOBCARD.
Name	90GXX09	NOTE- DO NOT SPECIFY QUOTES AROUND THIS FIELD.
CONTENT	PGMRNAME	
NEW CONTENT		
Synonym	SYSOUT CLASS	SYSOUT CLASS FOR ALL INSTALL JOBS.
Name	90GXX10	
CONTENT	SYSOUT=*	
NEW CONTENT		
Synonym	NOTIFY USERID	THE NOTIFY USERID PARAMETER FOR JOB CARDS.
Name	90GXX11	USE &SYSUID FOR USERID OF SUBMITTING USER.
CONTENT	&SYSUID	
NEW CONTENT		
Synonym	UNIT NAME TAPES	UNIT NAME FOR THE TAPE DRIVES BEING USED TO INSTALL THE CUSTOMPAC.
Name	90GXX12	TO INSTALL THE COSTOPIFAC.
CONTENT	349E	
NEW CONTENT		
Synonym	RACF USER	THE RACF 'USER=' PARAMETER FOR JOBCARDS.  IF YOU DO NOT HAVE RACF OPERATIONAL,
Name	90GXX14	DO NOT SPECIFY ANY VALUES FOR THIS
CONTENT	RACFUSR	PARAMETER.
NEW CONTENT		
Synonym	REGION SIZE	REGION SIZE PARAMETER TO BE USED IN THE JOBCARD
Name	90GXX15	FOR ALL BATCH INSTALLATION JOBS.
CONTENT	6500K	
NEW CONTENT		
Synonym	TIME PARAMETER	TIME PARAMETER FOR JOBCARD.
Name	90GXX16	
CONTENT	1440	
NEW CONTENT		

Synonym	JOB NAME	JOBNAME TO APPEAR ON THE JOBCARD.
Name	90GXX17	NORMALLY THIS WILL BE THE TSO USERID, LIMITED TO 6 CHARACTERS DUE TO IMS
CONTENT	USER	RESTRICTION.
NEW CONTENT		
Synonym	SMPLOG DD	LOCATION WHERE SMP/E WRITES THE SMPLOG OUTPUT
Name	90GXX18	DATA. IF THIS VARIABLE IS SET TO BLANK, THE BATCH JOB WILL NOT CONTAIN A DD STATEMENT FOR SMPLOG.
CONTENT	SYSOUT=*	IF THIS VARIABLE IS SET TO VALUE 'XXX', THE BATCH JOB WILL CONTAIN THE DD STATEMENT:
NEW CONTENT		//SMPLOG DD XXX 'XXX' COULD BE 'DUMMY' OR 'SYSOUT=*'.
Synonym	SMPLOGA DD	LOCATION WHERE SMP/E WRITES THE SMPLOGA OUTPUT
Name	90GXX19	DATA. IF THIS VARIABLE IS SET TO BLANK, THE BATCH JOB WILL NOT CONTAIN A DD STATEMENT FOR SMPLOGA.
CONTENT	SYSOUT=*	IF THIS VARIABLE IS SET TO VALUE 'XXX', THE BATCH JOB WILL CONTAIN THE DD STATEMENT:
NEW CONTENT		//SMPLOGA DD XXX 'XXX' COULD BE 'DUMMY' OR 'SYSOUT=*'.
Synonym	OUTPUT LOGGING	This variable controls OUTPUT LOGGING -
Name	90GXX20	If set to YES the job output will be stored in a PDS, and will be available
CONTENT	YES	for future reference. The MSGCLASS must be a valid HELD output class.
NEW CONTENT		If set to NO the job output will remain in the output queue. If NO is specified it is NOT possible to retrieve the maximum return code from the job output.
Synonym	SDSF OUTPUT DIS	This variable controls the SDSF disposition
Name	90GXX21	of the installation job output.  If set to HOLD the job output will HOLD on
CONTENT	HOLD	SDSF even if the Job output is copied to a
NEW CONTENT		separate library for reference purpose. Any other value than HOLD indicates NOHOLD.

Table 13. Variables used for ==> MVS OLD CAT		
Synonym	OLD MASTERCAT	Specify the full data set name of the
Name	900CN01	Driving System's Master Catalog
CONTENT	CATALOG.VSYSCAT	
NEW CONTENT		
Synonym	OLD UPDATE PW	UPDATE PASSWORD FOR DRIVING SYSTEM'S
Name	90OCP01	MASTER CATALOG. MAXIMUM 8 CHARACTERS. THE SLASH '/' IS PART OF THE VARIABLE
CONTENT	/PWUPDATE	AND MUST BE ENTERED HERE WHEN PASSWORD PROTECTION FOR THE CATALOG IS ACTIVE.
NEW CONTENT		THOTESTON FOR THE SAFAESS IS NOTIFE.

# **Appendix C. Package Reports**

This appendix contains descriptions of all the SMP/E reports that you can receive. The descriptions include information that helps you understand how you would use the reports. The contents of the first two reports appear in the data set named SYS1.ordernum.SCPPLENU(PACKRPT). The contents of the third report appear at the end of this appendix. The three reports are:

- SMP/E reports requiring action
- SMP/E informational reports
- System Hold Analysis report

The data set is in a browsable format that you can print. To find a report, search in the data set on the name of the report. Sometimes a report will be empty. In this case, the title of the report appears in the data set, with an indication that the report is empty.

## C.1 SMP/E Reports Requiring Action

The following reports **REQUIRE ACTION** on your part either before, during, or after you install your order.

Report Name	Report Contents

**APAR** This report lists APARs associated with unresolved PE PTFs installed on your system or

PE situations causing uninstallable SYSMOD chains. Using this report, you can identify

and track the APARs, looking for fixing PTFs that resolve the PE PTFs.

UNRESOLVED PE This report lists PTFs in error (PE PTFs) installed on your system that do not have an

installable correction. The report includes the affected FMID and the APAR number

describing the PE situation. The APAR descriptions are stored in file

SYS1.ordernum.APAR.INFO on the R0191A RIM tape. Review these descriptions for pos-

sible impacts to your system.

#### UNRESOLVED SYSTEM HOLD

This report lists all PTFs with SYSTEM HOLDS. Data set "CPAC.DOCLIB" has the following members by the HOLDSYSTEM reason codes. These members contain the HOLDDATA for the PTFs that were selected to be installed on top of the base CSI. The UNRESOLVED SYSTEM HOLD REPORT in SYS1.ordernum.SCPPLENU(PACKRPT) shows all system holds that were selected by the service upgrade on the base when producing your order.

- ACTION
- AO
- DELETE
- DEP
- DOC
- EC
- EXRF
- FULLGEN
- IOGEN
- MSGSKEL
- MVSCP
- UCLIN

This data set also has the following member

 PTFCLTRS - PTF Cover Letters for PTFs installed on top of the base CSI that have SYSTEM HOLDs.

The data set "CPAC.DOCLIB" also has the following members that contain HOLDDATA information for the PTFs installed in the base CSI.

- BASE contains HOLDDATA for all reason codes for the PTFs listed in member BASELIST
- BASELIST contains the list of base CSI PTFs that have SYSTEM HOLDS.

The data set "CPAC.REPORTS" has the following members that contain the PTF Cover Letters for the PTFs that have SYSTEM HOLDS.

• BASELTRS - PTF Cover Letters for Base CSI PTFs that have SYSTEM HOLDS.

These cover letters and HOLDDATA information provide important information that may apply to your system environment. To get a complete view of the HOLDDATA that has been incorporated into your ServerPac, refer to both the service upgrade members, as well as the base CSI members.

#### PRE-ANALYZED SYSTEM HOLD

This report lists all PTFs for which the SYSTEM HOLD has been solved.

The nature of the resolving action depends on why it was held; for example:

- If UCLIN was present, then it has been run at the correct place within the CustomPac process.
- If special instructions were needed, they will have been inserted in this installation guide at the appropriate place.
- If special processing jobs needed to be run, they will have been run while your package was built, OR supplied as a job in the installation jobstream.

## C.2 SMP/E Informational Reports

The following reports are for your information and require no action.

**Report Name** Report Contents

AMOUNT OF PTFs/FMIDs

This report lists the number of installable and not installable PTFs, the installable FMIDs and the unresolved APARs.

and the amegoried in this.

CSI This report lists SYSMODS installed in the CSI and SYSMODS selected in this order for

installation.

**SELECTION** This report identifies all PTFs that are included in the ServerPac SMP/E select lists pro-

vided with this package.

HIPER This report lists PTFs to be installed through this package that resolve High Impact Perva-

sive APARs.

**RESOLVED PE** This report lists PE PTFs that will be resolved during the installation of this package.

#### UNINSTALLABLE SYSMOD CHAIN

This report lists all SYSMODs that are included as part of file 2 of the service tape.

These PTFs include the uninstallable PTFs listed in the UNINSTALLABLE SYSMODs report and the PTFs in their chains.

The PTFs in the chains may also have been selected for installation as part of this package and therefore may also appear in the SELECTION report and file 2 of the service tape.

NO SERVICE A list of FMIDs in your target/DLIB zone set for which no additional service is available

on our database.

FORCE This report lists SYSMODs for which BYPASS(HOLDERR) was specified. during the

production of this package. ERRORS are BYPASSed for reasons such as: Levelset,

Change-team recommendation, and product requirements.

The APAR that was bypassed is listed along with the bypassed SYSMOD.

**AHEAD** This report lists PTFs higher than the base service level used for PTF selection. You may

want to perform an SMP/E RECEIVE into your SMPPTS as they may be used for correc-

tive service.

**IFREQ** This report lists the products (by FMID) that require that you install PTFs. It includes the

requesting FMIDs or PTFs and the PTFs to install. Use this table with the "List of func-

tions requiring IFREQ service" earlier in the book; see 4.4.8, "Additional IFREQ

Processing" on page 21.

This report reflects the IFREQ PTFs at the time of your order; you may find that you need

to apply additional IFREQ PTFs after installing service or products later.

### C.3 System Hold Analysis Report

Preliminary analysis of system holds for the PTFs installed in your package has been performed. This information has been summarized in the following system hold analysis report. The tasks to be performed have been categorized by specific action required. Review the information below and perform the recommended task if it applies to your installation.

For detailed information regarding any specific action, refer to the PTF cover letter.

## Appendix D. Information about the Data Sets in Your Order

This appendix contains reports about how IBM has tailored the delivered system. It describes how data sets are defined.

### **Empty Data Sets**

The Empty Data Sets report lists some of the data sets that might be empty. If you discover that a data set is empty, you can check its name against the contents of this report to see if the data set is validly empty.

Though empty, these data sets are still needed, either for normal operation or for installing service. For example, empty data sets in your order might be allocated by one or more of the products in your order, or be used during SMP/E CALLLIBS processing.

OMVS.AS390

OMVS.CB390

SYS1.CSSLIB

OMVS.JV390

CEE.SCEECPP

CEE.SCEELKED

CEE.SCEELKEX

**CEE.SCEEOBJ** 

CEE.SCEESPC

### **D.2 Master Catalog Data Sets**

For you to successfully IPL your system, the following data sets must be cataloged in the master catalog. The Installation Dialog enforces this requirement. Use this list when you use the "A" (Define alias-to-catalog) option.

# **Reader's Comment Form**

Reader's Comment Form for ServerPac order ordernum
Customer Name: nnnnn - nnnnnn
You may use this form to communicate your comments about this package, its organization, subject matter or publication, with the understanding that IBM may use or distribute whatever information you supply in any way it believes appropriate without incurring any obligation to you. Your comments will be sent to the author's department for whatever review and action, if any, are deemed appropriate.
CUSTOMER SATISFACTION:
very good: good: fair: poor:
1. Problems during installation (JCL samples, SMP/E, etc.):
2. Problems during post installation:

Readers Comment Form	
3. Problems with this book:	
4. Suggestions (improvements, enhancements, other):	
Name:	
Telephone:	
E-Mail Address:	
Please return by FAX# 1-800-426-1393 Or, mail to:	
Attn.: Customer Advocacy Manager IBM CORPORATION Dept. 31RA, Bldg. 002-3, MS P526 2455 South Road Poughkeepsie, N.Y. 12601-5400 U.S.A.	
If you prefer to send comments electronically, use one of these network IDs: IBMLink (United States customers only): IBMUSM10(MHVRCFS) Internet e-mail: mhyrcfs@us.ibm.com	

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