



**Program Directory for  
IBM Problem Determination Tools  
Common Component**

V1.7.0

Program Number 5655-Q12

FMIDs HVWR170, JVWR171, JVWR172

for Use with  
z/OS V01.13.00 or later

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**Note**

Before using this information and the product it supports, be sure to read the general information under 7.0, "Notices" on page 39.

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# Contents

<b>1.0 Introduction</b>	1
1.1 PDTCC Description	1
1.2 PDTCC FMIDs	2
<b>2.0 Program Materials</b>	3
2.1 Basic Machine-Readable Material	3
2.2 Optional Machine-Readable Material	5
2.3 Program Publications	5
2.3.1 Optional Program Publications	5
2.4 Program Source Materials	6
2.5 Publications Useful During Installation	6
<b>3.0 Program Support</b>	7
3.1 Program Services	7
3.2 Preventive Service Planning	7
3.3 Statement of Support Procedures	8
<b>4.0 Program and Service Level Information</b>	9
4.1 Program Level Information	9
4.2 Service Level Information	9
<b>5.0 Installation Requirements and Considerations</b>	10
5.1 Driving System Requirements	10
5.1.1 Machine Requirements	10
5.1.2 Programming Requirements	10
5.2 Target System Requirements	11
5.2.1 Machine Requirements	11
5.2.2 Programming Requirements	11
5.2.2.1 Installation Requisites	11
5.2.2.2 Operational Requisites	12
5.2.2.3 Toleration/Coexistence Requisites	12
5.2.2.4 Incompatibility (Negative) Requisites	12
5.2.3 DASD Storage Requirements	12
5.3 FMIDs Deleted	20
5.4 Special Considerations	20
<b>6.0 Installation Instructions</b>	21
6.1 Installing PDTCC	21
6.1.1 SMP/E Considerations for Installing PDTCC	21
6.1.2 SMP/E Options Subentry Values	21
6.1.3 Overview of the installation steps	21
6.1.4 Allocate sequential data sets to hold SMPMCS and compressed RELFILES	22

6.1.5 Upload the SMPMCS and compressed RELFILES to the host	24
6.1.6 Expand the compressed RELFILES with TSO RECEIVE	29
6.1.7 Sample Jobs	31
6.1.8 Create SMP/E environment (optional)	34
6.1.9 Perform SMP/E RECEIVE	34
6.1.10 Allocate SMP/E Target and Distribution Libraries	35
6.1.11 Create DDDEF Entries	35
6.1.12 Perform SMP/E APPLY	35
6.1.13 Perform SMP/E ACCEPT	37
6.1.14 Run REPORT CROSSZONE	38
6.1.15 Cleaning Up Obsolete Data Sets, Paths, and DDDEFS	38
6.2 Product Customization	38
<b>7.0 Notices</b>	<b>39</b>
7.1 Trademarks	39
<b>Reader's Comments</b>	<b>40</b>

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## Figures

1. Program File Content -- Base	4
2. Program File Content -- JPN	4
3. Program File Content -- KOR	4
4. Basic Material: Unlicensed	5
5. Publications Useful During Installation	6
6. PSP Upgrade and Subset ID	7
7. Component IDs	8
8. Driving System Software Requirements	11
9. Total DASD Space Required by PDTCC -- Base	12
10. Total DASD Space Required by PDTCC -- JPN	13
11. Total DASD Space Required by PDTCC -- KOR	13
12. Storage Requirements for PDTCC Target Libraries -- Base	15
13. Storage Requirements for PDTCC Target Libraries -- JPN	15
14. Storage Requirements for PDTCC Target Libraries -- KOR	16
15. Storage Requirements for PDTCC Distribution Libraries -- Base	16
16. Storage Requirements for PDTCC Distribution Libraries -- JPN	16
17. Storage Requirements for PDTCC Distribution Libraries -- KOR	17
18. Storage Requirements for PDTCC Web Download Data Sets -- Base	17
19. Storage Requirements for PDTCC Web Download Data Sets -- JPN	18
20. Storage Requirements for PDTCC Web Download Data Sets -- KOR	19
21. SMP/E Options Subentry Values	21
22. User Entered Values	24

23.	Sample Installation Jobs -- BASE	31
24.	Sample Installation Jobs -- JPN	31
25.	Sample Installation Jobs -- KOR	32



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## 1.0 Introduction

This program directory is intended for system programmers who are responsible for program installation and maintenance. It contains information about the material and procedures associated with the installation of IBM Problem Determination Tools Common Component. This publication refers to IBM Problem Determination Tools Common Component as PDTCC.

The Program Directory contains the following sections:

- 2.0, “Program Materials” on page 3 identifies the basic program materials and documentation for PDTCC.
- 3.0, “Program Support” on page 7 describes the IBM support available for PDTCC.
- 4.0, “Program and Service Level Information” on page 9 lists the APARs (program level) and PTFs (service level) that have been incorporated into PDTCC.
- 5.0, “Installation Requirements and Considerations” on page 10 identifies the resources and considerations that are required for installing and using PDTCC.
- 6.0, “Installation Instructions” on page 21 provides detailed installation instructions for PDTCC. It also describes the procedures for activating the functions of PDTCC, or refers to appropriate publications.

**The rest of this section only applies when PDTCC is ordered via Shopz. It does not apply when you downloaded it from the web.**

**Select this link to go to the next section: [1.1, “PDTCC Description”](#)**

Before installing PDTCC, read the *CBPDO Memo To Users* and the *CBPDO Memo To Users Extension* that are supplied with this program in softcopy format and this program directory; then keep them for future reference. Section 3.2, “Preventive Service Planning” on page 7 tells you how to find any updates to the information and procedures in this program directory.

PDTCC is supplied in a Custom-Built Product Delivery Offering (CBPDO, 5751-CS3). The program directory that is provided in softcopy format on the CBPDO tape is identical to the hardcopy format if one was included with your order. All service and HOLDDATA for PDTCC are included on the CBPDO tape.

Do not use this program directory if you install PDTCC with a SystemPac or ServerPac. When you use one of those offerings, use the jobs and documentation supplied with the offering. The offering will point you to specific sections of this program directory as needed.

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### 1.1 PDTCC Description

IBM Problem Determination Tools Common Component delivers common components used by some of IBM's problem determination tools for z/OS application development. PDTCC is automatically included in your order when you obtain one of the following products:

IBM Application Performance Analyzer for z/OS

IBM Fault Analyzer for z/OS  
IBM File Manager for z/OS  
IBM Debug Tool for z/OS  
IBM Debug for z Systems  
IBM Developer for z Systems  
IBM Developer for z Systems Enterprise Edition

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## **1.2 PDTCC FMIDs**

PDTCC consists of the following FMIDs:

HVWR170  
JVWR171  
JVWR172



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## 2.0 Program Materials

An IBM program is identified by a program number. The program number for PDTCC is 5655-Q12. The feature numbers are 6004, 6002, and 6003.

Basic Machine-Readable Materials are materials that are supplied under the base license and are required for the use of the product.

The program announcement material describes the features supported by PDTCC. Ask your IBM representative for this information if you have not already received a copy.

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### 2.1 Basic Machine-Readable Material

The distribution medium for this program is physical media or downloadable files. This program is in SMP/E RELFILE format and is installed by using SMP/E. See 6.0, “Installation Instructions” on page 21 for more information about how to install the program.

**The rest of this section only applies when PDTCC is ordered via Shopz. It does not apply when you downloaded it from the web.**

**Select this link to go to the next section: 2.2, “Optional Machine-Readable Material” on page 5**

You can find information about the physical media for the basic machine-readable materials for PDTCC in the *CBPDO Memo To Users Extension*.

Figure 1 describes the program file content for PDTCC.

Figure 2 on page 4 describes the program file content for PDTCC Japanese component.

Figure 3 on page 4 describes the program file content for PDTCC Korean component.

You can refer to the *CBPDO Memo To Users Extension* to see where the files reside on the tape.

#### Notes:

1. The data set attributes in this table must be used in the JCL of jobs that read the data sets. However, because the data sets are in IEBCOPY unloaded format, their actual attributes might be different.
2. If any RELFILEs are identified as PDSEs, ensure that SMPTLIB data sets are allocated as PDSEs.

Figure 1. Program File Content -- Base

<b>Name</b>	<b>O R G</b>	<b>R E C F M</b>	<b>L R E C L</b>	<b>BLK SIZE</b>
SMPMCS	SEQ	FB	80	6400
IBM.HVWR170.F1	PDS	FB	80	8800
IBM.HVWR170.F2	PDS	FB	80	8800
IBM.HVWR170.F3	PDS	U	0	6144
IBM.HVWR170.F4	PDS	FB	80	8800
IBM.HVWR170.F5	PDS	FB	80	8800
IBM.HVWR170.F6	PDS	FB	80	8800
IBM.HVWR170.F7	PDS	VB	4096	27998
IBM.HVWR170.F8	PDSE	U	0	6144
IBM.HVWR170.F9	PDS	U	0	6144

Figure 2. Program File Content -- JPN

<b>Name</b>	<b>O R G</b>	<b>R E C F M</b>	<b>L R E C L</b>	<b>BLK SIZE</b>
SMPMCS	SEQ	FB	80	6400
IBM.JVWR171.F1	PDS	FB	80	8800
IBM.JVWR171.F2	PDS	FB	80	8800
IBM.JVWR171.F3	PDS	U	0	6144
IBM.JVWR171.F4	PDS	FB	80	8800
IBM.JVWR171.F5	PDS	FB	80	8800
IBM.JVWR171.F6	PDS	FB	80	8800

Figure 3 (Page 1 of 2). Program File Content -- KOR

<b>Name</b>	<b>O R G</b>	<b>R E C F M</b>	<b>L R E C L</b>	<b>BLK SIZE</b>
SMPMCS	SEQ	FB	80	6400

Figure 3 (Page 2 of 2). Program File Content -- KOR

Name	O R G	R E C F M	L R E C L	BLK SIZE
IBM.JVWR172.F1	PDS	FB	80	8800
IBM.JVWR172.F2	PDS	FB	80	8800
IBM.JVWR172.F3	PDS	U	0	6144
IBM.JVWR172.F4	PDS	FB	80	8800
IBM.JVWR172.F5	PDS	FB	80	8800
IBM.JVWR172.F6	PDS	FB	80	8800

## 2.2 Optional Machine-Readable Material

No optional machine-readable materials are provided for PDTCC.

## 2.3 Program Publications

The following sections identify the basic publications for PDTCC.

Figure 4 identifies the basic unlicensed program publications for PDTCC. Those that are in softcopy format publications can be obtained from the IBM Publications Center website at <http://www.ibm.com/shop/publications/order/>.

Figure 4. Basic Material: Unlicensed

Publication Title	Form Number	Media Format
<i>IBM Problem Determination Tools Common Component Customization and User Guide</i>	SC19-4159	See note <sup>1</sup>
<b>Note:</b>		
1. These, and other, publications can be obtained from the PDTCC online library, <a href="http://www-01.ibm.com/software/awdtools/filemanager/library">http://www-01.ibm.com/software/awdtools/filemanager/library</a> .		

### 2.3.1 Optional Program Publications

No optional publications are provided for PDTCC.

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## 2.4 Program Source Materials

No program source materials or viewable program listings are provided for PDTCC.

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## 2.5 Publications Useful During Installation

You might want to use the publications listed in Figure 5 during the installation of PDTCC.

*Figure 5. Publications Useful During Installation*

<b>Publication Title</b>	<b>Form Number</b>	<b>Media Format</b>
<i>IBM SMP/E for z/OS User's Guide</i>	SA22-7773	See note <sup>1</sup>
<i>IBM SMP/E for z/OS Commands</i>	SA22-7771	See note <sup>1</sup>
<i>IBM SMP/E for z/OS Reference</i>	SA22-7772	See note <sup>1</sup>
<i>IBM SMP/E for z/OS Messages, Codes, and Diagnosis</i>	GA22-7770	See note <sup>1</sup>
<b>Note:</b>		
1. These, and other, publications can be obtained from the IBM Publications Center website at <a href="http://www.ibm.com/shop/publications/order/">http://www.ibm.com/shop/publications/order/</a> .		

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## 3.0 Program Support

This section describes the IBM support available for PDTCC.

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### 3.1 Program Services

Contact your IBM representative for specific information about available program services.

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### 3.2 Preventive Service Planning

Before you install PDTCC, make sure that you have reviewed the current Preventive Service Planning (PSP) information. Review the PSP Bucket for General Information, Installation Documentation, and the Cross Product Dependencies sections. For the Recommended Service section, instead of reviewing the PSP Bucket, it is recommended you use the IBM.ProductInstall-RequiredService fix category in SMP/E to ensure you have all the recommended service installed. Use the **FIXCAT(IBM.PRODUCTINSTALL-REQUIRESERVICE)** operand on the **APPLY CHECK** command. See 6.1.12, "Perform SMP/E APPLY" on page 35 for a sample APPLY command

If you obtained PDTCC as part of a CBPDO, HOLDDATA is included.

If the CBPDO for PDTCC is older than two weeks by the time you install the product materials, you can obtain the latest PSP Bucket information by going to the following website:

<http://www14.software.ibm.com/webapp/set2/psearch/search?domain=psp>

You can also use S/390 SoftwareXcel or contact the IBM Support Center to obtain the latest PSP Bucket information.

For program support, access the Software Support Website at <http://www-01.ibm.com/software/support/>.

PSP Buckets are identified by UPGRADEs, which specify product levels; and SUBSETs, which specify the FMIDs for a product level. The UPGRADE and SUBSET values for PDTCC are included in Figure 6.

*Figure 6. PSP Upgrade and Subset ID*

UPGRADE	SUBSET	Description
IBMPDToolSCC	HVWR170	PDTCC Base (English)
IBMPDToolSCC	JVWR171	PDTCC JPN (Japanese)
IBMPDToolSCC	JVWR172	PDTCC KOR (Korean)

For a complete list of available PTFs (both HIPER and non-HIPER PTFs) and the relevant APARs, refer to <http://www-01.ibm.com/support/docview.wss?uid=swg21612547>

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### 3.3 Statement of Support Procedures

Report any problems which you feel might be an error in the product materials to your IBM Support Center. You may be asked to gather and submit additional diagnostics to assist the IBM Support Center in their analysis.

Figure 7 on page 8 identifies the component IDs (COMPID) for PDTCC.

<i>Figure 7. Component IDs</i>			
<b>FMID</b>	<b>COMPID</b>	<b>Component Name</b>	<b>RETAIN Release</b>
HVWR170	5655IPV00	PDTCC -- Base	170
JVWR171	5655IPV00	PDTCC -- JPN	171
JVWR172	5655IPV00	PDTCC -- KOR	172

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## 4.0 Program and Service Level Information

This section identifies the program and relevant service levels of PDTCC. The program level refers to the APAR fixes that have been incorporated into the program. The service level refers to the PTFs that have been incorporated into the program.

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### 4.1 Program Level Information

The following APAR fixes against previous releases of PDTCC have been incorporated into this release. They are listed by FMID.

- FMID HVWR170

PM67623	PM74586	PM81985	PM87150	PM92954
PM68806	PM74587	PM82975	PM87449	PM93063
PM69462	PM74588	PM83598	PM88764	PM93824
PM72789	PM76089	PM84986	PM90173	PM94499
PM74584	PM76879	PM86203	PM92425	PM94541
PM74585	PM80985	PM87148	PM92944	PM96306

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### 4.2 Service Level Information

No PTFs against this release of PDTCC have been incorporated into the product package.

Frequently check the PDTCC PSP Bucket for HIPER and SPECIAL attention PTFs against all FMIDs that you must install. You can also receive the latest HOLDDATA, then add the **FIXCAT(IBM.PRODUCTINSTALL-REQUIRESERVICE)** operand on your **APPLY CHECK** command. This will allow you to review the recommended and critical service that should be installed with your FMIDs.

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## 5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating PDTCC. The following terminology is used:

- *Driving system*: the system on which SMP/E is executed to install the program.

The program might have specific operating system or product level requirements for using processes, such as binder or assembly utilities during the installation.

- *Target system*: the system on which the program is configured and run.

The program might have specific product level requirements, such as needing access to the library of another product for link-edits. These requirements, either mandatory or optional, might directly affect the element during the installation or in its basic or enhanced operation.

In many cases, you can use a system as both a driving system and a target system. However, you can make a separate IPL-able clone of the running system to use as a target system. The clone must include copies of all system libraries that SMP/E updates, copies of the SMP/E CSI data sets that describe the system libraries, and your PARMLIB and PROCLIB.

Use separate driving and target systems in the following situations:

- When you install a new level of a product that is already installed, the new level of the product will replace the old one. By installing the new level onto a separate target system, you can test the new level and keep the old one in production at the same time.
- When you install a product that shares libraries or load modules with other products, the installation can disrupt the other products. By installing the product onto a separate target system, you can assess these impacts without disrupting your production system.

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### 5.1 Driving System Requirements

This section describes the environment of the driving system required to install PDTCC.

#### 5.1.1 Machine Requirements

The driving system can run in any hardware environment that supports the required software.

#### 5.1.2 Programming Requirements



Figure 8. Driving System Software Requirements

Program Number	Product Name	Minimum VRM	Minimum Service Level will satisfy these APARs	Included in the shipped product?
Any <b>one</b> of the following:				
5694-A01	z/OS	V01.13.00	N/A	No
5650-ZOS	z/OS	V02.01.00 or higher	N/A	No

**Note:** SMP/E is a requirement for Installation and is an element of z/OS but can also be ordered as a separate product, 5655-G44, minimally V03.06.00.

**Note:** Installation might require migration to new z/OS releases to be service supported. See [http://www-03.ibm.com/systems/z/os/zos/support/zos\\_eos\\_dates.html](http://www-03.ibm.com/systems/z/os/zos/support/zos_eos_dates.html).

## 5.2 Target System Requirements

This section describes the environment of the target system required to install and use PDTCC.

PDTCC installs in the z/OS (Z038) SREL.

### 5.2.1 Machine Requirements

The target system can run in any hardware environment that supports the required software.

### 5.2.2 Programming Requirements

**5.2.2.1 Installation Requisites:** Installation requisites identify products that are required and *must* be present on the system or products that are not required but *should* be present on the system for the successful installation of this product.

Mandatory installation requisites identify products that are required on the system for the successful installation of this product. These products are specified as PREs or REQs.

PDTCC has no mandatory installation requisites.

Conditional installation requisites identify products that are *not* required for successful installation of this product but can resolve such things as certain warning messages at installation time. These products are specified as IF REQs.

PDTCC has no conditional installation requisites.

**5.2.2.2 Operational Requisites:** Operational requisites are products that are required and *must* be present on the system or products that are not required but *should* be present on the system for this product to operate all or part of its functions.

Mandatory operational requisites identify products that are required for this product to operate its basic functions. These products are specified as PREs or REQs.

PDTCC has no mandatory operational requisites.

Conditional operational requisites identify products that are *not* required for this product to operate its basic functions but are required at run time for this product to operate specific functions. These products are specified as IF REQs.

PDTCC has no conditional operational requisites.

**5.2.2.3 Toleration/Coexistence Requisites:** Toleration/coexistence requisites identify products that must be present on sharing systems. These systems can be other systems in a multisystem environment (not necessarily sysplex), a shared DASD environment (such as test and production), or systems that reuse the same DASD environment at different time intervals.

PDTCC has no toleration/coexistence requisites.

**5.2.2.4 Incompatibility (Negative) Requisites:** Negative requisites identify products that must *not* be installed on the same system as this product.

PDTCC has no negative requisites.

## 5.2.3 DASD Storage Requirements

PDTCC libraries can reside on all supported DASD types.

Figure 9 lists the total space that is required for each type of library.

<i>Figure 9. Total DASD Space Required by PDTCC -- Base</i>		
<b>Library Type</b>	<b>Total Space Required in 3390 Trks</b>	<b>Description</b>
Target	620 Tracks	
Distribution	620 Tracks	
Web Download	800 Tracks	This row only applies when PDTCC is downloaded from the web. It does not apply when you ordered it via Shopz. These are temporary data sets, which can be removed after the SMP/E install.

*Figure 10. Total DASD Space Required by PDTCC -- JPN*

<b>Library Type</b>	<b>Total Space Required in 3390 Trks</b>	<b>Description</b>
Target	35 Tracks	
Distribution	35 Tracks	
Web Download	22 Tracks	This row only applies when PDTCC is downloaded from the web. It does not apply when you ordered it via Shopz. These are temporary data sets, which can be removed after the SMP/E install.

*Figure 11. Total DASD Space Required by PDTCC -- KOR*

<b>Library Type</b>	<b>Total Space Required in 3390 Trks</b>	<b>Description</b>
Target	35 Tracks	
Distribution	35 Tracks	
Web Download	22 Tracks	This row only applies when PDTCC is downloaded from the web. It does not apply when you ordered it via Shopz. These are temporary data sets, which can be removed after the SMP/E install.

**Notes:**

1. For non-RECFM U data sets, IBM recommends using system-determined block sizes for efficient DASD utilization. For RECFM U data sets, IBM recommends using a block size of 32760, which is most efficient from the performance and DASD utilization perspective.
2. Abbreviations used for data set types are shown as follows.
  - U** Unique data set, allocated by this product and used by only this product. This table provides all the required information to determine the correct storage for this data set. You do not need to refer to other tables or program directories for the data set size.
  - S** Shared data set, allocated by this product and used by this product and other products. To determine the correct storage needed for this data set, add the storage size given in this table to those given in other tables (perhaps in other program directories). If the data set already exists, it must have enough free space to accommodate the storage size given in this table.
  - E** Existing shared data set, used by this product and other products. This data set is *not* allocated by this product. To determine the correct storage for this data set, add the storage size given in this table to those given in other tables (perhaps in other program directories). If the data set already exists, it must have enough free space to accommodate the storage size given in this table.

If you currently have a previous release of this product installed in these libraries, the installation of this release will delete the old release and reclaim the space that was used by the old release and any

service that had been installed. You can determine whether these libraries have enough space by deleting the old release with a dummy function, compressing the libraries, and comparing the space requirements with the free space in the libraries.

For more information about the names and sizes of the required data sets, see 6.1.10, "Allocate SMP/E Target and Distribution Libraries" on page 35.

3. All target and distribution libraries listed have the following attributes:
  - The default name of the data set can be changed.
  - The default block size of the data set can be changed.
  - The data set can be merged with another data set that has equivalent characteristics.
  - The data set can be either a PDS or a PDSE, with some exceptions. The exceptions are listed after the table.
4. All target libraries listed have the following attributes:
  - These data sets can be SMS-managed, but they are not required to be SMS-managed.
  - These data sets are not required to reside on the IPL volume.
  - The values in the "Member Type" column are not necessarily the actual SMP/E element types that are identified in the SMPMCS.
5. All target libraries that are listed and contain load modules have the following attributes:
  - These data sets can be in the LPA, but they are not required to be in the LPA.
  - These data sets can be in the LNKLIST.
  - These data sets are not required to be APF-authorized, with some exceptions. The exceptions are listed after the table.
  - Check your SMPLTS allocation if the table indicates that a load library ("RECFM" column specifies U) must be a PDSE ("DIR Blks" column specifies N/A). If you have an existing SMPLTS, and it is a PDS, you must allocate a new PDSE and copy your SMPLTS into it; then change the SMPLTS DDDEF entry to indicate the new PDSE data set.

The following figures describe the target and distribution libraries required to install PDTCC. The storage requirements of PDTCC must be added to the storage required by other programs that have data in the same library.

**Note:** Use the data in these tables to determine which libraries can be merged into common data sets. In addition, since some ALIAS names may not be unique, ensure that no naming conflicts will be introduced before merging libraries.

Figure 12. Storage Requirements for PDTCC Target Libraries -- Base

Library DDNAME	Member Type	Target Volume	T Y P E	O R G	R E C F M	L R E C L	No. of 3390 Trks	No. of DIR Blks
SIPVBIN1	Binary (zipped) file	ANY	U	PDS	VB	4096	9	2
SIPVLPA1	LMOD	ANY	U	PDS	U	0	5	2
SIPVMENU	Message	ANY	U	PDS	FB	80	15	5
SIPVMODA	LMOD	ANY	U	PDSE	U	0	10	N/A
SIPVMOD1	LMOD	ANY	U	PDS	U	0	144	10
SIPVPENU	Panel	ANY	U	PDS	FB	80	2	5
SIPVSAM1	Sample	ANY	U	PDS	FB	80	2	5
SIPVTENU	Table	ANY	U	PDS	FB	80	2	2

- SIPVLPA1 must be a PDS.
- SIPVMODA must be a PDSE.
- SIPVMODA, and SIPVMOD1 must be APF authorized.

Figure 13. Storage Requirements for PDTCC Target Libraries -- JPN

Library DDNAME	Member Type	Target Volume	T Y P E	O R G	R E C F M	L R E C L	No. of 3390 Trks	No. of DIR Blks
SIPVMOD1	LMOD	ANY	S	PDS	U	0	1	1
SIPVSAM1	Sample	ANY	S	PDS	FB	80	1	1
SIPVMJPN	Message	ANY	U	PDS	FB	80	10	10
SIPVPJPN	Panel	ANY	U	PDS	FB	80	15	15
SIPVTJPN	Table	ANY	U	PDS	FB	80	10	2

Figure 14. Storage Requirements for PDTCC Target Libraries -- KOR

Library DDNAME	Member Type	Target Volume	T Y P E	O R G	R E C F M	L R E C L	No. of 3390 Trks	No. of DIR Blks
SIPVMOD1	LMOD	ANY	S	PDS	U	0	1	1
SIPVSAM1	Sample	ANY	S	PDS	FB	80	1	1
SIPVMKOR	Message	ANY	U	PDS	FB	80	10	10
SIPVPKOR	Panel	ANY	U	PDS	FB	80	15	15
SIPVTKOR	Table	ANY	U	PDS	FB	80	10	2

Figure 15. Storage Requirements for PDTCC Distribution Libraries -- Base

Library DDNAME	T Y P E	O R G	R E C F M	L R E C L	No. of 3390 Trks	No. of DIR Blks
AIPVBIN1	U	PDS	VB	4096	144	2
AIPVLPA1	U	PDS	U	0	2	2
AIPVMENU	U	PDS	FB	80	2	5
AIPVMODA	U	PDSE	U	0	1200	N/A
AIPVMOD1	U	PDS	U	0	138	20
AIPVPENU	U	PDS	FB	80	138	5
AIPVSAM1	U	PDS	FB	80	80	5
AIPVTENU	U	PDS	FB	80	9	2

- AIPVLPA1 must be a PDS.
- AIPVMODA must be a PDSE.

Figure 16 (Page 1 of 2). Storage Requirements for PDTCC Distribution Libraries -- JPN

Library DDNAME	T Y P E	O R G	R E C F M	L R E C L	No. of 3390 Trks	No. of DIR Blks
AIPVMOD1	S	PDS	U	0	1	1
AIPVSAM1	S	PDS	FB	80	1	1

*Figure 16 (Page 2 of 2). Storage Requirements for PDTCC Distribution Libraries -- JPN*

<b>Library DDNAME</b>	<b>T Y P E</b>	<b>O R G</b>	<b>R E C F M</b>	<b>L R E C L</b>	<b>No. of 3390 Trks</b>	<b>No. of DIR Blks</b>
AIPVMJPN	U	PDS	FB	80	10	10
AIPVPJPN	U	PDS	FB	80	15	15
AIPVTJPN	U	PDS	FB	80	10	2

*Figure 17. Storage Requirements for PDTCC Distribution Libraries -- KOR*

<b>Library DDNAME</b>	<b>T Y P E</b>	<b>O R G</b>	<b>R E C F M</b>	<b>L R E C L</b>	<b>No. of 3390 Trks</b>	<b>No. of DIR Blks</b>
SIPVMOD1	S	PDS	U	0	1	1
AIPVSAM1	S	PDS	FB	80	1	1
AIPVMKOR	U	PDS	FB	80	10	10
AIPVPKOR	U	PDS	FB	80	15	15
AIPVTKOR	U	PDS	FB	80	10	2

The rest of this section only applies when PDTCC is downloaded from the web. It does not apply when you ordered it via Shopz.

Select this link to go to the next section: [5.3, "FMIDs Deleted" on page 20](#)

The following figures list data sets that are not used by PDTCC, but are required as input for SMP/E.

*Figure 18 (Page 1 of 2). Storage Requirements for PDTCC Web Download Data Sets -- Base*

<b>Data Set Name</b>	<b>T Y P E</b>	<b>O R G</b>	<b>R E C F M</b>	<b>L R E C L</b>	<b>No. of 3390 Trks</b>	<b>No. of DIR Blks</b>
hlq.IBM.HVWR170.F1	U	PDS	FB	80	2	6
hlq.IBM.HVWR170.F1.BIN	U	SEQ	FB	80	1	N/A
hlq.IBM.HVWR170.F2	U	PDS	FB	80	5	6
hlq.IBM.HVWR170.F2.BIN	U	SEQ	FB	80	3	N/A
hlq.IBM.HVWR170.F3	U	PDS	U	0	21	16
hlq.IBM.HVWR170.F3.BIN	U	SEQ	FB	80	11	N/A

Figure 18 (Page 2 of 2). Storage Requirements for PDTCC Web Download Data Sets -- Base

Data Set Name	T Y P E	O R G	R E C F M	L R E C L	No. of 3390 Trks	No. of DIR Blks
hlq.IBM.HVWR170.F4	U	PDS	FB	80	4	7
hlq.IBM.HVWR170.F4.BIN	U	SEQ	FB	80	2	N/A
hlq.IBM.HVWR170.F5	U	PDS	FB	80	2	6
hlq.IBM.HVWR170.F5.BIN	U	SEQ	FB	80	1	N/A
hlq.IBM.HVWR170.F6	U	PDS	FB	80	2	6
hlq.IBM.HVWR170.F6.BIN	U	SEQ	FB	80	1	N/A
hlq.IBM.HVWR170.F7	U	PDS	VB	4096	10	6
hlq.IBM.HVWR170.F7.BIN	U	SEQ	FB	80	8	N/A
hlq.IBM.HVWR170.F8	U	PDSE	U	0	366	N/A
hlq.IBM.HVWR170.F8.BIN	U	SEQ	FB	80	325	N/A
hlq.IBM.HVWR170.F9	U	PDS	U	0	20	6
hlq.IBM.HVWR170.F9.BIN	U	SEQ	FB	80	15	N/A
hlq.IBM.HVWR170.SMPMCS	U	SEQ	FB	80	1	N/A

**Note:** These are temporary data sets, which can be removed after the SMP/E install.

- hlq.IBM.HVWR170.F3, and hlq.IBM.HVWR170.F9 must be a PDS.
- hlq.IBM.HVWR170.F8 must be a PDSE.

Figure 19 (Page 1 of 2). Storage Requirements for PDTCC Web Download Data Sets -- JPN

Data Set Name	T Y P E	O R G	R E C F M	L R E C L	No. of 3390 Trks	No. of DIR Blks
hlq.IBM.JVWR171.F1	U	PDS	FB	80	2	6
hlq.IBM.JVWR171.F1.BIN	U	SEQ	FB	80	1	N/A
hlq.IBM.JVWR171.F2	U	PDS	FB	80	3	6
hlq.IBM.JVWR171.F2.BIN	U	SEQ	FB	80	1	N/A
hlq.IBM.JVWR171.F3	U	PDS	U	0	1	6
hlq.IBM.JVWR171.F3.BIN	U	SEQ	FB	80	1	N/A
hlq.IBM.JVWR171.F4	U	PDS	FB	80	4	7



Figure 19 (Page 2 of 2). Storage Requirements for PDTCC Web Download Data Sets -- JPN

Data Set Name	T Y P E	O R G	R E C F M	L R E C L	No. of 3390 Trks	No. of DIR Blks
hlq.IBM.JVWR171.F4.BIN	U	SEQ	FB	80	2	N/A
hlq.IBM.JVWR171.F5	U	PDS	FB	80	2	6
hlq.IBM.JVWR171.F5.BIN	U	SEQ	FB	80	1	N/A
hlq.IBM.JVWR171.F6	U	PDS	FB	80	2	6
hlq.IBM.JVWR171.F6.BIN	U	SEQ	FB	80	1	N/A
hlq.IBM.JVWR171.SMPMCS	U	SEQ	FB	80	1	N/A

**Note:** These are temporary data sets, which can be removed after the SMP/E install.

- hlq.IBM.JVWR171.F3 must be a PDS.

Figure 20. Storage Requirements for PDTCC Web Download Data Sets -- KOR

Data Set Name	T Y P E	O R G	R E C F M	L R E C L	No. of 3390 Trks	No. of DIR Blks
hlq.IBM.JVWR172.F1	U	PDS	FB	80	2	6
hlq.IBM.JVWR172.F1.BIN	U	SEQ	FB	80	1	N/A
hlq.IBM.JVWR172.F2	U	PDS	FB	80	3	6
hlq.IBM.JVWR172.F2.BIN	U	SEQ	FB	80	1	N/A
hlq.IBM.JVWR172.F3	U	PDS	U	0	1	6
hlq.IBM.JVWR172.F3.BIN	U	SEQ	FB	80	1	N/A
hlq.IBM.JVWR172.F4	U	PDS	FB	80	4	7
hlq.IBM.JVWR172.F4.BIN	U	SEQ	FB	80	2	N/A
hlq.IBM.JVWR172.F5	U	PDS	FB	80	2	6
hlq.IBM.JVWR172.F5.BIN	U	SEQ	FB	80	1	N/A
hlq.IBM.JVWR172.F6	U	PDS	FB	80	2	6
hlq.IBM.JVWR172.F6.BIN	U	SEQ	FB	80	1	N/A
hlq.IBM.JVWR172.SMPMCS	U	SEQ	FB	80	1	N/A

**Note:** These are temporary data sets, which can be removed after the SMP/E install.

- hlq.IBM.JVWR172.F3 must be a PDS.

---

## 5.3 FMIDs Deleted

Installing PDTCC might result in the deletion of other FMIDs. To see which FMIDs will be deleted, examine the ++VER statement in the SMPMCS of the product.

If you do not want to delete these FMIDs at this time, install PDTCC into separate SMP/E target and distribution zones.

**Note:** These FMIDs are not automatically deleted from the Global Zone. If you want to delete these FMIDs from the Global Zone, use the SMP/E REJECT NOFMID DELETEFMID command. See the SMP/E Commands book for details.

---

## 5.4 Special Considerations

### PDSE Considerations:

PDTCC uses the "partitioned data set extended" or PDSE format for the SIPVMODA target library. There are some operational differences between PDS and PDSE data sets. The PDS format may be shared by more than one z/OS system and no special precautions are necessary. However the PDSE format may only be shared by z/OS systems which are part of a sysplex or which are connected using Global Resource Serialization (are in a GRS complex). If z/OS systems share use of a PDSE data set outside of a sysplex or GRS environment, you may experience severe problems when the data set is updated. This is due to the fact that PDSE directory information is cached in storage, and when the data set is updated from one system the other system(s) have no knowledge of the update, and their cached directory information will be incorrect.

You must take care not to share the SIPVMODA data set between z/OS systems unless they are in a sysplex or are connected in a GRS complex. If you need to share the content of the SIPVMODA data set, a separate copy must be created for each z/OS system.

---

## 6.0 Installation Instructions

This chapter describes the installation method and the step-by-step procedures to install and to activate the functions of PDTCC.

Please note the following points:

- If you want to install PDTCC into its own SMP/E environment, consult the SMP/E manuals for instructions on creating and initializing the SMP/CSI and the SMP/E control data sets.
- You can use the sample jobs that are provided to perform part or all of the installation tasks. The SMP/E jobs assume that all DDDEF entries that are required for SMP/E execution have been defined in appropriate zones.
- You can use the SMP/E dialogs instead of the sample jobs to accomplish the SMP/E installation steps.

---

### 6.1 Installing PDTCC

#### 6.1.1 SMP/E Considerations for Installing PDTCC

Use the SMP/E RECEIVE, APPLY, and ACCEPT commands to install this release of PDTCC.

#### 6.1.2 SMP/E Options Subentry Values

The recommended values for certain SMP/E CSI subentries are shown in Figure 21. Using values lower than the recommended values can result in failures in the installation. DSSPACE is a subentry in the GLOBAL options entry. PEMAX is a subentry of the GENERAL entry in the GLOBAL options entry. See the SMP/E manuals for instructions on updating the global zone.

<i>Figure 21. SMP/E Options Subentry Values</i>		
Subentry	Value	Comment
DSSPACE	(1200,1200,1400)	Space allocation
PEMAX	SMP/E Default	IBM recommends using the SMP/E default for PEMAX.

#### 6.1.3 Overview of the installation steps

Overview of steps required to install PDTCC.

1. Allocate sequential data sets to hold SMPMCS and compressed RELFILEs (only applicable for web download, not Shopz orders)
2. Upload the SMPMCS and compressed RELFILEs to the host (only applicable for web download, not Shopz orders)

3. Expand the compressed RELFILEs by using the TSO RECEIVE command (only applicable for web download, not Shopz orders)

**Select this link to skip the web download specific steps: 6.1.7, “Sample Jobs” on page 31**

4. Create SMP/E environment (optional)
5. Perform SMP/E RECEIVE
6. Allocate SMP/E target and distribution libraries
7. Create DDDEF entries
8. Perform SMP/E APPLY
9. Perform SMP/E ACCEPT
10. Run REPORT CROSSZONE

## **6.1.4 Allocate sequential data sets to hold SMPMCS and compressed RELFILEs**

**This section only applies when PDTCC is downloaded from the web. It does not apply when it is ordered via Shopz.**

**Select this link to skip the web download specific steps: 6.1.7, “Sample Jobs” on page 31**

The SMP/E input data sets to install PDTCC are provided as binary files in the downloaded package, and must be uploaded to z/OS.

To ensure that the data sets are allocated correctly, it is advised to allocate empty data sets before uploading the data. You can use the following sample JCL to allocate the data sets. The sample JCL needs the following updates:

1. Add a JOB card and modify the allocation parameters to meet your site requirements.
2. **hlq** specifies the high level qualifier you choose to use for the data sets.
3. (Optional) Replace vvvvvv with the volume serial you choose to use for the data sets.

To allocate the data sets for the PDTCC Base, use this JCL:

```

//ALLOC   PROC LLQ=,
//         FMID=HVWR170,
//         TRKS=
//ALLOC   EXEC PGM=IEFBR14
//DATASET DD DSN=h1q.IBM.&FMID..&LLQ,
//         DISP=(NEW,CATLG),
//         RECFM=FB,LRECL=80,
//         DSORG=PS,BLKSIZE=0,
//         UNIT=SYSALLDA,
//*        VOL=SER=vvvvvv, * uncomment to specify a volser
//         SPACE=(TRK,(&TRKS,5))
//EALLOC  PEND
//*
//F1     EXEC ALLOC,LLQ=F1.BIN,TRKS=1
//F2     EXEC ALLOC,LLQ=F2.BIN,TRKS=3
//F3     EXEC ALLOC,LLQ=F3.BIN,TRKS=11
//F4     EXEC ALLOC,LLQ=F4.BIN,TRKS=2
//F5     EXEC ALLOC,LLQ=F5.BIN,TRKS=1
//F6     EXEC ALLOC,LLQ=F6.BIN,TRKS=1
//F7     EXEC ALLOC,LLQ=F7.BIN,TRKS=8
//F8     EXEC ALLOC,LLQ=F8.BIN,TRKS=325
//F9     EXEC ALLOC,LLQ=F9.BIN,TRKS=15
//SMPMCS EXEC ALLOC,LLQ=SMPMCS,TRKS=1
//*

```

To allocate the data sets for the PDTCC JPN feature, use this JCL:

```

//ALLOC   PROC LLQ=,
//         FMID=JVWR171,
//         TRKS=
//ALLOC   EXEC PGM=IEFBR14
//DATASET DD DSN=h1q.IBM.&FMID..&LLQ,
//         DISP=(NEW,CATLG),
//         RECFM=FB,LRECL=80,
//         DSORG=PS,BLKSIZE=0,
//         UNIT=SYSALLDA,
//*        VOL=SER=vvvvvv, * uncomment to specify a volser
//         SPACE=(TRK,(&TRKS,5))
//EALLOC  PEND
//*
//F1     EXEC ALLOC,LLQ=F1.BIN,TRKS=1
//F2     EXEC ALLOC,LLQ=F2.BIN,TRKS=1
//F3     EXEC ALLOC,LLQ=F3.BIN,TRKS=1
//F4     EXEC ALLOC,LLQ=F4.BIN,TRKS=2
//F5     EXEC ALLOC,LLQ=F5.BIN,TRKS=1
//F6     EXEC ALLOC,LLQ=F6.BIN,TRKS=1
//SMPMCS EXEC ALLOC,LLQ=SMPMCS,TRKS=1
//*

```

To allocate the data sets for the PDTCC KOR feature, use this JCL:

```

//ALLOC   PROC LLQ=,
//         FMID=JVWR172,
//         TRKS=
//ALLOC   EXEC PGM=IEFBR14
//DATASET DD DSN=h1q.IBM.&FMID.&LLQ,
//         DISP=(NEW,CATLG),
//         RECFM=FB,LRECL=80,
//         DSORG=PS,BLKSIZE=0,
//         UNIT=SYSALLDA,
//*        VOL=SER=vvvvvv, * uncomment to specify a volser
//         SPACE=(TRK,(&TRKS,5))
//EALLOC  PEND
//*
//F1     EXEC ALLOC,LLQ=F1.BIN,TRKS=1
//F2     EXEC ALLOC,LLQ=F2.BIN,TRKS=1
//F3     EXEC ALLOC,LLQ=F3.BIN,TRKS=1
//F4     EXEC ALLOC,LLQ=F4.BIN,TRKS=2
//F5     EXEC ALLOC,LLQ=F5.BIN,TRKS=1
//F6     EXEC ALLOC,LLQ=F6.BIN,TRKS=1
//SMPMCS EXEC ALLOC,LLQ=SMPMCS,TRKS=1
//*

```

**Expected Return Codes and Messages:** You will receive a return code of 0 if this job runs correctly.

## 6.1.5 Upload the SMPMCS and compressed RELFILEs to the host

This section only applies when PDTCC is downloaded from the web. It does not apply when it is ordered via Shopz.

Select this link to skip the web download specific steps: 6.1.7, “Sample Jobs” on page 31

Upload the files in binary format from your workstation to the z/OS data sets.

In the following sample dialog, we use FTP from a Microsoft Windows command line to do the transfer. Commands or other information entered by the user are in bold, and the following values are assumed:

<i>Figure 22. User Entered Values</i>	
<b>User enters:</b>	<b>Values</b>
mvsaddr	TCP/IP address or hostname of the z/OS system
tsouid	Your TSO user ID
tsopw	Your TSO password
d:	Location of the downloaded files
hlq	High-level qualifier you used for the data sets you allocated in the previous step

Issue these commands to upload the PDTCC Base:

```
C:\>ftp mvsaddr
Connected to mvsaddr.
220-FTPD1 IBM FTP CS %version% at mvsaddr, %time% on %date%.
220 Connection will close if idle for more than 5 minutes.
User (mvsaddr:(none)): tsouid
331 Send password please.
Password: tsopw
230 tsouid is logged on. Working directory is "tsouid.".
ftp> cd ..
250 " " is the working directory name prefix.
ftp> cd hlq
250 "hlq." is the working directory name prefix.
ftp> binary
200 Representation type is Image
ftp> prompt
Interactive mode Off.
```

```
ftp> mput d:\HVWR170\IBM.HVWR170.F*
200 Port request OK.
125 Storing data set hlq.IBM.HVWR170.F1.BIN
250 Transfer completed successfully.
ftp: 28080 bytes sent in 0.02 sec. (11293.945 Kb/s)
200 Port request OK.
125 Storing data set hlq.IBM.HVWR170.F2.BIN
250 Transfer completed successfully.
ftp: 151840 bytes sent in 0.33 sec. (8667.350 Kb/s)
200 Port request OK.
125 Storing data set hlq.IBM.HVWR170.F3.BIN
250 Transfer completed successfully.
ftp: 611920 bytes sent in 11.91 sec. (8088.401 Kb/s)
200 Port request OK.
125 Storing data set hlq.IBM.HVWR170.F4.BIN
250 Transfer completed successfully.
ftp: 102240 bytes sent in 0.80 sec. (8080.105 Kb/s)
200 Port request OK.
125 Storing data set hlq.IBM.HVWR170.F5.BIN
250 Transfer completed successfully.
ftp: 31360 bytes sent in 0.06 sec. (8515.625 Kb/s)
200 Port request OK.
125 Storing data set hlq.IBM.HVWR170.F6.BIN
250 Transfer completed successfully.
ftp: 5440 bytes sent in 0.02 sec. (11293.945 Kb/s)
200 Port request OK.
125 Storing data set hlq.IBM.HVWR170.F7.BIN
250 Transfer completed successfully.
ftp: 393120 bytes sent in 0.33 sec. (8667.350 Kb/s)
200 Port request OK.
125 Storing data set hlq.IBM.HVWR170.F8.BIN
250 Transfer completed successfully.
ftp: 18130000 bytes sent in 11.91 sec. (8088.401 Kb/s)
200 Port request OK.
125 Storing data set hlq.IBM.HVWR170.F9.BIN
250 Transfer completed successfully.
ftp: 808720 bytes sent in 0.80 sec. (8080.105 Kb/s)
ftp> put d:\HVWR170\IBM.HVWR170.SMPMCS
200 Port request OK.
125 Storing data set hlq.IBM.HVWR170.SMPMCS
250 Transfer completed successfully.
ftp: 14320 bytes sent in 0.01 sec. (4151.042 Kb/s)
ftp> quit
221 Quit command received. Goodbye.
```

Issue these commands to upload the PDTCC JPN feature:



```

C:\>ftp mvsaddr
Connected to mvsaddr.
220-FTPDI IBM FTP CS %version% at mvsaddr, %time% on %date%.
220 Connection will close if idle for more than 5 minutes.
User (mvsaddr:(none)): tsouid
331 Send password please.
Password: tsopw
230 tsouid is logged on. Working directory is "tsouid.".
ftp> cd ..
250 " " is the working directory name prefix.
ftp> cd hlq
250 "hlq." is the working directory name prefix.
ftp> binary
200 Representation type is Image
ftp> prompt
Interactive mode Off.

ftp> mput d:\HVWR170\IBM.JVWR171.F*
200 Port request OK.
125 Storing data set hlq.IBM.JVWR171.F1.BIN
250 Transfer completed successfully.
ftp: 2080 bytes sent in 0.02 sec. (11293.945 Kb/s)
200 Port request OK.
125 Storing data set hlq.IBM.JVWR171.F2.BIN
250 Transfer completed successfully.
ftp: 53120 bytes sent in 0.33 sec. (8667.350 Kb/s)
200 Port request OK.
125 Storing data set hlq.IBM.JVWR171.F3.BIN
250 Transfer completed successfully.
ftp: 1440 bytes sent in 11.91 sec. (8088.401 Kb/s)
200 Port request OK.
125 Storing data set hlq.IBM.JVWR171.F4.BIN
250 Transfer completed successfully.
ftp: 102960 bytes sent in 0.80 sec. (8080.105 Kb/s)
200 Port request OK.
125 Storing data set hlq.IBM.JVWR171.F5.BIN
250 Transfer completed successfully.
ftp: 31360 bytes sent in 0.06 sec. (8515.625 Kb/s)
200 Port request OK.
125 Storing data set hlq.IBM.JVWR171.F6.BIN
250 Transfer completed successfully.
ftp: 5520 bytes sent in 0.02 sec. (11293.945 Kb/s)
ftp> put d:\HVWR170\IBM.JVWR171.SMPMCS
200 Port request OK.
125 Storing data set hlq.IBM.JVWR171.SMPMCS
250 Transfer completed successfully.
ftp: 4880 bytes sent in 0.01 sec. (4151.042 Kb/s)
ftp> quit
221 Quit command received. Goodbye.

```

Issue these commands to upload the PDTCC KOR feature:

```
C:\>ftp mvsaddr  
Connected to mvsaddr.  
220-FTPDI IBM FTP CS %version% at mvsaddr, %time% on %date%.  
220 Connection will close if idle for more than 5 minutes.  
User (mvsaddr:(none)): tsouid  
331 Send password please.  
Password: tsopw  
230 tsouid is logged on.      Working directory is "tsouid".  
ftp> cd ..  
250 " " is the working directory name prefix.  
ftp> cd hlq  
250 "hlq." is the working directory name prefix.  
ftp> binary  
200 Representation type is Image  
ftp> prompt  
Interactive mode Off.
```

```

ftp> mput d:\HVWR170\IBM.JVWR172.F*
200 Port request OK.
125 Storing data set hlq.IBM.JVWR172.F1.BIN
250 Transfer completed successfully.
ftp: 2080 bytes sent in 0.02 sec. (11293.945 Kb/s)
200 Port request OK.
125 Storing data set hlq.IBM.JVWR172.F2.BIN
250 Transfer completed successfully.
ftp: 52960 bytes sent in 0.33 sec. (8667.350 Kb/s)
200 Port request OK.
125 Storing data set hlq.IBM.JVWR172.F3.BIN
250 Transfer completed successfully.
ftp: 1440 bytes sent in 11.91 sec. (8088.401 Kb/s)
200 Port request OK.
125 Storing data set hlq.IBM.JVWR172.F4.BIN
250 Transfer completed successfully.
ftp: 103920 bytes sent in 0.80 sec. (8080.105 Kb/s)
200 Port request OK.
125 Storing data set hlq.IBM.JVWR172.F5.BIN
250 Transfer completed successfully.
ftp: 31520 bytes sent in 0.06 sec. (8515.625 Kb/s)
200 Port request OK.
125 Storing data set hlq.IBM.JVWR172.F6.BIN
250 Transfer completed successfully.
ftp: 5520 bytes sent in 0.02 sec. (11293.945 Kb/s)
ftp> put d:\HVWR170\IBM.JVWR172.SMPMCS
200 Port request OK.
125 Storing data set hlq.IBM.JVWR172.SMPMCS
250 Transfer completed successfully.
ftp: 4880 bytes sent in 0.01 sec. (4151.042 Kb/s)
ftp> quit
221 Quit command received. Goodbye.

```

## 6.1.6 Expand the compressed RELFILEs with TSO RECEIVE

**This section only applies when PDTCC is downloaded from the web. It does not apply when it is ordered via Shopz.**

**Select this link to skip the web download specific steps: [6.1.7, “Sample Jobs” on page 31](#)**

The uploaded RELFILEs are in TSO TRANSMIT format and must be expanded with the TSO RECEIVE command to become usable. **hlq** Specifies the high level qualifier you used for the data sets you allocated in the previous step.

- BASE

```
RECEIVE INDA('hlq.IBM.HVWR170.F1.BIN')
RECEIVE INDA('hlq.IBM.HVWR170.F2.BIN')
RECEIVE INDA('hlq.IBM.HVWR170.F3.BIN')
RECEIVE INDA('hlq.IBM.HVWR170.F4.BIN')
RECEIVE INDA('hlq.IBM.HVWR170.F5.BIN')
RECEIVE INDA('hlq.IBM.HVWR170.F6.BIN')
RECEIVE INDA('hlq.IBM.HVWR170.F7.BIN')
RECEIVE INDA('hlq.IBM.HVWR170.F8.BIN')
RECEIVE INDA('hlq.IBM.HVWR170.F9.BIN')
```

- JPN

```
RECEIVE INDA('hlq.IBM.JVWR171.F1.BIN')
RECEIVE INDA('hlq.IBM.JVWR171.F2.BIN')
RECEIVE INDA('hlq.IBM.JVWR171.F3.BIN')
RECEIVE INDA('hlq.IBM.JVWR171.F4.BIN')
RECEIVE INDA('hlq.IBM.JVWR171.F5.BIN')
RECEIVE INDA('hlq.IBM.JVWR171.F6.BIN')
```

- KOR

```
RECEIVE INDA('hlq.IBM.JVWR172.F1.BIN')
RECEIVE INDA('hlq.IBM.JVWR172.F2.BIN')
RECEIVE INDA('hlq.IBM.JVWR172.F3.BIN')
RECEIVE INDA('hlq.IBM.JVWR172.F4.BIN')
RECEIVE INDA('hlq.IBM.JVWR172.F5.BIN')
RECEIVE INDA('hlq.IBM.JVWR172.F6.BIN')
```

When prompted on the TSO RECEIVE commands, use the appropriate DSNAME from the list below:

- BASE

```
DS('hlq.IBM.HVWR170.F1')
DS('hlq.IBM.HVWR170.F2')
DS('hlq.IBM.HVWR170.F3')
DS('hlq.IBM.HVWR170.F4')
DS('hlq.IBM.HVWR170.F5')
DS('hlq.IBM.HVWR170.F6')
DS('hlq.IBM.HVWR170.F7')
DS('hlq.IBM.HVWR170.F8')
DS('hlq.IBM.HVWR170.F9')
```

- JPN

```
DS('hlq.IBM.JVWR171.F1')
DS('hlq.IBM.JVWR171.F2')
DS('hlq.IBM.JVWR171.F3')
DS('hlq.IBM.JVWR171.F4')
DS('hlq.IBM.JVWR171.F5')
DS('hlq.IBM.JVWR171.F6')
```

- KOR

```

DS('h1q.IBM.JVWR172.F1')
DS('h1q.IBM.JVWR172.F2')
DS('h1q.IBM.JVWR172.F3')
DS('h1q.IBM.JVWR172.F4')
DS('h1q.IBM.JVWR172.F5')
DS('h1q.IBM.JVWR172.F6')

```

## 6.1.7 Sample Jobs

The following sample installation jobs are provided as part of the product to help you install PDTCC:

<i>Figure 23. Sample Installation Jobs -- BASE</i>			
Job Name	Job Type	Description	RELFILE
IPVWSMPE	SMP/E	Sample job to create an SMP/E environment (optional)	IBM.HVWR170.F2
IPVWRECV	RECEIVE	Sample SMP/E RECEIVE job	IBM.HVWR170.F2
IPVWALOC	ALLOCATE	Sample job to allocate target and distribution libraries	IBM.HVWR170.F2
IPVWDDEF	DDDEF	Sample job to define SMP/E DDDEFs	IBM.HVWR170.F2
IPVWAPLY	APPLY	Sample SMP/E APPLY job	IBM.HVWR170.F2
IPVWACPT	ACCEPT	Sample SMP/E ACCEPT job	IBM.HVWR170.F2
<b>Note:</b> When PDTCC is downloaded from the web, the RELFILE data set name will be prefixed by your chosen high level qualifier, as documented in section 6.1.6, "Expand the compressed RELFILES with TSO RECEIVE" on page 29.			

<i>Figure 24. Sample Installation Jobs -- JPN</i>			
Job Name	Job Type	Description	RELFILE
IPVWRCVJ	RECEIVE	Sample SMP/E RECEIVE job	IBM.JVWR171.F2
IPVWALOJ	ALLOCATE	Sample job to allocate target and distribution libraries	IBM.JVWR171.F2
IPVWDDFJ	DDDEF	Sample job to define SMP/E DDDEFs	IBM.JVWR171.F2
IPVWAPLJ	APPLY	Sample SMP/E APPLY job	IBM.JVWR171.F2
IPVWACPJ	ACCEPT	Sample SMP/E ACCEPT job	IBM.JVWR171.F2
<b>Note:</b> When PDTCC is downloaded from the web, the RELFILE data set name will be prefixed by your chosen high level qualifier, as documented in section 6.1.6, "Expand the compressed RELFILES with TSO RECEIVE" on page 29.			

Figure 25. Sample Installation Jobs -- KOR

Job Name	Job Type	Description	RELFILE
IPVWRCVK	RECEIVE	Sample SMP/E RECEIVE job	IBM.JVWR172.F2
IPVWALOK	ALLOCATE	Sample job to allocate target and distribution libraries	IBM.JVWR172.F2
IPVWDDFK	DDDEF	Sample job to define SMP/E DDDEFs	IBM.JVWR172.F2
IPVWAPLK	APPLY	Sample SMP/E APPLY job	IBM.JVWR172.F2
IPVWACPK	ACCEPT	Sample SMP/E ACCEPT job	IBM.JVWR172.F2
<p><b>Note:</b> When PDTCC is downloaded from the web, the RELFILE data set name will be prefixed by your chosen high level qualifier, as documented in section 6.1.6, "Expand the compressed RELFILES with TSO RECEIVE" on page 29.</p>			

The rest of this section only applies when PDTCC is ordered via Shopz. It does not apply when you downloaded it from the web.

Select this link to go to the next section: [6.1.8, "Create SMP/E environment \(optional\)"](#) on page 34

You can access the sample installation jobs by performing an SMP/E RECEIVE (refer to 6.1.9, "Perform SMP/E RECEIVE" on page 34) then copy the jobs from the RELFILES to a work data set for editing and submission. See Figure 23 on page 31 to find the appropriate relfile data set.

You can also copy the sample installation jobs from the tape or product files by submitting the following job. Depending on your distribution medium, use either the //TAPEIN or the //FILEIN DD statement and comment out or delete the other statement. Before you submit the job, add a job card and change the lowercase parameters to uppercase values to meet the requirements of your site.

To copy the sample jobs for PDTCC Base, use this JCL:

```
//STEP1 EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=*
//TAPEIN DD DSN=IBM.HVWR170.F2,
// DISP=(OLD,KEEP),
// LABEL=(X,SL),
// VOL=SER=VWR170,
// UNIT=tunit
//FILEIN DD DSN=IBM.HVWR170.F2,
// DISP=SHR,
//* VOL=SER=filevol,
// UNIT=SYSALLDA
//OUT DD DSNAME=jcl-library-name,
// DISP=(NEW,CATLG,DELETE),
// SPACE=(TRK,(5,5,5)),
//* VOL=SER=dasdvol,
// UNIT=SYSALLDA
```

```
//SYSUT3 DD UNIT=SYSALLDA,SPACE=(CYL,(1,1))
//SYSIN DD *
COPY INDD=xxxxIN,OUTDD=OUT
SELECT MEMBER=(IPVWSMPE,IPVWRECV,IPVWALOC)
SELECT MEMBER=(IPVWDDDEF,IPVWAPLY,IPVWACPT)
/*
```

To copy the sample jobs for PDTCC JPN feature, use this JCL:

```
//STEP1 EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=*
//TAPEIN DD DSN=IBM.JVWR171.F2,
// DISP=(OLD,KEEP),
// LABEL=(x,SL),
// VOL=SER=VWR171,
// UNIT=tunit
//FILEIN DD DSN=IBM.JVWR171.F2,
// DISP=SHR,
//* VOL=SER=filevol,
// UNIT=SYSALLDA
//OUT DD DSNAME=jcl-library-name,
// DISP=(NEW,CATLG,DELETE),
// SPACE=(TRK,(5,5,5)),
//* VOL=SER=dasdvol,
// UNIT=SYSALLDA
//SYSUT3 DD UNIT=SYSALLDA,SPACE=(CYL,(1,1))
//SYSIN DD *
COPY INDD=xxxxIN,OUTDD=OUT
SELECT MEMBER=(IPVWRCVJ,IPVWALQJ)
SELECT MEMBER=(IPVWDDFJ,IPVWAPLJ,IPVWACPJ)
/*
```

To copy the sample jobs for PDTCC KOR feature, use this JCL:

```
//STEP1 EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=*
//TAPEIN DD DSN=IBM.JVWR172.F2,
// DISP=(OLD,KEEP),
// LABEL=(x,SL),
// VOL=SER=VWR172,
// UNIT=tunit
//FILEIN DD DSN=IBM.JVWR172.F2,
// DISP=SHR,
//* VOL=SER=filevol,
// UNIT=SYSALLDA
//OUT DD DSNAME=jcl-library-name,
// DISP=(NEW,CATLG,DELETE),
// SPACE=(TRK,(5,5,5)),
//* VOL=SER=dasdvol,
// UNIT=SYSALLDA
```

```
//SYSUT3 DD UNIT=SYSALLDA,SPACE=(CYL,(1,1))
//SYSIN DD *
COPY INDD=xxxxIN,OUTDD=OUT
SELECT MEMBER=(IPVWRCVK,IPVWALOK)
SELECT MEMBER=(IPVWDDFK,IPVWAPLK,IPVWACPK)
/*
```

See the following information to update the statements in the previous sample:

**TAPEIN:**

**tunit** is the unit value that matches the product package.  
**x** is the tape file number that indicates the location of the data set name on the tape.  
 See the documentation that is provided by CBPDO for the location of IBM.HVWR170.F1, IBM.JVWR171.F1, and IBM.JVWR172.F1 on the tape.

**FILEIN:**

**filevol** is the volume serial of the DASD device where the downloaded files reside.

**OUT:**

**jcl-library-name** is the name of the output data set where the sample jobs are stored.  
**dasdvol** is the volume serial of the DASD device where the output data set resides. Uncomment the statement if a volume serial must be provided.

**SYSIN:**

**xxxxIN** is either TAPEIN or FILEIN depending on your input DD statement.

## 6.1.8 Create SMP/E environment (optional)

If you are using an existing CSI, do not run the sample job IPVWSMPE.

If you choose to create a new SMP/E environment for this install, a sample job is provided or you may choose to use your own JCL. If you choose to use the sample job provided, edit and submit IPVWSMPE. Consult the instructions in the sample job for more information.

**Expected Return Codes and Messages:** You will receive a return code of 0 if this job runs correctly.

## 6.1.9 Perform SMP/E RECEIVE

If you have obtained PDTCC as part of a CBPDO, use the RCVPDO job in the CBPDO RIMLIB data set to receive the PDTCC FMIDs, service, and HOLDDATA that are included on the CBPDO package. For more information, see the documentation that is included in the CBPDO.

You can also choose to edit and submit sample job IPVWRECV to perform the SMP/E RECEIVE for PDTCC. Consult the instructions in the sample job for more information.

If your order contains the Japanese feature, edit and submit sample job IPVWRCVJ to perform the SMP/E RECEIVE for that feature. Consult the instructions in the sample job for more information.

If your order contains the Korean feature, edit and submit sample job IPVWRCVK to perform the SMP/E RECEIVE for that feature. Consult the instructions in the sample job for more information.



**Expected Return Codes and Messages:** You will receive a return code of 0 if this job runs correctly.

### 6.1.10 Allocate SMP/E Target and Distribution Libraries

Edit and submit sample job IPVWALOC to allocate the SMP/E target and distribution libraries for PDTCC. Consult the instructions in the sample job for more information.

If your order contains the Japanese feature, edit and submit sample job IPVWALOJ to allocate the SMP/E target and distribution libraries for that feature. Consult the instructions in the sample job for more information.

If your order contains the Korean feature, edit and submit sample job IPVWALOK to allocate the SMP/E target and distribution libraries for that feature. Consult the instructions in the sample job for more information.

**Expected Return Codes and Messages:** You will receive a return code of 0 if this job runs correctly.

### 6.1.11 Create DDDEF Entries

Edit and submit sample job IPVWDDEF to create DDDEF entries for the SMP/E target and distribution libraries for PDTCC. Consult the instructions in the sample job for more information.

If your order contains the Japanese feature, edit and submit sample job IPVWDDFJ to create DDDEF entries for the SMP/E target and distribution libraries for that feature. Consult the instructions in the sample job for more information.

If your order contains the Korean feature, edit and submit sample job IPVWDDFK to create DDDEF entries for the SMP/E target and distribution libraries for that feature. Consult the instructions in the sample job for more information.

**Expected Return Codes and Messages:** You will receive a return code of 0 if this job runs correctly.

### 6.1.12 Perform SMP/E APPLY

1. Ensure that you have the latest HOLDDATA; then edit and submit sample job IPVWAPLY to perform an SMP/E APPLY CHECK for PDTCC. Consult the instructions in the sample job for more information.

If your order contains the Japanese feature, edit and submit sample job IPVWAPLJ to perform an SMP/E APPLY CHECK for that feature. Consult the instructions in the sample job for more information.

If your order contains the Korean feature, edit and submit sample job IPVWAPLK to perform an SMP/E APPLY CHECK for that feature. Consult the instructions in the sample job for more information.

The latest HOLDDATA is available through several different portals, including <http://service.software.ibm.com/holdata/390holddata.html>. The latest HOLDDATA may identify HIPER

and FIXCAT APARs for the FMIDs you will be installing. An APPLY CHECK will help you determine if any HIPER or FIXCAT APARs are applicable to the FMIDs you are installing. If there are any applicable HIPER or FIXCAT APARs, the APPLY CHECK will also identify fixing PTFs that will resolve the APARs, if a fixing PTF is available.

You should install the FMIDs regardless of the status of unresolved HIPER or FIXCAT APARs. However, do not deploy the software until the unresolved HIPER and FIXCAT APARs have been analyzed to determine their applicability. That is, before deploying the software either ensure fixing PTFs are applied to resolve all HIPER or FIXCAT APARs, or ensure the problems reported by all HIPER or FIXCAT APARs are not applicable to your environment.

To receive the full benefit of the SMP/E Causer SYSMOD Summary Report, do *not* bypass the PRE, ID, REQ, and IFREQ on the APPLY CHECK. The SMP/E root cause analysis identifies the cause only of *errors* and not of *warnings* (SMP/E treats bypassed PRE, ID, REQ, and IFREQ conditions as warnings, instead of errors).

Here are sample APPLY commands:

- a. To ensure that all recommended and critical service is installed with the FMIDs, receive the latest HOLDDATA and use the APPLY CHECK command as follows

```
APPLY S(fmid,fmid,...) CHECK
FORFMID(fmid,fmid,...)
SOURCEID(RSU*)
FIXCAT(IBM.ProductInstall-RequiredService)
GROUPEXTEND .
```

Some HIPER APARs might not have fixing PTFs available yet. You should analyze the symptom flags for the unresolved HIPER APARs to determine if the reported problem is applicable to your environment and if you should bypass the specific ERROR HOLDS in order to continue the installation of the FMIDs.

This method requires more initial research, but can provide resolution for all HIPERs that have fixing PTFs available and are not in a PE chain. Unresolved PEs or HIPERs might still exist and require the use of BYPASS.

- b. To install the FMIDs without regard for unresolved HIPER APARs, you can add the BYPASS(HOLDCLASS(HIPER)) operand to the APPLY CHECK command. This will allow you to install FMIDs even though one or more unresolved HIPER APARs exist. After the FMIDs are installed, use the SMP/E REPORT ERRSYSMODS command to identify unresolved HIPER APARs and any fixing PTFs.

```
APPLY S(fmid,fmid,...) CHECK
FORFMID(fmid,fmid,...)
SOURCEID(RSU*)
FIXCAT(IBM.ProductInstall-RequiredService)
GROUPEXTEND
BYPASS(HOLDCLASS(HIPER)) .
..any other parameters documented in the program directory
```

This method is quicker, but requires subsequent review of the Exception SYSMOD report produced by the REPORT ERRSYSMODS command to investigate any unresolved HIPERs. If

you have received the latest HOLDDATA, you can also choose to use the REPORT MISSINGFIX command and specify Fix Category IBM.ProductInstall-RequiredService to investigate missing recommended service.

If you bypass HOLDDs during the installation of the FMIDs because fixing PTFs are not yet available, you can be notified when the fixing PTFs are available by using the APAR Status Tracking (AST) function of ServiceLink or the APAR Tracking function of ResourceLink.

2. After you take actions that are indicated by the APPLY CHECK, remove the CHECK operand and run the job again to perform the APPLY.

**Note:** The GROUPEXTEND operand indicates that SMP/E applies all requisite SYSMODs. The requisite SYSMODS might be applicable to other functions.

**Expected Return Codes and Messages from APPLY CHECK:** You will receive a return code of 0 if this job runs correctly.

**Expected Return Codes and Messages from APPLY:** You will receive a return code of 0 if this job runs correctly.

### 6.1.13 Perform SMP/E ACCEPT

Edit and submit sample job IPVWACPT to perform an SMP/E ACCEPT CHECK for PDTCC. Consult the instructions in the sample job for more information.

If your order contains the Japanese feature, edit and submit sample job IPVWACPJ to perform an SMP/E ACCEPT CHECK for that feature. Consult the instructions in the sample job for more information.

If your order contains the Korean feature, edit and submit sample job IPVWACPK to perform an SMP/E ACCEPT CHECK for that feature. Consult the instructions in the sample job for more information.

To receive the full benefit of the SMP/E Causer SYSMOD Summary Report, do *not* bypass the PRE, ID, REQ, and IFREQ on the ACCEPT CHECK. The SMP/E root cause analysis identifies the cause of *errors* but not *warnings* (SMP/E treats bypassed PRE, ID, REQ, and IFREQ conditions as warnings rather than errors).

Before you use SMP/E to load new distribution libraries, it is recommended that you set the ACCJCLIN indicator in the distribution zone. In this way, you can save the entries that are produced from JCLIN in the distribution zone whenever a SYSMOD that contains inline JCLIN is accepted. For more information about the ACCJCLIN indicator, see the description of inline JCLIN in the SMP/E Commands book for details.

After you take actions that are indicated by the ACCEPT CHECK, remove the CHECK operand and run the job again to perform the ACCEPT.

**Note:** The GROUPEXTEND operand indicates that SMP/E accepts all requisite SYSMODs. The requisite SYSMODS might be applicable to other functions.

**Expected Return Codes and Messages from ACCEPT CHECK:** You will receive a return code of 0 if this job runs correctly.

If PTFs that contain replacement modules are accepted, SMP/E ACCEPT processing will link-edit or bind the modules into the distribution libraries. During this processing, the Linkage Editor or Binder might issue messages that indicate unresolved external references, which will result in a return code of 4 during the ACCEPT phase. You can ignore these messages, because the distribution libraries are not executable and the unresolved external references do not affect the executable system libraries.

**Expected Return Codes and Messages from ACCEPT:** You will receive a return code of 0 if this job runs correctly.

### 6.1.14 Run REPORT CROSSZONE

The SMP/E REPORT CROSSZONE command identifies requisites for products that are installed in separate zones. This command also creates APPLY and ACCEPT commands in the SMPPUNCH data set. You can use the APPLY and ACCEPT commands to install those cross-zone requisites that the SMP/E REPORT CROSSZONE command identifies.

After you install PDTCC, it is recommended that you run REPORT CROSSZONE against the new or updated target and distribution zones. REPORT CROSSZONE requires a global zone with ZONEINDEX entries that describe all the target and distribution libraries to be reported on.

For more information about REPORT CROSSZONE, see the SMP/E manuals.

### 6.1.15 Cleaning Up Obsolete Data Sets, Paths, and DDDEFs

The web download data sets listed in Figure 18 on page 17 (section 5.2.3, "DASD Storage Requirements" on page 12) are temporary data sets. You can delete these data sets after you complete the SMP/E install.

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## 6.2 Product Customization

The publication *IBM Problem Determination Tools Common Component Customization and User Guide* (SC19-4159) contains the necessary information to customize and use PDTCC.

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## 7.0 Notices

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## Reader's Comments

### Program Directory for IBM Problem Determination Tools Common Component, September 2016

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