

# CA Dispatch™

## Installation Guide

Release 11.7



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## CA Technologies Product References

- CA 1®
- CA 7™ Workload Automation
- CA Common Services
- CA Connect™
- CA Culprit™
- CA DRAS™
- CA Easytrieve®
- CA IDMS™
- CA LPD Report Convergence
- CA Mainframe Software Manager (CA MSM)
- CA Opera™
- CA Output Management Document Viewer
- CA Output Management Web Viewer
- CA Raps®
- CA Scheduler®
- CA Sort®
- CA Spool™
- CA TLC (CA Total License Care)

# Contact CA Technologies

## Contact CA Support

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- Online and telephone contact information for technical assistance and customer services
- Information about user communities and forums
- Product and documentation downloads
- CA Support policies and guidelines
- Other helpful resources appropriate for your product

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# Chapter 1: Overview

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This guide describes how to install and implement CA Dispatch.

This section contains the following topics:

[Audience](#) (see page 9)

[How the Installation Process Works](#) (see page 9)

[Installation Considerations](#) (see page 11)

## Audience

CA Dispatch Output Management is an online, interactive report distribution management system designed to reduce paper consumption and increase efficiency of report distribution. CA Dispatch supports a comprehensive online viewing facility that eliminates the need to print reports altogether.

This guide is targeted to the systems programmer who will install, use, and maintain CA Dispatch. It assumes you are familiar with CA Dispatch and IBM computer system terms and concepts. You should also have a working knowledge of MVS online facilities such as ISPF, since the CA Dispatch panels behave in a similar fashion.

## How the Installation Process Works

CA Technologies has standardized product installations across all mainframe products. Installation uses the following process:

- Acquisition—Transports the software to your z/OS system.
- Installation using SMP/E—Optionally creates a CSI environment and runs the RECEIVE, APPLY and ACCEPT steps. The software is untailed.
- Deployment—Copies the target libraries to another system or LPAR.
- Configuration—Creates customized load modules, bringing the software to an executable state.

CA MSM provides a web-based interface to make the standardized installation process easier. Using CA MSM, someone with limited knowledge of JCL and SMP/E can install a product.

**Note:** If you do not have CA MSM, you can download it from the Download Center at [the CA Support Online website](#). Follow the installation instructions in the CA Mainframe Software Manager documentation bookshelf on the CA Mainframe Software Manager product page. The standardized installation process can also be completed manually.

To install your product, do the following tasks:

1. Prepare for the installation by [confirming that your site meets all installation requirements](#) (see page 13).
2. Acquire the product using one of the following methods:
  - CA MSM
  - Pax-Enhanced Electronic Software Delivery (ESD)
  - Order a DVD.
3. Install the product based on your acquisition method.
4. Install the CA Common Services using the pax files that contain the CA Common Services you need at your site.

All sites should install all CA Common Services contained in the Required CA Common Service bundle.
5. Apply maintenance, if applicable.
6. Deploy your target libraries.
7. Configure your product.

## Installation Considerations

Before installation, you must prepare your system, assemble your materials, then follow the installation steps exactly and in order. Use the following list as a guide for the installation process.

1. Ensure that CA Common Services are installed on your system, and that the required hardware, software, and libraries are prepared.

CA Dispatch uses the CAI Resource Initialization Manager CAIRIM portion of the CA Common Services. CAIRIM prepares the operating system for CA products and components, and then executes them.

CA DRAS requires the CAIENF (Event Notification Facility) and the CAICCI (Common Communications Interface) components of the CA Common Services.

**Note:** For more information about system requirements, see the chapter "System Requirements".

2. Install CA Dispatch using one of the four installation methods -- CA MSM, PAX Enhanced ESD, DVD, or from a product tape.
3. Use options and initialization parameters to customize the solution according to the needs of your site, as follows:
  - Configure your CA Dispatch system.
  - Install the online interfaces including ISPF, TSO, VTAM, CICS and IMS.

**Note:** For more information about installing online interfaces, see the chapter "Installing Online Interfaces."

4. Optionally, configure and customize CA DRAS.

**Note:** For more information, see the *CA DRAS Operations Guide*.



# Chapter 2: Preparing for Installation

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This section describes what you need to know and do before you install the product.

This section contains the following topics:

- [Hardware Requirements](#) (see page 13)
- [Software Requirements - SYSMODs](#) (see page 14)
- [CA Common Services System Requirements](#) (see page 15)
- [Security Requirements](#) (see page 18)
- [Storage Requirements](#) (see page 19)
- [CADDSP Linear Data Set \(LDS\) File Considerations](#) (see page 22)
- [DVD Space Requirements](#) (see page 26)
- [CA DRAS Is Now Included with CA Dispatch](#) (see page 26)
- [Overview of the Cooperative Process](#) (see page 27)
- [Library Authorization](#) (see page 29)
- [CA IDMS Considerations](#) (see page 29)
- [Other Requirements](#) (see page 29)
- [Concurrent Releases](#) (see page 31)

## Hardware Requirements

This section describes the hardware and libraries required for CA Dispatch.

### Environment

- CA Dispatch only supports those releases of z/OS and JES2 that are supported by IBM. This includes z/OS, and the related releases of JES2 and JES3.
- CA Dispatch runs on any standard processors supported by z/OS
- To run CA Dispatch, you must allocate a region size of at least 7000 KB.
- CA Dispatch supports the following devices: 3380, 3390 and 9345 (RAID technology).

### Supported Cryptographic Hardware

Two cryptographic hardware choices are available for use on various systems:

- Cryptographic Coprocessor Facility (CCF) A standard component on z900 and a no-cost option for z800. On z800 and z900 systems, ICSF requires CCF.
- CP Assist for Cryptographic Functions (CPACF) A standard component on z9 and z10 and a no-cost option for z890 and z990.

Other available cryptographic hardware components do not necessarily improve encryption performance, as described in the following list:

- Peripheral Component Interconnect (PCI)-based coprocessors (PCICC, PCIXCC, and Crypto Express2), which provide secure key storage, hardware hashing, and SSL support.
- PCI-based accelerators (PCICA, Crypto Express2 configured in accelerator mode), which provide high performance SSL assistance.

**Note:** Because CA Dispatch uses a clear key, it does not require the use of the Cryptographic Express2 coprocessor (CEX2C). To run ICSF without a CEX2C coprocessor, you will need ICFS release FMID HCR7751 or higher.

If you are running an older release of ICSF, you will be required to purchase a CEX2C coprocessor because older releases of ICSF required that hardware to initialize the CKDS data set.

## Enabling ICSF Encryption

If you are enabling ICSF encryption on CA Dispatch, security privileges may be needed to allow access and update of keys in the ICSF CKDS data set. CA Dispatch does not access the ICSF CKDS data set directly but does invoke ICSF services to create new keys and access existing keys. If access to ICSF keys is restricted via an external security product, started task, batch jobs, and online users of CA Dispatch will need sufficient authorization to access these ICSF keys.

All CA Dispatch started tasks, batch jobs, utilities, and online users that access report data from CA Dispatch require [at a minimum] READ access to the ICSF keys.

The following started tasks, batch jobs, utilities, and online users will require WRITE access to ICSF keys:

- Any CA Dispatch External Archive tasks
- Any CA Dispatch External Extract tasks
- CA Dispatch main region
- Any OLVO (Online Viewing Only) regions
- All CADDSPx started tasks
- The Archive Duplicate batch job DSEXARB (program CADRARUT)

## Software Requirements - SYSMODs

There are two types of SYSMODs, Product Component, and Common Services for z/OS and SYSMODs.

## Product Component SYSMODs

The following are the product component SYSMODs:

CADSB70	CA Dispatch r11.7 Base Function
CADSB71	CA Dispatch CA IDMS Modules
CADSB72	CA Dispatch r11.7 CADDSPS Component
CBY3B70	CA DRAS r11.7 Component
CBY3B71	CA Dispatch r11.7 DRAS Agents

## CA Common Services System Requirements

We recommend that you maintain CA Common Services at a current maintenance level to ensure compatibility. For the latest information on maintenance requirements, go to CA Support Online.

Note: If you intend to use CA MSM for your installation and maintenance tasks, there may be certain additional CA Common Service requirements. For more information, see the Software Requirements section in the CA Mainframe Software Manager Product Guide.

The following CA Common Services are used with CA Dispatch:

- CAIRIM - Using the CAIRIM component requires CA Common Services.
- CAICCI
- CAIENF
- CA LMP
- CA C Runtime
- CA Health Checker Common Service

Note: If other CA products are installed at your site, some of these services may already be installed.

## CA Common Services Installation Considerations

If CA Common Services have not been installed on your system, you must do so before proceeding with this installation. For more information, see the CA Common Services Installation Guide.

### CAIRIM

CAIRIM, the CAI Resource Initialization Manager, is the common driver for a collection of dynamic initialization routines that eliminate the need for user SVCs, SMF exits, subsystems, and other installation requirements commonly encountered when installing systems software.

CAIRIM prepares the operating system for CA products and components, and then executes them. Some of the tasks CAIRIM performs are:

- Obtaining SMF data
- Verification of proper software installation
- Installation of MVS interfaces
- Automatic startup of the products of CA and other vendors
- Proper timing and order of initialization

CAIRIM must be installed on your system. If it has not already been installed, you must run installation Step 1. See the chapter "Installation Steps" for specific instructions.

### CAIENF

CAIENF is an operating system interface component that provides a simple approach for CA products to obtain data from an MVS system by interfacing to any of the z/OS applications used by CA, thus exploiting technologies such as relational database architectures for the benefit of the entire product line.

Be aware of the following:

- CAIENF must be installed into an APF-authorized library.  
Linklist is recommended although it is not required.
- CAIENF runs as a started task within its own address space.  
A database must be allocated and initialized for CAIENF to use. For more information on space requirements, see the CA Common Services documentation.

**Note:** CA Dispatch does not use the CAIENF/CICS component



## CAICCI

CAICCI (Common Communication Interface) provides CA enterprise applications with a wealth of capabilities, including common communications, cooperative processing, and database server facilities, as well as distributed database management. Full support for all forms of distributed processing ensures the highest degree of flexibility for the enterprise.

CA Dispatch uses the CAICCI (Common Communication Interface) service to transfer data from the mainframe to the PC. CAICCI is a facility that allows CA products to communicate with other applications in a simple, straightforward manner. CAICCI builds a layer on top of today's communication and network software so that an application can be isolated from the specifics of its environment.

CAICCI must be installed into an APF (Authorized Program Facility) authorized library. The library must be the same library as that used for CAIENF component installation.

CAICCI runs as a CAIENF subtask in the address space of CAIENF. It may also use additional address spaces.

For CSA requirements for CAICCI, see the *Common Services for z/OS* documentation.

## CA LMP

The CA License Management Program (CA LMP) is a standardized automated approach to the tracking of licensed software that uses common real time enforcement software to validate the user's configuration. CA LMP reports on activities related to the license, usage, and financial activity of program solutions.

CA LMP features include:

- A common key data set that can be shared among many CPUs
- The use of "check digits" to detect errors in transcribing key information
- Execution keys that can be entered without affecting any CA software solution already running
- No special maintenance requirements

CA Dispatch is licensed with an LMP key. You acquire the LMP key using one of the following methods:

- From your product media
- With ESD
- From CA Support

## CA C Runtime

CA C Runtime is a runtime facility with reentry capabilities. Its modular architecture insulates C runtime programs from system and release dependencies. There is little, if any, system-dependent code linked with the user program--this allows for smaller user programs and easier maintenance.

CA C Runtime uses a memory manager to handle dynamic allocation requests for small pieces of storage. This means that fewer calls need to be made on the operating system. The result is faster allocation and de-allocation. The routines used are grouped under the CA service code, F331.

**Important!** CA C Runtime is required for CA Dispatch.

Some of the features of CA-C Runtime are:

- Calls functions written in other languages, such as Assembler or COBOL
- Runtime kernels for each host environment
- Device drivers for each environment
- Single data structure for entry points

## Health Checker Common Service

CA Dispatch issues health checks and requires the CA Health Checker Common Service modules to be available in the CA Dispatch environment. CA Dispatch links to the CA Health Checker Common Service product to provide a standard access to the operating system's health checker services. The CA Health Checker Common Service runs under the IBM Health Checker for z/OS.

To successfully register CA checks, the IBM Health Checker must be active. For more information about the IBM Health Checker, see the IBM Health Checker for z/OS User's Guide – as appropriate for your release of z/OS.

## Security Requirements

To complete the tasks in this guide, you need the following security privileges:

- All installation jobs should be run with a userid that has the permissions required to create product required files and allow full access to those product files.
- If ICSF encryption is being utilized, user must have permissions to access, and possibly modify, ICSF parameters.

## Storage Requirements

Ensure that you have the following storage available:

- If installing with ESD, 250 cylinders for the downloaded files.
- For installation and setup:
  - Installation = 700 cylinders
  - SMP/E temporary libraries = 250 cylinders]

## CA Dispatch Target Libraries

Use this table to estimate disk space for the target libraries needed to install CA Dispatch:

Library Name	Blksize	Tracks	Dir Blks	Description
CAI.CADSCLSO	0	2	5	Clist library
CAI.CADSDA42	4276	1850	5	Dictionary Files
CAI.CADSDA46	4628	52	5	Helptext Files
CAI.CADSJCL	0	25	75	JCL library
CAI.CADSLMDO	6144	6	5	ISPF load library
CAI.CADSLOAD	6144	750	550	Load library
CAI.CADSMAC	0	250	400	Macro library
CAI.CADSOPTN	3120	85	250	Options library **
CAI.CADSPNLO	0	2	5	ISPF panels library
CAI.CADSPROC	0	25	75	Procedure library
CAI.CADSSRC	0	8	20	Source library
CAI.CADXML	32760	25	5	XML data
Total		3080		

\*\* Do not reblock this library

## CA DRAS Target Libraries

This table lists the amount of disk space needed to install the CA DRAS target libraries.

Library Name	Blksize	Blocks	Dir Blks	Description
CAI.CBY3LOAD	32760	115	99	Load library
CAI.CBY3JCL	0	5	10	JCL library
CAI.CBY3OPTN	0	5	10	Options library
CAI.CBY3PROC	0	5	10	Procedure Library
CAI.CBY3XML	32760	150	25	ISPL Load Library

## CA Dispatch Distribution Libraries

Use the following table to estimate disk space for the distribution libraries needed to install CA Dispatch:

Library Name	Blksize	Tracks	Dir Blks	Description
CAI.AADSCLS0	0	2	5	Clist library
CAI.AADSDA42	4276	1850	5	Dictionary files
CAI.AADSDA46	4628	52	5	Helptext files
CAI.ADSISPL	6144	6	5	ISPL Load library
CAI.AADSJCL	0	25	75	JCL library
CAI.AADSMAC	0	250	400	Macro library
CAI.AADSMOD	6144	750	550	Load library
CAI.AADSOPTN	3120	85	250	Options library
CAI.AADSPNLO	0	2	5	ISPF panels library
CAI.AADSPROC	0	25	75	Procedure library
CAI.AADSSRC	0	8	20	Source library
CAI.AADSXML	32760	26	5	XML data
<b>Total</b>		<b>3081</b>		

## CA DRAS Distribution Libraries

This table lists the amount of disk space needed to install the CA DRAS distribution libraries.

Library Name	Blksize	Blocks	Dir Blks	Description
CAI.ABY3JCL	0	5	10	JCL library
CAI.ABY3MOD	32760	115	99	Load Library
CAI.ABY3OPTN	0	5	10	Options library
CAI.ABY3PROC	3120	5	10	Procedure library
CAI.ABY3XML	32760	150	25	XML library

## Database Size Requirements

If you are doing a new installation for this release, you can select from the database sizes shown below.

D/B Area	Blk Size	-----Number of Blocks-----)				
		1	2	3	4	5
AR	4628	2,500	5,000	8,000	16,000	32,000
ARM	1096	1,000	1,000	1,000	2,000	4,000
DQ	4628	500	500	500	500	500
OQ	4628	500	500	500	500	500
OV	4628	9,000	9,000	9,000	18,000	18,000
RD	4628	2,000	6,500	11,000	22,000	44,000
RDS	4628	3,000	10,000	17,000	34,000	68,000
RDM	1096	50,000	50,000	50,000	50,000	50,000
RDX	4628	3,600	3,600	3,600	3,600	3,600
SYSGEN	4628	500	500	500	1,000	2,000
DL0DDDB	4276	5,000	5,000	5,000	5,000	5,000
DMSGDB	4276	5,000	5,000	5,000	5,000	5,000
DRUNDB	2676	2,000	2,000	2,000	2,000	2,000

D/B Area	Blk Size	(-----Number of Blocks-----)				
		1	2	3	4	5
DSCRDB	2676	2,000	2,000	2,000	2,000	2,000
HELPTXT	4628	500	500	500	500	500
DICTDB	4276	10,000	10,000	10,000	10,000	10,000

## CADDSP Linear Data Set (LDS) File Considerations

Up to 32 unique CA Dispatch regions can execute per LPAR. Each region will be linked, using the CA Dispatch SYSGEN, to a unique CADDSP task. The individual CADDSP tasks are identified by a unique, user defined, trailing suffix, CADDSPx. A set of VSAM Linear Data Sets (LDS) used as a data repository to store user report and MSGCLASS data must be allocated for each CADDSPx task.

A brief understanding of how CA Dispatch and CADDSP use the LDS files will help you determine the LDS file configuration and size allocations.

- A given CADDSP task captures and stores user report and MSGCLASS data (that is written to specific user defined JES class and destination combinations) to a set of LDS files. This data can be captured via a pre-JES Spool open intercept or post JES Spool SAPI collector.
- CA Dispatch uses these same LDS files as the input staging areas for the RPI, MSG and ARCHIVE subtasks.
- All bundled reports awaiting printing by the RPO subtasks will also reside within the LDS until released to print on the JES Spool.
- All Online Viewing Report and MSGCLASS report data is stored and retained on the LDS files until the retention expiration is reached.

During a new installation you will allocate and configure one set, or group, of Linear Data Sets (LDS) for use by a specific CADDSPx task. This set of LDS files consists of one required Root LDS file and a series of one or more appended LDS files. Based on your site's requirements (the need to create separate test and production regions), you may optionally allocate and configure multiple unique sets of LDS files for use by additional CA Dispatch/CADDSPx regions.

**Important!** Adjust the MAXCAD value in your SYS1.PARMLIB(IEASYSxx) whenever you are adding a new CADDSP environment or LDS file. See the following section, Updating the MAXCAD Assignment for more information.

## Root LDS

The CADDSP Root LDS is used exclusively to store configuration and report entry management information. It is managed by three types of internal records:

- Global CADDSP environment information records
- Individual report entry information records that describe each report or MSGCLASS entry stored in any of the Append LDS files
- Report Data mapping information records

Each individual Root LDS file is limited to a 2 GB maximum size. When initializing the Root LDS, there are two size factors which work in tandem that must be defined correctly:

- The physical size of the Root LDS file (up to 2GB). See the Calculating the physical size of the Root LDS section below.
- The MAXDS value, or maximum number of reports and MSGCLASS entries that can be stored within the LDS files at any one time. This value will be set by the MAXDS parameter during Root LDS initialization.

**Important!** The LDS file allocation sizes and MAXDS parameter value will be required during the Allocate LDS files and Configure CADDSP Processing Options step in the "Installation Steps" chapter.

## MAXDS Considerations

**Important!** The MAXDS parameter cannot be dynamically changed after the LDS files have been allocated and configured. Therefore, use extreme care when calculating this value. Changing this value requires the unloading of your LDS files, reinitializing the Root LDS and appended LDS files with the new MAXDS value, and reloading the data into the LDS files.

To determine the maximum number of reports and MSGCLASS entries that can be held on the LDS files at any one time, consider the following:

- All captured reports retained in Online Viewing (OLV). Each generation of a report must be counted.
- All captured MSGCLASS retained in Online Viewing (OLV). One entry represents all of the combined MSGCLASS JES and SYSOUT data sets for a given job. Each generation of MSGCLASS retained must be counted.
- An estimate of the maximum number of reports that may have been captured by CADDSP, but not yet processed by CA Dispatch subtasks. This includes all reports and MSGCLASS that need to be processed by RPI, MSG or the Archive subtasks, as well as all reports within open bundles not yet released for printing by the RPO subtask(s). If any of these tasks remain inactive for long periods of time, this count may fluctuate significantly.

- How frequently the DSEXVIEW or DSEXPSVW Online Viewing maintenance jobs are executed to delete expired reports from Online Viewing.  
Be aware that if these jobs are executed infrequently, more report generations will remain in the LDS files.
- An expansion factor for future growth. This factor should take into account the addition of reports and MSGCLASS from anticipated new applications.
- The allocation of the Root LDS file is limited to a maximum size of 2 GB and a MAXDS value of 8,368,176. Be aware that processing a file of this size carries significant performance and storage overhead. Therefore, the setting of the maximum size as your site's default should be avoided unless absolutely necessary after careful consideration.

The total number from all these factors will be your MAXDS value.

If you are upgrading from a prior release of CA Dispatch, you can execute job DSEXculp, specifying member DScuLP19, to produce "Report 19 ONLINE VIEWING REPORT (MSGCLASS & REPORTS)" which lists the current number of reports that are in your existing Online Viewing files.

Review the RUN TIME MESSAGES section of the DSEXculp execution. Within that section is an area that will look similar to the following:

RECORD NAME	NUMBER READ
OV-BASE	172
OV-VIEW	509

The NUMBER READ value on the line for RECORD NAME OV-VIEW indicates the number of reports and MSGCLASS that are in the current Online Viewing files. In this example, the value is 509.

**Note:** You must still estimate and consider the other factors above and add them to this value to calculate your MAXDS.

## Calculating the Physical Size of the Root LDS

Once you have determined MAXDS value, you can use the CADDMXDS utility to determine the number of 3390 cylinders to allocate for the Root LDS file.

To execute this utility, (after your SMP Receive and Apply steps complete), enter the following from the TSO ready prompt or ISPF Option 6:

```
EXEC 'CAI.CAICLS0(CADDMXDS)' 'nnnnnnn'
```

where *n* is your MAXDS value.



Information similar to the following will be displayed:

```
MaxDS specified. . . . . : 123568
Size required for your Root LDS. . . : 36MB
                                     or : 52 Cyls
Maximum MAXDS for this Root LDS. . . : 129328
```

This sample output indicates that when specifying a MAXDS=123568 you must define your root LDS with 52 cylinders.

## Append LDS Files

The CADDSP appended LDS files are used to store the actual report and MSGCLASS data. Data compression is performed upon all user report data. Therefore, the actual DASD space utilized by any given report is dependent upon the amount of compression that can be performed on the data.

Each individual appended LDS file is limited to a 2 GB maximum size. The maximum number of appended LDS files that can be appended to a Root LDS file is 75.

During the Allocate LDS Files and Configure CADDSP Processing Options step of the installation, the DDEXLDSI job defaults to allocating the Root LDS file and two appended LDS files.

Be aware of the following:

- If you determine that additional appended LDS files are required during the initial installation, or are deemed necessary in the future, the DDEXLDSA job can be used to allocate and initialize appended LDS files as needed.
- If you determine that an appended LDS file is no longer required after the initial installation, you can optionally delete it from the Root LDS.

To delete appended LDS files, see the Append Command in the "CADDSP Operation" chapter in the *CA Dispatch Systems Programmer Guide*.

## Updating the MAXCAD Assignment

Review the MAXCAD value you defined in the IEASYSxx member of your SYS1.PARMLIB. This value limits the number of common data spaces that can be brought up on a single LPAR.

```
MAXCAD=50,          /*permits up to 50 SCOPE=COMMON data spaces
```

**Note:** If omitted, the default value for MAXCAD is 25.

Each CADDSP environment uses:

- One internal common data space *plus*
- One common data space for EACH LDS file allocated

The total of all data spaces for EACH CADDSP environment must be added to the total number of data spaces used by other products on that LPAR.

**Important!** You must reIPL the system after this parameter is changed.

## DVD Space Requirements

Ensure that you have sufficient free space in the USS file system that you are using for Pax-Enhanced ESD to hold the directory created by the pax command and its contents. You need approximately 3.5 times the pax file size in free space.

If you do not have sufficient free space, you receive error message EDC51331.

## CA DRAS Is Now Included with CA Dispatch

CA DRAS (Distributed Repository Access System) is now packaged with CA Dispatch.

The CA DRAS system uses a Microsoft Windows-based viewer to enable cooperative report viewing. CA DRAS is middle-ware that runs as a started task on the mainframe. It communicates with CA Dispatch agents on one end and Windows-based viewers such as CA Output Management Web Viewer on the other. The installation steps in this guide allow you optionally install CA DRAS.

## Common Services Required for CA DRAS

The following services are required for cooperative viewing with CA DRAS:

- CAIENF
- CAICCI

CA Common Services for z/OS must be installed or maintained at the genlevel indicated on the cover letter for the product.

## CAICCI and TCP/IP

CAICCI provides robust TCP/IP support, and this protocol can be used to efficiently connect a wide variety of platforms and applications. Mainframes, PCs, and UNIX systems can all be inter-connected, using TCP/IP.

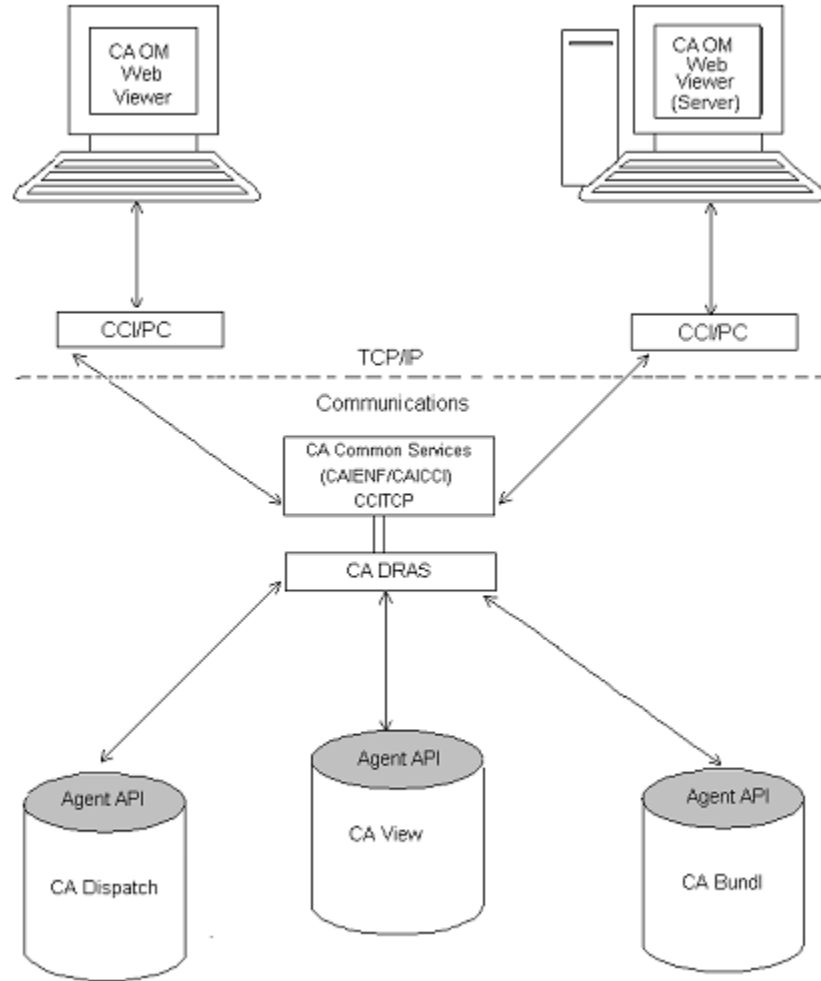
Be aware of the following:

- If you are using TCP/IP as your communications protocol, a mainframe TCP/IP product must be installed in addition to the base CAICCI component. Currently, CA TCPAccess Communications Server and IBM TCP/IP products are supported for z/OS.
- CAICCI utilizes TCP/IP using one or more separate server address spaces to coordinate TCP/IP processing for CAICCI. The CCITCP server task supports mainframe-to-PC connections using TCP/IP, and is required for CA DRAS.
- Use the appropriate client/server protocol parameter, depending on vendor for TCPIP or C runtime, as described in the CA Common Services documentation.

## Overview of the Cooperative Process

To successfully connect the desktop client to a mainframe repository, there are several key elements that need to be properly installed and configured. The following illustration shows how the workflow is processed, and where each solution fits into what is called Cooperative Processing.

The following diagram provides a basic view of how cooperative processing works to provide end user access to reports residing in a z/OS-based report repository.



1. The Client initiates a request using an initial login or a report data request from CA Output Management Web Viewer.
2. An SQL request is formatted by the Client API and passed through CA Common Services, Common Communications Interface (CCI). The Common Communications Interface utilizes the TCP/IP communication protocol to pass the request from the Windows environment, through CCI/PC, to the z/OS platform running the Common Communication Interface (CCITCP) task.
3. CA DRAS receives the request from the Common Communications Interface and passes it on to the requested repository Agent API for interpretation. The Agent API will format the request based on the repository system and pass the properly formatted request over to the repository system for processing.

4. The request is validated and processed by the Report Repository system: CA View, CA Dispatch, or CA Bundl. Once processed, it is returned to an SQL format and passed back to CA DRAS.
5. CA DRAS processes and packages the response and passes it back through the Common Communications Interface to the Viewer system, where it is processed and displayed to the Client.

## Library Authorization

CA Dispatch contains authorized programs. To run successfully, these programs must be executed from an authorized library. CA recommends that the CAI Common Load Library, CADSLOAD, be authorized, although, if other CA products have been installed, this library may already be authorized. To authorize the library, modify the appropriate member IEAAPFxx in SYS1.PARMLIB to add an entry for CADSLOAD as follows:

```
CAI.CADSLOAD      xxxxxx,
```

CAI.CADSLOAD is the data set name for the CAI Common Load Library, and xxxxxx is the volume serial number on which it resides. An IPL may be necessary to complete the authorization.

## CA IDMS Considerations

CA Dispatch is intended to run using its own CA IDMS CV (Central Version) number and is not designed to be installed under existing CVs, which may be used for other applications. There should be no contact with other on-site CVs except for using a common SVC (release-dependent). All necessary CA IDMS programs and JCL are supplied with CA Dispatch to operate the product. Ensure that CA Dispatch is using a unique CV number in your processing environment.

## Other Requirements

### SVC Dump Data Sets

CA Dispatch issues SVC dumps (SDUMP) for certain types of abends. These dumps will be written to the MVS/ESA SYS1.DUMPnn data sets. Verify with your systems programmer that the data sets are allocated with at least 100 cylinders.

## Dump Analysis and Elimination

The CA Dispatch SDUMP program supports MVS/ESA Dump Analysis and Elimination processing. This is an MVS/ESA feature that eliminates the possibility of duplicate SVC dumps being written to the SYS1.DUMP $nn$  data sets.

To use this MVS/ESA feature, the SYS1.DAE data set must be allocated and the following parameter members must be updated in SYS1.PARMLIB:

```
IEACMD $xx$   
SET DAE =  $xx$ 
```

$xx$  identifies the ADYSET $xx$  member.

```
ADYSET $xx$   
DAE=START,RECORDS(SSS),SVCDUMP(MATCH,UPDATE,SUPPRESS)
```

SSS is the number of records in SYS1.DAE.

## System Dump Parameters

CA Dispatch uses storage subpool 230. To dump this area through SYSUDUMP or SYSMDUMP, the IEADMP $xx$  and IEADMR $xx$  members in SYS1.PARMLIB must be updated to contain the following SDATA options:

- IEADMP $xx$  (SYSUDUMP)
- IEADMR $xx$  (SYSMDUMP)

```
SDATA=(RGN,LSQA,CSA,TRT,SUM,SQA,GRSQ)
```

The SDATA options indicate which areas of storage are to be included in the dump. If these dump parameters are not included, the defaults are used; these defaults may not include the areas of storage that CA Technical Support requires.

## Additional System Security for SVC

Optional installation steps can be performed to provide additional safeguards for the CA Dispatch SVC or Storage Key. This optional implementation will prevent accidental or unintentional misuse of the SVC and or Storage Key, thus insuring MVS integrity.

For more information, see the self documented JCL, DSINSVC in CAI.CADSJCL.

## JCL Procedures

We recommend that you add the CADSPROC library to the system PROCLIB concatenation.

## Additional Product Interfaces

Other products that interface with CA Dispatch are:

- CA Connect
- CA Opera
- CA RAPS
- CA Service Desk
- CA Scheduler Job Management
- CA 7 Workload Automation
- CA TLMS Tape Management
- CA 1 Tape Management

## Concurrent Releases

You can install this release of CA Dispatch and continue to use an older release for your production environment. If you plan to continue to run a previous release, consider the following points:

- When installing into an existing SMP/E environment, this installation deletes previous releases.
- If you acquired your product from tape or with Pax-Enhanced ESD, select different target and distribution zones for your new release from where your current release is installed. The new zones use different libraries than your current release.

**Note:** CA MSM installs into a new CSI by default.

- Define DDDEF entries in your new zones to point SMP/E to the proper libraries for installation. Ensure that they point to the new release libraries.





# Chapter 3: Installing Your Product Using CA MSM

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These topics provide information to get you started managing your product using CA MSM. You can use the online help included in CA MSM to get additional information.

Before using these topics, you must already have CA MSM installed at your site. If you do not have CA MSM installed, you can download it from the Download Center at [the CA Support Online website](#), which also contains links to the complete documentation for CA MSM.

## How to Use CA MSM: Scenarios

Imagine that your organization has started using CA MSM to simplify the installation of CA Technologies products and unify their management. You have also licensed a new CA Technologies product. In addition, you have a number of existing CSIs from previously installed CA Technologies products.

You can use the following scenarios to guide you through the process:

1. [Acquire the new product](#) (see page 33).
2. [Install the new product](#) (see page 34).
3. [Maintain products already installed in your environment](#) (see page 35).
4. [Deploy the product to your target systems](#) (see page 36).
5. [Configure the deployed product to your target systems](#) (see page 37).

## How to Acquire a Product

The *Product Acquisition Service (PAS)* facilitates the acquisition of mainframe products and the service for those products, such as program temporary fixes (PTFs). PAS retrieves information about products to which your site is entitled. Then it records these entitlements in a software inventory that is maintained on your driving system.

You can use the PAS component of CA MSM to acquire a CA Technologies product.

**Follow these steps:**

1. Set up a CA Support Online account.

To use CA MSM to acquire or download a product, you must have a CA Support Online account. If you do not have an account, you can create one on [the CA Support Online website](#).

2. Determine the CA MSM URL for your site.

To [access CA MSM](#) (see page 38), you require its URL. You can get the URL from your site's CA MSM administrator and log in using your z/OS credentials. When you log in for the first time, you are prompted to create a CA MSM account with your credentials for [the CA Support Online website](#). This account enables you to download product packages.

3. Log in to CA MSM and go to the Software Catalog page to locate the product that you want to manage.

After you log in to CA MSM, you can see the products to which your organization is entitled on the Software Catalog tab.

If you cannot find the product you want to acquire, update the catalog. CA MSM refreshes the catalog through [the CA Support Online website](#) using the site IDs associated with your credentials for [the CA Support Online website](#).

4. Download the product installation packages.

After you find your product in the catalog, you can download the product installation packages.

CA MSM downloads (acquires) the packages (including any maintenance packages) from the CA FTP site.

After the acquisition process completes, the product is ready for you to install or maintain.

## How to Install a Product

The *Software Installation Service (SIS)* facilitates the installation and maintenance of mainframe products in the software inventory of the driving system. This facilitation includes browsing downloaded software packages, managing SMP/E consolidated software inventories on the driving system, and automating installation tasks.

You can use the SIS component of CA MSM to install a CA Technologies product.

**Follow these steps:**

1. Initiate product installation and review product information.
2. Select an installation type.
3. Review installation prerequisites if any are presented.

4. Take *one* of the following steps to select an SMP/E environment:
  - Create an SMP/E environment:
    - a. Set up the global zone.
    - b. Create a target zone.
    - c. Create a distribution zone.
  - Use an existing SMP/E environment from your working set:
    - a. Update the global zone.
    - b. Set up the target zone: Either create a target zone or use an existing target zone.
    - c. Set up the distribution zone: Either create a distribution zone or use an existing distribution zone.
5. Review the installation summary and start the installation.

After the installation process completes, check for and install available product maintenance. The product is ready for you to deploy. Sometimes there are other steps to perform manually outside of CA MSM before beginning the deployment process.

## How to Maintain Existing Products

If you have existing CSIs, you can bring those CSIs into CA MSM so that you can maintain all your installed products in a unified way from a single web-based interface.

You can use the PAS and SIS to maintain a CA Technologies product.

### Follow these steps:

1. Migrate the CSI to CA MSM to maintain an existing CSI in CA MSM.

During the migration, CA MSM stores information about the CSI in the database.
2. Download the latest maintenance for the installed product releases from the Software Catalog tab.

If you cannot find a release (for example, because the release is old), you can add the release to the catalog manually and then update the release to download the maintenance.

3. Apply the maintenance.

**Note:** You can also install maintenance to a particular CSI from the SMP/E Environments tab.

After the maintenance process completes, the product is ready for you to deploy. You may have to perform other steps manually outside of CA MSM before beginning the deployment process.

## How to Deploy a Product

The *Software Deployment Service (SDS)* facilitates the mainframe product deployment from the software inventory of the driving system to the target system. This facilitation includes deploying installed products that are policy-driven with a set of appropriate transport mechanisms across a known topology.

You can use the SDS component of CA MSM to deploy a CA Technologies product that you have already acquired and installed.

**Follow these steps:**

1. Set up the system registry:
  - a. Determine the systems you have at your enterprise.
  - b. Set up remote credentials for those systems.
  - c. Set up the target systems (non-sysplex, sysplex or monoplex, shared DASD cluster, and staging), and validate them.
  - d. Add network information, including data destination information, to each system registry entry.
2. Set up methodologies.
3. Create the deployment, which includes completing each step in the New Deployment wizard.

After creating the deployment, you can save it and change it later by adding and editing systems, products, custom data sets, and methodologies, or you can deploy directly from the wizard.

**Note:** If you must deploy other products to the previously defined systems using the same methodologies, you must create a separate deployment.

4. Deploy the product, which includes taking a snapshot, transmitting to target, and deploying (unpacking) to your mainframe environment.

After the deployment process completes, the product is ready for you to configure. You may have to perform other steps manually outside of CA MSM before beginning the configuration process.

## How to Configure a Product

The *Software Configuration Service (SCS)* facilitates the mainframe product configuration from the software inventory of the driving system to targeted z/OS operating systems.

You can use the SCS component of CA MSM to configure a CA Technologies product that you have already acquired, installed, and deployed.

**Follow these steps:**

1. Select a deployed product to configure from the Deployments tab to open the Create Configuration wizard.
2. Create the configuration, which includes completing each step in the Create Configuration wizard, including the following:
  - a. Define a configuration name and select a target system.
  - b. Select configuration functions and options.
  - c. Define system preferences.
  - d. Create target settings.
  - e. Select and edit resources.
3. Build the configuration. The last step of the Create Configuration wizard lets you build the configuration.
4. Implement the configuration. The implementation process in CA MSM is a step-by-step process that carefully guides you and provides detailed instructions to start, stop, and manage the steps of the implementation process.

After the configuration process completes, the product is ready for you to use. You may have to perform other steps manually outside of CA MSM.

**Note:** You cannot use CA MSM to configure a product to a staging system.

**More information:**

[How to Complete Configuration With CA MSM](#) (see page 79)

## Access CA MSM Using the Web-Based Interface

You access CA MSM using the web-based interface. Obtain the URL of CA MSM from the CA MSM administrator.

**Follow these steps:**

1. Start your web browser, and enter the access URL.

The login page appears.

**Note:** If the Notice and Consent Banner appears, read and confirm the provided information.

2. Enter your z/OS login user name and password, and click the Log in button.

The initial page appears. If you log in for the first time, you are prompted to define your account on [the CA Support Online website](#).

**Note:** For more information about the interface, click the online help link at the top right corner of the page.

3. Click New.

You are prompted for the credentials to use on [the CA Support Online website](#).

**Important!** The account to which the credentials apply *must* have the Product Display Options set to BRANDED PRODUCTS. You can view and update your account preferences by logging into [the CA Support Online website](#) and clicking My Account. If you do not have the correct setting, you are not able to use CA MSM to download product information and packages.

4. Specify the credentials, click OK, and then click Next.

You are prompted to review your user settings.

**Note:** These settings are available on the User Settings page.

5. Change the settings or keep the defaults, and then click Finish.

A dialog shows the progress of the configuration task. You can click Show Results to view the details of the actions in a finished task.

**Important!** If your site uses proxies, review your proxy credentials on the User Settings, Software Acquisition page.

# Chapter 4: Installing Your Product from Pax-Enhanced ESD

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This section contains the following topics:

[How to Install a Product Using Pax-Enhanced ESD](#) (see page 39)

[Allocate and Mount a File System](#) (see page 45)

[Copy the Product Pax Files into Your USS Directory](#) (see page 48)

[Create a Product Directory from the Pax File](#) (see page 53)

[Copy Installation Files to z/OS Data Sets](#) (see page 54)

[Apply Maintenance](#) (see page 59)

## How to Install a Product Using Pax-Enhanced ESD

This section describes the Pax-Enhanced ESD process. We recommend that you read this overview and follow the entire procedure the first time you complete a Pax-Enhanced ESD installation. For experienced UNIX users, the *Pax-Enhanced ESD Quick Reference Guide* has sufficient information for subsequent installations.

**Important!** Downloading pax files for the SMP/E installation as part of the Pax-Enhanced ESD process requires write authority to the UNIX System Services (USS) directories that are used for the ESD process.

If you prefer not to involve all CA Technologies product installers with z/OS UNIX System Services, assign a group familiar with USS to perform Steps 1 through 4 and provide the list of the unpacked MVS data sets to the product installer. USS is not required for the actual SMP/E RECEIVE of the product or for any of the remaining installation steps.

To install files using Pax-Enhanced ESD, use the following process:

1. Allocate and mount the file system. This process requires a USS directory to receive the pax file and to perform the unpack steps. We recommend that you allocate and mount a file system that is dedicated to Pax-Enhanced ESD and create the directory in this file system. Ensure that all users who will be working with pax files have write authority to the directory.
2. Copy the product pax files into your USS directory. To download files, choose one of the following options:
  - Download a zip file from CA Support Online to your PC, unzip the file, and then upload the product pax files to your USS file system.
  - FTP the pax files from CA Support Online directly to your USS directory.

**Note:** Perform Steps 3 through 6 for each pax file that you upload to your USS directory.

3. Create a product directory from the pax file. Set the current working directory to the directory containing the pax file, and create a directory in your USS directory by entering the following command:

```
pax -rvf pax-filename
```

4. Use the SMP/E GIMUNZIP utility to create z/OS installation data sets. The file UNZIPJCL in the directory that the pax command created in Step 3 contains a sample job to GIMUNZIP the installation package. Edit and submit the UNZIPJCL job.
5. Receive the SMP/E package. Use the data sets that GIMUNZIP created in Step 4. Perform a standard SMP/E RECEIVE using the SMPPTFIN and SMPHOLD (if applicable) DASD data sets. Also, specify the high-level qualifier for the RELFILES on the RFPREFIX parameter of the RECEIVE command.
6. Proceed with product installation. Consult product-specific documentation, including AREADME files and installation notes to complete the product installation.
7. (Optional) Clean up the USS directory. Delete the pax file, the directory that the pax command created, all of the files in it, and the SMP/E RELFILES, SMPMCS, and HOLDDATA data sets.

**More Information:**

[USS Environment Setup](#) (see page 44)

[Allocate and Mount a File System](#) (see page 45)

[Copy the Product Pax Files into Your USS Directory](#) (see page 48)

[Create a Product Directory from the Pax File](#) (see page 53)

[Copy Installation Files to z/OS Data Sets](#) (see page 54)

## How the Pax-Enhanced ESD Download Works

**Important!** To download pax files for the SMP/E installation as part of the Pax-Enhanced ESD process, you must have write authority to the UNIX System Services (USS) directories used for the ESD process and available USS file space before you start the procedures in this guide.

Use the following process to download files using Pax-Enhanced ESD:

1. Log in to <https://support.ca.com/>, and click Download Center.  
The CA Support Online web page appears.
2. Under Download Center, select Products from the first drop-down list, and specify the product, release, and genlevel (if applicable), and click Go.  
The CA Product Download window appears.



3. Download an entire CA Technologies product software package or individual pax files to your PC or mainframe. If you download a zip file, you must unzip it before continuing.

For both options, [The ESD Product Download Window](#) (see page 41) topic explains how the download interface works.

**Note:** For traditional installation downloads, see the *Traditional ESD User Guide*. Go to <https://support.ca.com/>, log in, and click Download Center. A link to the guide appears under the Download Help heading.

4. Perform the steps to install the product based on the product-specific steps.

The product is installed on the mainframe.

## ESD Product Download Window

You can download CA Technologies product ESD packages multiple ways. Your choices depend on the size of the individual files and the number of files that you want to download. You can download the complete product with all components, or you can select individual pax and documentation files for your product or component.

The following illustration shows sample product files. The illustration lists all components of the product. You can use the Download Cart by selecting one or more components that you need, or selecting the check box for Add All to cart. If you prefer to immediately download a component, click the Download link.

CA Earl - MVS

- [Pax Enhanced Electronic Software Delivery \(ESD\) Guide](#)
- [Pax Enhanced Electronic Software Delivery \(ESD\) Quick Reference Guide](#)
- [Traditional Electronic Software Delivery \(ESD\) Guide](#)
- [Learn more about Using pkzip with your Downloaded Mainframe Products](#)
- [Learn more about downloading components of CA product](#)
- [Mounting ISO Images with OpenVMS](#)

If you have comments or suggestions about CA product documentation, send a message to [techpubs@ca.com](mailto:techpubs@ca.com).

**Note:** Related Published Solutions are available on the other results tab on this page. You must add these solutions to your Download Cart to include them with your product files for download.

[View Download Cart](#)

				<input type="checkbox"/> Add All to cart		
Product Components				Add to cart	Download	
CCS - LEGACY - ESD ONLY 140000AW030.pax.Z	14.0 /0000	07/06/2011	4.89MB	<input type="checkbox"/>	<a href="#">Download</a>	
CCS - MFNSM - ESD ONLY 140000AW040.pax.Z	14.0 /0000	07/06/2011	202.01MB	<input type="checkbox"/>	<a href="#">Download</a>	
CCS - BASE - ESD ONLY 140001AW010.pax.Z	14.1 /0000	06/05/2012	27.44MB	<input type="checkbox"/>	<a href="#">Download</a>	
CCS - OPTIONAL - ESD ONLY 140001AW020.pax.Z	14.1 /0000	06/05/2012	14.49MB	<input type="checkbox"/>	<a href="#">Download</a>	
CA EARL PRODUCT PACKAGE 610106AEO00.pax.Z	6.1 /0106	10/30/2008	1.85MB	<input type="checkbox"/>	<a href="#">Download</a>	
EARL PIPPACK AEO61010600.pdf	6.1 /0106	01/29/2010	93.92KB	<input type="checkbox"/>	<a href="#">Download</a>	
CA EASYTRIEVE PRODUCT PACKAGE B60000ESA00.pax.Z	11.6 /0000	07/05/2011	6.12MB	<input type="checkbox"/>	<a href="#">Download</a>	
DATACOM/AD PROD INFO PACKET CAIE00000P0.pdf	14.0 /0000	06/01/2012	220.53KB	<input type="checkbox"/>	<a href="#">Download</a>	
DATACOM/AD XPRESS INSTALL				<input type="checkbox"/>	<a href="#">Download</a>	

Clicking the link for an individual component takes you to the Download Method page.

### Download Method

---

Please choose a download method to complete your download request. [Learn More](#)

---

**HTTP via Download Manager**  
This is the CA recommended method for download. The Download Manager allows you to download your files faster and more efficiently.  
[Download](#)

---

**HTTP via Internet Browser**  
If Download Manager cannot be used or fails to start you may access your file(s) via your internet browser.  
[View File Link\(s\)](#)

---

**FTP**  
This method allows you to download your file(s) via FTP from CA's content delivery network or via native FTP servers.  
**Note:** Processing is required and an email notification will be sent when your request is ready for downloading.  
[FTP Request](#)

Depending on the size and quantity of ordered product files, the Download Method screen could also have these options:

**Note:** For mainframe downloads using this HTTP method, click the Learn More link.

### Download Method

---

Please choose a download method to complete your download request. [Learn More](#)

---

**HTTP via Download Manager**  
This is the CA recommended method for download. The Download Manager allows you to download your files faster and more efficiently.  
[Download](#)

---

**Create a Zip File**  
This method allows you to bundle your download files into one or more zip files of up to 3.5 GB each. These zip files can then be downloaded via HTTP or FTP.  
**Note:** Processing is required and an email notification will be sent when your request is ready for downloading.  
[Create Zip](#)

The HTTP method lets you start downloading immediately. The FTP method takes you to the Review Orders page that displays your order, first in a Pending status changing to Ready when your order has been processed.

Preferred FTP uses the new content delivery network (CDN). Alternate FTP uses the CA Technologies New York-based FTP servers.

The Create a Zip File option first creates the zip, and when ready, offers the options that the Zip Download Request examples show in the next illustration.

**Review Download Requests**

Below is a list of the FTP and large HTTP downloads that have been requested by your site. When status is set to **'Ready'** a link will appear.

- For FTP requests, click on the FTP link to view the path information for your download. For more information view our [FTP Help document](#)
- For HTTP requests, click on the HTTP link to initiate your download.
- To view the details of your request, click on the desired order number.

**Today's Downloads**

Order #	Status	Description	Date Placed	Download Options
<a href="#">10000961</a>	Ready	FTP Download Request	04/30/2010	<a href="#">Preferred FTP</a> ▼   <a href="#">Alternate FTP</a> ▼

**Previous 6 day Download History**

Order #	Status	Description	Date Placed	Download Options
<a href="#">10000949</a>	Ready	ZIP Download Request	04/29/2010	<a href="#">HTTP via DLM</a>   <a href="#">Preferred FTP</a> ▼   <a href="#">Alternate FTP</a> ▼
<a href="#">10000948</a>	Ready	ZIP Download Request	04/29/2010	<a href="#">HTTP via DLM</a>   <a href="#">Preferred FTP</a> ▼   <a href="#">Alternate FTP</a> ▼

## USS Environment Setup

You need a UNIX System Services (USS) directory and a file system with adequate space to perform the following tasks:

- Receive product pax files from CA Support Online.
- Perform utility functions to unpack the pax file into MVS data sets that you can use to complete the product installation.

We recommend that you allocate and mount a file system that is dedicated to Pax-Enhanced ESD. The amount of space that you need for the file system depends on the following variables:

- The size of the pax files that you intend to download.
- Whether you plan to keep the pax files after unpacking them. We do not recommend this practice.

We recommend that you use one directory for downloading and unpacking pax files. Reusing the same directory minimizes USS setup. You need to complete the USS setup only one time. You reuse the same directory for subsequent downloads. Alternatively, you can create a directory for each pax download.

**Important!** Downloading pax files for the SMP/E installation as part of the Pax-Enhanced ESD process requires write authority to the UNIX System Services (USS) directories that are used for the ESD process. The USS file system that is used for Pax-Enhanced ESD must have sufficient free space to hold the directory that the pax command created, and its contents. You need approximately 3.5 times the pax file size in free space to download the pax file and unpack its contents. For example, to download and unpack a 14 MB pax file, you need approximately 49 MB of free space in the file system hosting your ESD directory.

## Allocate and Mount a File System

You can use the zSeries File System (zFS) or hierarchical file system (HFS) for ESD downloads.

This procedure describes how to perform the following tasks:

- Allocate a zFS or an HFS.
- Create a mount point in an existing maintenance USS directory of your choice.
- Mount the file system on the newly created mount point.

**Note:** You must have either SUPERUSER authority, or the required SAF profile setting to allow you to issue the USS mount command for the file system.

- Optionally, permit write access to anyone in the same group as the person who created the directory.

**Important!** USS commands are case-sensitive.

**Follow these steps:**

1. Allocate the file system by customizing one of the following samples to your site requirements:

- On a zFS, use the following sample:

```
//DEFINE EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=*
//SYSUDUMP DD SYSOUT=*
//AMSDUMP DD SYSOUT=*
//SYSIN DD *
  DEFINE CLUSTER ( +
    NAME(your_zFS_data_set_name) +
    STORAGECLASS(class) +
    LINEAR +
    CYL(primary secondary) +
    SHAREOPTIONS(3,3) +
  )
/*
//FORMAT EXEC PGM=IOEAGFMT,REGION=0M,
// PARM=(' -aggregate your_zFS_data_set_name -compat')
//SYSPRINT DD SYSOUT=*
//SYSUDUMP DD SYSOUT=*
//STDOUT DD SYSOUT=*
//STDERR DD SYSOUT=*
//CEEDUMP DD SYSOUT=*
/*
```

- On an HFS, use the following sample:

```
//ALCHFS EXEC PGM=IEFBR14
//CAESD DD DSN=yourHFS_data_set_name,
// DISP=(NEW,CATLG,DELETE),UNIT=3390,
// DSNTYPE=HFS,SPACE=(CYL,(primary,secondary),1)
```

The file system is allocated.

**Note:** Ensure that the zFS or HFS data set name that you use conforms to your data set naming conventions for USS file systems. If the allocation of the file system data set fails, it is because of environmental settings not allowing for the allocation. On an HFS, try using the ISPF 3.2 Data Set Utility to allocate your HFS data set.

2. Create a mount point for the file system. This example shows how to create a /CA/CAESD directory in an existing directory, /u/maint. From the TSO OMVS shell, enter the following commands:

```
cd /u/maint/  
mkdir CA  
cd CA  
mkdir CAESD
```

**Note:** This document refers to this structure as *yourUSSESDdirectory*.

The mount point is created.

3. Mount the file system by customizing one of the following samples to your site requirements:

- On a zFS, use the following sample:

```
MOUNT FILESYSTEM('your_zFS_data_set_name')  
MOUNTPOINT('yourUSSESDdirectory')  
TYPE(ZFS) MODE(RDWR)  
PARM(AGGRGROW)
```

- On an HFS, use the following sample:

```
MOUNT FILESYSTEM('your_HFS_data_set_name')  
MOUNTPOINT('yourUSSESDdirectory')  
TYPE(HFS) MODE(RDWR)
```

The file system is mounted.

4. (Optional) Set security permissions for the directory. You can use the chmod command to let other users access the ESD directory and its files. For example, to allow write access to the ESD directory for other users in your USS group, from the TSO OMVS shell, enter the following command:

```
chmod -R 775 /yourUSSESDdirectory/
```

Write access is granted.

**Note:** For more information about the chmod command, see the IBM *z/OS UNIX System Services User Guide (SA22-7802)*.

## Copy the Product Pax Files into Your USS Directory

To begin the CA Technologies product installation procedure, copy the product pax file into the USS directory that you set up. Use one of the following methods:

- Download the product pax files directly from the CA Support Online FTP server to your z/OS system.
- Download the product pax file from the CA Support Online FTP server to your computer, and upload it to your z/OS system.
- Download the product file from CA Support Online to your computer. If your download included a zip file, unzip the file, and upload the unzipped pax files to your z/OS system.

This section includes a sample batch job to download a product pax file from the CA Support Online FTP server directly to a USS directory on your z/OS system and sample commands to upload a pax file from your computer to a USS directory on your z/OS system.

**Important!** The FTP procedures vary due to local firewall and other security settings. Consult your local network administrators to determine the appropriate FTP procedure to use at your site.

Ensure that sufficient free space is available in the USS file system that you are using for Pax-Enhanced ESD to hold the product pax file. If you do not have sufficient free space, error messages similar to the following appear:

```
EZA1490I Error writing to data set  
EZA2606W File I/O error 133
```

When the download finishes, the pax file size in your USS directory matches the value in the Size column for the corresponding pax file on the CA Technologies Products Download window.

### More Information:

[How the Pax-Enhanced ESD Download Works](#) (see page 40)  
[ESD Product Download Window](#) (see page 41)



## Download Using Batch JCL

Use this process to download a pax file from the CA Support Product Downloads window by running batch JCL on the mainframe. Use the sample JCL attached to the PDF file as *CAtoMainframe.txt* to perform the download.

**Important!** To simplify the Pax-Enhanced ESD process, the PDF version of this guide includes a sample JCL job that you can copy directly to the mainframe. To access this job, click the paper clip icon at the left of the PDF reader. A window displaying attachments opens. Double-click the file to view the sample JCL.

**Note:** We recommend that you follow the preferred method as described on CA Support Online. This procedure is our preferred download method; however, we do include the procedure to download to the mainframe through a PC in the next section.

### Follow these steps:

1. Supply a valid JOB statement.
2. Replace *yourTCPIP.PROFILE.dataset* with the name of the TCP/IP profile data set for your system. Consult your local network administrators, if necessary.

The job points to your profile.

3. Replace *YourEmailAddress* with your email address.

The job points to your email address.

4. Replace *yourUSSESDdirectory* with the name of the USS directory that you use for ESD downloads.

The job points to your USS directory.

5. Locate the product component to download on the CA Support Product Download window.

You have identified the product component to download.

6. Click Download for the applicable file.

**Note:** For multiple downloads, add files to a cart.

The Download Method window opens.

7. Click FTP Request.

The Review Download Requests window displays any files that you have requested to download.

**Note:** We send you an email when the file is ready to download or a link appears in this window when the file is available.

8. Select one of the following methods:

**Preferred FTP**

Uses CA Technologies worldwide content delivery network (CDN). If you cannot download using this method, review the security restrictions for servers that company employees can download from that are outside your corporate network.

**Host Name:** ftp://ftpdnloads.ca.com

**Alternate FTP**

Uses the original download servers that are based on Long Island, New York.

**Host Name:** ftp://scftpd.ca.com for product files and download cart files and ftp://ftp.ca.com for individual solution files.

Both methods display the host, user name, password, and FTP location, which you then can copy into the sample JCL.

**Note:** The following links provide details regarding FTP: the FTP Help document link in the Review Download Requests window and the Learn More link available in the Download Methods window.

9. Submit the job.

**Important!** If your FTP commands are incorrect, it is possible for this job to fail and still return a zero condition code. Read the messages in the job DDNAME SYSPRINT to verify the FTP succeeded.

After you run the JCL job, the pax file resides in the mainframe USS directory that you supplied.

**Example: CAtoMainframe.txt, JCL**

The following text appears in the attached CAtoMainframe.txt JCL file:

```
//GETPAX JOB (ACCOUNTNO),'FTP GET ESD PACKAGE',
//          MSGCLASS=X,CLASS=A,NOTIFY=&SYSUID
//*****
/* This sample job can be used to download a pax file directly from *
/* CA Support Online to a USS directory on your z/OS system.      *
/*                                                                *
/* When editing the JCL ensure that you do not have sequence numbers *
/* turned on.                                                    *
/*                                                                *
/* This job must be customized as follows:                        *
/* 1. Supply a valid JOB statement.                              *
/* 2. The SYSTCPD and SYSFTPD JCL DD statements in this JCL may be *
/* optional at your site. Remove the statements that are not    *
/* required. For the required statements, update the data set   *
/* names with the correct site-specific data set names.         *
/* 3. Replace "Host" based on the type of download method.      *
/* 4. Replace "YourEmailAddress" with your email address.       *
/* 5. Replace "yourUSSESDdirectory" with the name of the USS    *
/* directory used on your system for ESD downloads.             *
/* 6. Replace "FTP Location" with the complete path              *
/* and name of the pax file obtained from the FTP location     *
/* of the product download page.                                *
//*****
//GETPAX EXEC PGM=FTP,PARM=(EXIT',REGION=0M
//SYSTCPD DD DSN=yourTCPIP.PROFILE.dataset,DISP=SHR
//SYSFTPD DD DSN=yourFTP.DATA.dataset,DISP=SHR
//SYSPRINT DD SYSOUT=*
//OUTPUT DD SYSOUT=*
//INPUT DD *
Host
anonymous YourEmailAddress
lcd yourUSSESDdirectory
binary
get FTP_location
quit
```

## Download Files to Mainframe through a PC

If you download pax or zip files from CA Support Online to your PC, use this procedure to upload the pax file from your PC to your z/OS USS directory.

### Follow these steps:

1. Follow the procedures in [How the Pax-Enhanced ESD Download Works](#) (see page 9) to download the product pax or zip file to your PC. If you download a zip file, first unzip the file to use the product pax files.

The pax or zip file resides on your PC.

2. Open a Windows command prompt.

The command prompt appears.

3. Customize and enter the FTP commands with the following changes:
  - a. Replace *mainframe* with the z/OS system IP address or DNS name.
  - b. Replace *userid* with your z/OS user ID.
  - c. Replace *password* with your z/OS password.
  - d. Replace *C:\PC\folder\for\thePAXfile* with the location of the pax file on your PC.
  - e. Replace *yourUSSESDdirectory* with the name of the USS directory that you use for ESD downloads.
  - f. Replace *paxfile.pax.Z* with the name of the pax file to upload.

The pax file is transferred to the mainframe.

### Example: FTP Commands

This list is a sample of FTP commands to upload the pax file from your PC to your USS Pax-Enhanced ESD directory:

```
ftp mainframe
userid
password
bin
lcd C:\PC\folder\for\thePAXfile
cd /yourUSSESDdirectory/
put paxfile.pax.Z
quit
exit
```

## Create a Product Directory from the Pax File

Use the sample job attached to the PDF file as `Unpackage.txt` to extract the product pax file into a product installation directory.

**Important!** To simplify the Pax-Enhanced ESD process, the PDF version of this guide includes a sample JCL job that you can copy directly to the mainframe. To access this job, click the paper clip icon at the left of the PDF reader. A window displaying attachments opens. Double-click the file to view the sample JCL.

### Follow these steps:

1. Supply a valid JOB statement.
2. Replace *yourUSSESDdirectory* with the name of the USS directory that you use for ESD downloads.

The job points to your specific directory.

3. Replace *paxfile.pax.Z* with the name of the pax file.

The job points to your specific pax file.

4. Submit the job.

The job runs and creates the product directory.

**Note:** If the PARM= statement exceeds 71 characters, uncomment and use the second form of UNPAXDIR instead. This sample job uses an X in column 72 to continue the PARM= parameters to a second line.

## Sample Job to Execute the Pax Command (Unpackage.txt)

The following text appears in the attached Unpackage.txt JCL file:

```
//ESDUNPAX JOB (ACCOUNTNO), 'UNPAX ESD PACKAGE ',
// MSGCLASS=X, CLASS=A, NOTIFY=&SYSUID
//*****
/* This sample job can be used to invoke the pax command to create *
/* the product-specific installation directory. *
/* *
/* This job must be customized as follows: *
/* 1. Supply a valid JOB statement. *
/* 2. Replace "yourUSSESDdirectory" with the name of the USS *
/* directory used on your system for ESD downloads. *
/* 3. Replace "paxfile.pax.Z" with the name of the pax file. *
/* NOTE: If you continue the PARM= statement on a second line, make *
/* sure the 'X' continuation character is in column 72. *
//*****
//UNPAXDIR EXEC PGM=BPXBATCH,
// PARM='sh cd /yourUSSESDdirectory/; pax -rvf paxfile.pax.Z'
/*UNPAXDIR EXEC PGM=BPXBATCH,
/* PARM='sh cd /yourUSSESDdirectory/; pax X
/* -rvf paxfile.pax.Z'
//STDOUT DD SYSOUT=*
//STDERR DD SYSOUT=*
```

## Copy Installation Files to z/OS Data Sets

Use this procedure to invoke the SMP/E GIMUNZIP utility to create MVS data sets from the files in the product-specific directory.

### Follow these steps:

1. Locate and read the product readme file or installation notes, if applicable, which resides in the product-specific directory that the pax command created. This file contains the product-specific details that you require to complete the installation procedure.

You have identified the product-specific installation details.

2. Use ISPF EDIT or TSO ISHELL to edit the UNZIPJCL sample job. You can perform this step in one of the following ways:
  - Use ISPF EDIT. Specify the full path name of the UNZIPJCL file.
  - Use TSO ISHELL. Navigate to the UNZIPJCL file and use the E line command to edit the file.

The job is edited.

3. Change the SMPDIR DD PATH to the product-specific directory created by the pax command.

Your view is of the product-specific directory.

4. If ICSF is not active, perform the following steps:
  - a. Change the SMPJHOME DD PATH to your Java runtime directory. This directory varies from system to system.
  - b. Perform one of the following steps:
    - Change the SMPCPATH DD PATH to your SMP/E Java application classes directory, typically /usr/lpp/smp/classes/.
    - Change HASH=YES to HASH=NO on the GIMUNZIP parameter.

One of the following occurs: ICSF is active, or you are using Java.

5. Change all occurrences of *yourHLQ* to the high-level qualifier (HLQ) for z/OS data sets that the installation process uses. We suggest that you use a unique HLQ for each expanded pax file to identify uniquely the package. Do *not* use the same value for *yourHLQ* as you use for the SMP/E RELFILEs.

All occurrences of *yourHLQ* are set to your high-level qualifier for z/OS data sets.

6. Submit the UNZIPJCL job.

The UNZIPJCL job completes with a zero return code. Messages GIM69158I and GIM48101I in the output and IKJ56228I in the JES log are acceptable.

GIMUNZIP creates z/OS data sets with the high-level qualifier that you specified in the UNZIPJCL job. You use these data sets to perform the product installation. The pax file and product-specific directory are no longer needed.

**Note:** For more information, see the IBM *SMP/E for z/OS Reference (SA22-7772)*.

## How to Install Products Using Native SMP/E JCL

The following steps describe the process to install products using native SMP/E JCL:

1. Allocate product data sets and SMP/E data sets.
2. Create SMP/E CSI.
3. Receive base functions.
4. Apply base functions.
5. Accept base functions.

Configure the product according to your site requirements

## Prepare the SMP/E Environment for Pax Installation

The members in this procedure prepare the data sets, initialize the zones, and create the DDDEFs for Dispatch.

For information about the members, see the comments in the JCL.

### To prepare the SMP/E environment for your product

1. Customize the macro ADSSREDIT with your site-specific information and then copy the macro to your SYSPROC location. Replace the rightmost parameters for each ISREDIT CHANGE macro command. Each time you edit an installation member, type ADSSREDIT on the TSO command line, and press Enter to replace the defaults with your specifications.

The macro is ready to customize the SAMPJCL members.

**Note:** Set the DASD HLQ to the same value specified for the unzip to DASD ESD JCL.

**Note:** The following steps include instructions to execute the ADSSREDIT macro each time you open a new SAMPJCL member. To edit all SAMPJCL members simultaneously, read and follow the instructions in the ADSEDALL member.

2. Open the SAMPJCL member ADS1ALL in an edit session and execute the ADSSREDIT macro from the command line.

**Note:** If you are upgrading into an existing CSI you must comment out existing data sets from the ADS1ALL member prior to submission.

ADS1ALL is customized.

3. Submit ADS1ALL.

This job produces the following results:

- The target and distribution data sets for CA Dispatch are created.
- Unique SMPPTS, SMPMTS, SMPSCDS, and SMPSTS data sets for this target zone are created.

4. Open the SAMPJCL member ADS2CSI in an edit session and execute the ADSSREDIT macro from the command line.

**Note:** If you are upgrading into an existing CSI, prior to submission, do the following in ADS2CSI:

- Comment out existing SMP data sets and the CSI allocate step
- Change the UCLIN DDDEF ADD statements to REP statements for the allocated data sets .

For r11.0 upgrades into an existing CSI do the following:

- Manually add the r11.0 Target and Distribution library DDDEFs to the ADS2CSI JCL and change CAIT0 to CAITGT and CAID0 to CAIDLIB.
- Delete SMPLOG from the CSI.



You can manually remove this from your CSI or you can add the following to the ADS2CSI job in the target and distribution library DDDEFS

```
DEL DDDEF(SMPLOG) .
```

above the REP DDDEF(SMPLOG) statements.

ADS2CSI is customized.

5. Submit ADS2CSI.

This job produces the following results:

- The CSI data set is defined.
- The SMPPTS and SMPLOG data sets are allocated.
- The global, target, and distribution zones are initialized.
- The DDDEF entries for your product are created.
- The DDDEFs for the required SMP/E data sets are created.

## Run the Installation Jobs for a Pax Installation

Submit and run these SAMPJCL members in sequence. Do not proceed with any job until the previous job has completed successfully.

### To run the installation jobs

1. Open the SAMPJCL member ADS3RECD in an edit session and execute the ADSSEDIT macro from the command line.

**Note:** Be aware that the default middle level qualifier name of the SMP/E CSI has been removed beginning with release 11.6. If upgrading from a previous release, ensure that the correct, complete name of your CSI is specified in the PARM= on the execute card.

ADS3RECD is customized.

2. Submit the SAMPJCL member ADS3RECD to receive SMP/E base functions.

CA Dispatch is received and now resides in the global zone.

3. Open the SAMPJCL member ADS4APP in an edit session and execute the ADSSEDIT macro from the command line.

Important: The APPLY of CA Dispatch deletes the prior release of CA Dispatch.

4. **Note:** Be aware that the default middle level qualifier name of the SMP/E CSI has been removed beginning with release 11.6. If upgrading from a previous release, ensure that the correct, complete name of your CSI is specified in the PARM= on the execute card.

ADS4APP is customized.

5. Submit the SAMPJCL member ADS4APP to apply SMP/E base functions.

Your product is applied and now resides in the target libraries.

6. Open the SAMPJCL member ADS5ACC in an edit session and execute the ADSSEDIT macro from the command line.

**Note:** Be aware that the default middle level qualifier name of the SMP/E CSI has been removed beginning with release 11.6. If upgrading from a previous release, ensure that the correct, complete name of your CSI is specified in the PARM= on the execute card.

ADS5ACC is customized.

7. Submit the SAMPJCL member ADS5ACC to accept SMP/E base functions.

Your product is accepted and now resides in the distribution libraries.

## Apply Maintenance

CA Support Online may have maintenance and HOLDDATA that have been published since the installation data was created. When the maintenance process is complete the product is ready to deploy.

### To apply maintenance

1. Check CA Support Online and download any PTFs and HOLDDATA published since this release was created. If the base release was created recently, you may find that no PTFs or holddata have been published yet.

2. Transfer the downloaded files to two separate FB 80 sequential data sets. Use one data set to contain the PTFs and the other to contain the HOLDDATA.

The PTFs and HOLDDATA become accessible to the SAMPJCL maintenance members.

3. The ADSSEDIT macro was customized in the installation steps. Verify that you still have the values from the base install.

4. Open the SAMPJCL member ADS6RECP in an edit session and execute the ADSSEDIT macro from the command line.

ADS6RECP is customized with your JOB statement, CSI location, and zone names.

5. Customize the ADS6RECP SMPPTFIN and SMPHOLD DD statements to reference the FB 80 data sets for the PTFs and HOLDDATA.

6. Submit ADS6RECP.

The PTFs and HOLDDATA are received.

7. Open the SAMPJCL member ADS7APYP in an edit session and execute the ADSSEDIT macro from the command line.

ADS7APYP is customized.

8. Submit ADS7APYP.

The PTFs are applied.

9. (Optional) Open the SAMPJCL member ADS8ACCP in an edit session and execute the ADSSEDIT macro from the command line.

ADS8ACCP is customized.

10. (Optional) Submit SAMPJCL member ADS8ACCP.

The PTFs are accepted.

**Note:** You do not have to submit the job at this time. You can accept the PTFs according to your site's policy.

**Important:** Be aware that the currently active CADSLOAD contains site specific load modules. These load modules were created during the initial product installation or subsequent product configuration. Directly copying over, or replacing, the currently active CADSLOAD with your SMP target CADSLOAD will back level these site specific load modules and result in undesired product behavior and or product failure. The following is a list of possible site specific load modules.

a. Database size dependent load modules

You must modify and execute member DSINCOPY to copy all database size dependent load modules from the currently active CADSLOAD to your new CADSLOAD.

b. CA Dispatch SVC

If you customized and submitted member DSINSVC or ADSJSVC in CAI.CADSJCL to update the CA Dispatch SVC routine with a new SVC number or CVKEY, you must copy load module CADSSVC from the currently active CADSLOAD to your new CADSLOAD.

c. Security Options load module

If you customized and submitted CADSJCL member DSEXSECX to activate any required security options, you must copy load module CADSSEC from the currently active CADSLOAD to your new CADSLOAD.

d. Special Feature Options load module

If you customized and submitted CADSJCL member DSINEX07 or ADSJEX07 to activate any required product special features, you must copy load module CADSFAT from the currently active CADSLOAD to your new CADSLOAD.

e. CA 7 Scheduling Interface load module

If you customized and submitted CADSJCL member DSINEX08 or ADSJEX08 to build, assemble and link the CA 7 Scheduling Interface, you must copy load module CADSCA7U from the currently active CADSLOAD to your new CADSLOAD.

f. CA ENF Event Collection Option load module

If you customized and submitted CADSJCL member DSINEXSX or ADSJSTAX to customize the CAIENF events being processed by the STATUS task of CA Dispatch, you must copy load module RDFGSTAX from the currently active CADSLOAD to your new CADSLOAD.

g. User Exit load modules

If you customized and submitted CADSJCL members DSINEX01 or ADSJEX01, DSINEX02 or ADSJEX02, DSINEX03 or ADSJEX03, DSINEX04 or ADSJEX04, DSINEX06 or ADSJEX06 to customize any of the CA Dispatch user exit programs, you must copy the following load modules from the currently active CADSLOAD to your new CADSLOAD.

- RDFGEX01 - BUNDLE START, SEPARATOR PAGE EXIT
- RDFGEX02 - EMBEDDED DJDE EXIT

- EDFGEX03 - BUNDLE END, SEPARATOR PAGE EXIT
  - RDFGEX04 - RECIPIENT SEPARATOR PAGE EXIT
  - RDFGEX06 - USER SECURITY EXIT
- h. CICS Online User Interface load modules
- If you customized and submitted CADSJCL member DSINCI1 to customize the CA Dispatch CICS Online User Interface, you must copy load modules CADSINTC and VCICICS from the currently active CADSLOAD to your new CADSLOAD.
- i. IMS Online User Interface load module
- If you customized and submitted CADSJCL member DSINIM1 to customize the CA Dispatch IMS Online User Interface, you must copy load modules CADSIMS from the currently active CADSLOAD to your new CADSLOAD.

## HOLDDATA

When you apply maintenance, you typically encounter SMP/E HOLDDATA. We use HOLDDATA to notify your SMP/E system of SYSMODs that have errors or special conditions. We support system and external HOLDDATA.

## System HOLDDATA

System HOLDDATA indicates data that is an in-stream part of the SYSMOD, informing you of special conditions. The following reasons may be used with SYSTEM HOLDDATA for CA Dispatch:

### **ACTION**

Indicates that you must perform special processing before or after you apply this SYSMOD.

### **AO**

This SYSMOD may affect automated operations. It may change either the message identifier or the displacement of a field inside the message.

### **DDDEF**

Indicates that data sets and DDDEFs are being added or modified.

**DELETE**

Deletes the SYSMOD load module. You cannot reverse this type of SYSMOD with the SMP/E RESTORE command.

**DEP**

Indicates a dependency for this SYSMOD that you must externally verify.

**DOC**

Indicates a documentation change with this SYSMOD.

**DYNACT**

Describes the steps to dynamically activate this fix without performing an IPL.

**EC**

Indicates that this SYSMOD requires a hardware engineering change. An EC hold SYSMOD usually does not affect the product unless the EC is present on the hardware device.

**ENH**

This SYSMOD introduces a small programming enhancement. The hold contains the instructions to implement the enhancement. If no action is needed to implement the enhancement, give a summary of the enhancement.

**EXIT**

Changes delivered by this sysmod may require reassembly of user exits.

**EXRF**

Indicates that the sysmod must be installed in both the Active and Alternate Extended Recovery Facility Systems.

**IPL**

Indicates that an IPL is required for this SYSMOD to take effect. This is used only when there is no alternative for dynamic activation.

**MSGSKEL**

Indicates that the sysmod contains internationalized message versions which must be run through the message compiler for each language.

**MULTSYS**

Apply this sysmod to multiple systems for either pre-conditioning, coexistence, or exploitation.

**RESTART**

Indicates that after applying this SYSMOD, the site must perform a special restart as opposed to a routine restart.

**SQLBIND**

Indicates that a bind is required for a database system other than DB2.

**SYSMOD**

Some or all of the elements delivered by this sysmod are to be downloaded to a workstation.

Code a bypass operand on your APPLY command to install SYSMODs that have internal holds. Only code the bypass operand after you have performed the required action, or if you are performing the action after the APPLY, if that is appropriate.

## External HOLDDATA

External HOLDDATA is not part of the PTF. It resides in a separate file. It is commonly used for SYSMODs that have been distributed and later are discovered to cause problems.

Download the external HOLDDATA from CA Support to a DASD file, and allocate the file to the SMPHOLD DD statement. To take care of the external HOLDDATA, receive it into your SMP/E environment. SMP/E receives the HOLDDATA from CA supplied jobs.

If a SYSMOD has an unresolved hold error, SMP/E does not install it unless you add a bypass to your APPLY command. You can bypass an error hold in situations that are not applicable to you. Error holds that are not applicable to you can include a problem that happens only with a hardware device that you do not have or in a product feature that you do not use.

When CA publishes a SYSMOD that resolves the hold, the resolving SYSMOD supersedes the hold error. This action lets you apply the original SYSMOD in conjunction with the fixing SYSMOD.

A special HOLDDATA class called ERREL exists. We have determined that the problem fixed by the SYSMOD is more important than the one that it causes. We recommend that you apply these SYSMODs.

The only manual task is running a REPORT ERRSYSMODS. This report identifies the following:

- Any held SYSMODs already applied to your system.
- Any resolving SYSMODs that are in receive status.

SMP/E identifies the SYSMOD to apply to correct the situation.





# Chapter 5: Installing Your Product from Tape

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This section contains the following topics:

[Unload the Sample JCL from Tape](#) (see page 66)

[How to Install Products Using Native SMP/E JCL](#) (see page 67)

[Apply Maintenance](#) (see page 70)

## Unload the Sample JCL from Tape

The sample JCL to install the product is provided in the CAI.SAMPJCL library on the distribution tape.

### To unload the sample JCL from tape

1. Run the following sample JCL:

```
//COPY      EXEC  PGM=IEBCOPY,REGION=4096K
//SYSPRINT  DD   SYSOUT=*
//SYSUT1    DD   DSN=CAI.SAMPJCL,DISP=OLD,UNIT=unitname,VOL=SER=nnnnnn,
//          LABEL=(1,SL)
//SYSUT2    DD   DSN=yourhlq.SAMPJCL,
//          DISP=(,CATLG,DELETE),
//          UNIT=sysda,SPACE=(TRK,(15,3,6),RLSE)
//SYSUT3    DD   UNIT=sysda,SPACE=(CYL,1)
//SYSIN     DD   DUMMY
```

#### **unitname**

Specifies the tape unit to mount the tape.

#### **nnnnnnn**

Specifies the tape volume serial number.

#### **yourhlq**

Specifies the data set prefix for the installation.

#### **sysda**

Specifies the DASD where you want to place the installation software.

The SAMPJCL data set is created and its contents are downloaded from the tape.

2. Continue with one of the following options:
  - If you already have the SMP/E environment set up, go to the ADS1ALL job.
  - If you do not have the SMP/E environment set up, go to Prepare the SMP/E Environment for Tape Installation.

## How to Install Products Using Native SMP/E JCL

The following steps describe the process to install products using native SMP/E JCL:

1. Allocate product data sets and SMP/E data sets.
2. Create SMP/E CSI.
3. Receive base functions.
4. Apply base functions.
5. Accept base functions.
6. Configure the product according to your site requirements.

### Prepare the SMP/E Environment for Tape Installation

The members used in this procedure prepare the data sets, initialize the zones, and create the DDDEFS for CA Dispatch.

For information about the members, see the comments in the JCL.

#### Follow these steps:

1. Customize the macro ADSSREDIT with your site-specific information and then copy the macro to your SYSPROC location. Replace the rightmost parameters for each ISREDIT CHANGE macro command. Each time you edit an installation member, type ADSSREDIT on the TSO command line, and press Enter to replace the defaults with your specifications.

The macro is ready to customize your CAI.SAMPJCL members.

**Note:** The following steps include instructions to execute the ADSSREDIT macro each time you open a new SAMPJCL member. To edit all SAMPJCL members simultaneously, read and follow the instructions in the ADSEDALL member.

2. Open the SAMPJCL member ADS1ALL in an edit session and execute the ADSSREDIT macro from the command line.

**Note:** If you are upgrading into an existing CSI, prior to submission, you must comment out existing data sets from the ADS1ALL member.

ADS1ALL is customized.

3. Submit ADS1ALL.

This job produces the following results:

- The target and distribution data sets for CA Dispatch are created.
- Unique SMPLTS, SMPMTS, SMPSCDS, and SMPSTS data sets for this target zone are created.

4. Open the SAMPJCL member ADS2CSI in an edit session and execute the ADSEEDIT macro from the command line.

**Note:** If you are upgrading into an existing CSI, prior to submission, do the following in ADS2CSI1:

- Comment out existing SMP data sets and the CSI allocate step and
- Change the UCLIN DDDEF ADD statements to REP statements for the allocated data sets.

For r11.0 upgrades into an existing CSI, do the following:

- Manually add the r11.0 Target and Distribution library DDDEFs to the ADS2CSI JCL and change CAIT0 to CAITGT and CAID0 to CAIDLIB.
- Delete SMPLOG from the CSI.

You can manually remove this from your CSI or you can add the following to the ADS2CSI job in the target and distribution library DDDEFs:

```
DEL DDDEF(SMPLOG) .
```

above the REP DDDEF(SMPLOG) statements.

ADS2CSI is customized.

5. Submit ADS2CSI.

This job produces the following results:

- The CSI data set is defined.
- The SMPPTS and SMPLOG data sets are allocated.
- The global, target, and distribution zones are initialized.
- The DDDEF entries for your product are created.
- The DDDEFs for the required SMP/E data sets are created.

## Run the Installation Jobs for a Tape Installation

Submit and run these SAMPJCL members in sequence. Do not proceed with any job until the previous job has completed successfully.

### To run the installation jobs

1. Open the SAMPJCL member ADS3RECT in an edit session and execute the ADSSREDIT macro from the command line.

**Note:** Be aware that the default middle level qualifier name of the SMP/E CSI has been removed beginning with release 11.6. If upgrading from a previous release, ensure that the correct, complete name of your CSI is specified in the PARM= on the execute card.

ADS3RECT is customized.

2. Submit the SAMPJCL member ADS3RECT to receive SMP/E base functions. CA Dispatch is received and now resides in the global zone.
3. Open the SAMPJCL member ADS4APP in an edit session and execute the ADSSREDIT macro from the command line.

Important: The APPLY of CA Dispatch r11.7 will delete the prior release of CA Dispatch.

**Note:** Be aware that the default middle level qualifier name of the SMP/E CSI has been removed beginning with release 11.6. If upgrading from a previous release, ensure that the correct, complete name your CSI is specified in the PARM= on the execute card.

ADS4APP is customized.

4. Submit the SAMPJCL member ADS4APP to apply SMP/E base functions.  
Your product is applied and now resides in the target libraries.
5. Open the SAMPJCL member ADS5ACC in an edit session and execute the ADSSREDIT macro from the command line.

**Note:** Be aware that the default middle level qualifier name of the SMP/E CSI has been removed beginning with release 11.6. If upgrading from a previous release, ensure that the correct, complete name your CSI is specified in the PARM= on the execute card.

ADS5ACC is customized.

6. Submit the SAMPJCL member ADS5ACC to accept SMP/E base functions.  
Your product is accepted and now resides in the distribution libraries.

## Apply Maintenance

CA Support Online may have maintenance and HOLDDATA that have been published since the installation data was created. When the maintenance process is complete the product is ready to deploy.

### To apply maintenance

1. Check CA Support Online and download any PTFs and HOLDDATA published since this release was created. If the base release was created recently, you may find that no PTFs or holddata have been published yet.

2. Transfer the downloaded files to two separate FB 80 sequential data sets. Use one data set to contain the PTFs and the other to contain the HOLDDATA.

The PTFs and HOLDDATA become accessible to the SAMPJCL maintenance members.

3. The ADSSEDIT macro was customized in the installation steps. Verify that you still have the values from the base install.

4. Open the SAMPJCL member ADS6RECP in an edit session and execute the ADSSEDIT macro from the command line.

ADS6RECP is customized with your JOB statement, CSI location, and zone names.

5. Customize the ADS6RECP SMPPTFIN and SMPHOLD DD statements to reference the FB 80 data sets for the PTFs and HOLDDATA.

6. Submit ADS6RECP.

The PTFs and HOLDDATA are received.

7. Open the SAMPJCL member ADS7APYP in an edit session and execute the ADSSEDIT macro from the command line.

ADS7APYP is customized.

8. Submit ADS7APYP.

The PTFs are applied.

9. (Optional) Open the SAMPJCL member ADS8ACCP in an edit session and execute the ADSSEDIT macro from the command line.

ADS8ACCP is customized.

10. (Optional) Submit SAMPJCL member ADS8ACCP.

The PTFs are accepted.

**Note:** You do not have to submit the job at this time. You can accept the PTFs according to your site's policy.

**Important:** Be aware that the currently active CADSLD contains site specific load modules. These load modules were created during the initial product installation or subsequent product configuration. Directly copying over, or replacing, the currently active CADSLD with your SMP target CADSLD will back level these site specific load modules and result in undesired product behavior and or product failure. The following is a list of possible site specific load modules.

a. Database size dependent load modules

You must modify and execute member DSINCOPY to copy all database size dependent load modules from the currently active CADSLD to your new CADSLD.

b. CA Dispatch SVC

If you customized and submitted member DSINSVC or ADSJSVC in CAI.CADSLD to update the CA Dispatch SVC routine with a new SVC number or CVKEY, you must copy load module CADSSVC from the currently active CADSLD to your new CADSLD.

c. Security Options load module

If you customized and submitted CADSLD member DSEXSECX to activate any required security options, you must copy load module CADSSEC from the currently active CADSLD to your new CADSLD.

d. Special Feature Options load module

If you customized and submitted CADSLD member DSINEX07 or ADSJEX07 to activate any required product special features, you must copy load module CADSFAT from the currently active CADSLD to your new CADSLD.

e. CA 7 Scheduling Interface load module

If you customized and submitted CADSLD member DSINEX08 or ADSJEX08 to build, assemble and link the CA 7 Scheduling Interface, you must copy load module CADSCA7U from the currently active CADSLD to your new CADSLD.

f. CA ENF Event Collection Option load module

If you customized and submitted CADSLD member DSINEXSX or ADSJSTAX to customize the CAIENF events being processed by the STATUS task of CA Dispatch, you must copy load module RDFGSTAX from the currently active CADSLD to your new CADSLD.

g. User Exit load modules

If you customized and submitted CADSLD members DSINEX01 or ADSJEX01, DSINEX02 or ADSJEX02, DSINEX03 or ADSJEX03, DSINEX04 or ADSJEX04, DSINEX06 or ADSJEX06 to customize any of the CA Dispatch user exit programs, you must copy the following load modules from the currently active CADSLD to your new CADSLD.

- RFGEX01 - BUNDLE START, SEPARATOR PAGE EXIT
- RFGEX02 - EMBEDDED DJDE EXIT

- EDFGEX03 - BUNDLE END, SEPARATOR PAGE EXIT
  - RDFGEX04 - RECIPIENT SEPARATOR PAGE EXIT
  - RDFGEX06 - USER SECURITY EXIT
- h. CICS Online User Interface load modules
- If you customized and submitted CADSJCL member DSINCI1 to customize the CA Dispatch CICS Online User Interface, you must copy load modules CADSINTC and VCICICS from the currently active CADSLOAD to your new CADSLOAD.
- i. IMS Online User Interface load module
- If you customized and submitted CADSJCL member DSINIM1 to customize the CA Dispatch IMS Online User Interface, you must copy load modules CADSIMS from the currently active CADSLOAD to your new CADSLOAD.

## HOLDDATA

When you apply maintenance, you typically encounter SMP/E HOLDDATA. We use HOLDDATA to notify your SMP/E system of SYSMODs that have errors or special conditions. We support system and external HOLDDATA.

## System HOLDDATA

System HOLDDATA indicates data that is an in-stream part of the SYSMOD, informing you of special conditions. The following reasons may be used with SYSTEM HOLDDATA for CA Dispatch:

### **ACTION**

Indicates that you must perform special processing before or after you apply this SYSMOD.

### **AO**

This SYSMOD may affect automated operations. It may change either the message identifier or the displacement of a field inside the message.

### **DDDEF**

Indicates that data sets and DDDEFs are being added or modified.



**DELETE**

Deletes the SYSMOD load module. You cannot reverse this type of SYSMOD with the SMP/E RESTORE command.

**DEP**

Indicates a dependency for this SYSMOD that you must externally verify.

**DOC**

Indicates a documentation change with this SYSMOD.

**DYNACT**

Describes the steps to dynamically activate this fix without performing an IPL.

**EC**

Indicates that this SYSMOD requires a hardware engineering change. An EC hold SYSMOD usually does not affect the product unless the EC is present on the hardware device.

**ENH**

This SYSMOD introduces a small programming enhancement. The hold contains the instructions to implement the enhancement. If no action is needed to implement the enhancement, give a summary of the enhancement.

**EXIT**

Changes delivered by this sysmod may require reassembly of user exits.

**EXRF**

Indicates that the sysmod must be installed in both the Active and Alternate Extended Recovery Facility Systems.

**IPL**

Indicates that an IPL is required for this SYSMOD to take effect. This is used only when there is no alternative for dynamic activation.

**MSGSKEL**

Indicates that the sysmod contains internationalized message versions which must be run through the message compiler for each language.

**MULTSYS**

Apply this sysmod to multiple systems for either pre-conditioning, coexistence, or exploitation.

#### **RESTART**

Indicates that after applying this SYSMOD, the site must perform a special restart as opposed to a routine restart.

#### **SQLBIND**

Indicates that a bind is required for a database system other than DB2.

#### **SYSMOD**

Some or all of the elements delivered by this sysmod are to be downloaded to a workstation.

Code a bypass operand on your APPLY command to install SYSMODs that have internal holds. Only code the bypass operand after you have performed the required action, or if you are performing the action after the APPLY, if that is appropriate.

## **External HOLDDATA**

External HOLDDATA is not part of the PTF. It resides in a separate file. It is commonly used for SYSMODs that have been distributed and later are discovered to cause problems.

Download the external HOLDDATA from CA Support to a DASD file, and allocate the file to the SMPHOLD DD statement. To take care of the external HOLDDATA, receive it into your SMP/E environment. SMP/E receives the HOLDDATA from CA supplied jobs.

If a SYSMOD has an unresolved hold error, SMP/E does not install it unless you add a bypass to your APPLY command. You can bypass an error hold in situations that are not applicable to you. Error holds that are not applicable to you can include a problem that happens only with a hardware device that you do not have or in a product feature that you do not use.

When CA publishes a SYSMOD that resolves the hold, the resolving SYSMOD supersedes the hold error. This action lets you apply the original SYSMOD in conjunction with the fixing SYSMOD.

A special HOLDDATA class called ERREL exists. We have determined that the problem fixed by the SYSMOD is more important than the one that it causes. We recommend that you apply these SYSMODs.

The only manual task is running a REPORT ERRSYSMODS. This report identifies the following:

- Any held SYSMODs already applied to your system.
- Any resolving SYSMODs that are in receive status.

SMP/E identifies the SYSMOD to apply to correct the situation.

# Chapter 6: Installing Your Product from DVD

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This section contains the following topics:

[DVD Contents](#) (see page 75)

[The pax Command](#) (see page 75)

[How to Install a Product](#) (see page 75)

[Create a Product Directory from the Pax File](#) (see page 77)

[Complete the Installation](#) (see page 78)

## DVD Contents

The DVD contains a folder that includes the pax file for the product.

Product updates may have occurred after you acquired the product DVD. The files on the online site always have the most current product updates. To determine if you have the latest updates, go to <http://ca.com/support> and click Download Center.

## The pax Command

The pax command performs the following actions:

- Extracts the files and directories that are packaged within the pax file.
- Creates a USS directory in the same directory structure where the pax file resides.
- Automatically generates a product and level-specific directory name.

## How to Install a Product

The pax.Z files that are delivered on the DVD must be uploaded to your z/OS USS directory.

**Follow these steps:**

1. Copy the entire product software package (or individual pax files) to your PC from the CA Technologies product DVD.

**Note:** Do *not* change the format of the pax.Z.

2. Open a Windows command prompt.

The command prompt appears.

3. Customize and enter the following FTP commands:

```
FTP mainframe  
userid  
password  
bin  
lcd C:\PC\folder\for\thePAXfile  
cd /yourUSSESDdirectory/  
put paxfile.pax.Z  
quit  
exit
```

*mainframe*

Specifies the z/OS system IP address or DNS name.

*userid*

Specifies your z/OS user ID.

*password*

Specifies your z/OS password.

**C:**\PC\folder\for\thePAXfile

Specifies the location of the pax file on your PC.

**Note:** If you specify a location that has blanks or special characters in the path name, enclose that value in double quotation marks.

*yourUSSESDdirectory*

Specifies the name of the USS directory that you use for ESD downloads.

*paxfile.pax.Z*

Specifies the name of the pax file to upload.

The pax file is transferred to the mainframe.

## Create a Product Directory from the Pax File

The sample job [Unpackage.txt](#) (see page 78) simplifies the Pax-Enhanced ESD process; you can copy this JCL job directly to the mainframe.

### Follow these steps:

1. Enter the following JCL:

```
//ESDUNPAX JOB (accountnumber), 'UNPAX ESD PACKAGE ',  
// MSGCLASS=X, CLASS=A, NOTIFY=&SYSUID  
//UNPAXDIR EXEC PGM=BPXBATCH,  
// PARM='sh cd /yourUSSESDDirectory/; pax -rvf paxfile.pax.Z'  
//STDOUT DD SYSOUT=*  
//STDERR DD SYSOUT=*
```

*accountnumber*

Specifies a valid JOB statement.

*yourUSSESDDirectory*

Specifies the name of the USS directory for your ESD downloads.

**Note:** If the PARM= statement exceeds 71 characters after making these changes, uncomment and use the second form of UNPAXDIR in the sample JCL instead.

*paxfile.pax.Z*

Specifies the name of the pax file.

2. Submit the job.

The job runs and creates the product directory.

## Sample JCL

The following is the text for the Unpackage.txt JCL file:

```
//ESDUNPAX JOB (ACCOUNTNO), 'UNPAX ESD PACKAGE ',
// MSGCLASS=X, CLASS=A, NOTIFY=&SYSUID
//*****
/* This sample job can be used to invoke the pax command to create *
/* the product-specific installation directory. *
/* *
/* This job must be customized as follows: *
/* 1. Supply a valid JOB statement. *
/* 2. Replace "yourUSSESDdirectory" with the name of the USS *
/* directory used on your system for ESD downloads. *
/* 3. Replace "paxfile.pax.Z" with the name of the pax file. *
/* NOTE: If you continue the PARM= statement on a second line, make *
/* sure the 'X' continuation character is in column 72. *
//*****
//UNPAXDIR EXEC PGM=BYPXBATC,
// PARM='sh cd /yourUSSESDdirectory/; pax -rvf paxfile.pax.Z'
/*UNPAXDIR EXEC PGM=BYPXBATC,
/* PARM='sh cd /yourUSSESDdirectory/; pax X
/* -rvf paxfile.pax.Z'
//STDOUT DD SYSOUT=*
//STDERR DD SYSOUT=*
```

## Complete the Installation

# Chapter 7: Starting Your Product

---

This section describes what you need to do to start CA Dispatch.

This section contains the following topics:

[How to Complete Configuration With CA MSM](#) (see page 79)

[Verify MSM](#) (see page 86)

[How to Configure Without CA MSM](#) (see page 86)

[Prepare to Start Your Product](#) (see page 118)

[Post Installation Considerations](#) (see page 140)

## How to Complete Configuration With CA MSM

The topics in this section describe the manual tasks you perform when [configuring your product using CA MSM](#) (see page 37).

### Install CICS Support (Optional)

If you plan to have CICS interface to CA Dispatch, you must perform this step; otherwise, go to the next step. The following sections tell you what to do if you want CICS support.

#### Update the CICS support user modification

JCL member DSINCI1 in the CAI.CADSJCL data set provides customers with user modification DSINCI1 that installs source modules into CA Dispatch for CICS support. DSINCI1 defines four new source modules, DSUCFC1, DSUCFC2, DSUCFC3 and DSUCFC4. The source for these modules is inline in the user modification.

Modules DSUCFC1 and DSUCFC2 in the user modification specify CWADISP=0. Module DSUCFC3 in the user modification specifies NTID=DSP2. You must change these parameters before receiving and applying the user modification.

To install the CICS interface modules outside of SMP/E and link into a separate load library, use member ADSJCI1 in CAI.CADSJCL. Customize the ADSJCI1 source code the same as you would for DSINCI1.

## CWA CONSIDERATIONS

CICS communicates with CA Dispatch by way of a 4-byte area in the Common Work Area (CWA).

A four-byte area must be identified and reserved for the exclusive use of the interfaces. Calculate the displacement from the beginning (relative 0) of the CSA to the reserved area.

**Important!** CSA definitions must be mapped out with extreme care. If displacement calculations are in error, unpredictable results in the CA Dispatch/CICS interface and/or other applications utilizing the CWA may occur.

The transaction ID, specified in the source for module DSUCFC3 in the user modification, also needs to be changed to match the second transaction ID specified in Step 4 of the installation worksheet.

Receive and Apply the DSINCI1 user modification

Use SMP to receive and apply the DSINCI1 user modification. SMP will assemble and link the source modules defined in the user modification into the CAI.CADSLOAD data set.

## CICS Table Considerations

There are several CICS internal tables that you must update in order for the interface to function. Some tables can be assembled through batch jobs. The CEDA transaction can define or alter some of the resources such as the TCT, PCT, and PPT interactively.

For additional information, the *CICS/OS/VS Resource Definition Book* (online) describes the CEDA transaction, and the *CICS/OS/VS Resource Definition book* (macro) describes how to code the tables you require.

- Transaction Table (Program Control Table - PCT)

Entries to this table should look like the following:

```
DFHPCT TYPE=ENTRY,  
        TRANSID=DSP1,  
        PROGRAM=CADSINTC,  
DFHPCT TYPE=ENTRY,  
        TRANSID=DSP2,  
        PROGRAM=VCICICS,  
        TWASIZE=400
```

**Note:** The TRANSID fields can be changed as per your installation's transaction requirements. However, if you change DSP2, the new transaction ID must be the same as in DSUCFC3. For more information, see the Define the CICS Interface step.



- Program Table (Processing Program Table - PPT)

Entries to this table should look like the following:

```
DFHPPT TYPE=ENTRY, PROGRAM=CADSINTC, RES=YES, RELOAD=NO, LANG=ASSEMBLER
```

```
DFHPPT TYPE=ENTRY, PROGRAM=VCICICS, RES=NO, RELOAD=NO, LANG=ASSEMBLER
```

Be aware of the following:

- Program CADSINTC stores CSECT addresses within the 4-byte CWA. Program VCICICS utilizes these addresses to branch to the appropriate CSECT within CADSINTC. Even though transaction DSP1 is executed once, the module (CADSINTC) it invokes is continuously being branched to by VCICICS. Because of this, it *must* be a resident module.
- Abends can occur if you use the same interface modules for access to both a main region and an OLVO region; this is the result of concurrent usage of a temporary storage queue.

You can prevent this situation by using the CADSQID parameter as follows:

- Create an interface for both the main and OLVO region but use a different CADSQID for each.
- If symbolic CADSQID is not specified, the default queue name CADSMAIN will be used. The following example defines a default temporary storage queue named CADSMAIN:

```
CADSINTC IDMSINTC XA=YES, CWADISP=0, OPSYS=MVS, SYSCTL=CAICTL
END
```

**Note:** If symbolic CADSQID=xxxx is specified, a queue name of CADSxxxx is used. Symbolic CADSQID cannot specify blanks and it must be 4 characters long. The following example defines a temporary storage queue named CADSOLVO:

```
CADSINTC IDMSINTC XA=YES, CWADISP=0, OPSYS=MVS, SYSCTL=CAICTL, CADSQID=OLV
END
```

- List Table (Program List Table - PLT)

Entries to this table should look like the following:

```
DFHPLT TYPE=ENTRY, PROGRAM=CADSINTC
```

**Note:** If transaction DSP1 is entered by an operator, terminal lockup will result since no terminal I/O processing occurs in the program. Simply press the RESET key to continue processing.

## CICS Storage Protection Considerations

Be aware that CICS storage protection cannot be used with CA Dispatch. Make the following program and transaction changes to allow the CA Dispatch CICS interface to function in an environment where CICS storage protection has been established.

There are two CICS STARTUP parameters, RENTPGM and STGPROT for the CICS storage protect feature. The following procedures will avoid DFHSR0622 and DFHSR0001 errors for CADSINTC and VCICICS when RENTPGM and STGPROT parameters are used.

Modify your CICS program and Transaction definitions as follows:

1. The DSP1 and DSP2 transactions, which invoke interface programs CADSINTC and VCICICS, must be defined with TASKDATAKEY=CICS.

```
DFHPCT TYPE=ENTRY,  
        TRANSID=DSP1,  
        PROGRAM=CADSINTC,  
        TASKDATAKEY=CICS
```

```
DFHPCT TYPE=ENTRY,  
        TRANSID=DSP2,  
        PROGRAM=VCICICS,  
        TASKDATAKEY=CICS,  
        TWASIZE=400
```

2. The interface programs CADSINTC and VCICICS must be defined with EXECKEY=CICS.

```
DFHPPT TYPE=ENTRY, PROGRAM=CADSINTC, RES=YES, RELOAD=NO,  
        LANG=ASSEMBLER, EXECKEY=CICS
```

```
DFHPPT TYPE=ENTRY, PROGRAM=VCICICS, RES=NO, RELOAD=NO,  
        LANG=ASSEMBLER, EXECKEY=CICS
```

3. Ensure that CADSINTC and VCICICS are linked with NORENT parameter.

```

/*-----
//RELINK EXEC PGM=IEWL,
//          PARM='XREF,LET,LIST,NCAL,NORENT',
//          REGION=1024K
//SYSPRINT DD SYSOUT=*
//SYSLIN DD DDNAME=SYSIN
//SYSLIB DD DSN=CAI.CADSLOAD,DISP=SHR
//SYSUT1 DD DSN=&&SYSUT1,UNIT=SYSDA,SPACE=(1024,(50,20))
//SYSLMOD DD DSN=CAI.CICS41.CAILIB,DISP=SHR << should this be changed? >>
//SYSIN DD *
INCLUDE SYSLIB(CADSINTC)
ENTRY STARTUP
MODE AMODE(31),RMODE(24)
NAME CADSINTC(R)
INCLUDE SYSLIB(VCICICS)
ENTRY VCICICSE
MODE AMODE(31),RMODE(24)
NAME VCICICS(R)
/*

```

### Modify CICS Startup JCL

1. Concatenate the LOAD library containing the CA Dispatch CICS modules to the CICS region load library list (DFHRPL).
2. Add the following DD statement to the CICS regions startup JCL.

```
//CAICTL DD DSN=CAI.SYSCTL,DISP=SHR
```

**Note:** An FCT entry is not necessary for this file. I/O access to this file is through normal OS convention.

### Install IMS Support (Optional)

If you plan to have an IMS interface to CA Dispatch, perform these steps; otherwise, go to the next step.

## Update the IMS Support User Modification

JCL member DSINIM1 in the CAI.CADSJCL data set provides customers with user modification DSINIM1 that installs source modules into CA Dispatch for IMS support. DSINIM1 defines two new source modules, DSUCFI1 and DSUCFI2. The source for these modules is inline in the user modification.

To install the IMS interface modules outside of SMP/E and link into a separate load library, use member ADSJIM1 in CAI.CADSJCL. Customize the ADSJIM1 source code the same as you would for DSINIM1.

### Do the following:

1. Update the DSINIM1 member with the IMS transaction code that is defined in Step 4c of the work sheet you prepared earlier.
2. Locate NTID=DSP2 in the definition for the DSUCFI1 source module, and change the DSP2 to the IMS transaction code.

Member DSUCFI1 also contains a number of terminal definitions specified using the #UCFUTD macro. CA Dispatch uses the first terminal definition that does not contain the TERM=YES parameter it encounters in DSUCFI1 as the default terminal definition. Any other default terminal definitions are ignored.

The example below shows a default terminal definition as an IBM 3277 Model 2 terminal, and several other possible definitions.

```
#UCFUTD TYPE=T3277,MODEL=2
#UCFUTD TYPE=TTY,TERM=TWX01
#UCFUTD TYPE=TTY,TERM=TWX02
#UCFUTD TYPE=TTY,TERM=TWX05
#UCFUTD TYPE=T3277,MODEL=3,NLINES=32,TERM=REM003
#UCFUTD TYPE=T3277,MODEL=4,NLINES=43,TERM=LOC046
#UCFUTD TYPE=T3277,MODEL=5,NLINES=27,NCHARS=132,TERM=REM032
#UCFUTD TYPE=T3279,MODEL=2,TERM=COLOR33
```

3. Receive and apply the IMS support user modification after you have completed the updates.

## PSB Generation for the Interface Module

Execute the following JCL to generate an IMS PSB for the Interface program:

```
//CADSPSB EXEC PSBGEN,MBR=CADSIMS
//C.SYSIN DD *
PCB TYPE=TP,MODIFY=YES
PSBGEN PSBNAME=CADSIMS,LANG=ASSEM
END
```

## ACB Generation for the Interface Module

Create an ACB for the interface by running an ACBGEN with the following parameters:

```
//SYSIN DD *
        BUILD PSB=CADSIMS
```

## Define the Interface as an IMS application

Define the following statements to IMS:

```
APPLCTN PSB=CADSIMS,SCHDTYP=PARALLEL
TRANSACT CODE=(CADS),MSGTYPE=(MULTSEG,RESPONSE),SPA=134
```

Where CADS is the transaction ID specified on the NTID= parameter in the Define the IMS Interface step.

## Modify IMS Startup JCL:

1. Concatenate the LOAD library containing the CA Dispatch IMS modules to the IMS region load lib list.
2. Add the following DD statement to the startup JCL of the IMS region:

```
//SYSCTL DD DSN=CAI.SYSCTL,DISP=SHR
```

## Install ISPF Support (Optional)

If you plan to have ISPF interface to CA Dispatch, you must perform this step; otherwise, go to the next step.

The CLIST source code for providing a link between ISPF and CA Dispatch is in member DSISPF in the CAICLS0 library.

Edit the ALLOC statement with the correct data set name. The default value is CAI.DISP.SYSCTL.

Perform one of the following options:

- Allocate all of the ISPF libraries by copying the following ALLOC statements into a separate, user CLIST or into your logon CLIST. CAIOPTN member DSISPALC contains the ALLOC statements listed below. Whichever method you use, modify the CLIST to concatenate the CAI ISPF libraries with your system libraries:

```
ALLOC FI (ISPLIB) SHR DA('CAI.CADSPNL0' +
ALLOC FI (ISPLLIB) SHR DA('CAI.CADSLMD0' +
ALLOC FI (SYSPROC) SHR DA('CAI.CADSCLS0' +
```

- Allocate the ISPF libraries in your logon procedure. Modify the logon procedure to concatenate the CAI ISPF libraries with your system libraries:

```
//ISPPLIB DD DSN=CAI.CADSPNL0,DISP=SHR
//ISPLLIB DD DSN=CAI.CADSLMD0,DISP=SHR
//SYSPROC DD DSN=CAI.CADSCLS0,DISP=SHR
```

To complete the ISPF installation, update the ISPF main panel with a selection for CA Dispatch by placing a selection literal on the ISPF main screen and adding a PANEL (UCFMENU) NEWAPPL (UCF).

## Verify MSM

The MSM configuration submitted two jobs using the Jobcard that you provided. Take a look in the JES queue for the job output. These jobs should end RC=0.

Proceed to the section Prepare to Start Your Product to continue the install process.

## How to Configure Without CA MSM

This section describes the manual tasks you perform if you are not configuring your product using CA MSM. These are the minimum configuration tasks needed before CA Dispatch can be customized, started, and used in your environment.

### Step 1. Allocate LDS Files and Configure CADDSPX Processing Options

This step is for all new CA Dispatch installations. It defines and configures a set of linear data sets (LDS) for use by a specific CADDSPX task and a CA Dispatch task.

**Note:** LDS files cannot be shared by multiple CADDSPX and CA Dispatch tasks.

CADSJCL member DDEXLDSI must be customized and executed. DDEXLDSI is a two step job that does the following:

- Executes a standard IBM IDCAMS utility to allocate the Root and Append linear data sets.
- After the LDS files are allocated, DDEXLDSI executes the CADDUTIL utility to define and store all CADDSPX configuration and processing options within the Root LDS.

**Important!** All options should be reviewed before you submit the DDEXLDSI job.

## The IDCAMS Utility

The first step of job DDEXLDSI executes the IBM IDCAMS utility which allocates the CADDSPS VSAM linear data sets (LDS).

By default, the DDEXLDSI job is set up to initialize one 50 cylinder Root LDS and two (200 and 100 cylinder) appended LDS files. If your site requires more than 3 LDS files, CAIJCL member DDEXLDSA can subsequently be used to append additional LDS files to add more report data space.

The LDS files are used as input staging areas for the RPI, MSG, and ARCHIVE subtasks. All report data that is awaiting printing by the RPO tasks also resides within the LDS. All Online Viewing Report and MSGCLASS data is stored on the LDS. For information about LDS sizing calculations, see the "System Requirements" chapter.

The following is an example of the Define Cluster statement with Data set name, Volume and cylinder size.

Modify the default settings where necessary so that the values specified are compatible with your site requirements. Be sure to consider the following critical variables:

```
DEF CL ( NAME ( CAI.CADDLDS.ROOT          ) -
          VOL ( XXXXXX ) CYL ( 50 , 0 ) - ****Modify
          SHR ( 1 , 3 ) LINEAR           )
DEF CL ( NAME ( CAI.CADDLDS.APPEND01     ) -
          VOL ( XXXXXX ) CYL ( 200 , 0 ) - ****Modify
          SHR ( 1 , 3 ) LINEAR           )
DEF CL ( NAME ( CAI.CADDLDS.APPEND02     ) -
          VOL ( XXXXXX ) CYL ( 100 , 0 ) - ****Modify
          SHR ( 1 , 3 ) LINEAR           )
```

## The CADDUTIL Utility

The second step of job DDEXLDSI executes program CADDUTIL. Control statements for CADDUTIL define *all* of the processing options needed to to run both the CADDSPS and post-JES Spool report collector SAPI tasks.

CADDUTIL stores these options into the Root LDS.

**Note:** For more information about the processing options and the CADDUTIL utility, see the CADDSPS Operation chapter in the *CA Dispatch Systems Programmer Guide*.

Modify the default settings where necessary so that the values specified are compatible with your site requirements. Be sure to consider the following critical ROOT, ADD and APD configuration statements:

- ROOT Statement specifies the MAXDS value.

The MAXDS value must equal the maximum number of reports and MSGCLASS entries that can be stored within the LDS. The following shows the format of the ROOT initialization statement:

```

ROOT      DDname = ddname
          [ {, INIT / ALTER } ]
          [, Div = ( nnnnn [ , nnnnnn ] [, {CHECKing/NOCHECKing} ] ) ]
          [, Index = nnnnnnnnn ]
          [, Lock = ( nbr ] [, time ] ) ]
          [, MAXDs = nnnnn ]
          [, MDWarn = nnn ]
          [, Order = ( field1 [ , field2 [ , ... ] ) ] ]
          [, PFcount = nnnnnn ]
          [, PRintline = nnn ]
          [, PURge = ( [ Asynchro/Synchro ] [, { Clean/Quick } ] ) ]
          [, SCan = ( [ SEQuential/SORTed ]
          [, UPdatbitm = [ ON/OFF ]
          [, Util = ( [ utl1 ] [, utl2 ] ) ]
          [, WPurge = nnnn ]
          [, ENCrpt = ([OFF / ICSF ] [ , nnn ]} ]
          [, PAGEOut = ( nnnnn [ , {INTERLeav/SEQUENTia} ] ) ]
    
```

The default setting for MAXDS in the DDEXLDSI JCL is 123568. This setting is a model only. It requires modification to your site specification.

**Important!** Consider carefully when calculating the MAXDS value. The MAXDS value cannot be dynamically changed after the Root LDS has been allocated and configured. To change the MAXDS value, you will have to do an OLV unload, reallocation / reconfiguration of the LDS files, and an OLV reload.

**Note:** For more information about MAXDS sizing calculations, see the "System Requirements" chapter.

- ADD Statement specifies the task identifier, associated input class / destination combination and action values. The following shows the format of the ADD initialization statement:

```

Add task
          [, Class = class ]
          [, Dest = destination ]
          [, Action = action ]
          [, Initial = [Dynamic/Start/STop] ]
    
```



The following shows sample ADD initialization statements with task, associated Class / Destination combinations and action variables. By default, the DDEXLDSI job is set up to process user report data as follows:

- All user report data written to Class A / Destination RPI1 will be captured and assigned to task RPI1.
- All user report data written to Class A / Destination RPI2 will be captured and assigned to task RPI2.
- All user report data written to Class A / Destination RPI3 will be captured and assigned to task RPI3.
- All user MSGCLASS data written to Class S will be captured and assigned to task MSG.
- All user report data written to Class X will be captured and assigned to task ARCH.

All tasks, except MSG, will dynamically intercept report data. These settings are examples and are site specific. *They will require modification.*

```
ADD RPI1 , C = A , D = RPI1 , A = INTERCEPT
```

```
ADD RPI2 , C = A , D = RPI2 , A = INTERCEPT
```

```
ADD RPI3 , C = A , D = RPI3 , A = INTERCEPT
```

```
ADD MSG , C = S
```

```
ADD ARCH, C = X      , A = INTERCEPT
```

**Important!** CADDSP will capture (pre-JES Spool via open intercept and post JES Spool via SAPI data collector) and store all reports and MSGCLASS (all MSGCLASS data will be processed via SAPI data collector) output written to these class/destination combinations.

In a later step in the installation process, you will enter these same class and destination combinations on the VSGMU105 Dedicated Sysout Control Information Screen. If these class or class/destination combination values do not match the corresponding values defined to VSGMU105 Dedicated Sysout Control Information Screen, the reports and MSGCLASS stored in the LDS cannot be processed by the RPI, MSG or ARCH subtasks in CA Dispatch.

**Note:** For more information on class and destination combination settings, see the Distribution Considerations section in the "Installation Options" chapter of the *CA Dispatch Systems Programmer Guide*. Also see screen VSGMU105 Dedicated Sysout Control Information in the "Sysgen Screens" chapter in the *CA Dispatch Reference Guide*.

- APPEND statement specifies associated JCL DDNAMEs.

The following shows the format of the Append initialization statement. An APPEND statement must be added for each appended LDS file defined to CADDSP. The CADDUTIL utility will initialize each corresponding LDS file referenced by DDNAME.

```
Append/Append DDname = ddname { , INIT / DELETE }
```

The following shows the sample Append initialization statement with the critical variables. By default, the DDEXLDSI job is set up to initialize and append two LDS files using the DDNAME of APD1 and APD2.

```
APD DDNAME = APD1 , INIT
```

```
APD DDNAME = APD2 , INIT
```

This sample shows DDEXLDSI JCL with the associated DDNAME. << accurate?? >>

```
//UTIL EXEC PGM=CADDUTIL,REGION=6M
//STEPLIB DD DISP=SHR,DSN=CAI.CADSLD <==
//ROOT DD DISP=SHR,DSN=CAI.CADDLDS.ROOT <==
//APD1 DD DISP=SHR,DSN=CAI.CADDLDS.APPEND01 <==
//APD2 DD DISP=SHR,DSN=CAI.CADDLDS.APPEND02 <==
//SYSPRINT DD SYSOUT=*
//SYSIN DD *
```

**Note:** In a later step in the installation process, you will have to enter both the CADDSPx Task Suffix and the name of the Root LDS file created by this step on the Sysgen Control Information Screen (VSGMU110). This will assign or link the specific CA Dispatch task to an associated CADDSPx task. For more information, see the Test and Validate Operation step.

## MAXCAD Value Consideration

**Important!** Adjust the MAXCAD value in your SYS1.PARMLIB(IEASYSxx) whenever you are adding a new CADDSP environment or LDS file.

**Note:** For more information, see CADDSP Linear Data Set Requirements in the System Requirements chapter.

## Step 2. Install and Initialize the Databases

This step is for new installations of CA Dispatch only.

Skip this step if you are upgrading from a previous release of CA Dispatch.

CADSJCL member DSEXDBIN contains the database install and initialization JCL. The following occurs:

- Files from the SMP/E processing are copied.  
If the DSHLQ used for the database will be different than the SMP/E processing, make an appropriate change in the IDCAMS step of JCL DSEXDBIN.
- Database files are allocated.
- Database files are Initialized.

Edit and customize the JCL, including all symbolics.

Select one of five sizes (1, 2, 3, 4, or 5) for the CA Dispatch Archive/Online Viewing and Report Distribution systems. Also select the size for your CA Dispatch IDMS Journal files (1, 2, or 3).

**Note:** The archive and distribution systems may be different sizes. CA has found that Size 2 for both archive and distribution systems works well for most users. For more information., see the *CA Dispatch Systems Programmer Guide*. Use the chart in the worksheet in Step 4 as a guide in making your choices. Carefully evaluate your needs. Once the system is installed, moving from one size to another is a time consuming process.

Submit the job and review the output.

If this job completes with a return code higher than 8, follow the directions included in the JCL.

Ensure that all steps except SCHEMA and SUBSCHM complete with a return code of 0. Step SCHEMA will end with a return code of 8. Step SUBSCHM will complete with a return code of 4.

For any other non-zero return codes, follow the recovery directions in the JCL.

### Considerations for IDMS Sites Using a System Number Other Than 01

If you are a current CA IDMS site and would like to use a system number other than 01, select option LT in the SYS01 symbolic.

**Note:** Step CASYSG will JCL flush if the SYS01 symbolic is set to LE. This is correct; the CASYSG step should only run if the symbolic is set to LT.

If you change the SYS01 symbolic from LE to LT, you must also modify the \*TOSYS parameter in member DSVIN in the CADSOPTN Library to reflect the new system number before you execute this job.

If you are going to test CA Dispatch r11.7 on the same CPU as your production CA Dispatch, be sure to choose a unique CVNUM (from 1 to 32) for CA Dispatch r11.7.

### Step 3. Generate Subschema Load Modules

This step is for all new CA Dispatch installations.

CADSJCL member DSEXSUBS will punch and link all necessary subschemas into load modules for the batch jobs to use when running in local mode.

Customize the JCL and submit the job. Return code 00 is expected in all steps.

### Step 4. Copy Size-Dependent Load Modules

This step is for all upgrade CA Dispatch installations.

CADSJCL member DSINCOPY will copy the size dependent load modules from your r11.6 CA LIB to the new r11.7 CADSLOAD.

Customize the JCL and submit the job. Return code 00 is expected.

### Step 5. Define Users and the Network

This step is for the following installation situations:

- This step is for new installations of CA Dispatch.
- Skip this step if you are upgrading from CA Dispatch because system user information already exists in your current CA Dispatch library.
- Do not skip this step if you are changing your CV number (see the System section below).

**Note:** If you are using internal security, users are copied over without passwords.

CADSJCL member DSEXUSR1 is used to define the system network to define users (optional) if internal security is being used. This JCL causes a batch sysgen of the CA IDMS system to take place. You must make several changes to the sysgen parameters that are contained in the CADSOPTN library.

The three definition areas include System, Network, and Users (optional). The following notes pertain to those particular instructions that you may need to modify.

**Note:**

- The SYSTEM statement must be the first statement.
- Each statement must end in a period.
- For more detailed information, see the User Generation Reference section of the *CA Dispatch Systems Programmer Guide*.

## System Statement

Edit CADSOPTN member DSSYSXA.

The SYSTEM statement must be the first statement. If the system number is to be other than 01, you must verify that it was changed (as specified in Step 4d of the worksheet).

If the CV (Central Version) number is to be other than 01 (CVNUM parameter on the SYSTEM statement), you must verify that it was changed (as specified in Step 4d of the worksheet). This is only necessary if you are already using CA IDMS and have a Central Version with the number 01 or if you are running more than one copy of CA Dispatch on this system.

## Network

Edit CADSOPTN member DSNETWKX to make network changes.

If the VTAM application ID specified in Step 4d of the worksheet is not DISPATCH, you must specify this ID in the Sysgen. Verify that the change was made to the following statement:

```
'APPLICATION ID IS XXXXXXXX'
```

## User Statement

Edit the CADSOPTN member DSUSERS to add users to the system.

**Important!** This only applies if the Internal Security feature is being used.

One USER statement is needed for each user of the system. This statement establishes security codes for the users of CA Dispatch. A sample USER statement containing full authority is provided in the supplied member DSUSERS.

## Security Codes for Internal Security

Security codes are assigned at a task level. Each user who signs on to CA Dispatch already has a set of security codes assigned. Based on these security codes, certain functions will be available, such as Sysgen maintenance, archiving, status inquiry, database inquiry, and database update. The security codes are built and maintained by CA and are summarized in the following table.

### Internal Security Table

Security Code	Description of the Functions
02	Allows the user to sign on to CA Dispatch
05	Allows entry of JES commands in the Report Selection and Status Screen (VRDM1400)
06	Permits access to the subtask control commands including S, E, and ST
51	Allows dialog entry Without this code, no panels (screens) can be viewed.
52	Allows updating of CA Dispatch maintenance data. This code also allows records to be deleted and permits database updates.
53	Allows updating of CA Dispatch status information For example, it permits changing information on the Feedback Update Screen (VRDMU500).
54	Allows updating of CA Dispatch operational information For example, from queue screens, to blank out time/pages in order to manually release bundles.
55	Permits deletion of report data from archive and from online viewing
56	Permits routing of report data from archive or online viewing and allows reprinting of data from archive or online viewing
58	Allows updating of CA Dispatch sysgen maintenance data
253	For CA IDMS high security, primarily DCMT commands
254	For DCUF Commands

For example, if a user is to have the authority to update report distribution information, the user must be assigned the security codes 2, 51, and 52. If they are also allowed to change related Sysgen information, they will also need to be assigned code 58. If they are only allowed to update report status information, they must be assigned security codes 2, 51, and 53.

**Note:** To modify a user's security codes, first delete the user; modify the security codes, then re-add the user with the new security codes.

After making the necessary modifications to the above members, tailor CADSJCL member DSEXUSR1 (CA IDMS batch sysgen). Once complete, submit the DSEXUSR1 job and review the output to ensure that it executed properly (a return code of 04 or less is valid).

Any time there are changes to the CA IDMS environment (such as new users or new passwords), this job and associated data can be re-executed. Be sure to retain it for future use.

**Note:** If you want to utilize security codes for your own purposes in the security exit, use a number between 150 and 240.

## Step 6. Security Options

This step is for all CA Dispatch installations.

**Note:** Set the installation security options before CA Dispatch is started up.

Edit CADSSRC member CADSSEC to specify the security options you want to enforce. For more information about security, see the "Security" chapter in the *CA Dispatch Systems Programmer Guide*. Customize and submit CADSJCL member DSEXSECX to build, assemble and link the security module.

To use the internal dictionary definitions, specify the following:

- INTERNAL
- AUTOSGN=YES

These parameters are coded as follows:

```
#SECPARM INTERNAL, AUTOSGN=YES
```

## Step 7. Update CAIRIM Parameters

This step is for all CA Dispatch installations.

CA Dispatch uses CAIRIM/CAS9 to perform product initialization processing. You must execute CAIRIM/CAS9 after each IPL or before starting CA Dispatch or CADDSP for the first time after each IPL. Therefore, you must update the CAIRIM parameters to request initialization of CA Dispatch and supply the LMP key data.

- To add the CA Dispatch initialization routine to the CA initialization list, edit CAIOPTN member CARIMPRM and merge in CADSOPTN member DSLIST. If you have several CAIOPTNs within your environment, you must find out which CAIOPTN contains the startup list used by CAS9 and merge in the appropriate CADSOPTN member DSLIST.

CA Dispatch uses product initialization module DSINIT. It has two functions.

- Performs default product initialization to allow CA Dispatch to run on the operating system.
- Performs optional functions to allow clients to manipulate the CA Dispatch processing environment once it has been initialized on the system.

JES must be active when the CA Dispatch product initialization routine, DSINIT, is invoked by CAS9/CAIRIM. Therefore we advise against adding the CA Dispatch initialization parameter to any CAS9/CAIRIM procedure that is started with S CAS9, SUB=MSTR unless it has been ascertained that JES has been started and is ACTIVE prior to DSINIT being invoked.

Invoking the CAS9/CAIRIM CA Dispatch product initialization routine, DSINIT, prior to JES startup and initialization will result in the following message:

```
CADS017E DSINIT Unable to find JES2 version
```

The execution of the CA initialization procedure for CA Dispatch requires approximately 54 KB of CSA.

### Default DSINIT Initialization Function

The following is the default DSINIT initialization function:

```
PRODUCT(CA Dispatch) VERSION(DSB7) INIT(DSINIT) PARM(parameter)  
PARM(CADDSENT,INIT)
```

This is the default process if no PARM is used.



Load the CA Dispatch SVC common routines, and initialize CADDSPS control blocks.

The following syntax is equivalent:

```
PRODUCT(CA DISPATCH) VERSION(DSB7) INIT(DSINIT) PARM(CADDSNT,INIT)
```

or

```
PRODUCT(CA DISPATCH) VERSION(DSB7) INIT(DSINIT)
```

The following conditions apply:

- This is the default setting.
- This syntax will be used during the IPL or before starting CADDSPS or Dispatch for the first time after each IPL.
- Creates the CADDSPS CADDSNT control block.
- Adds or loads the CADDSPS load modules CADDMSG, CADDMSGI, CADDSPA, CADDSPDI, or CADDTABU into storage.
- Performs a check to determine whether the CA Dispatch level of software is compatible to the operating system/JES software level.
- Loads the Dispatch SVC.

## Optional DSINIT functions

The following are the optional DSINIT function sub-parameters:

### **PARM(CADSSVC)**

Request DSINIT to initialize or refresh the CA Dispatch SVC.

```
PRODUCT(CA DISPATCH) VERSION(DSB7) INIT(DSINIT) PARM(CADSSVC)
```

The following conditions apply:

- All Dispatch regions using this SVC must be down.
- Performs initial Load or refresh of the Dispatch SVC.
- Used to modify the Dispatch SVC if it has been changed.
- The CADDSPS SNT and load modules are not affected.

**PARM(CADDSNT,DELETE)**

If all CADDSPLx tasks are inactive, modules CADDMSG, CADDMSGI, CADDSPAU, CADDSPOI, CADDTABU, and the CADDSNT control block are removed from the operating system.

PRODUCT(CA DISPATCH) VERSION(DSB7) INIT(DSINIT) PARM(CADDSNT,DELETE)

The following tasks are performed:

- All CADDSPL tasks must be inactive.
- Deletes the CADDSPL CADDSNT control block from storage
- Deletes the CADDSPL the load modules CADDMSG, CADDMSGI, CADDSPAU, CADDSPOI, or CADDTABU from storage.
- Must perform another PARM(CADDSNT, INIT) to reinitialize environment.
- Does not delete the Dispatch SVC.
- Used only in exceptional situations.

**PARM(CADDSNT,REFRESH)**

Look for CADDSNT and no active tasks with CA Dispatch. When these conditions are met, load a new copy of CADDSNT. The prior copy of CADDSNT is deleted.

PRODUCT(CA DISPATCH) VERSION(DSB7) INIT(DSINIT) PARM(CADDSNT,REFRESH)

The following tasks are performed:

- All CADDSPLx tasks must be inactive.
- Existing CADDSNT is deleted from storage
- Create a new CADDSPL CADDSNT control block for new CADDSPL tasks
- Used only in exceptional situations.

**PARM(module,DELETE)**

Request to remove a specific module from storage; module is either CADDMSG, CADDMSGI, CADDSPAU, CADDSPOI, or CADDTABU.

PRODUCT(CA DISPATCH) VERSION(DSB7) INIT(DSINIT) PARM(module,DELETE)

The following tasks are performed:

- All CADDSPL tasks must be inactive
- Deletes a specific CADDSPL load module; can be CADDMSG, CADDMSGI, CADDSPAU, CADDSPOI, or CADDTABU from storage.
- Used only in exceptional situations
- Perform PARM(modulename,REFRESH) to reload a new copy of the module after deleting it.
- Used only in exceptional situations

**PARM(module,REFRESH)**

Requests that a new copy of module, which is either CADDMSG, CADDMSGI, CADDSPAU, CADDSPOI, or CADDTABU, be loaded into storage. The prior copy of the refreshed module is deleted.

```
PRODUCT(CA DISPATCH) VERSION(DSB7) INIT(DSINIT) PARM(module,REFRESH)
```

The following tasks are performed:

- CADDSPx tasks must be inactive
- Existing refreshed module is deleted from storage
- Adds/loads a new copy of a specific CADDSP load module, can be CADDMSG, CADDMSGI, CADDSPAU, CADDSPOI, or CADDTABU
- Used only in exceptional situations

**Important Usage Information**

Prior to starting CA Dispatch or CADDSP, Client sites must execute CAS9 with either of the following initialization statements to set up the complete CA Dispatch r11 environment:

```
PRODUCT(CA DISPATCH) VERSION(DSB7) INIT(DSINIT)
```

or

```
PRODUCT(CA DISPATCH) VERSION(DSB7) INIT(DSINIT) PARM(CADDSENT,INIT)
```

Executing the statement without the PARM sub-parameter defaults to PARM(CADDSENT,INIT).

The PARM(CADDSENT,INIT) performs the following tasks:

- Builds the CADDSENT control block in storage.
- Loads the 5 refreshable CADDSP load modules into storage.
  - CADDMSG—'Message Processing Module'
  - CADDMSGI—'Specific Spool Message Table for CADDSP Intercept'
  - CADDSPAU—'Spool SSI Allocate/Deallocate'
  - CADDSPOI—'Spool Open/Close Front-End'
  - CADDTABU—'MVS and JES Table of Offsets'
- Performs a check to determine whether the CA Dispatch level of software is compatible with the operating system of the site or the JES software level.

If the operating system level is not supported, the initialization will end with a return code of 8, and the following messages will be displayed:

```
*CADS012E DSINIT Unsupported release/level of JES
*CADS014I DSINIT JESLIT value is: z/OS 1.16
```

- Installs the Dispatch SVC.

Successful initializations will end with a zero conditional code. Incomplete or Unsuccessful initializations will end with a non-zero conditional code.

**Important!** Incomplete or unsuccessful initialization may result in the inability to start the product.

- A successful initialization will display the following messages:

```
CAS9115I - INPUT: PRODUCT(CA DISPATCH) VERSION(DSB7) INIT(DSINIT)
CADS015I DSINIT Module CADDSENT at 8575F2A0 added
CADS015I DSINIT Module CADDMSG at 8575E000 added
CADS015I DSINIT Module CADDMSGI at 8575D000 added
CADS015I DSINIT Module CADDSPAU at 8575B000 added
CADS015I DSINIT Module CADDSPOI at 85756BF0 added
CADS015I DSINIT Module CADDTABU at 85755000 added
CADS014I DSINIT JESLIT value is: z/OS 1.16
CADS004I CA Dispatch Initialization Successful
CAS9130I - MODULE DSINIT COMPLETE, RC=00
```

- An unsuccessful initialization will display the following messages:

```
CAS9115I - Input: PRODUCT(CA DISPATCH) VERSION(DSB7) INIT(DSINIT)
CADS015I DSINIT Module CADDSENT at 97B632A0 added
CADS015I DSINIT Module CADDMSG at 9A988000 added
CADS015I DSINIT Module CADDMSGI at 987CD000 added
CADS015I DSINIT Module CADDSPAU at 987D7000 added
CADS015I DSINIT Module CADDSPOI at 98738000 added
CADS015I DSINIT Module CADDTABU at 987D5000 added
CADS012E DSINIT Unsupported release/level of JES
CADS014I DSINIT JESLIT value is: z/OS 1.12
CADS004I CA Dispatch Initialization Successful
CAS9140E - Init error: CA DISPATCH Ver DSB7, Init routineRC=0008
```

- Execute CAS9 / DSINIT PARM(CADDSENT,DELETE) to remove the CADDSPx components from the operating system. Shut down all Dispatch and CADDSPx tasks (if running multiple Dispatch/CADDSPx regions). Once everything is inactive, execute CAS9 / DSINIT with PARM(CADDSENT,DELETE) to remove the components.

**Note:** The PARM(CADDSENT,DELETE) does not remove the Dispatch SVC from the system.

- If you modify the CA Dispatch SVC between IPLs, you must execute CAS9 / DSINIT PARM(CADSSVC) to reinstall the new version of the SVC.

This can be done repeatedly if need be. You no longer need to change the VERSION(DSB7) to force a reinstall of the SVC (as you did in prior releases of Dispatch). This function may be used more often under z/OS 1.9 if using the default AllowUserKeyCSA(NO) configuration as you will need to modify the SVC to run non-KEY 8.

**Note:** You cannot repeatedly run PARM(CADDSNT,INIT) to reinstall the SVC; as you will receive an error message: "CADS001E CADDSNT already active" if it has been previously executed.

- If you need to apply a specific fix or maintenance to one or more of the five refreshable CADDSP load modules:
  1. Stop all open intercept tasks.
  2. Shut down all CA Dispatch and CADDSP tasks (if running multiple Dispatch/CADDSP regions).
  3. Once everything is inactive:
    - a. Execute CAS9 / DSINIT PARM(CADDSNT,DELETE) to remove everything,
    - b. Execute a CAS9 / DSINIT PARM(CADDSNT,INIT) to reinstall everything new or refresh the affected load modules using CAS9/DSB7INIT PARM(modulename,REFRESH)

The PARM(CADDSNT,DELETE) does not remove the Dispatch SVC.

## Step 8. Update MVS Auto Commands for CAIRIM

This step is for all new and upgrade CA Dispatch installations. The MVS auto commands file must be updated to execute CAIRIM.

The MVS auto commands are found in SYS1.PARMLIB in the member COMMNDxx (MVS Commands). The default member name is COMMND00. However, you or one of your systems programmers may have set up the system to use an alternate COMMND member. If this is the case, CAIRIM must be added to the COMMND member that is in use for your normal system IPL. In some cases, multiple members may be concatenated for processing. If this is the case, it does not matter which of the members contains the command. The command is coded in standard MVS command member format, starting in column 1 as follows:

```
COM= 'START CAS9                CAI RESOURCE INITIALIZATION MANAGER'
```

**Note:** CAIRIM may have been previously installed in your system for another CA product. If this is so, proceed to the next step.

## Step 9. Install the CAIENF Interface

This step is for all new CA Dispatch installations and existing installations that are newly installing CCS r12.

The CA Dispatch STATUS function uses the CAIENF Event Notification Facility.

To use this functionality, CAIENF must be updated to define CA Dispatch as a user of this facility and to define new Events that will be used exclusively by CA Dispatch.

By default, CA Dispatch will pick up the following events:

Event	Description
JOBINIT	Used by the Abend Handling process
STEPTERM	Used by the Abend Handling process
JOBTERM	Used by the Abend Handling process
JOBPRINT	Used by the Bundle Print Time process
DISP144	Used to log the PC Download process
DISP145	Used to log the Bar Code process
DISP146	Used to record the information on the NJE jobs

Jobs that can be run to install, define and optionally customize the events that CA Dispatch will process:

- JOBINIT, STEPTERM, JOBTERM, and JOBPRINT are common Events that come standard with CAIENF.
- DISP144, DISP145, and DISP146 are Events that are installed and used exclusively by CA Dispatch.

### DSPr7--Installing the CAIENF Interface When Running CAIENF r11.0

The CA Dispatch interface with CAIENF r11.0 is installed using the following JCL.

## DSEXALT

The DSEXALT JCL includes statements that will update the CAIENF Event definitions according to the default CA Dispatch requirements.

Edit and execute CADSJCL member DSEXALT. This JCL must be run as part of the installation of the CAIENF interface to the STATUS task.

**Note:** The DSEXALT job must be run with CAIENF down.

The following statements are included in this member:

```
ALTER DB(ENFDB) EVENT(DISP144 ) OPT(A,P,R) RETPD(2)
ALTER DB(ENFDB) EVENT(DISP145 ) OPT(A,P,R) RETPD(2)
ALTER DB(ENFDB) EVENT(DISP146 ) OPT(A,P,R) RETPD(2)
ALTER DB(ENFDB) EVENT(JOBINIT ) OPT(A,P,R) RETPD(2)
ALTER DB(ENFDB) EVENT(JOBPRINT) OPT(A,P,R) RETPD(2)
ALTER DB(ENFDB) EVENT(JOBTERM ) OPT(A,P,R) RETPD(2)
ALTER DB(ENFDB) EVENT(STEPTERM) OPT(A,P,R) RETPD(2)
```

where

### **OPT(A, P, R)**

Indicates that this event is **Active**, **Recorded** and will be **Purged** when it reaches the Retention period. These options are recommended for CA Dispatch to process these events properly.

### **RETPD(2)**

Defines the retention period in number of days (2). This value is given as a sample and can be adjusted according to site specifications. This value should be large enough to cover the longest period of time (in days) that your CA Dispatch STATUS task could be shut down. This is required to permit the processing of events that occurred while the STATUS Task was inactive.

If you don't plan to use the Abend Handling feature within CA Dispatch, you can remove the ALTER command for the JOBINIT, STEPTERM, and JOBTERM events. You must also run the DSINEXSX job (described below) to remove these events from the list of events that CA Dispatch processes.

If you don't plan to use Bundle Print Times within the STATUS function, you can remove the ALTER command for the JOBPRINT events. You must also run the DSINEXSX job (described below) to remove these events from the list of events that CA Dispatch processes.

**Important!** Never remove the DISP144, DISP145, and DISP146 events, as they are required by CA Dispatch.

**Note:** If your site has never previously recorded or used CAIENF Events, you may need to increase the size of your CAIENF Database to accommodate the new volume in recorded events. Please refer to The CA Common Services for z/OS, Getting Started Guide, Chapter 3, "Calculate Space Requirements" for more information.

## DSEXEDCM

This JCL installs the new CA Dispatch DCM (CADSDCM0) into the CAIENF database. A DCM is a database control module containing event and data definitions. This DCM adds fields and events specific to and required by CA Dispatch. Edit and execute CADSJCL member DSEXEDCM. It only has to be run once.

**Note:** The DSEXEDCM job must be run with CAIENF down.

## DSINEXSX

This JCL is optional and only needs to be run if the site wishes to change the events being processed by CA Dispatch by default (see the previous table).

Edit CADSJCL member DSINEXSX. This member will create and install a new usermod; DSINEXSX, which will customize the CAIENF events being picked up by the STATUS task of CA Dispatch.

This usermod will modify the RDFGSTAX module. It contains the source member RDFGSTAX. There are two input parameters:

ABNDHDG=YES/NO

This parameter determines whether to pick up the events related to the Abend Handling process. These events include JOBINIT, JOBTERM and STEPTERM.

The Abend Handling process within CA Dispatch allows you specify how a report is to be processed if the Job and/or Step that created it abends. To accomplish this, a great number of events may need to be processed. If you do not plan to use this function, you can avoid the processing of these events.



BNDLPRT=YES/NO

Determines whether to pick up the events related to the Bundle Print Time process.

The Bundle Print Time permits you to follow your printing process via the VRDMI400 screen. Therefore, it requests the processing of all of the JOBPRINTs in your system. Set BNDLPRT=NO if you don't plan to use the Bundle Print Time option.

## ADSJSTAX

This JCL is optional and only needs to be run if you wish to change the events being processed by CA Dispatch by default. This JCL provides the same change as DSINEXSX but outside of SMP/E and links into a separate load library.

## Installing the CAIENF Interface When Running CAIENF r12 and Above

In previous versions of CAIENF, an ENFDB was always installed as part of the CAIENF base install process. With CAIENF r12, the installation of an ENFDB is an optional step.

**Note:** In order for CA Dispatch to provide complete and accurate STATUS data about information such as Job print times, Bundle print information, and abend information, the ENFDB must be available to record (store) the information that occurs while CA Dispatch is down for maintenance or other reasons. If the ENFDB is not available, the CA Dispatch STATUS information will be compromised and incomplete.

See the CA Common Services for z/OS Installation Guide for more information about installing CAIENF.

## Installing the CA Dispatch DCM (CADSDCM0)

The CADSDCM0 load module is installed into the CA Dispatch CADSLOAD during the CA Dispatch installation. In order for CAIENF to access this module, *one* of the following steps should be performed:

Do *one* of the following:

- Copy CADSDCM0 into the CCS or CAIENF CAIDCM load library.
- Put the CA Dispatch CADSLOAD into the CAIDCM Steplib concatenation.

## Defining the CAIENF Event Parameters

In CAIENF, these parameters are defined in the ENFPARM member that is read at CAIENF startup.

The following parameters should be added to this member:

```
DCM(CADSDCM0)
EVENT(DISP144,REC)
EVENT(DISP145,REC)
EVENT(DISP146,REC)
EVENT(DISP144,PURGE=Y)
EVENT(DISP145,PURGE=Y)
EVENT(DISP146,PURGE=Y)
EVENT(DISP144,RP=2)
EVENT(DISP145,RP=2)
EVENT(DISP146,RP=2)
EVENT(JOBINIT,REC)
EVENT(JOBINIT,PURGE=Y)
EVENT(JOBINIT,RP=2)
EVENT(JOBTERM,REC)
EVENT(JOBTERM,PURGE=Y)
EVENT(JOBTERM,RP=2)
EVENT(JOBPRINT,REC)
EVENT(JOBPRINT,PURGE=Y)
EVENT(JOBPRINT,RP=2)
EVENT(STEPTERM,REC)
EVENT(STEPTERM,PURGE=Y)
EVENT(STEPTERM,RP=2)
```

These suggested parameters will make all events that are used by CA Dispatch recordable, with a retention period of 2 days. They will be purged from the ENFDB when the retention period has been met.

For more information about these parameters, see the *CA Common Services for z/OS Reference Guide*, Chapter 5: CAIENF Control Options.

## Step 10. Build GDG for Journal Backups

This step is for new CA Dispatch installations.

Skip this step if you are upgrading CA Dispatch.

CA IDMS requires journals for the recovery process. Usually, the current files on disk are sufficient to recover automatically. However, if they are not, these backups provide the ability to roll forward or backward to the extent of the tapes and time period maintained.

The JCL supplied with CA Dispatch assumes the use of generation data sets.

Edit CADSOPTN member DSGDG. Be sure that the correct library name is used, as well as the number of generations. The default generation limit in DSGDG for journal offloads may be too low for your site and must be changed to match your requirements or you will be deleting required generation tapes.

Execute CADSJCL member DSINGDG, which contains the JCL to build a generation index for journal backup data sets using the IDCAMS utility.

**Note:**

- The DSEXJNL1 JCL member assumes that GDGs are built. If they are not, you must modify the JCL for DSEXJNL1.
- For more information, see the topic Backup, Restore and Recovery in the *Systems Programmer Guide*.

## Step 11. Install the VTAM Application ID

This step is for all CA Dispatch installations.

If you are planning to access CA Dispatch through VTAM, the VTAM application ID, or APPLID, must be installed. This ID is specified in the Upgrade Parameters worksheet. If you change it, you must rerun the Define Users and the Network step, because the VTAM APPLID also appears in the SYSTEM statement of the CA IDMS batch Sysgen (DSEXUSR1).

The following is an example of how to define the application ID to SYS1.VTAMLST for terminal access:

```
DISPATCH APPL AUTH=(ACQ,NOPASS,NVPACE,NOTSO,NOP0)
```

## Step 12. Install TSO Support

This step is for all CA Dispatch installations.

The CLIST source code for providing a link between TSO and CA Dispatch is in member DSTSO in the CADSCLS0 library.

Edit and customize the ALLOC and CALL statements in the CLIST to reflect the correct data set name. The default setting is CAI.DISP.SYSCTL for the ALLOC and CAI.CADSLOAD for the CALL statement. The following is a listing of the DSTSO CLIST with the ALLOC and CALL statements highlighted.

```
CONTROL MAIN NOMSG
ERROR DO
    IF &LASTCC LT 0 THEN +
        DO
            WRITE
            WRITE + End of CAI/UCF/TSO session for user &SYSUID.
            WRITE + CA Dispatch online not active or is being quiesced.
            WRITE
            FREE F(CAICTL)
            EXIT QUIT
        END
    RETURN
END
FREE F(CAICTL)
ALLOC F(CAICTL) DA('CAI.DISP.SYSCTL') SHR
CALL 'CAI.CADSLOAD(CAITSODC)'
FREE F(CAICTL)
WRITE
WRITE + End of CAI/UCF/TSO session for user &SYSUID.
WRITE
EXIT QUIT
```

Copy the DSTSO member into one of your system CLIST libraries and name it with the name specified in the Upgrade Parameters worksheet. Invoke the CLIST by entering this name.

---

## Step 13. Install Optional Online Interfaces

This step is for all CA Dispatch installations.

### Step 13a. Install CICS Support (Optional)

If you plan to have CICS interface to CA Dispatch, you must perform this step; otherwise, go to the next step. The following sections tell you what to do if you want CICS support.

#### Update the CICS support user modification

JCL member DSINCI1 in the CAI.CADSJCL data set provides customers with user modification DSINCI1 that installs source modules into CA Dispatch for CICS support. DSINCI1 defines four new source modules, DSUCFC1, DSUCFC2, DSUCFC3 and DSUCFC4. The source for these modules is inline in the user modification.

Modules DSUCFC1 and DSUCFC2 in the user modification specify CWADISP=0. Module DSUCFC3 in the user modification specifies NTID=DSP2. You must change these parameters before receiving and applying the user modification.

To install the CICS interface modules outside of SMP/E and link into a separate load library, use member ADSJCI1 in CAI.CADSJCL. Customize the ADSJCI1 source code the same as you would for DSINCI1.

#### CWA CONSIDERATIONS

CICS communicates with CA Dispatch by way of a 4-byte area in the Common Work Area (CWA).

A four-byte area must be identified and reserved for the exclusive use of the interfaces. Calculate the displacement from the beginning (relative 0) of the CSA to the reserved area.

**Important!** CSA definitions must be mapped out with extreme care. If displacement calculations are in error, unpredictable results in the CA Dispatch/CICS interface and/or other applications utilizing the CWA may occur.

The transaction ID, specified in the source for module DSUCFC3 in the user modification, also needs to be changed to match the second transaction ID specified in Step 4 of the installation worksheet.

Receive and Apply the DSINCI1 user modification

Use SMP to receive and apply the DSINCI1 user modification. SMP will assemble and link the source modules defined in the user modification into the CAI.CADSLOAD data set.

## CICS Table Considerations

There are several CICS internal tables that you must update in order for the interface to function. Some tables can be assembled through batch jobs. The CEDA transaction can define or alter some of the resources such as the TCT, PCT, and PPT interactively.

For additional information, the *CICS/OS/VS Resource Definition Book* (online) describes the CEDA transaction, and the *CICS/OS/VS Resource Definition book* (macro) describes how to code the tables you require.

- Transaction Table (Program Control Table - PCT)

Entries to this table should look like the following:

```
DFHPCT TYPE=ENTRY,  
      TRANSID=DSP1,  
      PROGRAM=CADSINTC,  
DFHPCT TYPE=ENTRY,  
      TRANSID=DSP2,  
      PROGRAM=VCICICS,  
      TWASIZE=400
```

**Note:** The TRANSID fields can be changed as per your installation's transaction requirements. However, if you change DSP2, the new transaction ID must be the same as in DSUCFC3. For more information, see the Define the CICS Interface step.

- Program Table (Processing Program Table - PPT)

Entries to this table should look like the following:

```
DFHPPT TYPE=ENTRY, PROGRAM=CADSINTC, RES=YES, RELOAD=NO, LANG=ASSEMBLER  
DFHPPT TYPE=ENTRY, PROGRAM=VCICICS, RES=NO, RELOAD=NO, LANG=ASSEMBLER
```

Be aware of the following:

- Program CADSINTC stores CSECT addresses within the 4-byte CWA. Program VCICICS utilizes these addresses to branch to the appropriate CSECT within CADSINTC. Even though transaction DSP1 is executed once, the module (CADSINTC) it invokes is continuously being branched to by VCICICS. Because of this, it *must* be a resident module.
- Abends can occur if you use the same interface modules for access to both a main region and an OLVO region; this is the result of concurrent usage of a temporary storage queue.

You can prevent this situation by using the CADSQID parameter as follows:

- Create an interface for both the main and OLVO region but use a different CADSQID for each.
- If symbolic CADSQID is not specified, the default queue name CADSMAIN will be used. The following example defines a default temporary storage queue named CADSMAIN:

```
CADSINTC IDMSINTC XA=YES, CWADISP=0, OPSYS=MVS, SYSCTL=CAICTL
END
```

**Note:** If symbolic CADSQID=xxxx is specified, a queue name of CADSxxxx is used. Symbolic CADSQID cannot specify blanks and it must be 4 characters long. The following example defines a temporary storage queue named CADSOLVO:

```
CADSINTC IDMSINTC XA=YES, CWADISP=0, OPSYS=MVS, SYSCTL=CAICTL, CADSQID=OLV
END
```

- List Table (Program List Table - PLT)

Entries to this table should look like the following:

```
DFHPLT TYPE=ENTRY, PROGRAM=CADSINTC
```

**Note:** If transaction DSP1 is entered by an operator, terminal lockup will result since no terminal I/O processing occurs in the program. Simply press the RESET key to continue processing.

## CICS Storage Protection Considerations

Be aware that CICS storage protection cannot be used with CA Dispatch. Make the following program and transaction changes to allow the CA Dispatch CICS interface to function in an environment where CICS storage protection has been established.

There are two CICS STARTUP parameters, RENTPGM and STGPROT for the CICS storage protect feature. The following procedures will avoid DFHSR0622 and DFHSR0001 errors for CADSINTC and VCICICS when RENTPGM and STGPROT parameters are used.

Modify your CICS program and Transaction definitions as follows:

1. The DSP1 and DSP2 transactions, which invoke interface programs CADSINTC and VCICICS, must be defined with TASKDATAKEY=CICS.

```
DFHPCT TYPE=ENTRY,
        TRANSID=DSP1,
        PROGRAM=CADSINTC,
        TASKDATAKEY=CICS
```

```
DFHPCT TYPE=ENTRY,
        TRANSID=DSP2,
        PROGRAM=VCICICS,
        TASKDATAKEY=CICS,
        TWASIZE=400
```

2. The interface programs CADSINTC and VCICICS must be defined with EXECKEY=CICS.

```
DFHPPT TYPE=ENTRY,PROGRAM=CADSINTC,RES=YES,RELOAD=NO,  
LANG=ASSEMBLER,EXECKEY=CICS
```

```
DFHPPT TYPE=ENTRY,PROGRAM=VCICICS,RES=NO,RELOAD=NO,  
LANG=ASSEMBLER,EXECKEY=CICS
```

3. Ensure that CADSINTC and VCICICS are linked with NORENT parameter.

```
/*-----  
//RELINK EXEC PGM=IEWL,  
//          PARM='XREF,LET,LIST,NCAL,NORENT',  
//          REGION=1024K  
//SYSPRINT DD SYSOUT=*  
//SYSLIN DD DDNAME=SYSIN  
//SYSLIB DD DSN=CAI.CADSLOAD,DISP=SHR  
//SYSUT1 DD DSN=&&SYSUT1,UNIT=SYSDA,SPACE=(1024,(50,20))  
//SYSLMOD DD DSN=CAI.CICS41.CAILIB,DISP=SHR << should this be changed? >>  
//SYSIN DD *  
INCLUDE SYSLIB(CADSINTC)  
ENTRY STARTUP  
MODE AMODE(31),RMODE(24)  
NAME CADSINTC(R)  
INCLUDE SYSLIB(VCICICS)  
ENTRY VCICICSE  
MODE AMODE(31),RMODE(24)  
NAME VCICICS(R)  
/*
```

## Modify CICS Startup JCL

1. Concatenate the LOAD library containing the CA Dispatch CICS modules to the CICS region load library list (DFHRPL).
2. Add the following DD statement to the CICS regions startup JCL.

```
//CAICTL DD DSN=CAI.SYSCTL,DISP=SHR
```

**Note:** An FCT entry is not necessary for this file. I/O access to this file is through normal OS convention.

## Step 13b. Install IMS Support (Optional)

If you plan to have IMS interface to CA Dispatch, perform these steps; otherwise, go to the next step.



## Update the IMS Support User Modification

JCL member DSINIM1 in the CAI.CADSJCL data set provides customers with user modification DSINIM1 that installs source modules into CA Dispatch for IMS support. DSINIM1 defines two new source modules, DSUCFI1 and DSUCFI2. The source for these modules is inline in the user modification.

To install the IMS interface modules outside of SMP/E and link into a separate load library, use member ADSJIM1 in CAI.CADSJCL. Customize the ADSJIM1 source code the same as you would for DSINIM1.

### Do the following:

1. Update the DSINIM1 member with the IMS transaction code that is defined in Step 4c of the work sheet you prepared earlier.
2. Locate NTID=DSP2 in the definition for the DSUCFI1 source module, and change the DSP2 to the IMS transaction code.

Member DSUCFI1 also contains a number of terminal definitions specified using the #UCFUTD macro. CA Dispatch uses the first terminal definition that does not contain the TERM=YES parameter it encounters in DSUCFI1 as the default terminal definition. Any other default terminal definitions are ignored.

The example below shows a default terminal definition as an IBM 3277 Model 2 terminal, and several other possible definitions.

```
#UCFUTD TYPE=T3277,MODEL=2
#UCFUTD TYPE=TTY,TERM=TWX01
#UCFUTD TYPE=TTY,TERM=TWX02
#UCFUTD TYPE=TTY,TERM=TWX05
#UCFUTD TYPE=T3277,MODEL=3,NLINES=32,TERM=REM003
#UCFUTD TYPE=T3277,MODEL=4,NLINES=43,TERM=LOC046
#UCFUTD TYPE=T3277,MODEL=5,NLINES=27,NCHARS=132,TERM=REM032
#UCFUTD TYPE=T3279,MODEL=2,TERM=COLOR33
```

3. Receive and apply the IMS support user modification after you have completed the updates.

## PSB Generation for the Interface Module

Execute the following JCL to generate an IMS PSB for the Interface program:

```
//CADSPSB EXEC PSBGEN,MBR=CADSIMS
//C.SYSIN DD *
PCB TYPE=TP,MODIFY=YES
PSBGEN PSBNAME=CADSIMS,LANG=ASSEM
END
```

## ACB Generation for the Interface Module

Create an ACB for the interface by running an ACBGEN with the following parameters:

```
//SYSIN DD *  
        BUILD PSB=CADSIMS
```

## Define the Interface as an IMS application

Define the following statements to IMS:

```
APPLCTN PSB=CADSIMS,SCHDTYP=PARALLEL  
TRANSACT CODE=(CADS),MSGTYPE=(MULTSEG,RESPONSE),SPA=134
```

Where CADS is the transaction ID specified on the NTID= parameter in the Define the IMS Interface step.

## Modify IMS Startup JCL:

1. Concatenate the LOAD library containing the CA Dispatch IMS modules to the IMS region load lib list.
2. Add the following DD statement to the startup JCL of the IMS region:

```
//SYSCTL DD DSN=CAI.SYSCTL,DISP=SHR
```

## Step 13c. Install ISPF Support (Optional)

If you plan to have ISPF interface to CA Dispatch, you must perform this step; otherwise, go to the next step.

The CLIST source code for providing a link between ISPF and CA Dispatch is in member DSISPF in the CADSL50 library.

Edit the ALLOC statement with the correct data set name. The default value is CAI.DISP.SYSCTL.

Afterwards, perform one of the following options:

- Allocate all of the ISPF libraries by copying the following ALLOC statements into a separate, user CLIST or into your logon CLIST. CAIOPTN member DSISPALC contains the ALLOC statements listed below. Whichever method you use, modify the CLIST to concatenate the CAI ISPF libraries with your system libraries:

```
ALLOC FI (ISPLIB) SHR DA('CAI.CADSPNLO' +  
ALLOC FI (ISPLLIB) SHR DA('CAI.CADSLMDO' +  
ALLOC FI (SYSPROC) SHR DA('CAI.CADSCLS0' +
```

- Allocate the ISPF libraries in your logon procedure. Modify the logon procedure to concatenate the CAI ISPF libraries with your system libraries:

```
//ISPPLIB DD DSN=CAI.CADSPNLO,DISP=SHR
```

```
//ISPLLIB DD DSN=CAI.CADSLMDO,DISP=SHR
```

```
//SYSPROC DD DSN=CAI.CADSCLSO,DISP=SHR
```

To complete the ISPF installation, update the ISPF main panel with a selection for CA Dispatch by placing a selection literal on the ISPF main screen and adding a PANEL (UCFMENU) NEWAPPL (UCF).

## Step 14. Change the SVC Number and CVKEY (Optional)

If you want to change:

- The z/OS storage protection key used by CA Dispatch, perform Steps 14a, and 14c.
- The SVC number CA Dispatch uses for inter-region communication, perform Steps 14b, and 14c.

The DSINSVC and ADSJSVC members are self documenting. Follow the instructions in this section. Otherwise, go to the next step.

### Step 14a. Change the CA Dispatch CVKEY

The default CA Dispatch storage protection key can be changed to do the following:

- Improve storage protection for shared storage used for communication between CA Dispatch and external tasks
- To specify a system key to operate CA Dispatch in z/OS systems that are using the ALLOWUSERKEYCSA(NO) option.

Member DSINSVC or ADSJSVC in CAI.CADSJCL provides a user modification to update the CA Dispatch SVC routine with the new CVKEY. After applying the user modification, update and apply PPT entries that direct z/OS to run CA Dispatch jobs in the storage protection key specified by CVKEY.

To install the CA Dispatch SVC outside of SMP/E and link into a separate load library, use member ADSJSVC in CAI.CADSJCL. Customize the ADSJSVC source code the same as you would for DSINSVC.

## Assign PPT Entries

You must assign PPT entries for at least three CA Dispatch programs. If you are running an online viewing only region, you must define a PPT entry for the program specified in the OLVO region in CAI.CAIJCL member DSEXVDS. Use the following definitions:

```
/* Define storage key for the main CA Dispatch program */
PPT PGMNAME(CAISYS01)
  KEY(x)          /* <--- Use key specified in CVKEY=x */
  PRIV
  CANCEL
  SYST
  AFF(NONE)
  NOSWAP
/* Define storage key for the external archive program */
PPT PGMNAME(XTARMAIN)
  KEY(x)          /* <--- Use key specified in CVKEY=x */
  CANCEL
  AFF(NONE)
/* Define storage key for the external extract program */
PPT PGMNAME(XTEXMAIN)
  KEY(x)          /* <--- Use key specified in CVKEY=x */
  CANCEL
  AFF(NONE)
/* Define storage key for Online Viewing Only region */
PPT PGMNAME(XXXXXXXX) /* <--- Specify name from DSEXVDS */
  KEY(x)          /* <--- Use key specified in CVKEY=x */
  PRIV
  CANCEL
  SYST
  AFF(NONE)
  NOSWAP
```

There are two methods you can use to define these PPT entries to the system:

- Define them in a separate SCHEDxx member in your PARMLIB,  
The primary advantage of using a separate SCHEDxx member is you do not have to update your PARMLIB to remove the names dynamically. Just use a SET SCHED=00 command.
- Add them to the SCHEDxx member you are presently using.

After the PPT entries have been defined, run CAIRIM to load the updated SVC routine in place of the CA Dispatch SVC routine loaded when CAIRIM was run during system initialization.

## Step 14b. Change the SVC Number Used by the SVC Routine

The CA Dispatch SVC number can be changed to use a number other than the default SVC 161 if it conflicts with other SVC routines. The default CA Dispatch SVC number will not conflict with any other CA products.

To change the SVC number, tailor and submit member DSINSVC in the CADSJCL library to change the SVC number.

To install the CA Dispatch SVC outside of SMP/E and link into a separate load library, use member ADSJSVC in CADSJCL. Customize the ADSJSVC source code the same as you would for DSINSVC .

After you update the SVC routine, you must also perform an IDMS SYSGEN to direct the IDMS component to use the new SVC number. In member DSSYSXA in CADSJCL, locate text "SVC IS xxx" or "SVC = xxx". If you find this text in DSSYSXA, change the xxx to match the SVC specified in DSINSVC or ADSJSVC.

If you cannot find "SVC IS xxx" or "SVC = xxx" in DSSYSXA, do the following:

1. Locate the start of the SYSTEM definition.  
This will be on a non-comment line with the word SYSTEM on it.
2. Locate the end of the SYSTEM definition.  
This will be the first non-comment line after the start of the SYSTEM definition that contains a period (.) character.
3. Insert, before the line that defines the end of the SYSTEM definition, a non-comment line that contains the text "SVC IS xxx" or "SVC = xxx", where xxx is the SVC number specified in the DSINSVC or ADSJSVC member in CAI.CADSJCL.

After you have made this change, run member DSEXUSR1 in CAI.CADSJCL to use the modified SVC in DSSYSXA. Restart CA Dispatch.

## Step 14c. Load the New SVC

If you intend to install the updated SVC as part of your next IPL, you do not have to alter the CAS9 or CAIRIM task that initializes many CA products.

If you intend to update the SVC dynamically, prepare a custom job that looks like the following job.

```
//xxx      JOB ....
//CAIRIM   EXEC PGM=CAIRIM
//STEPLIB DD DISP=SHR,DSN=library-containing-CA-Common-Svcs
//         DD DISP=SHR,DSN=library-containing-new-CADSSVC
//         DD DISP=SHR,DSN=library-containing-CA Dispatch
//PARMLIB  DD *
           PRODUCT(CA DISPATCH) VERSION(DSB7) INIT(DSINIT) PARM(CADSSVC)
//AUTOCMD  DD DUMMY
//KEYS     DD DUMMY
```

The data specified in the VERSION parameter must change each time the CAIRIM program is run for each system IPL so that CAIRIM will actually load the new SVC routine. Typically, you specify DSB7 for the first run after an IPL, DSBA the second time, and so on.

You can start CA Dispatch using your normal startup procedure after the new SVC routine is installed by CAIRIM.

## Prepare to Start Your Product

The topics in this section describe the tasks that are universal to all installation scenarios.

## Activate Special Features (Optional)

This step is for all CA Dispatch installations as follows:

- For upgrades from r11.0 and 11.6

Locate your existing CADSFEEAT source. This source code may be located in the r11.0 CAI.SAMPJCI(DSBOEX07). The source code should be compared to the r11.6 version of CADSFEEAT that is located in CAI.CAISRC. The r11.7 version is the model that contains all the available features and the default values. Any features that were being used in r11.0 or r11.6 should be included in the new source. See Building CADSFEEAT for details.

- New installs

Review the list of special features and identify any that you may wish to implement. Use the procedure that follows to build your own customized CADSFEEAT. The Special Features do not need to be built at this time and the procedure can be used at any time to change the Special Features being used. CA Dispatch includes a version of CADSFEEAT with all the default values.

## Building CADSFEEAT

To implement one or more Special Features, edit member DSINEX07 or ADSJEX07 in the CAI.CADSJCL, insert the CADSFEEAT model from the CAI.CADSSRC at the appropriate place, make the changes to activate the required features, then receive and apply this usermod.

After the usermod is applied, recycle CA Dispatch to activate the special features.

## Special Features

### **FEAT002 - Invalid UID and Password/RDFGEX06**

This Special Feature allows propagation of the Userid and password through a VTAM connection to the RDFGEX06 exit. Note, the feature is only valid with internal security. The options are:

N—No VTAM Userid/Password propagation

Y—VTAM Userid/Password propagation

**FEAT003 - Disable OPTCD=J recognition process**

This Special Feature permits you to disable the recognition of OPTCD=J. The options are:

N—Honor OPTCD=J

Y—Ignore OPTCD=J

**Note:** Activation of this feature is NOT recommended and should be done in a controlled environment only.

**FEAT004 - Suppress Blank page before report with DJDE**

When a DJDE is associated with a report, a blank page is printed before the report. This Special Feature suppresses this blank page. The options are:

N—Blank Page printed

Y—No Blank Page printed

**FEAT005 - Suppress Blank page before separator with DJDE**

When a DJDE is associated with a bundle, a blank page is printed before the separator. This Special Feature suppresses this blank page. The options are:

N—Blank Page printed

Y—No Blank Page printed

**FEAT006 - Force External Start for Archive**

This Special Feature permits you to always start the Archive tasks as external. The options are:

N—Standard Start

Y—External Start enforced

**FEAT007 - Force External Start for Extract**

This Special Feature permits you to always start the Extract task as external. The options are:

N—Standard Start

Y—External Start enforced



**FEAT008 - Set the Interval between DC980086 Archive Idle Messages**

This Special Feature permits you to suppress the sending of the DS980086 Archive Idle Message. The options are:

- N Set interval to 5 minutes (default)
- 0,Y Do not send DC980086 message
- 1-9 Set interval to 1-9 minutes, where 1=1,2=2,..9
- A-F Set interval to 10-15 minutes, where A=10,B=11,..F=15
- G Set interval to 30 minutes
- H Set interval to 60 minutes
- I Set interval to 120 minutes
- J Set interval to 240 minutes
- K Set interval to 480 minutes
- L Set interval to 720 minutes
- M Set interval to 1440 minutes

**FEAT009- Set the Interval between DC980087 Extract Idle Message**

This Special Feature permits you to set a custom interval for the sending of the DC980087 Extract Idle Messages. The options are:

- N Set interval to 5 minutes (default)
- 0,Y Do not send DC980086 message
- 1-9 Set interval to 1-9 minutes, where 1=1,2=2,..9
- A-F Set interval to 10-15 minutes, where A=10,B=11,..F=15
- G Set interval to 30 minutes
- H Set interval to 60 minutes
- I Set interval to 120 minutes
- J Set interval to 240 minutes
- K Set interval to 480 minutes
- L Set interval to 720 minutes
- M Set interval to 1440 minutes

### **FEAT010 - Suppress the Manifest Banner page**

This Special Feature permits you to suppress the Manifest Banner page. The options are:

N—Print the Manifest Banner page

Y—Suppress the Manifest Banner page.

When Convert CC to Mach. (Y/N) ==> N is used on the Report Base Definition screen (VRDMU110), no carriage control changes.

When Convert CC to Mach. (Y/N) ==> Y is used on the Report Base Definition screen (VRDMU110), certain default carriage control characters are inserted. These inserted characters depend on FEAT013 setting:

- FEAT013=N: insert three characters x'01408B';
- FEAT013=Y: insert two characters x'0940'

### **FEAT011- Like 5.1 Separator pages**

The original special fix was designed to print the Separator pages in 6.0 the same format as in 5.1. CA Dispatch r11 added a new date format - *mm/dd/yyyy* in place of the old date format - *yyddd*. This Special Feature permits you to select the version of separator page to print. The options are:

N—Current r11 format with date as mm/dd/yyyy

Y—r5.1 offset with date as mm/dd/yyyy

6—Former r6.0 format with date as yyddd

5—Former r5.1 format with date as yyddd

### **FEAT012 - Arch. Condense Input Tapes/Diff Unit**

This Special Feature uses the same unit to allocate volser preventing unallocation between tape mount. It should only be used when all of the tapes were created on the same device type. The options are:

N—No trace

Y—Trace requested.

### **FEAT013 - Manifest Banner and Information on same page**

This Special Feature permits you to print the Manifest Banner on the same page as the Manifest information. The options are:

N—Print the Manifest Banner on a separate page

Y—Print the Manifest Banner on the first Manifest page

**FEAT014 - VSGMU210 Unit for Extract**

This Special Feature permits you to request the use of the unit value specified in the sysgen VSGMU210 screen in place of the unit stored in the archived database record; with CA Dispatch r11, the unit value specified for ARCH1 will be used. The options are:

- N—Use the unit used during the Archive function
- Y—Use the unit specified on the VSGMU210 screen

**FEAT016 - No Wait for IEF238D (Arch & Condense)**

This Special Feature permits you to put the Archive task in wait for a specific unit. The options are:

- N—Reply can be *unit addr* or CANCEL
- Y—Reply can be *unit addr*, WAIT or CANCEL

**Note:** This feature is designed to work only with External Archive, therefore FEAT006 is also required.

**FEAT017 - No Wait for IEF238D (Extract)**

This Special Feature permits you to put the Extract task in wait for a specific unit. The options are:

- N—Reply can be *unit addr* or CANCEL
- Y—Reply can be *unit addr*, WAIT or CANCEL

**Note:** This feature is designed to work only with External Extract, therefore FEAT007 is also required.

**FEAT021- Set maximum RPO tasks**

This feature permits you to set the maximum number of RPO tasks required to satisfy your production needs. By default, the product is distributed with this value set to 1, but you can specify a maximum of 15 RPO tasks. We recommend changing this number only if your experience with this release indicates a need for faster bundle processing. The FEAT021 value is a single hexadecimal digit specified in the range of 1 to F.

**FEAT022-Change default archive media (T, D, S, O)**

When sending reports directly to the Archive class without an External Writer name, CA Dispatch cannot match a Report Definition to determine which media the Archived report will use. The default media is TAPE. This Special feature will allow the use of another media as the default. The options are:

- T—Tape (default)
- D—DASD
- S—SMS
- O—Optical

**FEAT023-Change Archive Default if OLV fills. (T, D, S,O)**

If the OV file fills and reports cannot be put into Online Viewing, the Archive task will automatically archive the reports. This allows a selection of a media other than tape for this archive procedure.

T=Tape (default)

D=DASD

S=SMS

O=Optical

**FEAT024-Create Separator Page when PASSTHRU=Y**

This Special Feature allows the creation of separators when PASSTHRU=Y. The options are:

N—Do not create separators

Y—Create separators page

**FEAT025-Bypass AFP processing for END Recipient Separator Page**

The options are:

N Normal AFP process

Y Omit normal AFP process for END Recipient Separator Page

**FEAT026-Provide an installation code to use as a default for logons.**

The options are:

N No change to normal processing (no default installation)

1 Installation code = "CADS" Main Menu

2 Installation code = "CAOV" Online Viewing Main Menu

3 Installation code = "CAMSG" Online Viewing MSGCLASS

4 Installation code = "CARPT" Online Viewing Reports

5 Installation code = "CAAR" Archive Menu

6 Installation code = "CASG" Sysgen Menu

7 Installation code = "CARCP" End User, Online user viewing

These installation codes direct the end user to the specified main menu but upon exiting the screens, the Enter Next Task Code prompt appears. The ",X" option can be added to the end of the installation code to prevent the Enter Next Task Code prompt. When exiting the specified main menu, the session is ended with an automatic log off.

Additional options:

A	Installation code = "CADS,X"	Main Menu
B	Installation code = "CAOV,X"	Online Viewing Main Menu
C	Installation code = "CAMSG, X"	Online Viewing MSGCLASS
D	Installation code = "CARPT,X"	Online Viewing Reports
E	Installation code = "CAAR,X"	Archive Menu
F	Installation code = "CASG,X"	Sysgen Menu
G	Installation code = "CARCP,X"	End User, Online user viewing

#### **FEAT027-Change output bundle writer name**

Use the input report name as the output bundle writer name. The options are:

- N No change to normal
- Y The input report name is used as the bundle writer name

#### **FEAT028 - Page Selection case insensitive option:**

- N-case sensitive, default
- Y-case insensitive, match regardless of case

#### **FEAT029-Print the Manifest Banner Page in the 5.1 Format**

The options are:

##### **N-Default r11 format:**

- Current offsets,
- Date as mm/dd/yyyy,
- No blank line above the MANIFEST block word

##### **Y-Modified r11 format:**

- Current offsets,
- Date as mm/dd/yyyy,
- 21 blank lines above the MANIFEST block word

##### **6-r6.0/r11.0 compatible format:**

- r6.0 offset of time value (it is the same as r5.1 offset),
- Date as mm/dd/yy,
- No blank line above the MANIFEST block word,
- Prints information introduced by later versions

**5-r5.1/r11.0 compatible format:**

r5.1 offset of time value,  
Date as mm/dd/yy,  
21 blank lines above the MANIFEST block word,  
Prints information introduced by later versions

**E-Early r5.1 format:**

Looks like early r5.1 version without information  
Introduced by later modifications, includes:  
r5.1 offsets of all labels and values,  
Date maintained as mm/dd/yy,  
21 blank lines above the MANIFEST block word

**FEAT030 - Add extra line to the recipient separator page like r6.0**

The options are:

- N No change to normal
- Y One extra report info line is added to separator page.

**FEAT031 - Suppress a report DJDE.**

The options are:

- N No change to normal
- Y Suppress a report DJDE

**FEAT032 - Suppress a default DJDE**

The options are:

- N No change to normal
- Y Suppress a default DJDE.

**FEAT033 - Suppress extra lines after DJDEs/page breaks as in 5.1**

The options are:

- N No change to extra lines and page breaks (default).
- Y Suppress page breaks with lines per pages = 0 and suppress extra lines after DJDE packets. Treat both as in release 5.1.

**FEAT034 - Recognize the VRDMU110 Report Base Definition Screen initial default Special Feature Flags FEAT035 thru FEAT047**

The options are:

- N Do not recognize VRDMU110 Special Feature Flags FEAT035 thru FEAT047 (normal default).
- Y Recognize VRDMU110 Special Feature Flags FEAT035 thru FEAT047

\*NOTE:

- If FEAT034 is set to Y, you must review the group, FEAT035 thru 47, and set correctly to the value you desire.
- If FEAT034 is set to N, you need make no changes to FEAT035 thru 47, as they will not be used.

**\*FEAT035 - Provide a VRDMU110 Report Base Definition Screen initial default value for field 'Print'.**

The options are:

- Y Report is to be printed (normal default)
- N Report is not to be printed.

**\*FEAT036 - Provide a VRDMU110 Report Base Definition Screen initial default value for field 'PC Download'.**

The options are:

- N Report is not to be downloaded to a PC (normal default)
- Y Report is not to be downloaded to a PC.

If you set the default to 'Y' you must set FEAT042, 'Online Viewing', to 'Y' as well.

**\*FEAT037 - Provide a VRDMU110 Report Base Definition Screen initial default value for field 'Archive Flag #1'.**

The options are:

- N Report is not to be Archived (normal default)
- D Report is to be archived to DASD.
- O Report is to be archived to OPTICAL.
- S Report is to be archived to SMS DASD.
- T Report is to be archived to TAPE.

**\*FEAT038 - Provide a VRDMU110 Report Base Definition Screen initial default value for field 'Archive Flag #2'.**

The options are:

- D Report is to be archived to DASD.
- O Report is to be archived to OPTICAL.
- S Report is to be archived to SMS DASD.
- T Report is to be archived to TAPE.

**\*FEAT039 - Provide a VRDMU110 Report Base Definition Screen initial default value for field 'Archive Flag #3'.**

The options are:

- D Report is to be archived to DASD.
- O Report is to be archived to OPTICAL.
- S Report is to be archived to SMS DASD.
- T Report is to be archived to TAPE.

**\*FEAT040 - Provide a VRDMU110 Report Base Definition Screen initial default value for field 'Archive Flag #4'.**

The options are:

- D Report is to be archived to DASD.
- O Report is to be archived to OPTICAL.
- S Report is to be archived to SMS DASD.
- T Report is to be archived to TAPE.

**\*FEAT041 - Provide a VRDMU110 Report Base Definition Screen initial default value for field 'Passthru'.**

The options are:

- N Report is not to use Passthru processing option (normal default).
- Y Report is to use Passthru processing option

**\*FEAT042 - Provide a VRDMU110 Report Base Definition Screen initial default value for field 'Online Viewing'.**

The options are:

- N Report is not to be stored in Online Viewing (normal default).
- Y Report is to be stored in Online Viewing



**\*FEAT043 - Provide a VRDMU110 Report Base Definition Screen initial default value for field 'Convert CC'.**

The options are:

- Y Report is to use Convert CC processing option (normal default).
- N Report is not to use Convert CC processing option.

**\*FEAT044 - Provide a VRDMU110 Report Base Definition Screen initial default value for field 'Abend Handling' if the job step that produces the report abends but still produces the base report.**

The options are:

- P Process report as normal (normal default).
- D Delete report.
- A Archive report.
- O Store report in Online Viewing.

**\*FEAT045 - Provide a VRDMU110 Report Base Definition Screen initial default value for field 'AFP Mixed Mode'.**

The options are:

- N Report is not to use AFP Mixed Mode processing option (normal default).
- Y Report is to use AFP Mixed Mode processing option.

Mutually exclusive with FEAT046 and FEAT047.

**\*FEAT046 - Provide a VRDMU110 Report Base Definition Screen initial default value for field 'AFP Page Mode'.**

The options are:

- N Report is not to use AFP Page Mode processing option (normal default).
- Y Report is to use AFP Page Mode processing option.

Mutually exclusive with FEAT045 and FEAT047.

**\*FEAT047 - Provide a VRDMU110 Report Base Definition Screen initial default value for field 'Embedded DJDE'.**

The options are:

- N Report is not to use Embedded DJDE processing option (normal default).
- Y Report is to use Embedded DJDE processing option.

Mutually exclusive with FEAT045 and FEAT046.

**FEAT048 - Provide an extra line on the Manifest separator page**

Formerly QS18048 in 6.0, this Special Feature adds an extra line:"\*APPROXIMATE COST\$ N/A\*"

The options are:

- N No extra line is added.
- Y The additional line is included.

**FEAT049 - Insert x'8B' line between a default DJDE and the subsequent separator page when all of the following occur:**

- The report is defined for machine carriage control
- Default DJDE is defined for recipient
- Page Selection is defined for recipient
- An x'89' machine control character is on the last line of report data selected for the recipient

The options are:

- N Suppress the x'8B' line, which is normally inserted between a default DJDE and the subsequent separator page (default).
- Y Insert the x'8B' line between a default DJDE and the subsequent separator page.

**FEAT052 - alter the number of Manifest page entries from 43 to 8.**

The options are:

- N Perform normal default processing.
- Y Alter the number of Manifest page entries from 43 to 8.

**FEAT053 - Change position of Manifest page bar code bundle id information from offset +110to offset +99.**

The options are:

- N Perform normal default processing.
- Y Change position of Manifest page bar code bundle id information from offset +110 to offset +99.

## Update CAISDI Parameters

This step is for new CA Dispatch installations that wish to implement CAISDI.

**Note:** Upgrades that have already implemented CAISDI can bypass this step.

Sites running Service Desk can have CA Dispatch automatically open Service Desk tickets for unexpected product abends with CADDSP. This provides your organization with an immediately recorded notification of the identified problem so that it can be quickly addressed before causing more serious problems with CA Dispatch that could impact your system operations and the archiving of your critical reports.

## Configuring CAISDI for CA Dispatch

The following CAISDI/med PRODUCT and EVENT initialization statements define the interaction between CAISDI and CA Dispatch to generate Service Desk tickets for CA Dispatch abends:

```

/*=====*/

/* CA Dispatch Product Interface Definitions */
/* */
/* Define CA Dispatch product ABEND events that are to be */
/* captured by CAISDI/med, and how that information is to be */
/* presented in the ticket to CA Service Desk. */
/* */
/* Required customization: */
/* */
/* SERVER CAISDI/med name for Service Desk Server */
/* */
/* */
/* NOTE: Sample values for AFFECTED_END_USER, REPORTED_BY, */
/* ASSIGNEE, and TEMPLATE are valid, provided the */
/* CA Service Desk Administrator loads predefined */
/* templates and contacts. Otherwise, customize these */
/* parameters as directed by the CA Service */
/* Desk Administrator. */
/* */
/*===== */
PRODUCT CA DISPATCH, /* Product name */+
EVENT=ABEND, /* Event qualifier */+
JOBNAME=*, /* Product JOB names */+
AFFECTED_END_USER=System_Dispatch_User, /* Affected End User*/+
REPORTED_BY=System_Dispatch_User, /* Reported by */+
ASSIGNEE=System_Dispatch_User, /* Assigned contact name */+
PRIORITY=3, /* Priority for tickets */+
/* TEMPLATE='Dispatch,Priority unassigned', /* template name */+
SERVER=USDSRV01 /* Direct requests to this server */

EVENT ABEND, /* Capture ABEND events */+
PRODUCT=CA DISPATCH, /* Associated Product */+
COMPONENT='CADD CADD SPL R11 *', /* CA Dispatch */+
JOBNAME=*, /* Product JOB names */+
EXCLUDE=(X'122',X'222',X'522') /* Ignore x22 abends */

```

This example shows how the PRODUCT and EVENT statements are used to activate the capture of abend events for CA Dispatch. These statements also define the CA Service Desk attributes to be associated with the tickets that are opened as a result of the abend event.

- The PRODUCT statement defines the product, in this case CA Dispatch.

- The JOBNAME parameter defines the job names to which this product statement applies. The sample has coded '\*' so that all CA Dispatch-intercepted abends are processed by this EVENT statement in any address space including customer address space with intercepted reports. The JOBNAME parameter could be used to restrict the event to a specific JOB, or leave it as it is to handle all of them. The JOBNAME parameter is also useful if more than one copy of CA Dispatch is operating in a single z/OS operating system image.

For example, separate JOBNAME parameter operand specifications could be used to uniquely direct and categorize CA Service Desk tickets from each respective CA Dispatch component address space.

- The EVENT parameter indicates that the events associated with this PRODUCT definition are abend events.
- The SERVER parameter refers to the SERVER statement that defines the Service Desk server that is to receive tickets associated with this product definition.

The remaining parameters identify CA Service Desk entities that are assigned to any generated tickets. These entities should be predefined by the CA Service Desk administrator on the target CA Service Desk server.

- The most important predefined entity is the Service Desk TEMPLATE name. The proper use of predefined Service Desk templates ensure that tickets generated by CAISDI/med on behalf of CA Dispatch are properly categorized, prioritized, and assigned.
- The AFFECTED\_END\_USER parameter is used to define the contact name that appears in the Affected End User field of the ticket.
- The REPORTED\_BY parameter is used to define the contact name that appears in the Reported By field of the ticket.
- The PRIORITY parameter defines the priority of the ticket.
- The ASSIGNEE parameter is used to define the contact name that appears in the Assignee field of the ticket.
- The EVENT statement contains the crucial COMPONENT operand that is used to match this event statement with the actual event. For CA Dispatch, this is set to a value of "CADD CADDSP R11 \*". This operand must be entered exactly as it is coded in this example. *Note that the spaces between words are significant.*

CA Dispatch recovery routines place the character string "CADD CADDSP R11" in the SDWACID field for all CA Dispatch abend events. This COMPONENT specification indicates that CAISDI/med abend event intercept should capture any detected abend event where the concatenation of the SDWACID and SDWASC fields begins with the characters "CADD CADDSP R11". The asterisk (\*) in the sample initialization statement is a wild card, and indicates that any subsequent characters are considered a match condition.

- The EXCLUDE parameter of the EVENT statement lists abend/reason code combinations for CA Dispatch that should be ignored for problem reporting. (In the sample all \*22 abends are eliminated.) The JOBNAME parameter of the EVENT statement defines the jobs where the abend event may occur. In the sample, \* is coded so that all CA Dispatch-intercepted abends are processed by this EVENT statement in any address space, including customer address space with intercepted reports. The JOBNAME parameter can be used to restrict the event to a specific JOB, or masked to handle a range of jobs. The JOBNAME parameter is also useful if multiple copies of CA Dispatch are operating in a single z/OS operating system image. In this situation separate JOBNAME parameters can direct and categorize Service Desk tickets from each CA Dispatch address space.

The PRODUCT parameter on the EVENT statement defines the CAISDI/med product associated with the abend events captured. It is this PRODUCT name specification that makes the connection back to the CAISDI/med PRODUCT initialization statement.

**Note:** For more information about these parameters, see the chapter, "Running CAISDI." in the *CA Common Services for z/OS CA Service Desk Integration Guide*.

## Set Up Tape Management Interfaces

This step is for all new and upgrade CA Dispatch installations.

If you use a tape management system to manage your CA Dispatch tapes, you must be sure that it is set up correctly in order to prevent a premature scratch of a CA Dispatch archive tape.

**Note:** For more information about the tape management instructions, see the Tape Management in the chapter "Product Integration" of the *CA Dispatch Systems Programmer Guide*.

## Set Up the CA Spool Interface

This step is for all new and upgrade CA Dispatch installations.

If you use CA Spool to manage the printed bundles produced by CA Dispatch, you must be sure that it is set up correctly in order to maintain your site's current level of automation. Complete instructions can be found in the CA Spool - Print Management section of the "Product Integration" chapter of the *CA Dispatch Systems Programmer Guide*.

## Email Reports from CA Dispatch through CA Spool

Using CA Spool integration CA Dispatch can perform the following actions:

- Send reports directly to recipient's email address.
- Restrict emailed reports to contain only the pages the recipient is authorized to view.
- Convert emailed reports to PDF format. This action is optional.

Reports can be sent to CA Spool for email processing. Depending on the option selected by the recipient, the CA Dispatch reports are attached as TXT or PDF files in the email or a CA Spool weblink is included in the body of the email.

For CA Dispatch to send reports through Email to recipients, you must perform the following actions:

- You must install CA Dispatch User Exit RDFGEX04, utilizing the Email functionality in sample exit RDFGEX4A found in CAI.CADSSRC.
- Define recipients to use a special email keyword on VRDMU310 Recipient Definition Screen.
- Define report recipients to send their output to the CA Spool Writer and Destination.
- Follow specific processing consideration in your CA Spool environment.

For more information about emailing reports through CA Spool, see the following:

- Email Reports from CA Dispatch through CA Spool section in the "User Exits" chapter of the *CA Dispatch Systems Programmer Guide*
- Report Recipient Definition Screen (VRDMU130) section in "Reports, Events, Report Recipients, and Printer" chapter in the *CA Dispatch Reference Guide*
- Report Recipient Definition Screen (VRDMU130) in the "Defining and Maintaining Recipients" chapter in the *CA Dispatch Reference Guide*

The following are the CA Spool processing considerations when using the WEBLINK support:

1. Set PURGE=NO on the target CA Spool NODE statement. Set a Retain value equal to the length of time you want reports sent to this node available for viewing in the CA Spool Web Interface.
2. Add a CA Spool DESTID for the target CA Spool Node containing FADDRES1='WEBHOST=your.webserver.domain' and FADDRES2='WEBPORT=nnnn', where nnnn is the port number used for CA Spool's Web Interface.

For example:

```
DESTID QDEST=EMAILPRT, FADDRES1='WEBHOST=CPUA@CA.COM',
      FADDRES2='WEBPORT=8080'
```

## Set Up Job Scheduling Interfaces

This step is for all new and upgrade CA Dispatch installations.

If you use the CA Dispatch job scheduling interfaces to CA 7 or CA Scheduler, you must be sure that they are set up correctly in order to maintain your site's current level of automation.

Complete instructions can be found in the CA 7 - Job Scheduling and CA Scheduler - Job Scheduling sections of the "Product Integration" chapter of the *CA Dispatch Systems Programmer Guide*.

## Tailor the Execution JCL

This step is for all CA Dispatch installations.

The CAI Common procedure library (CADSPROC) contains all of the procedures relevant to CA Dispatch and CADDSP. These procedures were placed there during the SMP APPLY processing. You can review these procedures; however, the execution JCL provides all the necessary overrides.

You will find the execution JCL in your CAI Common JCL library (CADSJCL). The member names that begin with DSEX are executed once the product is installed. The member names that begin with DSIN are used for installation of the product. The installation members may contain inline procedures, and the execution JCL members execute procedures in the CAI.CADSPROC library.

Optionally, you may copy members beginning with CADS (in CADSPROC) into a PROCLIB of your choice, or the CADSPROC library can be added to the system PROCLIB concatenations.

The CA Dispatch members that you need to modify at this time are:

JCL Type	CAIJCL Name	Description
EXECUTION JCL	DSEXJNL1	Offload journal files ( <i>this is extremely important</i> )
	DSEXDISP	CA Dispatch batch startup JCL
	DSEXXTAR	Start the external Archive subtask 1
	DSEXSTR2	Start the external Archive subtask 2

JCL Type	CAIJCL Name	Description
	DSEXSTR3	Start the external Archive subtask 3



<b>JCL Type</b>	<b>CAIJCL Name</b>	<b>Description</b>
	DSEXTEX	Start the external Extract subtask
BACKUP/ RESTORE JCL	DSEXBR01	Back up CA Dispatch to tape
	DSEXBR04	Restore CA Dispatch from tape
PERIODICAL SERVICES JCL (batch maintenance)	DSEXPSAR	Archive Periodic Services - delete Archive reports and MSGCLASS that have met their retentions, scratch tape volumes that no longer have active reports. Must run with Dispatch up, subtasks up or down.
	DSEXPSVW	Online Viewing Periodic Services – delete OLV reports and MSGCLASS that have met their retentions. Must run with Dispatch up, subtasks up or down.
	DSEXPSST	Status Periodic Services – delete Status records when they have exceeded their retentions. Must run with Dispatch up, subtasks down.
	DSEXTMIG	Archive Periodic Services - delete Archive reports and MSGCLASS that have met their retentions, scratch tape volumes that no longer have active reports. Must run with Dispatch down.
	DSEXVIEW	Online Viewing Periodic Services – delete OLV reports and MSGCLASS that have met their retentions. Must run with Dispatch down.
	DSEXPURG	Status Periodic Services – delete Status records when they have exceeded their retentions. Must run with Dispatch down.

If you want to run CA Dispatch as a started task, modify CADSPROC member CADSDISP accordingly.

CADDSPPL PROCLIB Name	Description
CADDSPPLx	<p>CADDSPPLx initialization and startup JCL</p> <p>The trailing task suffix "x" identifies a unique CADDSPPL environment.</p> <p>This proc is started as an STC started task. The following naming convention must be adhered to for the start-up proc and spawned tasks:</p> <p>CADDSPPLx and CADZSPPLx</p> <p><b>Warning:</b> If you attempt to submit CADDSPPLx as a batch job the CADZSPPLx and CADZSAPx jobs will not be automatically spawned and a CADD300E error message may be issued at start-up.</p>
CADZSPPLx	<p>CADDSPPL Main proc</p> <p>The trailing task suffix "x" identifies a unique CADDSPPL environment.</p>
CADZSAPx	<p>CADDSPPL SAPI proc</p> <p>The trailing task suffix "x" identifies a unique CADDSPPL environment.</p> <p><i>Do not submit this job! This job is automatically started by CADZSPPLx as needed.</i></p> <p>This proc is automatically submitted when the first SAPI task is started. It is stopped when the last SAPI task has shut down..</p>

**Important!** Do not submit this job! This job is started automatically by CADDSPPLx.

Copy, and optionally rename, the CADDSPPLx, CADZSPPLx, and CADZSAPx procedures to a valid system procedure library.

You must define one set of these three procedures for each CADDSPPL environment you want to execute. The trailing one-character task suffix "x", identifies a unique CADDSPPL environment.

## Considerations for Tailoring the Execution JCL

Be aware of the following:

- Later in the install you will need to enter both the one character CADDSPPLx Task Suffix assigned in this step and the name of the Root LDS file on the Sysgen Control Information Screen (VSGMU110). This is done to assign or link the CA Dispatch task to an associated CADDSPPL task. See the Test and Validate step.

- The CADZSPLx procedure can reference a member of a library or a sequential file which contains a set of CADDSP operator commands via an optional SPLCMD DD card. These commands will be executed during the start up of the CADZSPLx STC.

A sample of this set is:

```
S RPI1,SAPI
S RPI2
P RPI3
P MSG
S ARCH
STAT,X.
```

- For sites using ABEND-AID:

Disable ABEND-AID processing for all CA Dispatch regions including external distributions, archive, and extract. To do this, insert a DD statement in the CA Dispatch as:

```
//ABNLIGNR DD DUMMY
```

This DD statement has been included in procs CADSDISP, CADSXTEX, CADSXSTAR, CADDSPx, CADZSPLx, and CADZSAPx.

For more information, see your *ABEND-AID Reference Manual*.

## Start CA Dispatch

At this point CADSLOAD should be an authorized library and CADSPROC should be a system recognized PROC library, or the CAS9 PROC should have been copied into one of your system PROCLIBs. If necessary, IPL your system to install the libraries.

If it is not necessary to IPL, tailor JCL member DSEXSTRT from the CADSJCL library and submit. This job will execute the CAS9 Proc (CAIRIM) to initialize the system for CA Dispatch.

Note: All CA Dispatch systems should be inactive when DSEXSTRT is run.

## Start the Tasks

For CA Dispatch and CADDSP to function properly, start the system in the following order:

1. Start ENF and wait for it to initialize completely.
2. Start CADDSP by starting CADDSPx and waiting for it to initialize completely.
3. Start CA Dispatch.

**Important!** Before you start your system, be sure that the job DSEXJNL1 has been tailored and be certain that it does not have JCL errors.

If CAIRIM has not been executed prior to the Initialize the System step, CA Dispatch will have been automatically started through the CAIRIM Auto Commands function. If CAIRIM has been run previously, the Auto Commands will not be issued.

You can use the following console command to start CA Dispatch:

```
START CADSDISP
```

You can also execute CA Dispatch as a batch job. To do so, submit the member DSEXDISP in the CADSJCL library (which has already been tailored). When you see the Enter Next Task Code prompt, the system is ready.

## Post Installation Considerations

Now that you have successfully installed CA Dispatch, you should consider reviewing the Systems Programmer Guide for information about tuning CA Dispatch for optimal performance.

## Test and Validate Operation

This step is for all CA Dispatch installations.

### Test and Validate CADDSP

To test CADDSP, follow these steps :

1. Issue the F SPLx,STAT X modify command from the console.

This command will show utilization statistics for your CADDSP linear data sets. Make note of the number of blocks in use and the "captive" count.

2. If the CADDSP tasks are down, issue the F SPLx,S RPI1 modify command from the console.

This command will start the Intercept and the SAPI task for the RPI1 task.

- To test the CADDSP open intercept, execute a test job that will produce a test report to be intercepted by CADDSP.

You can use the following JCL to do this:

```
//STEP1 EXEC PGM=IEBGENER
//SYSUT1 DD *
    Test Report for CADDSP Spool and CA Dispatch testing
//SYSUT2 DD SYSOUT=(A,rptname),DEST=DST1
//SYSPRINT DD DUMMY
//SYSIN DD DUMMY
```

where:

*A* is equal to a CADDSP RPI1 selection class defined in the prior Allocate LDS Files and Configure CADDSP Processing Options step.

*DST1* is equal to a CADDSP RPI1 selection destination defined in the prior Allocate LDS Files and Configure CADDSP Processing Options step.

**Note:** Destination is optional.

- Issue the F SPLX,STAT X command again and make note of the Blocks in Use and "Captive" count. If both counts are higher than the amount shown in Step 1, your CADDSP spool intercept function is working properly.
- To test the CADDSP SAPI interface, execute the IEBGENER job (as in Step 3) again. However, this time, change the class/destination so that they are **not** CADDSP RPI1 selection class/destination values. (This should allow the test report to go out to the JES queue.)
- Change the class/destination of the test report in the JES queue to the class/destination you have defined in one of your CADDSP RPI1 selections; this should cause the SAPI task to move the test report from the JES queue into CADDSP.

## Test and Validate the CA Dispatch Main Region

Perform the following steps to initially configure and test the CA Dispatch main region:

At this point, you can sign on to the system through VTAM, or if you installed the TSO or CICS interfaces, follow the SIGNON instructions in the *Reference Guide*.

Your first task should be to access the Sysgen screens (Option 9 on the Report Distribution Option Menu) to set up basic defaults and complete the initialization tasks.

- Sign onto CA Dispatch and select Option 9 Sysgen from the CA Dispatch main menu.
- Select Option 0 from the Sysgen Option Menu. Enter the necessary SYSOUT Class/Destination information on the Dedicated Sysout Control Information Screen (VSGMU105).

**Important!** This screen is used to assign or link the CA Dispatch task to an associated CADDSPx task.

The Sysout Class and Destination combination values for the RPI1, RPI2, RPI3, MSG and ARCH tasks entered here must correspond to the Sysout Class and Destination values defined in Step 10. Allocate and Initialize CADDSP L DS.

**Note:** The multiple Archive tasks all process input from one ARCH Class/Destination combination defined in CADDSP L DS.

After making your updates, PF3 to save your changes.

3. Select Option 1 from the Sysgen Option Menu. Enter the necessary control parameters on the Sysgen Control Information Screen (VSGMU110).

**Important!** This screen is used to assign or link the CA Dispatch task to an associated CADDSP L DS task.

Enter the appropriate value into the Task Suffix field, where x identifies the CADDSP L DS task. For example, if your CADDSP L DS task is named CADDSP L P, you would enter P into the Task Suffix field. The CADDSP L DS task names were defined in the Tailor the Execution JCL step.

Enter the actual Root LDS Dataset name that was allocated in Step 10. Allocate and Initialize CADDSP L DS.

Some of the new and important fields required on this screen are Undefined Report Definition, Manifest Position, Bundle Sort Order, Bundle Recovery DSN Prefix and Unit.

After making your updates, PF3 to save your changes.

4. Select Option 9 from the Sysgen Option Menu. Enter the control parameters necessary for online viewing on the Online Viewing Control Information Screen (VSGMU190). After making your updates, press PF3 to save your changes.
5. Select Option A from the Sysgen Option Menu. Enter the default archive parameters on the Archive Control Information Screen (VSGMU210).

To avoid contention with duplicate file names when using multiple archive tasks, we suggest that unique qualifiers (such as ARCH1, ARCH2, ARCH3) be added to the DSN prefix defined on the Sysgen Archive Task Information Screen (VSGMU215).

After making your updates, press PF3 to save your changes.

**Note:** DSSTAR00 in the START JCL PROC override statement will not autostart any CA Dispatch tasks to allow for Sysgen tailoring. Changing this member to DSSTAR11 will autostart the distribution, status, archive, and extract tasks. DSSTAR12 will autostart distribution and status only.

**Note:** If CADDSP L DS has not intercepted any reports yet, RPI and ARCH will fail with an "LDS empty" message. Restart RPI and ARCH after a report has been captured and stored in the LDS.

6. After you complete the sysgen by viewing and modifying the CA Dispatch online screens, you can manually start and test functions by using the following commands at the Enter Next Task Code prompt:

S DIST—Starts the distribution tasks that bundle reports (RPI, RPO, MSG)

S ARCH—Starts the archive task, which archives reports to tape

S EXTR—Starts the extract task, which reprints reports from tape

S STAT—Starts the status task, which records external ENF Event status to the database

If you had problems bringing the system up, make the required corrective modifications and resubmit the job. If you cannot resolve the problem access <http://ca.com/support>, the CA web site to quickly locate answers to many questions. Technical support is available 24 hours a day, 7 days a week.

## Reinstall Online Viewing Only Region (Optional)

Perform this step according to your site requirements.

If you have previously installed (or now wish to install) an online viewing only region (OLVO), see the Online Viewing Only Region chapter in the *Systems Programmer Guide* for more information.

**Note:** If you want to install an OLVO at a later time, you can do so then.

## Determine the Type of PC Processing Used

If you want to use CA Dispatch to manage online report viewing, there are two ways of controlling the report download, management, and upload process.

- Manage your report functions with Cooperative Processing  
See the chapter "Mainframe to PC, Connect Using Cooperative Processing" in the *Systems Programmer Guide*.
- Use the CA Dispatch Report Transfer Client (RTC) functions  
See the chapter "Mainframe to PC, Connect Using Report Transfer Client" in the *Systems Programmer Guide*.

## Save the Installation Materials

Be sure to save all of your installation materials and all output from the installation process. This material will be essential for timely and accurate CA maintenance and support of the product.





# Chapter 8: Migration Considerations

---

Describe what you are migrating and things to consider when you migrate existing configuration and data.

This section contains the following topics:

[Upgrade Considerations](#) (see page 145)

## Upgrade Considerations

The changes in CA Dispatch Release 11.7 require you to take specific actions before you begin the upgrade. This section provides information about the following:

- Pre-upgrade Requirements
- Areas of Consideration
- Executing CA Dispatch r11.7 with prior Releases
- Installation requirements
- Maintenance considerations
- Upgrade sequence

In addition to reading this entire section carefully, you must read the Product Maintenance Letter (PML) that comes with your tape and information on the SupportConnect web site <http://supportconnect.ca.com>. The SupportConnect web site provides the most current information.

## Pre-upgrade Requirements

CA Dispatch clients can upgrade to CA Dispatch r11.7 from Release 11.0 and Release 11.6.

## Areas of Consideration

**Important!** Be sure all of your reports are processed out of the input and output queues before you upgrade to Release 11.7.

CA Dispatch r11.6 provides encryption features. This feature causes data to be encrypted on the LDS files. Data encrypted on the LDS is no longer viewable by the r11.0 software level of CA Dispatch. Prior to starting the upgrade process, the r11.0 LDS files should be unloaded using the r11.0 DSEXULD utility. The unloaded files will provide a restore point that can be used to revert to r11.0.

When upgrading to CA Dispatch r11.7, consider the following:

- Support for upgrading from CA Dispatch r11.0 and r11.6.
- CA Dispatch r5.1 and r6.0 must be upgraded to r11.0. The upgrade procedures are only available from the CA Dispatch r11.0 install tape.
- CA Dispatch r11.7 is only backwardly compatible to CA Dispatch r11.6.
- The following target libraries are used in Release 11.7:
  - CADSJCL – JCL library
  - CADSOPTN – Options libraries used instead of PPOPTION or CAIOPTN
  - CADSCLSO -- CLIST library used instead of CAICLIB or CAICLS0
  - CADSPNLO -- Panel library used instead of CAISPP or CAIPNLO
  - CADSLOAD -- Execution load library

## Executing CA Dispatch r11.7 with Prior Releases

CA Dispatch r11.7 can also execute concurrently with Release 11.0 or 11.6.

**Important!** You cannot share the SMP/E CSI for CA dispatch r11.7 with prior releases.

## Installation Requirements for Output Management Product Integration

This section provides an overview of other output management products that interface with CA Dispatch, maintenance considerations, and the order in which products must be upgraded.

Output Management products that interface with CA Dispatch are:

- Output Management Distributed Repository Access System (referred to as CA DRAS through the rest of the guide)

- Output Management Web Viewer
- CA Spool Print Management
- CA LPD

## Maintenance Considerations

See the Product Maintenance Letter (PML) that came with the CA Dispatch installation or maintenance tape for more information and an up-to-date list of required APARs or PTFs.

## Upgrade Sequence

You do not have to upgrade all products immediately when upgrading CA Dispatch to r11.7.

CA Dispatch r11.7 works with:

- CA DRAS r11.5 and r11.6. You can upgrade CA DRAS to the current version at your convenience
- CA Spool r11.6, r11.5, and r11. You can upgrade CA Spool to the current version at your convenience.
- CA LPD r11.6 and r11.5.

You can upgrade CA LPD at your convenience.



# Appendix A: Installation Worksheets

---

The worksheets that follow contain the SMP and system-related values pertinent to the installation. The information included will be required during the installation process and should be kept as a valuable reference.

This section contains the following topics:

[Step 1. Enter the Global Install Parameters:](#) (see page 149)

[Step 2. Enter the Data Set Qualifiers and SMP Parameters:](#) (see page 150)

[Step 3. Optional Online Interface Parameters:](#) (see page 151)

[Step 4. Enter the Upgrade and New Install Parameters](#) (see page 151)

[CA DRAS Installation Worksheet](#) (see page 154)

[Tape Installation Worksheet](#) (see page 155)

## Step 1. Enter the Global Install Parameters:

- Enter your standard SYSOUT class for CA product installations and SMP output.

Default: SYSOUT=\*

SYSOUT=\_\_\_\_\_

- Enter the installation product tape TAPEVOL.

Default: TAPEVOL=

TAPEVOL=\_\_\_\_\_

- Enter the installation database tape TAPESER.

Default: TAPESER=

TAPESER=\_\_\_\_\_

- Enter the name for the CA Dispatch started task.

Default: STCNAM=CADSB7

STCNAM=\_\_\_\_\_

- Enter Assembler type: IEV90, ASMA90 or another type.

Default: ASMBLR=ASMA90

ASMBLR=\_\_\_\_\_

## Step 2. Enter the Data Set Qualifiers and SMP Parameters:

- Enter the common distribution, target and SMP libraries' data set high-level qualifiers you plan to assign.

Default: DSHLQ='CAI'

DSHLQ=\_\_\_\_\_

- Enter the data set high-level qualifiers for your CA Dispatch databases. (If you are upgrading from CA Dispatch, CA Dispatch converts your current database files; it does not build new database files.)

Default: DBHLQ='CAI'

DBHLQ=\_\_\_\_\_

- Enter your generic unit name for permanent DASD volumes.

Default: PERMDA=SYSDA

PERMDA=\_\_\_\_\_

- Enter your generic unit name for temporary work DASD volumes.

Default: WORK=SYSDA

WORK=\_\_\_\_\_

- Enter your generic unit name for the 6250 BPI tape drive.

Default: TAPE=TAPE

TAPE=\_\_\_\_\_

- Enter the DASD pack you plan to use as your SMP temporary library volume.

TLIB=\_\_\_\_\_

- Do you want to allocate CA Dispatch distribution libraries?

Default: DISPLIB=YES

DISPLIB=\_\_\_\_\_

- Do you want to allocate Common CA target libraries?

Default: CATARG=YES

CATARG=\_\_\_\_\_

- Enter the VOLSER to allocate the libraries.

Default: (none)

LIBSER=\_\_\_\_\_

## Step 3. Optional Online Interface Parameters:

CICS – Do you want to install the CICS interface?

Default: CICS=NO      CICS=\_\_\_\_\_

What is the displacement in the CSA for the CWA (common work area) where there are four available bytes?      Default: CWADISP=0      CWADISP=\_\_\_\_\_

List two available transaction IDs for CA Dispatch.      Default: CICID1=DSP1      CICID1=\_\_\_\_\_  
Default: CICID2=DSP2      CICID2=\_\_\_\_\_

**Note:** The value for CICID2 is the value you enter during the running of the REXX install procedure.

Enter your system CICS load library.      Default: CICLIB=CICS.LOAD      CICLIB=\_\_\_\_\_

Enter your system CICS macro library.      Default: CICMAC=CICS.MACLIB  
CICMAC=\_\_\_\_\_

IMS - Do you want to install the IMS interface?

Default: IMS=NO      IMS=\_\_\_\_\_

Enter an available transaction ID for CA Dispatch.      Default: IMDIS=DSP2      IMSID=\_\_\_\_\_

Enter your system IMS load library name.      Default: IMSLIB=IMS.LOAD      IMSLIB=\_\_\_\_\_

## Step 4. Enter the Upgrade and New Install Parameters

- Are you performing an upgrade?

Default: UPGRADE=NO      UPGRADE=\_\_\_\_\_

### Upgrade Parameters

- Enter the VTAM application ID for CA Dispatch.

Default: APPLID=DISPATCH      APPLID=\_\_\_\_\_

- Enter the TSO CLIST name to use to initiate online interaction with CA Dispatch.

Default: TSOC=CADSTSO

TSOC=\_\_\_\_\_

- What IDMS central version number do you want to assign to CA Dispatch?

Default: CVNUM=01

CVNUM=\_\_\_\_\_

**Note:** If you do not have any other IDMS applications installed, leave the CVNUM set to the preset number of 01.

- What IDMS system number do you want to assign to CA Dispatch?

Default: SYSNUM=01

SYSNUM=\_\_\_\_\_

**Note:** If you do not have any other IDMS applications installed, leave the SYSNUM set to the preset number of 01.

- Enter the DASD volume on which the system databases are to reside.

SYSVOL=\_\_\_\_\_

- OLV conversion: Enter the report Class/Destination combination currently being used by distribution.

RCLASS=\_\_\_\_\_

RDEST =\_\_\_\_\_

- OLV conversion: Do you want to convert MSGCLASS?

CONVERT=\_\_\_\_\_

## New Installation Parameters

- Enter the VTAM application ID for CA Dispatch.

Default: APPLID=DISPATCH

APPLID=\_\_\_\_\_

- Enter the TSO CLIST name to use to initiate online interaction with CA Dispatch.

Default: TSOC=CADSTSO

TSOC=\_\_\_\_\_

- What IDMS central version number do you want to assign to CA Dispatch?

Default: CVNUM=01

CVNUM=\_\_\_\_\_

**Note:** If you do not have any other IDMS applications installed, leave the CVNUM set to the preset number of 01.



- What IDMS system number do you want to assign to CA Dispatch?

Default: SYSNUM=01

SYSNUM= \_\_\_\_\_

**Note:** If you do not have any other IDMS applications installed, leave the SYSNUM set to the preset number of 01.

- You must determine the size of the distribution and archive database you are going to install: size 1, 2, 3, 4, or 5.

Migrating from one size to another can be done, but it is not easy. Care should be taken to allow for expansion. We recommend size 2. Use the following table to help you decide. It contains the number of reports and how they relate to the approximate number of cylinders on a 3380 disk.

	Size 1	Size 2	Size 3	Size 4	Size 5
Appx. # of reports	2,500	12,500	25,000	50,000	100,000
Distribution system	130	210	305	585	1,005
Archival System	20	40	65	125	245

Choose the size you need for the distribution System (RD size).

Default: RDSIZE=2

RDSIZE= \_\_\_\_\_

**Note:** If you choose size 5, enter the DASD volume on which the size 5 RD file is to reside.

RDVOL= \_\_\_\_\_

- Choose the size you need for the Archival System (AR size).

Default: ARSIZE=2

ARSIZE= \_\_\_\_\_

- Enter the DASD volume on which both databases are to reside.

Default: APCDB1

DBVOL= \_\_\_\_\_

- Enter the DASD volume on which the system databases are to reside?

Default: APCM01

SYSVOL= \_\_\_\_\_



- a What VOL=SER do you want to use for the SMP libraries, if libraries do not already exist?  
Default: VOLSER= \_\_\_\_\_ VOLSER= \_\_\_\_\_
7. What is the SMP/E Target Zone name? CAIT0= \_\_\_\_\_
8. What is the SMP/E Distribution Zone name? CAIDO= \_\_\_\_\_

## Tape Installation Worksheet

**If you are installing from tape:**

### **Unload Tape**

(Optional) If you are installing from tape, gather the following information related to tape unloading:

#### **Tape Unit**

unitname = \_\_\_\_\_

#### **Tape Volume Serial Number**

nnnnnnn = \_\_\_\_\_

#### **Data Set Prefix for the Installation**

yourhlq = \_\_\_\_\_

#### **DASD for the Installation Software**

sysda = \_\_\_\_\_



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