

CA DRAS™

Operations Guide

Release 12.2



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CA Technologies Product References

This document references the following CA Technologies products:

- CA ACF2™
- CA Common Services for z/OS
- CA Dispatch™
- CA OPS/MVS®
- CA Output Management Document Viewer
- CA Output Management Web Viewer
- CA TLC (CA Total License Care)
- CA Top Secret® for z/OS
- CA View®

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Contact CA Support

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- 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: Introduction and Overview

CA DRAS is middle-ware that runs as a started task on the mainframe. CA DRAS communicates with agents such as CA View Output Archival and Viewing on one end and Windows-based viewers such as CA Output Management Web Viewer on the other.

This section contains the following topics:

[Who Should Read This Guide?](#) (see page 9)

[CA DRAS Terminology](#) (see page 9)

[Overview of the Cooperative Process](#) (see page 11)

[CA DRAS Documentation](#) (see page 12)

Who Should Read This Guide?

The information in this guide is targeted to the MVS systems programmer who uses and maintains CA DRAS and the administrator or project manager who is responsible for bringing the cooperative process online at your site.

This guide contains information about how to use CA DRAS in your environment. Specific instructions about your primary z/OS-based repositories are included to help you implement and configure CA DRAS for cooperative viewing from your report repository.

Note: CA DRAS is now packaged with the individual Output Management repository systems – CA View and CA Dispatch. Detailed installation instructions for CA DRAS can be found in these product Installation Guides. There you can find the system requirements and information about how to install CA DRAS.

CA DRAS Terminology

Client Applications or Clients

These terms apply to the CA viewing solutions that work with CA DRAS and your z/OS-based mainframe repositories to provide the cooperative viewing process. Cooperative Viewing is currently available with CA Output Management Web Viewer.

Cooperative Processing/Cooperative Viewing

The ability to view or print a z/OS-based report from a Windows application or web browser.

DRAS – Distributed Repository Access System

A distributed relational database server that provides access to data in a large variety of formats residing on different media.

CA DRAS provides a uniform, consistent view of data throughout the enterprise by treating all the data as relational tables, regardless of the original format or storage medium.

Mainframe Repository

The CA Output Management solutions that are used to process, store, and manage your mainframe reports. Cooperative Viewing is currently available from the following repositories:

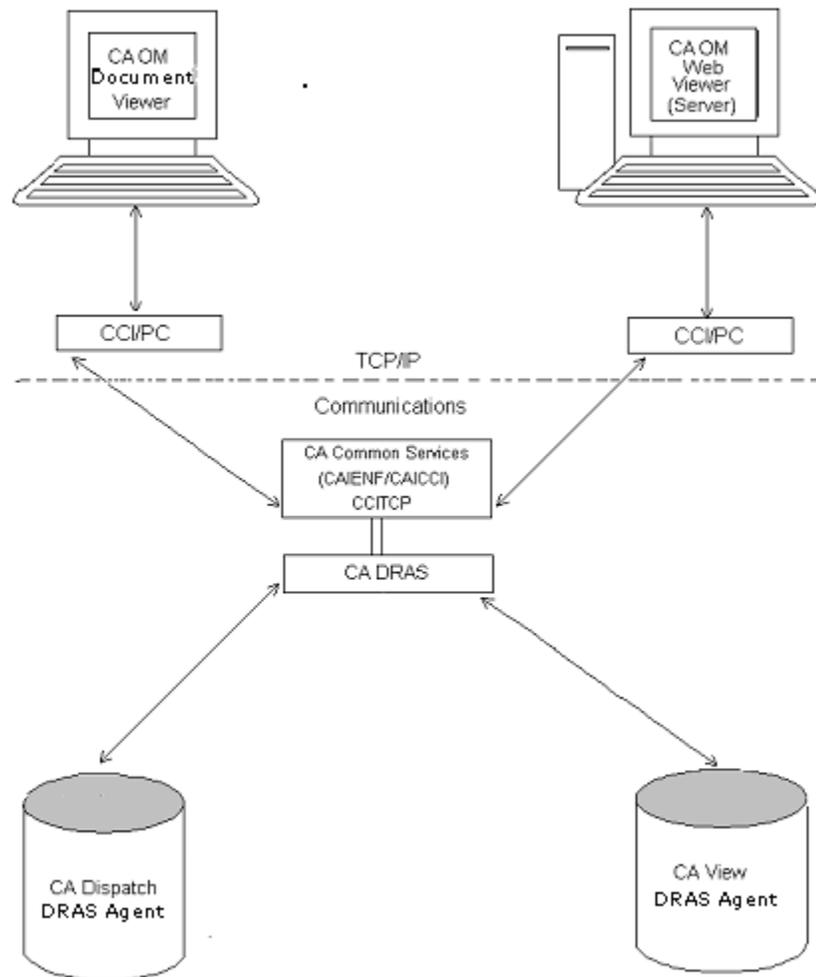
- CA View
- CA Dispatch

Repository Agent or Agents

Agent code is supplied for each z/OS-based repository. This code allows the specific repositories to process common requests that are received from CA DRAS. When the Client makes a request through CA DRAS, the Agent sends that request into the repository and passes back its response.

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 in a z/OS-based report repository.



The Client initiates a request with an initial login or a report data request from CA OM Document Viewer or CA OM Web Viewer.

1. 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 CAICCI-PC, to the z/OS- platform running the Common Communication Interface (CCITCP) task.
2. 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.
3. The request is validated and processed by the Report Repository system: CA View or CA Dispatch. Once processed, it is returned in SQL format and passed back to CA DRAS.
4. 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.

CA DRAS Documentation

This CA DRAS Operations Guide is supplied by CA Technologies.

For more information about system operation, maintenance, and features related to your mainframe, client applications, and repository agents, see the documentation supplied with those products.

As previously noted, CA DRAS is now packaged with the Output Management mainframe repository systems – CA View and CA Dispatch. For installation requirements and detailed instructions, see the product Installation Guides.

Chapter 2: Prerequisites and Requirements

This chapter lists the prerequisites for client and server, explains CA Common Services, and describes the hardware and software resources you must install and operate CA DRAS.

This section contains the following topics:

[Prerequisites](#) (see page 13)

[CA Common Services Prerequisites](#) (see page 13)

[Resource Requirements](#) (see page 16)

Prerequisites

The base configuration of the client viewer and mainframe-based repository solutions must already be installed in your environment. To implement cooperative viewing, you need CA View:

z/OS-based Report Repositories

- CA View Release 12.2

The CA View Release 12.2 DRAS base and agent code is supplied with the CA View Release install as SYSMODs CBY3C20 and CBY3C22.

The CA View Release 12.2 DRAS agent can access CA View supported databases Release 12.2, Release 12.1, and Version 12.0.

However, for compatibility, if you versioned your CA View database to the most recent version, verify that your CA DRAS task uses the most recent libraries.

Client Viewer Applications

- CA OM Web Viewer Version 12.1, 12.0, and r11.5

TCP/IP Communications

- IBM TCP/IP

CA Common Services Prerequisites

CA DRAS runs in a z/OS environment and uses common functions provided with CA Common Services. If the following services are not already installed on your system, they must be installed before you proceed with this installation.

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

- CAIENF
- CAICCI
- CAICCI for TCP/IP

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

Note: For more information including installing, configuring, and using the common services, see the *CA Common Services for z/OS Getting Started* guide.

CAIENF

CA DRAS uses CAIENF (Event Notification Facility) services. 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 CA's z/OS applications, thus exploiting technologies such as relational database architectures for the benefit of the entire product line.

The level of integration is improved by enabling operating systems and CA software-generated event information to be driven through a standard interface, simplifying multiple product-to-product interfaces, and associated necessary maintenance.

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 about space requirements, see the CA Common Services documentation.

Note: CA DRAS does not use the CAIENF/CICS component.

CAICCI

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

CA DRAS uses the CAICCI service to provide communication between client applications and the servers. 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.

Be aware of the following:

- CAICCI must be installed into an APF (Authorized Program Facility) authorized library. The library used must be the same as the one used for CAIENF component installation.
- CAICCI runs as a CAIENF subtask within CAIENFs address space. CAICCI uses the same database as the one allocated and initialized for CAIENF to use. CAICCI requires that an update is made to the CAIENF database. For more information, see CA Common Services documentation.

CAICCI for TCP/IP

CAICCI provides robust TCP/IP support, and this protocol can be used to connect a wide variety of platforms and applications. Mainframes and PCs can 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. The 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 parm, depending on vendor for TCPIP or C runtime, as described in the CA Common Services documentation.

CAIRIM

CAIRIM (CAI Resource Initialization Manager) is the common driver for a collection of dynamic initialization routines. These initialization routines eliminate the need for user SVCs, SMF exits, subsystems, and other installation requirements that you commonly encounter when you install systems software. CAIRIM prepares the operating system for CA products and components, and then executes them.

The following list contains some of the tasks CAIRIM performs:

- Obtains SMF data
- Verifies proper software installation
- Installs MVS interfaces
- Automatically starts CA products and the products of other vendors
- Properly times and sets the order of the initialization

Note: CA DRAS requires CAIRIM to run the required CA LMP if Web Viewer Version 12.0 or higher (any platform) is used.

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

Resource Requirements

Depending on the mainframe repository you intend to use, see the *CA View* or *CA Dispatch Installation Guide* for further information.

Chapter 3: Installing CA DRAS

Note: CA DRAS is packaged with the individual Output Management repository systems – CA View and CA Dispatch. Detailed installation instructions for CA DRAS can be found in these product Installation Guides. There you can find the system requirements and information about how to install CA DRAS.

Chapter 4: Starting Your Product

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

This section contains the following topics:

[Complete Configuration With CA CSM](#) (see page 19)

[How to Configure Without CA CSM](#) (see page 22)

[Start CA DRAS](#) (see page 34)

[Post-Installation Considerations](#) (see page 46)

[Prepare to Start Your Product](#) (see page 46)

Complete Configuration With CA CSM

When you configure your product using CA CSM, the following items are configured automatically by the DRAS Configuration Option:

- BY3CJST Startup PROC
- DRAS Control Statements

To complete the configuration, perform these tasks:

1. [Authorize program load libraries](#) (see page 20).
2. [Enter the LMP code](#) (see page 20).
3. [Define the CA LMP execution key](#) (see page 21).

Authorize Program Load Libraries

Do one of the following to either authorize the program load library or copy the modules to a system authorized library:

If you want DRAS to execute from its own load library, APF authorize the load library by adding an entry for CBY3LOAD to member IEAAPFxx of SYS1.PARMLIB.

Note: Authorization does not take effect until the next IPL.

If you do not want to APF-authorize the DRAS target library, copy the load modules in CBY3LOAD to an existing authorized library, such as, SYS1.LINKLIB or any other library in the linklist.

You can APF authorize temporarily by issuing the following MVS operator commands:
SETPROG APF,ADD,DSN=CBY3LOAD,VOLUME=XXXXXX.

In addition to the authorization of the DRAS CBY3LOAD library, review the CA DRAS startup PROC BY3CJST to help ensure that additional STEPLIB libraries are also authorized. These libraries may include the CA View CVDELOAD, CA View AFP to PDF CFD9LOAD, the optional SASC runtime library CSARLOAD, and the CA Dispatch CADSLOAD libraries.

Enter the LMP Code

All users of CA Output Management Web Viewer Version 12.0 or higher must perform this step.

CA DRAS requires CA LMP (License Management Program), one of the CA Common Services, to initialize correctly if you are using it with CA Output Management Web Viewer Version 12.0 or higher. CA LMP provides a standardized and automated approach to the tracking of licensed software. Examine the CA LMP Key Certificate you received with your CA Output Management Web Viewer product.

Your LMP Key Certificate contains the following information:

Product Name

Specifies the trademarked or registered name of the copy of CA Output Management Web Viewer licensed for the designated site.

Supplement

Specifies the reference number of your license for the particular CA View, in the format nnnnnn nnn. This format differs slightly inside and outside North America, and in some cases may not be provided at all.

Expiration Date

Specifies the date (MONTH dd, yyyy as in OCTOBER 21, 2013) that your license expires for the installation and maintenance of the designated CA Output Management Web Viewer.

Technical Contact

Specifies the name of the technical contact at your site, who is responsible for the installation and maintenance of CA Output Management Web Viewer. This is the person to whom CA addresses all CA LMP correspondence.

MIS Director

Specifies the name of the Director of MIS, or the person who performs that function at the site. If the title, but not the individual's name is indicated on the Certificate, enter the actual name when correcting and verifying the Certificate.

CPU Location

Specifies the address of the building where the CPU is installed. CA LMP is provided as a part of CAIRIM (Resource Initialization Manager), another one of the CA Common Services.

Execution Key

Specifies an encrypted code required by CA LMP for CA Output Management Web Viewer initialization, referred to as the LMP Code during installation.

Product Code

Specifies a two-character code that corresponds to CA Output Management Web Viewer.

CPU ID

Specifies the code that identifies the specific CPU for which installation of your CA Output Management Web Viewer is valid.

Define the CA LMP Execution Key

To define a CA LMP execution key to the CAIRIM parameters, modify member KEYS in OPTLIB data set. Syntax is as follows:

```
PROD(pp) DATE(ddmmyy) CPU(tttt-mmm/ssss) LMPCODE(kkkkkkkkkkkkkkk)
```

where:

pp

Specifies the two-character product code (required). For any given CA LMP software solution, this code agrees with the product code already in use by the CAIRIM initialization parameters for earlier service packs of CA Output Management Web Viewer.

ddmmmyy

Specifies the CA LMP licensing agreement expiration date (required).

tttt-mmmm

Specifies the CPU type and model (for example, 3090-600) on which the CA LMP software solution is to run (required). If the CPU type or model requires less than four characters, blank spaces are inserted for the unused characters.

ssssss

Specifies the serial number of the CPU on which the CA LMP software solution is to run (required).

kkkkkkkkkkkk

Specifies the execution key required to run the CA LMP software solution (required). This CA LMP execution key is provided on the Key Certificate shipped with each CA LMP software solution.

The following example shows a control statement for the CA LMP execution software parameter. The CA LMP execution key is invalid and is provided only as an example.

```
PROD(4Q) DATE(21OCT13) CPU(3090-600 /370623) LMPCODE(52H2K06130Z7RZD6)
```

Note: For more information about the procedure for defining the CA LMP execution key to the CAIRIM parameters, see the *CA Common Services Getting Started guide*.

How to Configure Without CA CSM

The topics in this section describe the manual tasks you perform if you are not configuring your product using CA CSM.

Configuring CA DRAS

Before you start the CA DRAS task, do the following:

- Modify the BY3CJST JCL to run CA DRAS.
- Modify the CA DRAS control statements.

Customize BY3CJST

Member BY3CJST in CAI.CBY3PROC provides the sample JCL needed to execute CA DRAS in your environment. The example below explains the required DD statements and defines which libraries need to be allocated. Modify these statements to reflect your data set choices.

```
//CADRAS EXEC PGM=CAHFDRAS,TIME=NOLIMIT,REGION=0M,PARM='TRAP(OFF)/'
//STEPLIB DD DISP=SHR,DSN=CAI.CBY3LOAD (DRAS LOADLIB)
//* DD DISP=SHR,DSN=CAI.CFD9LOAD (VIEW AFP to PDF LOADLIB )
//* DD DISP=SHR,DSN=CAI.CVDELOAD (VIEW REPOSITORY LOADLIB)
//* DD DISP=SHR,DSN=CAI.CBQ4LOAD (CA Spool Load Library)
//* DD DISP=SHR,DSN=CAI.CADSLD (DISPATCH REPOSITORY LOADLIB)
//* DD DISP=SHR,DSN=CAI.CSARLOAD (SASC RUNTIME LIBRARY)
//DRASCFG DD DISP=SHR,DSN=CAI.CBY3OPTN(CAHFDCFG) (CONFIGURATION FILE)
//SYSOUT DD SYSOUT=*,HOLD=YES
//SYSPRINT DD SYSOUT=*,HOLD=YES
//DRASLOG DD SYSOUT=*,HOLD=YES
//DRASTRC DD SYSOUT=*,HOLD=YES
//*-----*
//* AFP-TO-PDF TRANSFORM DD STATEMENTS *
//*-----*
//*A2PDREPT DD DUMMY
//*A2PDPARM DD DISP=SHR,DSN=CAI.CBY3OPTN(CAHAA2PP)
//*A2PDFCT DD DISP=SHR,DSN=CAI.CBY3OPTN(CAHAMFCT)
//*PDEFPS DD DISP=SHR,DSN=SYS1.PDEFLIB
//*FONTPDS DD DISP=SHR,DSN=SYS1.FONTLIBB
//*-----*
//* CA Spool Java Transformer DD statements *
//*-----*
//*STDENV DD DISP=SHR,DSN=CAI.CBY3OPTN(CAHAX2YP)
//*BXYTRACE DD SYSOUT=*,HOLD=YES
```

The CA DRAS task can be executed as a started task or a batch job. Depending on site-specific requirements, it is recommended that it be defined as a started task to ensure a higher dispatching priority and greater throughput. To run CA DRAS as a started task, the STC JCL must be copied into a system PROCLIB.

Note: Use the REGION=0M parameter in the JCL on the Job Card statement for the task, to allocate the maximum system default size.

Additional customization requirements are based on the individual report repositories that are being used for each CA DRAS task. It is possible to have multiple repositories controlled by one CA DRAS task, even if you are storing and accessing reports from different repository systems. For example, you can have one CA DRAS task controlling user access to a CA View repository, as well as a CA Dispatch database.

Note: For more information about the customization requirements for each repository system, see the following sections for CA View and CA Dispatch.

The following table explains the JCL statements in BY3CJST.

DDname	Purpose
STEPLIB	Points to the library containing CA DRAS server modules as well as the libraries that contain the agent modules and main modules for each report repository system.
DRASCFG	Points to the data set containing CA DRAS configuration statements.
SYSOUT	Points to the data set that is to receive IBM C runtime error messages.
SYSPRINT	Points to the data set that is to receive CA DRAS informational messages.
DRASTRC	Points to the data set that is to receive the CA DRAS runtime trace.
DRASLOG	Points to the data set that is to receive the CA DRAS message log.

Modifying the CA DRAS Control Statements

Control statements are stored in a configuration file allocated using the DRASCFG DD statement and read at initialization.

Generally, these statements can be divided into groups based on their functions, as follows:

- Statements that supply initialization values to CA DRAS.
- Statements that define repositories to CA DRAS and supply their physical attributes.
- Statements that control logging and diagnostics.
- Statements that start internal processes.

As part of its initialization, CA DRAS reads the user-supplied configuration file, which does the following:

- Defines the repositories that CA DRAS accesses.
- Selects the language for data translation.
- Specifies the number of parallel threads used for processing queries.
- Specifies various logging options.
- Issues any of a special set of commands reserved for starting and stopping internal processes, such as agents.

Note: Once the product has initialized, commands can be issued from the operator's console to temporarily override some of the configuration information while the task or job remains active.

For more information about the available commands, see the chapter "Operating CA DRAS."

Sample Configuration File

A sample configuration file is provided in the CBY3OPTN file, member name CAHFDCFG. A definition of each of the generic statements is provided in the next section. For setting the product-specific statements, see the section that contains information about the product you are using.

```

SET    SERVER ID(DRASSVR)
SET    THREADS(12)
SET    LANGUAGE(T1252X1140)
SET    CLIENT TYPE(WINDOWS)
SET    CLIENT TRANSLATION(ON)
SET    LONGWAIT(60)
SET    MESSAGE SUPP(ON)
SET    MESSAGE ECHO(CAHFMTK016I) ROUT(11) DESC(6)
SET    MESSAGE ECHO(CAHFMTK021I) ROUT(11) DESC(6)
SET    MESSAGE ECHO(CAHFSCM001I) ROUT(11) DESC(6)
SET    MESSAGE ECHO(CAHFSPT010I) ROUT(11) DESC(6)
SET    MESSAGE ECHO(CAHFSPT011I) ROUT(11) DESC(6)
SET    MESSAGE ECHO(nnn)          ROUT(11) DESC(6)
SET    MESSAGE ECHO(ON)
ACCESS REPOSITORY NAME(nnnnnnnn) PATH('nnn.nnnnnn') PRODUCT(nnnn)

```

Standard CAHFDCFG Control Statements

These generic control statements are required for all products.

SET SERVER

The Server ID acts as a main identifier for the server on the network. All servers within a given network must have unique IDs. In this example, the SERVER ID has been defined as DRASSVR. The value defined in the Server ID field has no correlation to any other system identifier. It is a user-defined field with a maximum length of 8 bytes.

SET THREADS

The value defined in the THREADS parameter determines how many concurrent tasks are started to process work in the CA DRAS region. This is a tuning parameter, and increasing the count can improve server throughput if excessive delays are observed. Increasing this count cannot necessarily improve the throughput if the value has already been increased to the optimum setting for your system and workload. If performance improvement cannot be obtained by increasing the value in this field, contact your local technical support center for further assistance. The default is 12.

SET LANGUAGE

The language parameter specifies that data are generated in the chosen language.

Language	Description
T1252X0273	Austria/Germany "traditional"
T1252X1141	Austria/Germany "Euro Support"
T1252X0277	Denmark/Norway "traditional"
T1252X1142	Denmark/Norway "Euro Support"
T1252X0278	Finland/Sweden "traditional"
T1252X1143	Finland/Sweden "Euro Support"
T1252X0297	France "traditional"
T1252X1147	France "Euro Support"
T1253X0875	Greece "traditional"
T1252X0500	International "traditional"
T1252X1148	International "Euro Support"
T1252X0280	Italy "traditional"
T1252X1144	Italy "Euro Support"
T1252X0284	Latin America, Spain "traditional"
T1252X1145	Latin America, Spain "Euro Support"
T0874X0838	Thai with Low Tone Marks & Ancient Characters
T1254X1026	Turkey (Latin 5) "traditional"
T1252X0285	United Kingdom "traditional"
T1252X1146	United Kingdom "Euro Support"
T1252X0037	US/Canada "traditional"
T1252X1140	US/Canada "Euro Support"

SET CLIENT TYPE

Indicates the operating system of the client software. The default value of (WINDOWS) must be used.

SET CLIENT TRANSLATION

This setting tells the DRAS server how the EBCDIC to/from ASCII code page translation is performed.

ON (the default setting) indicates:

- The translation is shared between the z/OS based DRAS server and Windows-based DRAS client. Thus, both the server and client require the code page tables.
- Compatibility is guaranteed with currently supported older levels of the DRAS client which reside in CA OM Web Viewer.

Note: If US-to-US code page is not used (the default), the On setting can cause more maintenance for the Document Viewer administrator because a code page table must be built for each language and then must reside on every user's PC and on the DRAS server.

OFF indicates:

- The z/OS based DRAS server does the translation.

Note: If US-to-US code page (the default) is not used, maintenance is reduced because only one code page table must be built and it resides on the server.

- Older DRAS client applications may not support this feature.

Note: In a mixed DRAS environment where two or more DRAS servers with different CLIENT TRANSLATION settings are set, when adding folders in CA OM Web Viewer, the DRAS discovery cannot list all active repositories.

SET LONGWAIT

Indicates the number of minutes a user can be inactive before a session time-out occurs.

SET MESSAGE SUPP

Specifies the level of messages written to the DRAS log. If message suppression is ON, informational messages are not written to the log.

For definitions of the Message and Access Repository Name control statements for your particular product, see one of the following:

- Modifying CA DRAS Control Statements for CA View
- Modifying CA DRAS Control Statements for CA Dispatch

Note: The SET MESSAGE DEST control statement is obsolete and must NOT appear in the configuration file. CA DRAS does not start if it finds this statement.

Configuring CA DRAS for CA View

The following section provides the information to configure CA DRAS for cooperative viewing from a CA View Report Repository.

Modify BY3CJST for CA View

The following JCL has been customized for CA View.

```
//CADRAS EXEC PGM=CAHFDRAS,TIME=NOLIMIT,REGION=0M,PARM='TRAP(OFF)/'
//STEPLIB DD DISP=SHR,DSN=CAI.CBY3LOAD (DRAS LOADLIB)
//* DD DISP=SHR,DSN=CAI.CFD9LOAD (VIEW AFP to PDF LOADLIB )
//* DD DISP=SHR,DSN=CAI.CVDELOAD (VIEW REPOSITORY LOADLIB)
//* DD DISP=SHR,DSN=CAI.CBQ4LOAD (CA SPOOL LOAD LIBRARY)
//* DD DISP=SHR,DSN=TPV.CSARLOAD (SASC RUNTIME LIBRARY)
//DRASCFG DD DISP=SHR,DSN=CAI.CBY3OPTN(CAHFDCFG) (CONFIGURATION FILE)
//SYSOUT DD SYSOUT=*,HOLD=YES
//SYSPRINT DD SYSOUT=*,HOLD=YES
//DRASLOG DD SYSOUT=*,HOLD=YES
//DRASTRC DD SYSOUT=*,HOLD=YES
//*
//* AFP-TO-PDF TRANSFORM DD STATEMENTS
//*
//*A2PDREPT DD DUMMY
//*A2PDPARM DD DISP=SHR,DSN=CAI.CBY3OPTN(CAHAA2PP)
//*A2PDFCT DD DISP=SHR,DSN=CAI.CBY3OPTN(CAHAMFCT)
//*PDEFPS DD DISP=SHR,DSN=SYS1.PDEFLIB
//*FONTPDS DD DISP=SHR,DSN=SYS1.FONTLIBB
//*-----*
//* CA Spool Java Transformer DD statements *
//*-----*
//*STDENV DD DISP=SHR,DSN=CAI.CBY3OPTN(CAHAX2YP)
//*BXYTRACE DD SYSOUT=*,HOLD=YES
```

Note: If CA Deliver is in use at your site and has been installed in a separate load library, it is necessary to add that library into your STEPLIB DD concatenation for CA DRAS. CA View needs access to CA Deliver load modules.

Add the AFP-to-PDF Transform Data Sets to the CA DRAS Started Task Procedure

Uncomment the AFP-to-PDF transform DD statements and the SAS/C Runtime Library if CA DRAS uses the CA View AFP-to-PDF transform option. Note that an LMP Key is required to activate this option.

The supplied CBY3OPTN members CAHAA2PP and CAHAMFCT are specified in the required DD statements in the CA DRAS started task JCL. These members contain the parameters needed by the AFP-TO-PDF Transform process.

BYC3JST in CAI.CBY3PROC contains samples of the following statements.

AFP-to-PDF TRANSFORM DD STATEMENTS

For AFP-To-PDF transformation, you must add the following data sets to the JCL:

A2PDPARM

Specifies the default CA View AFP-To-PDF transform parameters. This file contains various parameters that control the AFP-to-PDF data stream transformation.

```
//A2PDPARM DD DISP=SHR,DSN=CAI.CBY30PTN(CAHAA2PP)
```

A2PDREPT

Specifies the AFP-To-PDF transform summary report file.

You may not want to see this output—it is included for diagnostic purpose only.

```
//A2PDREPT DD DUMMY
```

A2PDFCT

Specifies the default AFP-To-PDF master font correlation table, which is pre-configured to replace the AFP fonts with Type 3 PDF soft fonts that are embedded in the PDF output file.

```
//A2PDFCT DD DISP=SHR,DSN=CAI.CBY30PTN(CAHAMFCT)
```

STEPLIB

Points to the libraries that contain the CA DRAS server modules, report repository agent modules, and the SAS/C runtime library.

PDEFPS

Specifies the AFP page definition (PAGEDEF) resource library. This is needed to provide a default PAGEDEF in case the AFP report does not contain one. The library must contain the P16 PAGEDEF.

```
//PDEFPS DD DISP=SHR,DSN=SYS1.PDEFLIB
```

FONTPS

Specifies the AFP font library. This is used in case the default PAGEDEF must be used.

```
//FONTPS DD DISP=SHR,DSN=SYS1.FONTLIBB
```

Note: For more information about AFP-to-PDF Transform, see the chapter "AFP-to-PDF Transform" in the *CA View Reference Guide*.

Add the CA Spool Java Transformer DD statements to the CA DRAS Procedure

Uncomment the CA Spool Java Transformer DD statements and the CA Spool Load Library if you want to use the CA Spool Java Transformers to convert AFP, Metacode, and text reports to PDF during viewing.

The supplied CBY3OPTN member CAHAX2YP contains the configuration parameters needed by the CA Spool Java Transformers.

BYC3JST in CAI.CBY3PROC contains samples of the following statements.

CA Spool Java Transformer DD statements

STEPLIB

Points to the libraries that contain the CA DRAS server modules, repository agent modules, and the CA Spool Load Library.

STDENV

Specifies the CA Spool Java Transformer configuration parameters. This file contains various parameters that control the CA Spool Java Transformation of AFP, Metacode, and text reports to PDF.

Note: For more information about the CA Spool Java Transformer configuration parameters, see the *CA View Reference Guide*.

BXYTRACE

Specifies the CA Spool Java Transformer tracing file if tracing is activated.

SYSPRINT

Specifies the CA Spool Java Transformer report file if requested in the CA Spool Java Transformer configuration file.

Note: For more information about CA Spool Java Transformers, see the *CA View Reference Guide*.

Modifying CA DRAS Control Statements for CA View

A sample configuration file is provided in the CBY3OPTN, member name CAHFDCFG.

Note: When modifying the parameters in your CAHFDCFG member, each parameter must be contained on one line, within the 80 byte length available. If a parameter specification is incomplete or spans more than one line, the result is an error message: 'CAHFMTK019E Failed to process configuration file, status = 1' and the task does not initialize properly.

```

SET    SERVER ID(DRASSVR)
SET    THREADS(12)
SET    LANGUAGE(T1252X1140)
SET    CLIENT TYPE(WINDOWS)
SET    CLIENT TRANSLATION(ON)
SET    LONGWAIT(60)
SET    MESSAGE SUPP(ON)
SET    MESSAGE ECHO(CAHFMTK016I) ROUT(11) DESC(6)
SET    MESSAGE ECHO(CAHFMTK021I) ROUT(11) DESC(6)
SET    MESSAGE ECHO(CAHFSCM001I) ROUT(11) DESC(6)
SET    MESSAGE ECHO(CAHFSPT010I) ROUT(11) DESC(6)
SET    MESSAGE ECHO(CAHFSPT011I) ROUT(11) DESC(6)
SET    MESSAGE ECHO(CAHA)          ROUT(11) DESC(6)
SET    MESSAGE ECHO(ON)
ACCESS REPOSITORY NAME(PRODVIEW) PATH('SAR.SYSTEM1') PRODUCT(VIEW11)

```

Note: Specify PRODUCT (VIEW11) in the ACCESS REPOSITORY statement for CA View supported databases.

Control Statements for CA View

Be sure to customize the following statements.

SET MESSAGE ECHO

Specifies whether and which messages are to be echoed to SYSLOG. To display all messages specific to CA View, specify the following statement:

```
SET    MESSAGE ECHO(CAHA)          ROUT(11) DESC(6)
```

ACCESS REPOSITORY

The ACCESS REPOSITORY statement identifies a repository to the CA DRAS server and defines the data set information that is required for the CA DRAS task to access the repository. There can be multiple ACCESS REPOSITORY statements that are defined to a CA DRAS task.

The format of the ACCESS REPOSITORY statement is as follows:

```
ACCESS REPOSITORY NAME(VIEWPROD) PATH('CAVIEW.PROD.VIEW') PRODUCT(VIEW11)
```

NAME

A unique name which can be 1-8 characters. The name is given to each repository to enable easier identification. In the example above, the database being accessed is the CA View Production Database, so the name is defined as VIEWPROD to identify which repository was being accessed.

Important! The following values are reserved and cannot be used for access repository names: BNFINDD, BUND50, BUND51, DISP60, DISP11, DSFINDD, RTFINDD, SYSTEM, VIEW16 and VIEW11.

PATH

Identifies the Database High-Level Qualifier (DBHLQ) for your CA View database. This value must match the DBHLQ defined to CA View.

PRODUCT

Identifies the type of repository being accessed. Specify VIEW11 for CA View supported databases (Release 12.2, Release 12.1, Version 12.0, r11.7,).

Note: For more information about the SET command, see the chapter "Operating CA DRAS".

Configuring CA DRAS for CA Dispatch

The following section provides the information to configure CA DRAS for cooperative viewing from a CA Dispatch Report Repository.

Modify BY3CJST for CA Dispatch

The following JCL has been customized for CA Dispatch. Note that there are additional modifications to the CA DRAS JCL that are required to communicate with a CA Dispatch repository.

```
//CADRAS EXEC PGM=CAHFDRAS,TIME=NOLIMIT,REGION=0M
//STEPLIB DD DISP=SHR,DSN=CAI.CBY3LOAD (DRAS LOADLIB)
// DD DISP=SHR,DSN=CAI.CADSLD (DISPATCH REPOSITORY LOADLIB)
//DRASCFG DD DISP=SHR,DSN=CAI.CBY3OPTN(CAHFDCFG) (CONFIGURATION FILE)
//SYSOUT DD SYSOUT=*,HOLD=YES
//SYSPRINT DD SYSOUT=*,HOLD=YES
//DRASLOG DD SYSOUT=*,HOLD=YES
//DRASTRC DD SYSOUT=*,HOLD=YES
//DISP1 DD DISP=SHR,DSN=DISPATCH.SYSCTL (CA DISPATCH SYSCTL DATASET)
//*** REQUIRED DUMMY JOURNAL STATEMENTS ***
//SYSJRLN DD DUMMY
//CAIJRNL1 DD DUMMY
//CAIJRNL2 DD DUMMY
//CAIJRNL3 DD DUMMY
//CAIJRNL4 DD DUMMY
```

The CA Dispatch SYSCTL file must be allocated to the CA DRAS task to provide access to the CA Dispatch reports. The DDNAME added to the JCL must match the value defined in the ACCESS REPOSITORY parameter defined in your CA DRAS configuration file. In addition, the data set allocated must match the data set defined to the CA Dispatch region using the CAICTL DD statement.

In this example, a DDNAME of DISP1 is defined. There must be a separate and unique DDNAME statement added for each CA Dispatch region that must be accessed.

Note: For more information about ACCESS REPOSITORY statement, see Modifying CA DRAS Control Statements for CA Dispatch. DD DUMMY Statements are required for the CA Dispatch journal files.

Modifying CA DRAS Control Statements for CA Dispatch

A sample configuration file is provided in the CBY3OPTN file, member name CAHFDCFG.

Note: When modifying the parameters in your CAHFDCFG member, each parameter must be contained on one line, within the 80-byte length available. If a parameter specification is incomplete or spans more than one line, the result is an error message: 'CAHFMTK019E Failed to process configuration file, status = 1' and the task does not initialize properly.

```
SET SERVER ID(DRASSVR)
SET THREADS(12)
SET LANGUAGE(T1252X1140)
SET CLIENT TYPE(WINDOWS)
SET CLIENT TRANSLATION(ON)
SET LONGWAIT(60)
SET MESSAGE SUPP(ON)
SET MESSAGE ECHO(CAHFMTK016I) ROUT(11) DESC(6)
SET MESSAGE ECHO(CAHFMTK021I) ROUT(11) DESC(6)
SET MESSAGE ECHO(CAHFSCM001I) ROUT(11) DESC(6)
SET MESSAGE ECHO(CAHFSPT010I) ROUT(11) DESC(6)
SET MESSAGE ECHO(CAHFSPT011I) ROUT(11) DESC(6)
SET MESSAGE ECHO(CADS)          ROUT(11) DESC(6)
SET MESSAGE ECHO(ON)
ACCESS REPOSITORY NAME(DS117T)   PATH('DS117T')   PRODUCT(DISPATCH)
```

Note: Specify PRODUCT (DISPAT11) in the ACCESS REPOSITORY statement for CA Dispatch Release 11.7.

Control Statements for CA Dispatch

Be sure to customize the following statements.

SET MESSAGE ECHO

Specifies whether and which messages are to be echoed to SYSLOG. To display all messages specific to CA Dispatch, specify the following statement:

```
SET MESSAGE ECHO(CADS)          ROUT(11) DESC(6)
```

ACCESS REPOSITORY

The ACCESS REPOSITORY statement identifies a repository to the CA DRAS server and defines the data set information required for the CA DRAS task to access the repository. There can be multiple ACCESS REPOSITORY statements defined to a CA DRAS task including r11.6 and r11.7 of CA Dispatch. There must be a separate CA DRAS task for each release if you have more than one release.

The format of the ACCESS REPOSITORY statement for r11.6 and r11.7 is as follows:

```
ACCESS REPOSITORY NAME(DISPPROD) PATH('DISP1') PRODUCT(DISPAT11)
```

NAME

A unique name, which can be 1-8 characters. The name is given to each repository to enable easier identification. In the example above, the database being accessed is the CA Dispatch Online Viewing production region, so the name was defined as DISPPROD to identify which repository was being accessed.

Important! The following values are reserved and cannot be used for access repository names: BNFIN, BUND50, BUND51, DISP60, DISP11, DSFIN, RTFIN, SYSTEM, and VIEW11.

PATH

Identifies the DDNAME in the CA DRAS started task JCL that was defined to allocate the CA Dispatch SYSCTL file for the repository you are accessing. In the section, Modify BYC3JST for CA Dispatch, note that a DD statement named DISP1 was added to the JCL. The DDNAME and PATH values must match.

PRODUCT

Identifies the type of repository being accessed. Specify DISPAT11 for CA Dispatch r11.6 and r11.7.

Start CA DRAS

This section includes information about Starting and Stopping CA DRAS and using CA DRAS commands.

Start and Stop CA DRAS

You can start and stop CA DRAS by using the following CA DRAS commands.

Start CA DRAS

Use one of the following methods to start CA DRAS:

- Submit a batch job using CAIPROC member BY3CJST as a model.
- Issue an MVS START command at the console and execute CA DRAS as a started task.

When the CA DRAS task is started successfully, the following messages display:

- CAHFMTK021I CA DRAS server (*rryy SPnn yymm*) started (where *rr*=release, *nn*=service pack, *yy*=2 digit year, *mm*=month).
- CAHFMTK004I CCI communication started.
- CAHFMTK005I request processing threads created.
- CAHFSCM002I DRAS message processing initialized successfully.
- CAHFSCM001I CA DRAS server initialized successfully.

Stop CA DRAS

Use one of the following methods to stop CA DRAS:

- Issue an MVS STOP command at the console for normal shutdown (for example, P BY3CJST).
- Issue an MVS MODIFY command at the console for normal shutdown (for example, F BY3CJST,STOP).
- Issue an MVS CANCEL command at the console for emergency shutdown (for example, C BY3CJST).

When the CA DRAS task is shut down you receive the following messages:

```
++ Command ++ STOP
```

```
CAHFMTK016I DRAS is terminating...
```

```
CAHFMTK003I CCI communication terminated
```

Installation Verification

To help you verify that CA DRAS is properly installed, we provide an installation verification program. To execute this program, customize and run JCL member BY3HIVP in CBY3OPTN. Provide your SERVER ID as a parameter to the program.

The program CAHFIVP attempts to connect to the DRAS server and, if successful, reads from the CA DRAS catalog. CAHFIVP logs its actions to SYSPRINT. You can scan the output for non-zero return codes.

For example:

```
//BY3HIVP JOB ...
//*****
//*
//*          CA DRAS Installation Verification Program          *
//*
//* Run this job to verify that CA-DRAS is installed properly and *
//* that it has a connection to CAICCI.                          *
//*
//* CHANGE:  **CAI** TO DRAS PRODUCT LIBRARIES DATA SET PREFIX. *
//*
//*
//*****
//STEP1   EXEC PGM=CAHFIVP,PARM=server-id
//STEPLIB DD DISP=SHR,DSN=CAI.CBY3LOAD
//SYSPRINT DD SYSOUT=*
//SYSOUT  DD SYSOUT=*
//CEEDUMP DD SYSOUT=*
```

Recoverability

CA DRAS is a multi-tasking server. It consists of a main task, a logging task, a special processing task, and one or more normal request processing tasks. The number of normal processing tasks is specified with the SET THREADS command in the configuration file.

If an ABEND occurs on the main task, the CA DRAS started task ends and must be restarted. But if the ABEND or other critical error occurs on a sub-task, the impact on the main task depends upon the particular sub-task. If a normal request processing task abends it is removed but CA DRAS can still continue to process in most cases.

Logging Subtask

Although CA DRAS can continue to run without the logging task, it is not recommended. Without logging, it is impossible for you to know if work is being done or if errors are occurring. If the main task detects that the logging task has abended, the following message is written to the JES log, and a user ABEND is issued to terminate the region.

CAHFMTK023S Log task ABEND. CA DRAS is terminating.

Additionally, user ABEND **U0100** is issued to force the region down.

The ABEND reason code is set to the ABEND code of the original problem. For example, if the logging task abended with a SOC4, the message is:

```
IEA995I SYMPTOM DUMP OUTPUT 238  
..USER COMPLETION CODE=0100 REASON CODE=400C4000
```

Special Processing Subtask

Some of the work done by CA DRAS must be serialized. A special processing subtask is started for this purpose. If it abends, CA DRAS cannot continue, and you can see the following message:

```
CAHFMTK025S Critical task ABEND. CA DRAS is terminating
```

Additionally, user ABEND **U0300** is issued to force the region down.

The ABEND reason code is set to the ABEND code of the original problem. For example, if the special processing task abended with a SOC4, the message is:

```
IEA995I SYMPTOM DUMP OUTPUT 238  
USER COMPLETION CODE=0300 REASON CODE=400C4000
```

Normal Processing Subtasks

When you configure CA DRAS, you specify the number of normal processing subtasks with the SET THREADS(nn) command. If one of these subtasks abends, CA DRAS alerts you with a message to SYSLOG.

For example, you specify SET THREADS(12) in your configuration file. As a result, CA DRAS attaches 12 subtasks. If one of them abends, CA DRAS issues the message:

```
CAHFMTK026S Processing thread ABEND. 11 of 12 threads still running
```

You can never see a CAHFMTK026S message that says "0 of 12 threads still running." Instead, you can see:

```
CAHFMTK027S All processing threads have ABENDED. CA DRAS is terminating
```

Additionally, user ABEND **U0400** is issued to force the region down.

The ABEND reason code is set to the ABEND code of the last failing subtask. For example, if the processing task abended with a SOC4, the message is:

```
IEA995I SYMPTOM DUMP OUTPUT 238  
USER COMPLETION CODE=0400 REASON CODE=400C4000
```

CA DRAS Product State Management

CA DRAS uses the "Active status API call" for communicating active status to the CA OPS/MVS System State Manager (SSM component). This API is used to notify CA OPS/MVS of the current operating state (STARTING, UP, STOPPING, DOWN) of the given CA DRAS address space. The CA OPS/MVS SSM application can use this information to automatically control the operation of the CA DRAS address space.

For more information about using the Active status API call, see the *CA OPS/MVS Event Management and Automation User Guide*, in the "Automated Applications Provided with the Product" appendix, in the Active Status and Health Status Generic Event API Calls section.

Using CA DRAS Commands

The following sections provide a full description of CA DRAS commands, parameters, options, and usage.

Command Syntax

Issue an MVS MODIFY command at the console to execute any of the operational commands documented in this chapter, except where noted.

Example:

```
F BY3CJST,DISPLAY REPOSITORY
```

The SET Command

Use the SET command to set certain options used by the CA DRAS server. Options changed using the SET commands are only retained while the session remains active. To permanently change the values of these parameters, update the CAHFDCFG configuration file.

Note: For more information about how to update this configuration file for permanent modifications, see the chapter "Configuring CA DRAS".

Note: The SET MESSAGE DEST statement is no longer valid and must NOT appear in the configuration file.

Options that can be dynamically changed using the SET command include:

- LOGUSERS
- LONGWAIT
- MESSAGE ECHO
- MESSAGE SUPPRESSION

The format and options of the SET command are defined next.

SET CLIENT TRANSLATION

This command indicates where code page translation is done. The format of the command is:

```
SET CLIENT TRANSLATION(ON|OFF)
```

ON

Indicates that translation occurs at the client (this is the default).

OFF

Indicates that the server does the translation.

Note: This command is intended for future use and, for the time being, must be set to ON.

SET CLIENT TYPE

This command indicates the operating system of the client software. The format is:

```
SET CLIENT TYPE(WINDOWS|UNIX|LINUX|MVS|ZOS)
```

This command is *reserved* for future use. At this time, use the default, WINDOWS.

SET THREADS

This command instructs CA DRAS to set the number of parallel execution threads to the specified value (*count*). Acceptable values are 1–99. The format of this command is:

```
SET THREADS(count)
```

count

Indicates a tuning parameter that can be used to increase the server throughput.

The value defined in the THREADS parameter determines how many concurrent tasks are started to process work in the CA DRAS region. This is a tuning parameter, and increasing the count can improve server throughput if excessive delays are observed.

Increasing this count may not necessarily improve the throughput if the value has already been increased to the optimum setting for your system and workload. If performance improvement cannot be obtained by increasing the value in this field, contact CA Support for further assistance. The default is 12.

SET LANGUAGE

This command designates the message language. The format of this command is:

```
SET LANGUAGE(Language)
```

language

Specifies that data is generated in the chosen language.

SET LONGWAIT

This command specifies the number of minutes a user can be inactive before being timed-out. The format of this command is:

```
SET LONG WAIT(mm|OFF)
```

mm

Indicates the number of minutes a user can be idle before being disconnected. SET LONGWAIT(OFF) disables checking for idle users. This command can be included in the configuration file or issued from the console.

SET MESSAGE ECHO

These commands specify whether and which messages are to be echoed to SYSLOG. The formats of the commands are:

```
SET MESSAGE ECHO(ON|OFF)
```

```
SET MESSAGE ECHO(message_id) [ROUT(rr)] [ DESC(dd)]
```

ON

Starts message echoing.

OFF

Stops message echoing.

message_id

Specifies a complete or partial message ID.

Rr

Specifies the routing code (default 11).

dd

Specifies the descriptor code (default 6).

The second form of the command allows you to specify which messages are to be echoed.

SET MESSAGE ECHO(ON), without specifying any message numbers, causes all agent messages to be echoed; that is, messages whose IDs start with BUN, CADS, or CAHA, are written to SYSLOG.

These commands can be included in the configuration file or issued from the console.

```
++ Command ++ SET MESSAGE ECHO(ON)
CAHFMTK029I Message echoing turned on
++ Command ++ SET MESSAGE ECHO(OFF)
CAHFMTK029I Message echoing turned off
++ Command ++ SET MESSAGE ECHO(CAHFMKT02) ROUT(11) DESC(6)
CAHFMTK031I CAHFMTK02 added to echoed messages list
```

SET MESSAGE SUPPRESSION

This command designates the level of messages written to DRASLOG. The format of this command is:

```
SET MESSAGE SUPpression(ON|OFF)
```

ON

Suppresses all informational messages.

OFF

Allows them to be written to DRASLOG.

This command can be included in the configuration file or issued from the console. Note that SUPPRESSION can be abbreviated to SUPP.

```
++ Command ++ SET MESSAGE SUPP(ON)
CAHFMTK030I Message suppression turned on
++ Command ++ SET MESSAGE SUPP(OFF)
CAHFMTK030I Message suppression turned off
```

SET LOGUSERS

This command specifies whether user IDs must appear in the DRASLOG with the computer name.

```
SET LOGUSERS(ON|OFF)
```

ON

Causes the user ID to be added to the computer name in DRASLOG messages.

OFF

Suppresses displaying the user ID by default.

```
++ Command ++ SET LOGUSERS(ON)
Log Users      = ON
++ Command ++ SET LOGUSERS(OFF)
Log Users      = OFF
```

The ACCESS Command

Use the ACCESS command to identify a repository to the CA DRAS server and specify the path to the repository file. The ACCESS statement is only valid in the configuration file; it may not be entered as an operator command. The format of the ACCESS command is:

```
ACCESS REPOSITORY NAME(name) PATH(path) PRODUCT(product)
```

Name

Specifies the name of the repository file (1-8 characters)

Path

Specifies the path to the repository file.

A path containing special characters can be enclosed in single quotes. The maximum length of the path statement is 44 bytes.

Note: For more information about the path requirements for each repository, see the chapter "Configuring CA DRAS".

Product

Specifies the type of repository. Valid values are: DISPAT11/VIEW11

The DISPLAY Command

Use the DISPLAY command to see the current options used by the CA DRAS server. The format and options of the DISPLAY command are:

```
DIisplay LOGUSERS
DIisplay MESSage [ALL]
DIisplay REPOsitory
DIisplay SERVer ID
DIisplay THReads
DIisplay USER counts
DIisplay ALL
```

DISPLAY LOGUSERS

This command displays the current setting of the SET LOGUSERS option. The format of this command is:

```
DIsplay LOGUSERS
```

Sample output from this command:

```
++ Command ++ DI LOGUSERS
Log Users      = ON
```

DISPLAY MESSAGE

This command displays the current settings of the CA DRAS log message options. The format of the command is:

```
DIsplay MESSage [ALL]
```

Sample output from this command:

```
++ Command ++ DI MESS
Suppression      = OFF
Echo message     = ON
Echo count       = 9
```

```
++ Command ++ DI MESS ALL
Suppression      = OFF
Echo message     = ON
Echo count       = 9
```

Echoed messages:

```
1 ECHO=CAHFMTK016I ROUT=11 DESC=6
2 ECHO=CAHFMTK021I ROUT=11 DESC=6
3 ECHO=CAHFSCM001I ROUT=11 DESC=6
4 ECHO=CAHFSPT010I ROUT=11 DESC=6
5 ECHO=CAHFSPT011I ROUT=11 DESC=6
7 ECHO=CAHA      ROUT=11 DESC=6
8 ECHO=BUN      ROUT=11 DESC=6
9 ECHO=CADS     ROUT=11 DESC=6
```

DISPLAY REPOSITORY

This command displays information from the ACCESS commands in the configuration file. The format of the command is:

```
DIsplay REPOsitory
```

Sample output from this command:

```
++ Command ++ DI REPO
Repository Name(1) = VIEW11DB
Repository Path(1) = OPM.VIEW.HB31
Repository Prod(1) = VIEW11
```

DISPLAY SERVER ID

This command displays the server name from the SET SERVER ID command in the configuration file. The format of the command is:

```
DIisplay SERVer id
```

Sample output from this command:

```
++ Command ++ DI SERV
Server ID          = PRODDRAS
```

DISPLAY THREADS

This command displays information about the CA DRAS processing threads. The format of the command is:

```
DIisplay THReads
```

Sample output from this command:

```
++ Command ++ DI THR
Thread Count      = 5/5
High thread used  = 4
```

Thread count is expressed as two numbers. The first is the number of threads specified on the SET THREADS command in the configuration file. The second number is the number of those threads that are still available to process work. The difference is the number of threads that have abended.

DISPLAY USER COUNTS

This command displays the counts of active users, the high water mark of active users, and the status of the SET LONGWAIT option. The format of the command is:

```
DIisplay USER counts
```

Sample output from this command:

```
++ Command ++ DI USER
Active Users      = 5
Users HWM         = 23
Longwait         = 60
```

DISPLAY ALL

This command displays all the previous information plus the Language, Client Type, and Client Translation settings from the configuration file. The format of the command is:

```
DIisplay ALL
```

Sample output from this command:

```
++ Command ++ DI ALL
Server ID      = PRODDRAS
Language       = T1252X1140
Client Type    = LINUX/UNIX/WINDOWS
Client Translation = OFF
Repository Name(1) = VIEW11DB
Repository Path(1) = OPM.VIEW.HB31
Repository Prod(1) = VIEW11
Thread Count   = 5/5
High thread used = 4
Active Users   = 5
Users HMM      = 23
Longwait      = 60
Suppression    = OFF
Echo message   = ON
Echo count     = 9
Log Users      = ON
```

The LIST Command

Use the List USERS command to display the IDs of users logged on to CA DRAS. The number of users and their IDs display in SYSPRINT. The format of the LI command is:

```
LIst USERS
```

If no users are logged on, this SYSPRINT message displays:

```
LIST USERS: No logged-on users
```

If users are logged on, this SYSPRINT message displays:

```
LIST USERS: 12 logged-on users
```

```
USER1  USER1  USER10  USER10  USER11  USER12  USER13  USER14
USER15  USER16  USER18  USER21
```

The REFRESH Command

Use this command to schedule a refresh of the catalog. The next time the catalog is accessed, it will be refreshed. The format of this command is:

```
REFRESH
```

This command can be issued from the console, without stopping and restarting CA DRAS.

Post-Installation Considerations

Now that you have successfully installed CA DRAS, consider the following:

- For information on shutting down CA DRAS, see the section Starting Your Product of this document.
- For information on tuning CA DRAS for optimal performance, see the section SET THREADS of this document.

Prepare to Start Your Product

After the DRAS configuration file is set with all desired Repository Access statements, run the Installation Verification program. Verify that Systems Programming has the DRAS task(s) running at an adequate priority. For example, if you are using Workload Manager, the task priority must be SYSHI.

Chapter 5: Security Considerations

This chapter documents the security considerations for each repository and the steps to secure your documents in a cooperative environment.

This section contains the following topics:

[Security Considerations for CA View](#) (see page 47)

[Security Considerations for CA Dispatch](#) (see page 49)

Security Considerations for CA View

The following section lists the configuration requirements for implementing external security for CA View in a cooperative environment.

For more information about setting up your security environment, see the chapter "Security" in the *CA View Reference Guide*. There are no additional considerations specifically for CA DRAS that are not included in the CA View security configuration.

CA View Modes and Access from CA OM Web Viewer

CA View provides support for SAR, SARO, EXP, and EXPO modes for report and cross-report index selection.

Within CA View, selection is based on the MODE and DISTID (for EXP and SAR modes) that is defined to the CA View database for the logon ID for the user. New users not previously defined to the CA View database default to the mode referenced by the CA View DEFMODE initialization parameter, and the DISTID is set to the logon ID of the user. The user profile exit, SARPRFUX, is called to allow overrides of default or existing user profile.

Note: CA OM Web Viewer automatically displays the selection list based on the default definition, or the last MODE used in 3270 viewing mode.

You can log in and change the mode and DISTID settings dialog.

JOB Mode and CA OM Web Viewer

Users can access JOB mode only through logging in to CA View directly through the mainframe. Users cannot access JOB mode through CA OM Web Viewer, which can result in the following scenarios:

- A mainframe user last accessed CA View in JOB mode and later attempts to access CA View through CA OM Web Viewer. The user is provided access through the first available mode for which the user is authorized. If the user is authorized for JOB mode only, the user is denied access and an error message appears.
- A new user attempts to access CA View through CA OM Web Viewer and the CA View SARINIT DEFMODE parameter is set to allow access through JOB mode only. The user is denied access and an error message appears.

To address these scenarios and to help provide users with optimal access to both products, follow these best practices:

- When you grant JOB mode access to existing CA View users, inform them that they cannot access CA OM Web Viewer through JOB mode, as explained earlier.
- When you define new CA View users and grant them access to JOB mode, also grant them access to at least one other mode. Verify that the other mode is appropriate for their role in your organization.

CA Top Secret Security Considerations

If you use CA Top Secret Security as your primary security package, take the following steps to establish the authorization required by the CA DRAS task to access the CA View database.

1. Create an ACID that must be assigned to the CA DRAS started task.
2. Give this ACID the appropriate security permissions for the CA View and CA DRAS datasets.
3. Give this ACID access to the CA View facility.
4. Define a new CA DRAS facility in Top Secret.
5. Give this ACID a MASTFAC pointing to the new CA DRAS facility.
6. Add an entry in the started task table to assign this ACID to the CA DRAS started task.
7. Give users access to the CA DRAS facility.
8. Restart the CA DRAS started task to pick up the new security definitions.

CA ACF2 Security Considerations

If you use CA ACF2 Security as your primary security package, take the following steps to establish the authorization required by the CA DRAS task to access the CA View database.

1. Create a LOGONID for the started tasks as follows:

```
INSERT DRAS STC NAME(dras)
```

2. Compile a data set rule to give the CA DRAS task access to CA View data sets as follows:

```
$KEY(drashighlvl)  
caview.hlq UID(view uid) R(A) W(A) A(L) E(A)
```

Note: As an alternative to compiling data set rules, the CA DRAS task logon ID can be given NON-CNCL privileges. This logon ID can then access any data set or resource without having to compile rules. Using this method, CA DRAS has full access to CA View. The internal security rules defined in CA View then control password or password phrase and user ID validation and SYSOUT ID access authorization.

3. Create the logon ID as follows:

```
INSERT DRAS STC NAME(dras) NON-CNCL
```

Note: If users log on to CA View or CA DRAS, that logon ID also needs the MUSASS (Multi-User Single Address Space System) logon ID attribute as follows:

```
INSERT DRAS STC NAME(dras) NON-CNCL MUSASS
```

Important! To verify the proper CA View user definition and security setup, view the reports from a 3270 emulator. If you cannot view reports through your mainframe emulation, you cannot generate a report list through cooperative processing. To correct this, review this topic or contact CA Support for assistance.

Security Considerations for CA Dispatch

The following section lists the configuration requirements for implementing external security for CA Dispatch in a cooperative environment.

External Security Considerations for CA Dispatch

Access to the CA Dispatch Online Viewing file is accomplished cooperatively using a normal logon (UCF). Security is based on the existing definitions in CA Dispatch. If you use external security in your environment, a call is made from CA Dispatch to your external security package before access is granted. When logging in through CA OM Web Viewer the user is prompted to enter in their CA Dispatch User ID and password.

Modifications may be required if you are using the PANEL option to control access to the Online Viewing panels. Review the settings in the CA Dispatch CADSSEC member in the r11.6 CAIOPTN library, or the 11.7 CADSSRC library, to determine if the panel level security is set in your environment.

If set, panel level security requires read access to the following dialogs:

- DSXQURX—Similar to the Online Viewing Recipient Selection Screen (VOVMI300)
- DSXQRIX—Similar to the Online Viewing Report Selection Screen (VOVMI310)
- DSXQRDX—Similar to the Online Viewing Screen for Report (VOVMI320)
- DSXARRS—Used to view archived version of a report in the report list.
- DSXARPS—Used to create a request to recall an archived report.

or

- DSX*—Allows access to all cooperative processing dialogs

Note: After updating your external security definitions to allow access to the new dialog panels, recycle the CA Dispatch task to implement the changes.

For more information about using external security with CA Dispatch, see the chapter "Security" in the *CA Dispatch Systems Programmer Guide*.

Internal Security Considerations for CA Dispatch

If you use internal security in your environment, there are two Internal Security Codes that are required for a USERID that accesses the CA Dispatch database cooperatively:

- Internal Security Code 2: Allows the user to sign on to CA Dispatch
- Internal Security Code 51: Allows the user entry into the Online Viewing Dialogs

To allow access, all user IDs must be defined in the database dictionary file (DICTDB). Internal security changes or the addition of new users are compiled into the database dictionary file by executing User Generation DSEXUSR1.

Note: For more information about USER statement, see User Statement in the *CA Dispatch System Programmer Guide*.

Important! If you use a customized version of CA Dispatch Security Exit RDFGEX06, it may be incompatible with the security calls that are processed through CA DRAS. Use External Security when setting up CA Dispatch Cooperative Viewing.

Additional Security Considerations for CA Dispatch

For a User ID to function cooperatively, it must be defined as a Recipient in Online Viewing using the SYSGEN User Recipient Screen (VSGMU235).

1. Define the User ID:

- Select Option 9 (VSGMI100) from the CA Dispatch Main Menu for SYSGEN information.
- Select option C (VSGMU230) for USER DEFINITION.
- Tab down to the ADD ==> field, add the USERID and press the Enter key.

Note: The message 'DC900012 INFORMATION HAS BEEN ADDED' displays. A User ID must be added for any user who has to view reports cooperatively from an Online Viewing Only (OLVO) region as well.

2. Attach Recipient(s):

- After the User ID has been defined, tab to the ID and place an 'S' next to the definition to select it. The VSGMU235 screen displays.
- On the VSGMU235 screen, attach a RECIPIENT to the User ID by entering the Recipient ID in the ADD==> field. Press the Enter key.

Note: For more information about setting up the Viewing by Recipient functionality and a description of the VSGMU235 screen fields, see Defining Print Defaults and Recipients for Users section, in the *CA Dispatch Reference Guide*.

The report list that is generated when a user logs on to CA Dispatch through CA OM Web Viewer is based on the reports that are defined to each Recipient for that User ID. To verify whether proper CA Dispatch definition and security setup exist, we suggest that you first attempt to view the reports from a 3270 emulator through CA Dispatch Online Viewing. (From the main menu, select option B - Online Viewing, and then select Option 3, select Reports by Recipient To View).

If you cannot view reports through your mainframe emulation, you cannot generate a report list through cooperative processing. To correct this, review the previous instructions or contact your local CA Support representative for assistance.

Chapter 6: Desktop/Server Considerations

Now that CA DRAS is installed and configured in your environment, you can set up your viewing solutions to access the report repositories. This chapter outlines the steps needed to define the CA DRAS repositories to CA OM Web Viewer.

This section contains the following topics:

[Prerequisites](#) (see page 53)

[CA OM Web Viewer](#) (see page 53)

Prerequisites

The following topics discuss the prerequisites that are needed to access the mainframe-based output management report repositories using CA DRAS.

TCP/IP Services

TCP/IP Services must be installed on all computers running CA OM Web Viewer.

CA OM Web Viewer

For specific installation prerequisites, see the CA OM Web Viewer documentation.

After installation, the administrator is responsible for defining the remote folders for each mainframe repository that the end-user accesses.

Note: For more information about how to set up DRAS type folders, see the chapter "Maintaining Folders, Folder Sets, and Users and System Preferences" in the *CA OM Web Viewer Administrator Guide*.

Chapter 7: Troubleshooting

This chapter contains the following information:

- Identifying and resolving problems
- Contacting CA Support
- Receiving new versions of a product and ongoing maintenance
- Requesting product enhancements

This section contains the following topics:

[Diagnostic Procedures](#) (see page 56)

[Accessing the Online Client Support System](#) (see page 58)

[CA TLC: Total License Care](#) (see page 59)

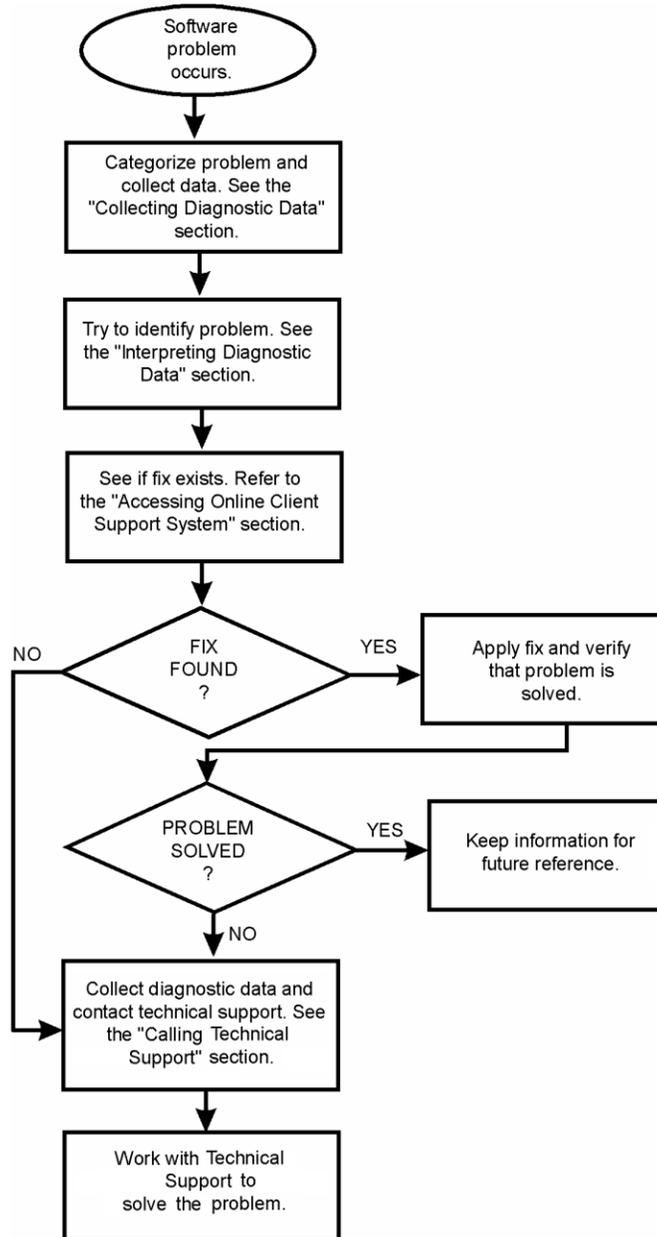
[Call CA Support](#) (see page 59)

[Product Versions and Maintenance](#) (see page 59)

[Requesting Enhancements](#) (see page 60)

Diagnostic Procedures

Refer to the following flowchart for a summary of the procedures you must follow if you have a problem with a CA software product. Each of these procedures is detailed on the following pages.



Collecting Diagnostic Data

The following information is helpful in diagnosing problems that can occur:

- Control statements used to activate your product
- JCL used to install or activate your product
- All CA DRAS Task output DSNs
- Relevant system dumps or product dumps
- List of other IBM or third-party products that can be involved
- Manufacturer, model number, and capacity of your hardware
- Numbers and text of IBM or CA error messages associated with the problem
- Names of panels where the problem occurs
- Listings of all fixes applied to all relevant software, including:
 - The dates fixes were applied
 - Fix numbers
 - Names of components to which fixes were applied
- Short description of problems

Interpreting Diagnostic Data

When you have collected the specified diagnostic data, write down your answers to the following questions:

- What was the sequence of events prior to the error condition?
- What circumstances existed when the problem occurred and what action did you take?
- Has this situation occurred before? What was different then?
- Did the problem occur after a particular PTF was applied or after a new version of the software was installed?
- Have you recently installed a new version of the operating system?
- Has the hardware configuration (tape drives, disk drives, and so forth) changed?

From your response to these questions and the diagnostic data, try to identify the cause and resolve the problem.

Accessing the Online Client Support System

CA Support Online is an online product support and service system available on the Internet from CA. It contains an extensive Knowledge Base that allows you to retrieve many types of product-related information with a single search. Support Online also provides full product downloads.

The best features of CA's prior online support systems are fully integrated into CA Support Online. These include:

- Solution downloads
- CA Support issue management
- License key downloads
- Virus signature downloads
- Product-specific FAQs
- Product documentation downloads
- Newsgroup open forums
- E-News newsletters
- CA Tech Insider Subscriptions

CA Support Online, support.ca.com, offers everything that the previous online sites offered, and much more.

Requirements for Using Support Online

With a current version of a browser and without logging in, you have access to a considerable amount of information on the website. This includes access to FAQs, published solutions (for channel products only), compatibilities, virus signatures, news, CA user group information, and support services, and to perform general Knowledge Base searches.

For full access to all the services related to your licensed products, including published solutions, license keys, newsgroups, Hyper Subscriptions, product and documentation downloads, and issue management, you must log in. These areas require that you are a registered user. You can create an account on the main page, if needed.

Accessing the Technical Support Phone Services Directory

The Technical Support Phone Services Directory lists each CA product and the telephone number to call for primary support for that product. To access the directory, click the Contact Us link on support.ca.com.

CA TLC: Total License Care

Many CA software solutions use license keys or authorization codes to validate your hardware configuration. If you need assistance obtaining a license key or authorization code, contact the CA-TLC: Total License Care group through support.ca.com.

Call CA Support

For further technical assistance with this product, CA Support is available 24 hours a day, seven days a week. You can obtain a complete list of CA locations and telephone numbers by product at CA Support Online, support.ca.com.

If you are unable to resolve the problem, have the following information ready before contacting CA Support:

- All the diagnostic information described in Collecting Diagnostic Data.
- Product name, version number, operating system, and Genlevel or Service Pack.
- Product name and version number of any other software you suspect is involved.
- Version level and PUTLEVEL of the operating system.
- Your name, telephone number and extension (if any).
- Your company name.
- Your site ID.
- A severity code. This is a number (from 1 to 4) that you assign to the problem. Use the following to determine the severity of the problem:
 1. a "system down" or inoperative condition
 2. a suspected high-impact condition associated with the product
 3. a question concerning product performance or an intermittent low-impact condition associated with the product
 4. a question concerning general product utilization or implementation

Product Versions and Maintenance

Customers are requested to operate only under currently supported versions of the product.

Customers with current maintenance agreements also receive ongoing product maintenance. When a new version of the system is available, a notice is sent to all current customers.

Requesting Enhancements

CA welcomes your suggestions for product enhancements. All suggestions are considered and acknowledged. You can use either of two methods to request enhancements:

- Contact CA support or open a case on support.ca.com, the CA web-based, interactive support system.
- Contact your Account Manager who can initiate the request for you.

Chapter 8: Diagnostic and Error Messages

The CA DRAS task logs many high-level actions in its DRASLOG file. Most messages logged are informational in nature and indicate normal operation of the CA DRAS task.

This section contains the following topics:

[Messages](#) (see page 61)

[Main Task \(MTK\) Messages](#) (see page 64)

[Server Component \(SCM\) Messages](#) (see page 75)

[Subsystem \(SPT\) Messages](#) (see page 80)

[Repository Agent \(AGN\) Messages](#) (see page 83)

Messages

All (normal) messages logged by the CA DRAS server task are of the format:

```
Mmm dd, yyyy hh:mm:ss CAHFxxxnnn l
```

This consists of the date and time (*Mm, dd, yyyy hh:mm:ss*) the message was issued, the message name (CAHFcccnnn l where ccc is the CAHF component, nnn, the number; and l, the severity level), and descriptive text.

Additional messages may be relayed by CA DRAS to the client and the log originating from one of the Repository Agents, CA Dispatch, or CA View. These typically have the same message name prefix as the agent interfaces base product. The prefixes are listed later in this appendix.

Messages issued by the Repository Agents are contained in the message guides of the repository products. For more information and suggested actions for the base messages provided in this appendix, see the product-specific documentation.

Status Codes

A numeric value status code appears in many of the CA DRAS messages. If the message includes a status code ("...status = <status code>"), the code is one of the following values:

The following Status codes indicate normal operation:

0 (STC_Success)

12 (STC_EndOfData) represents normal operation under most circumstances

52 (STC_SuccessWithCLConvOn)

53 (STC_SuccessWithCLConvOff)

The following table describes all the possible status values and corresponding descriptions.

Status Code	Description
000	STC_Success (normal)
001	STC_BadHandle
002	STC_InvalidArgument
003	STC_NotActive
004	STC_Warning
005	STC_NotFound
006	STC_NotEnough
007	STC_UnknownError
008	STC_SystemError
009	STC_LogicError
010	STC_TimeOut (Timeout with Host System)
011	STC_Reconfigured
012	STC_EndOfData (normal, usually)
013	STC_Conflict
014	STC_CatalogError
015	STC_ObjectBusy
016	STC_NotSupported
017	STC_AbandonTuple
018	STC_AbandonRelation
019	STC_NullTable
020	STC_Storage

Status Code	Description
021	STC_NullPointer
022	STC_Size
023	STC_DriverError
024	STC_PathError
025	STC_ParseError
026	STC_Duplicate
027	STC_OpenError
028	STC_SyntaxError
029	STC_AgentError
030	STC_LengthError
031	STC_Full
032	STC_CommunicationError (CCI Error)
033	STC_ConnectionError
034	STC_CancelRequest
035	STC_EnqueueError
036	STC_DequeueError
037	STC_SubsystemError
038	STC_LogonError
039	STC_FdamError
040	STC_FdamNullView
041	STC_InvalidRPCHandle
042	STC_InsufficientTableSpace (storage problem)
043	STC_ContinueRequest
044	STC_GlobalAnchorError (storage problem)
045	STC_NullHandle
046	STC_DbunError
052	STC_SuccessWithCLConvOn (normal)
053	STC_SuccessWithCLConvOff (normal)
054	STC_SuccessCLConvOnNPE
055	STC_SuccessCLConvOffNPE

Status Code	Description
056	STC_StatusSupported
057	STC_LongwaitTimeout

Severity Codes

CA DRAS messages contain a severity code as described earlier in this appendix. The available codes and meanings are listed in the following table:

Code	Description
I	Informational message. No action is necessary.
W	Warning message. Usually, no action is necessary.
E	Error. Requires corrective action or input. May require contacting CA Support.
S	Severe error. May include an ABEND. Requires corrective action or input. May require contacting CA Support.

CA DRAS User Abend Codes

CA DRAS can take any of three user ABENDs when a critical component is lost. Each of these force termination of the CA DRAS task. If one of these is issued, try to restart CA DRAS. Notify CA Support.

The following table describes the ABEND codes:

ABEND Code	Description
U0100	This ABEND, issued in conjunction with message CAHFMTK023S, indicates that the logging task failed.
U0300	CAHFMTK025S and this ABEND indicate that a critical processing task failed.
U0400	When there are no processing tasks left running, CA DRAS takes this ABEND and issues CAHFMTK027S.

Main Task (MTK) Messages

The following descriptions list the reasons and actions for main task messages:

CAHFMTK001E

Failed to setup CCI communication, please check server ID

Reason:

Error Message—During initialization, the server task was unable to establish connection to CAICCI (Common Communication Interface).

Action:

The server task will end due to this error. Verify that CAICCI and CCITCP tasks are active. If not, start CAICCI and CCITCP and then start CA DRAS. If the problem persists, contact CA Support for assistance.

CAHFMTK002E

Failed to terminate CCI communication

Reason:

Error Message—the CAICCI communication link could not be properly closed when the CA DRAS task was shut down.

Action:

If the CAICCI and CCITCP tasks are active, check to see if any error messages or abends have occurred.

CAHFMTK003I

CCI communication terminated

Reason:

Informational Message—the server task has successfully terminated communication with CAICCI. This occurs once during CA DRAS shut-down.

Action:

None.

CAHFMTK004I

CCI communication started

Reason:

Informational Message—the server task has successfully established communication with CAICCI. This occurs once during CA DRAS startup.

Action:

None.

CAHFMTK005I

Request processing threads created

Reason:

Informational Message—the server task has successfully created its processing threads. This occurs once during startup.

Action:

None.

CAHFMTK007E

Erroneous status (<status>) from CCI receive

Reason:

Error Message—an error occurred during data transmission. An asynchronous request has completed with a non-zero status. The server task will terminate (RC=16).

Action:

Check the CAICCI and CCITCP tasks for problems. Restart the CA DRAS task. If the problem persists, contact CA Support for assistance.

CAHFMTK008E

Cannot get CCI conversation ID

Reason:

Error Message—an error occurred during data transmission. The incoming data (from an asynchronous CCI request) was not part of a CCI conversation established by/for the CA DRAS task. The server task will terminate (RC=16).

Action:

Check the CAICCI and CCITCP tasks for problems. Restart the CA DRAS task. If the problem persists, contact CA Support for assistance.

CAHFMTK009E

No conversation ID for incoming data

Reason:

Error Message—CA DRAS was unable to obtain the CAICCI conversation ID from the incoming data (an asynchronous CCI request). The input data is ignored.

Action:

If there are a large number of these errors, contact CA Support for assistance.

CAHFMTK010E

Cannot get CCI sender's ID

Reason:

Error Message—CA DRAS was unable to obtain the CAICCI sender ID from the incoming data (from an asynchronous CCI request). The server task will terminate (RC=16).

Action:

Check the CAICCI and CCITCP tasks for problems. Restart the CA DRAS task. If the problem persists, contact CA Support for assistance.

CAHFMTK011E

Cannot get CCI incoming data length

Reason:

Error Message—CA DRAS was unable to obtain the data length from the incoming data (from an asynchronous CCI request). The server task will terminate (RC=16).

Action:

Check the CAICCI and CCITCP tasks for problems. Restart the CA DRAS task. If the problem persists, contact CA Support for assistance.

CAHFMTK012E

Cannot create a PQE for the incoming request

Reason:

Error Message—CA DRAS was unable to create a process queue element (PQE) for the incoming data (from an asynchronous CCI request).

Action:

Restart CA DRAS and monitor the task's storage usage. Verify that the task has adequate region for processing. Also check the CAICCI and CCITCP tasks for errors. If the problem persists, contact CA Support for assistance.

CAHFMTK013E

CCI send for conid(<conversation id>) failed, status = <status code>, reason = < reason code>

Reason:

Error Message—CA DRAS unsuccessfully replied to a client application that had made a CCI request. This is most likely to occur if the client application that initiated the CCI request was no longer active/receiving when the request was completed by the server. This message is always followed by CAHFMTK020I.

Action:

Check the status of your CA OM Web Viewer to determine if there are any problems with the client application. Monitor the task for additional problems. If the problem persists, contact CA Support for assistance.

CAHFMTK014I

**Output message(<address>) messageLength(<size>) sent to client(<cci name>)
conid(<conversation id>)**

Reason:

Informational Message—CA DRAS has successfully replied to a client application that had made a CCI request.

Action:

None.

CAHFMTK015E

**conid(<conversation id>) has invalid output data dataBuffer(<address>)
dataLength(<size>)**

Reason:

Error Message—an error occurred when CA DRAS attempted to reply to an asynchronous CCI request. This is most likely to occur if the client application that initiated the CCI request was no longer active/receiving when the request was completed by the server.

Action:

Check the status of your CA OM Web Viewer to determine if there are any problems with the client application. Monitor the task for additional problems. If the problem persists, contact CA Support for assistance.

CAHFMTK016I

DRAS is terminating

Reason:

Informational Message—the CA DRAS task has begun shutdown processing as a result of a STOP command. This occurs once during CA DRAS shutdown.

Action:

None.

CAHFMTK018E

Failed to initialize server(<server name>)

Reason:

Error Message—problems occurred during initialization preventing the server task from starting.

Action:

None—this message follows other, more descriptive error messages.

CAHFMTK019E

Failed to process configuration file, status = <status code>

Reason:

Error Message—problems occurred during initialization.

Action:

Check the configuration file (referenced by the DRASCFG DD statement) for errors. Correct any errors and then restart the task. If the problem persists, contact CA Support for assistance.

CAHFMTK020I

Cancel connection for client(<cci name>) conid(<conversation id>)

Reason:

Informational Message—the CA DRAS task is canceling the CCI connection for a client. The message always follows error message CAHFMTK013E.

Action:

None.

CAHFMTK021I

CA DRAS server (<server genlevel>) started

Reason:

Informational Message—the server task has been started. This message also lists the CA DRAS version and maintenance level.

Action:

None.

CAHFMTK022I

Client(<cci name>) not found, connection for this client has been canceled

Reason:

Informational Message—the CA DRAS task is canceling the CCI connection for a client. The message generally follows error message CAHFMTK013E.

Action:

None.

CAHFMTK023S

Log task ABEND. CA-DRAS is terminating.

Reason:

The CA DRAS logging subtask has abended and CA DRAS has terminated with a U0100 abend.

Action:

Try to restart CA DRAS. Report the problem to CA Support.

CAHFMTK025S

Critical task ABEND. CA-DRAS is terminating.

Reason:

A critical subtask has abended and CA DRAS has terminated with a U0300 abend.

Action:

Try to restart CA DRAS. Report the problem to CA Support.

CAHFMTK026S

Processing thread ABEND. *n* of *t* threads still running.

Reason:

A processing subtask has abended. There are still *n* of the original *t* threads running. (*t* is the number you specified in the SET THREADS command.)

Action:

Continue to monitor CA DRAS. If the number of remaining threads falls too low to support your workload, shut down and restart CA DRAS. Report the error to CA Support.

CAHFMTK027S

All processing threads have ABENDED. CA-DRAS is terminating.

Reason:

All processing threads have abended and CA DRAS has terminated with a U0400 abend.

Action:

Try to restart CA DRAS. Report the problem to CA Support.

CAHFMTK028E

Command is only allowed in the configuration file

Reason:

You have entered a command from the console that is only allowed in the configuration file (referenced by the DRASCFG DD statement).

Action:

To complete the action you requested, put it in the configuration file and recycle CA DRAS.

CAHFMTK029I

Message echoing turned x

Reason:

Informational Message—displays the ECHO condition for message echoing, where x can be ON or OFF.

Action:

None.

CAHFMTK030I

Message suppression turned x

Reason:

Informational Message—displays the condition for message suppression, where x can be ON or OFF.

Action:

None.

CAHFMTK031I

message-id added to echoed messages list

Reason:

Informational Message—indicates the specified message ID, routing, and descriptor code will be added to a linked list of echoed messages.

Action:

None.

CAHFMTK032I

Longwait timeout set to *mins* minutes

Reason:

Informational Message—indicates session time-out time in the LONGWAIT command, where *mins* equals the minutes specified before idle users' sessions will be terminated.

Action:

None.

CAHFMTK033I

Longwait timeout has been turned off

Reason:

Informational Message—indicates that the LONGWAIT command has been disabled and CA DRAS is not checking for idle users.

Action:

None.

CAHFMTK034W

Language *language* not found

Reason:

Warning Message—CA DRAS cannot find the language specified in the configuration file.

Action:

Verify the language in the configuration file. Otherwise, the default translation tables will be used.

CAHFMTK035W

Load module CAHFDCPG not found

Reason:

Warning Message—CA DRAS cannot find the codepage load module.

Action:

None. The default translation tables will be used.

CAHFMTK036W

Default translation tables will be used

Reason:

Warning Message—This message follows either CAHF034W or CAHF035W.

Action:

None.

CAHFMTK038S

Unable to find CAHARLSE module

Reason:

Severe error. CA DRAS cannot find CA View CAHARLSE module. CA DRAS terminates with return code 8.

Action:

Determine why there is no CAHARLSE module in the CA View load library. This could also be because there is no CA View CAILIB available to CA DRAS. Correct and restart CA DRAS.

CAHFMTK039S

Unable to find CADSRLE module

Reason:

Severe error. CA DRAS cannot find CA Dispatch CADSRLE module. CA DRAS terminates with return code 8.

Action:

Determine why there is no CADSRLE module in the CA Dispatch load library. This could also be because there is no CA Dispatch load library available to CA DRAS. Correct and restart CA DRAS.

CAHFMTK040S

Invalid product code *pppppppp*

Reason:

Severe error. *pppppppp* is a product code specified in the PROD parameter of the ACCESS configuration statement and it is invalid. CA DRAS terminates with return code 8.

Action:

Correct the product code. Restart CA DRAS.

CAHFMTK041S

Release mismatch. Product: *pppppppp*

Reason:

Severe error. *pppppppp* is a product code specified in the PROD parameter of the ACCESS configuration statement. It does not match the release number in the product's load library. For example, DISPAT11 (meaning CA Dispatch Release 11.n) has been entered on an ACCESS statement, but the load library is for a non-supported CA Dispatch. CA DRAS terminates with return code 8.

Action:

Either correct the ACCESS statement or make available a CAILIB for the release of the product you want to use. Restart CA DRAS.

Server Component (SCM) Messages

The following lists the reasons and actions for server component messages:

DRASSCM001I

CA DRAS server initialized successfully

Reason:

Informational Message—the server task has successfully initialized its services. This occurs once during CA DRAS startup. Following the message, CA DRAS is ready to accept client logons.

Action:

None.

CAHFSCM002I

DRAS message processing initialized successfully

Reason:

Informational Message—the server task has successfully initialized its message processing. This occurs once during CA DRAS startup.

Action:

None.

CAHFSCM003E

message processing initialization failed, status = <status code>

Reason:

The CA DRAS task failed to initialize. This was caused by a failure to initialize the message processing component.

Action:

Verify that the load library contains the CAHFMSGSGS load module. Check your configuration information (referenced by the DRASCFG DD statement.) Also check the started task JCL to ensure that all required files are allocated and available. If the problem persists, contact CA Support for assistance.

CAHFSCM004E

DRAS Connection Services initialization failed, status = <status code>

Reason:

Error Message—during initialization, the server task failed to establish Connection Services.

Action:

If the listed status was 20, CA DRAS could not obtain enough storage in order to initialize the service. If so, attempt to increase the REGION parameter and restart CA DRAS. For more information on other status codes, see the Status Codes table at the beginning of this appendix. If the problem persists, contact CA Support for assistance.

CAHFSCM006E

DRAS Repository Services initialization failed, status = <status code>

Reason:

Error Message—during initialization, the server task failed to establish Repository Services.

Action:

If the listed status was 20, CA DRAS could not obtain enough storage in order to initialize the service. If so, attempt to increase the REGION parameter and restart CA DRAS. For more information on other status codes, see the Status Codes table at the beginning of this appendix. If the problem persists, contact CA Support for assistance.

CAHFSCM007E

DRAS Request Services initialization failed, status = <status code>

Reason:

Error Message—during initialization, the server task failed to establish Request Services

Action:

If the listed status was 20, CA DRAS could not obtain enough storage in order to initialize the service. If so, attempt to increase the REGION parameter and restart CA DRAS. For more information on other status codes, see the Status Codes table at the beginning of this appendix. If the problem persists, contact CA Support for assistance.

CAHFSCM008E

DRAS View Services initialization failed, status = <status code>

Reason:

Error Message—during initialization, the server task failed to establish View Services

Action:

If the listed status was 20, CA DRAS could not obtain enough storage in order to initialize the service. If so, attempt to increase the REGION parameter and restart CA DRAS. For more information on other status codes, see the Status Codes table at the beginning of this appendix. If the problem persists, contact CA Support for assistance.

CAHFSCM009E

DRAS Table Services initialization failed, status = <status code>

Reason:

Error Message—during initialization, the server task failed to establish Table Services

Action:

If the listed status was 20, CA DRAS could not obtain enough storage in order to initialize the service. If so, attempt to increase the REGION parameter and restart CA DRAS. For more information on other status codes, see the Status Codes table at the beginning of this appendix. If the problem persists, contact CA Support for assistance.

CAHFSCM010E

DRAS Compiler Services initialization failed, status = <status code>

Reason:

Error Message—during initialization, the server task failed to establish Compiler Services

Action:

If the listed status was 20, CA DRAS could not obtain enough storage in order to initialize the service. If so, attempt to increase the REGION parameter and restart CA DRAS. For more information on other status codes, see the Status Codes table at the beginning of this appendix. If the problem persists, contact CA Support for assistance.

CAHFSCM011E

DRAS Driver Services initialization failed, status = <status code>

Reason:

Error Message—during initialization, the server task failed to establish Driver Services

Action:

If the listed status was 20, CA DRAS could not obtain enough storage in order to initialize the service. If so, attempt to increase the REGION parameter and restart CA DRAS. For more information on other status codes, see the Status Codes table at the beginning of this appendix. If the problem persists, contact CA Support for assistance.

CAHFSCM012E

DRAS Expression Services initialization failed, status = <status code>

Reason:

Error Message—during initialization, the server task failed to establish Expression Services

Action:

If the listed status was 20, CA DRAS could not obtain enough storage in order to initialize the service. If so, attempt to increase the REGION parameter and restart CA DRAS. For more information on other status codes, see the Status Codes table at the beginning of this appendix. If the problem persists, contact CA Support for assistance.

DRASSCM013E

DRAS Catalog Services initialization failed, status = <status code>

Reason:

Error Message—during initialization, the server task failed to establish Catalog Services.

Action:

If the listed status was 5, CA DRAS was unable to open its catalog file. Verify that the CAHFDCAT module is in the load library. If the listed status was 20, CA DRAS could not obtain enough storage in order to process its catalog file. Increase the REGION parameter and restart the CA DRAS task. For more information on other status codes, see the Status Codes table at the beginning of this appendix. If the problem persists, contact CA Support for assistance.

Subsystem (SPT) Messages

CAHFSPT001I

<action name> started for client(<cci name>) conid(<conversation id>)

Reason:

Informational Message—normal processing. The named action has been initiated for the named client under the listed conversation ID.

Action:

None.

CAHFSPT002I

<action name> ended for client(<cci name>) conid(<conversation id>), status = <status code>

Reason:

Informational Message—normal processing. The named action has completed for the named client under the listed conversation ID with listed status. Normal status codes are 0 and 12.

Action:

None.

CAHFSPT003I

<action name> ended for client(<cci name>) conid(<conversation id>), status = <status code>, tableSize = <size>

Reason:

Informational Message—normal processing. The named action has completed for the named client under the listed conversation ID with listed status and table size. Normal status codes are 0 and 12. The table size will vary.

Action:

None.

CAHFSPT004I

**Output message(<address>) messageLength(<size>) sent to client(<cci name>)
conid(<conversation id>)**

Reason:

Informational Message—normal processing. The named output message of the indicated length was sent back to the client under the listed conversation ID.

Action:

None.

CAHFSPT005I

**Process transaction type(<number>) for client(<cci name>) conid(<conversation id>)
under TCS(<address>)**

Reason:

Informational Message—normal processing.

Action:

None.

CAHFSPT006I

conid(<conversation id>) was dispatched under TCS(<address>)

Reason:

Informational Message—normal processing.

Action:

None.

CAHFSPT007I

**conid(<conversation id>) dispatched under TCS(<address>) was requeued to the other
sub-task**

Reason:

Informational Message—normal processing.

Action:

None.

CAHFSPT008I

conid(<conversation id>) dispatched under TCS(<address>) was requeued to the main task

Reason:

Informational Message—normal processing.

Action:

None.

CAHFSPT009I

DRAS_CancelConnect was invoked for conid(<conversation id>), status = <status code>

Reason:

Informational Message—normal processing.

Action:

None.

CAHFSPT010I

DRAS catalog refresh has been scheduled

Reason:

Informational Message—a catalog refresh has been scheduled.

Action:

None.

CAHFSPT011I

DRAS catalog refresh complete

Reason:

Informational Message—a catalog refresh has completed.

Action:

None.

CAHFSPT012E

Longwait timeout: User userid has been disconnected

Reason:

The specified user's session has been terminated. The user exceeded the LONGWAIT number of minutes that the user can be idle before being timed-out.

Action:

When ready, the user should log in again.

Repository Agent (AGN) Messages

As noted previously, CA DRAS Repository Agent interface messages, sent in their own format can be written to the DRAS Log. These are usually error or important informational messages that must be noted.

CA View

CA View agent messages are prefixed CAHA. For more information, see the *CA View Message Guide*.

CA Dispatch

CA Dispatch agent messages are prefixed CADS. For more information, see the *CA Dispatch Message Guide* for the release you are running.

There can be other related error messages that appear in the CA DRAS log or in the JES log. Whenever an error or warning occurs, it is always helpful to view the logs of the CA Dispatch Region (CAILOG, DSLOG, and JESLOG) for accompanying messages. For more information about these messages, see the *CA Dispatch Message Guide*.

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