Control-D CA-View
9.0.00
Conversion Guide

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- Operating system and environment information

  - Machine type

  - Operating system type, version, and service pack or other maintenance level such as PUT or PTF

- System hardware configuration

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- Sequence of events leading to the issue

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- Messages received (and the time and date that you received them)

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Contents

About this guide

This guide contains the information necessary to help you to convert from CA-View to Control-D. The guide contains the following parts:

Provides an introduction, outlines conversion steps, gives naming conventions, and gives a short explanation of each step of the conversion process.

Specifies the steps needed to perform the conversion.

Gives the procedure and examples for defining and building a Control-D Recipient Tree using utility CTDBLDTR.

Conventions Used in This Guide

Notational conventions that may be used in this guide are explained below.

Standard Keyboard Keys

Keys that appear on the standard keyboard are identified in boldface, for example, **Enter, Shift, Ctrl+S** (a key combination), or **Ctrl S** (a key sequence).

WARNING:

The commands, instructions, procedures, and syntax illustrated in this guide presume that the keyboards at your site are mapped in accordance with the EBCDIC character set. Certain special characters are referred to in this documentation, and you must ensure that your keyboard enables you to generate accurate EBCDIC hex codes. This is particularly true on keyboards that have been adapted to show local or national symbols. You should verify that

$ is mapped to x'5B'
# is mapped to x'7B'
@ is mapped to x'7C'

If you have any questions about whether your keyboard is properly mapped, contact your system administrator.

Preconfigured PFKeys

Many commands are preconfigured to specific keys or key combinations. This is particularly true with regard to numbered PF keys, or pairs of numbered PFKeys. For example, the END command is preconfigured to, and indicated as, **PF03/PF15**. To execute the END command, press either the **PF03** key or the **PF15** key.

Instructions to enter commands may include

- only the name of the command, such as, enter the END command

- only the PF keys, such as, press **PF03/PF15**

- or both, such as, press **PF03/PF15,** or enter the END command

Command Lines and Option Fields

Most screens contain a command line, which is primarily used to identify a single field where commands, or options, or both, are to be entered. These fields are usually designated COMMAND, but they are occasionally identified as COMMAND/OPT or COMMAND/OPTION.

Option field headings appear in many screens. These headings sometimes appear in the screen examples as OPTION, or OPT, or O.

Names of Commands, Fields, Files, Functions, Jobs, Libraries, Members, Missions, Options, Parameters, Reports, Subparameters, and Users

The names of commands, fields, functions, jobs, libraries, members, missions, options, parameters, reports, subparameters, users, and most files, are shown in standard UPPERCASE font.

User Entries

In situations where you are instructed to enter characters using the keyboard, the specific characters to be entered are shown in this **UPPERCASE BOLD** text, for example, type **EXITNAME.**

Syntax statements

In syntax, the following additional conventions apply:

- A vertical bar (|) separating items indicates that you must choose one item. In the following example, you would choose **a**, **b,** or **c**:

  a| b | c

- An ellipsis (. . .) indicates that you can repeat the preceding item or items as many times as necessary.

- Square brackets ([ ]) around an item indicate that the item is optional. If square brackets ([ ]) are around a group of items, this indicates that the item is optional, and you may choose to implement any single item in the group. Square brackets can open ([ ) and close ( ]) on the same line of text, or may begin on one line of text and end, with the choices being stacked, one or more lines later.

- Braces ({ }) around a group of items indicates that the item is mandatory, and you must choose to implement a single item in the group. Braces can open ({) and close (}) on the same line of text, or may begin on one line of text and end, with the choices being stacked, one or more lines later.

Screen Characters

All syntax, operating system terms, and literal examples are presented in this typeface. This includes JCL calls, code examples, control statements, and system messages. Examples of this are:

- calls, such as

```
CALL 'CBLTDLI'
```

- code examples, such as

```
FOR TABLE owner.name USE option, . . . ;
```

- control statements, such as

```
//PRDSYSIN DD * USERLOAD PRD(2) PRINT
```

- system messages, both stand-alone, such as `You are not logged on to database database_name`, and those embedded in text, such as the message `You are not logged on to database database_name`, are displayed on the screen.

Variables

Variables are identified with *italic* text. Examples of this are:

- In syntax or message text, such as
  `Specify database` *database_name*

- In regular text, such as
  replace database *database_name1* with database *database_name2* for the current session

- In a version number, such as
  EXTENDED BUFFER MANAGER for IMS 4.1.**xx**

Special elements

This book includes special elements called *notes* and *warnings*:

Note: Notes provide additional information about the current subject.

WARNING: Warnings alert you to situations that can cause problems, such as loss of data, if you do not follow instructions carefully.

Related Publications

Control-D Getting Started Guide

Introduction to Control-D concepts and facilities in the framework of a hands-on demonstration.

Control-D Online Viewing Guide

Tutorial guide that demonstrates the features of the Online Viewing facility.

Control-D Implementation Guide

Practical guide for determining implementation objectives, and for planning and performing the implementation of Control-D.

AFP in the Control-D Environment Implemention Guide

Guide to the efficient utilization of the built-in AFP support features of Control-D.

INCONTROL for z/OS Administrator Guide

Information for system administrators about customizing and maintaining INCONTROL™ products.

INCONTROL for z/OS Installation Guide

Step-by-step guide to installing INCONTROL products using the INCONTROL™ Installation and Customization Engine (ICE) application.

INCONTROL for z/OS Messages Manual

Comprehensive listing and explanation of all INCONTROL and IOA messages and codes.

INCONTROL for z/OS Security Guide

Step-by-step guide to implementing security in INCONTROL products.

INCONTROL for z/OS Utilities Guide

Describes utilities designed to perform specific administrative tasks that are available to INCONTROL products.

1 Overview

This chapter includes the following topics:

Introduction

This publication helps you convert from CA-View to Control-D software.

The CA-View to Control-D conversion tool creates Control-D components based on information extracted from the CA-View database.

This conversion tool supports Control-D version 6.3.00 and above. IOA and Control-D environments must be installed before starting the conversion process.

This conversion tool is supplied as an open source that can be adjusted to the specific conversion process requirements.

The layout of the input files used for the conversion might differ based on the release or settings of the converted product. The requirements for conversion might be different based on the specific implementation.

Before starting the conversion, all the details must be analyzed and the SARL*xxxx*, SARJ*xxxx*, and SARD*xxxx* members adjusted accordingly.

Conversion Steps

The steps for converting CA-View to Control-D are described in 2   Conversion Steps (on page 16)

Each of these steps can be implemented separately according to the needs of the report distribution environment. For example, CA-View archive indexes can be converted without performing other parts of the conversion.

Naming Conventions

CA-View to Control-D conversion members are located in the IOA SAMPLE library. Nearly all the members associated with this conversion tool have names beginning with the characters SAR.

- SARDEF*xx*—Members containing default settings and definitions

- SARJ*xxxx*—Members containing conversion jobs

- SARL*xxxx*—CA-View report layouts

- SARS*xxxx*—Source programs of the conversion jobs

- CTDBLDTR—Program for creating the Control-D Recipient Tree

Creating the Control-D Recipient Tree

Program CTDBLDTR in the IOA SAMPLE library is used for conversion of the Recipient Tree. Information about this program is in member CTDBLDDC in the IOA SAMPLE library, and in 3   Building a Control-D Recipient Tree (on page 21).

Creating Decollation Mission Definitions

Conversion program SARSREP7 creates Control-D decollation mission definitions from CA-View information. These decollation missions enable Control-D to decollate reports to the same recipients that received those reports using CA-View. A report similar to the CA-View Selection By Recipients Listing is used as input.

Printing characteristics are not processed by this conversion program because Control-D automatically extracts all printing characteristics from the JES SPOOL. Therefore, the printing characteristics from the job's JCL are utilized.

Default values for conversion process parameters are located in member SARDEFDM in the IOA SAMPLE library and are described in A   Default Conversion Parameters (on page 26).

Job SARJDEC1

Job SARJDEC1 creates a sequential file used as input for job SARJDEC2.

Job SARJDEC2

Job SARJDEC2 reads the file created by job SARJDEC1 and produces decollation mission definitions that are stored as members in the Control-D REPORTS library.

The member name for each decollation mission definition is based on the CA-View jobname. Therefore, each CA-View job has a corresponding Control-D decollation definition member.

Creating the Control-D History User File

This part of the conversion process creates the History User file in the Control-D environment to facilitate access to reports archived by CA-View. Thus, reports created by CA-View can be restored in the Control-D environment from the original tapes backed up by CA-View. If the reports on the original CA-View archive tape are compressed, use the SARPAC utility to unpack them before restoring.

The CA-View archived report can be restored directly from the CA-View archive tape according to the user's online restore request. For this purpose, the special CTDX004 exit and SARSKL skeleton, described below, are used.

Alternate method is to restore all reports from the CA-View archive tape once by the utility CTDSARRS and then backup or migrate them using Control-D and Control-V tools. This method is recommended if the CA-View archive tapes are large and restoring the reports directly from the tapes would take an unacceptable amount of time. The utility CTDSARRS is described in the appendix B.

Jobs SARJRPA1 and SARJRPA2

Jobs SARJRPA1 and SARJRPA2 produce a list of all reports defined in the CA-View database and a list of all archived reports. These lists contain the relevant information for creating the Control-D History User file. Write these lists to a disk file for later use by job SARJARC1.

Before submitting jobs SARJRPA1 and SARJRPA2, ensure that there is enough space for the temporary work files.

Job SARJARC1

Job SARJARC1 performs the following steps to create a sequential file for job SARJARC2:

1. Defines all the files used by the conversion program

2. Sorts the CA-View report list and removes unneeded records

3. Propagates user names

4. Sorts the CA-View report by USERNAME

5. Sorts the user table by OLDUSER

6. Converts user names

7. Reformats the list of archived reports

8. Merges both reports into one report to be used by job SARJARC2

Job SARJAR11

If the CA-View report list is missing, the job SARJAR11 must be used instead of job SARJARC1. Only the list of the archived reports is used as an input file for this job. In this case, the default user name is taken from the SARDEFAR definitions member. This is instead of taking different user names from the CA-View report list for each report.

This job includes one step that reformats the list of archived reports and creates a report to be used by job SARJARC2.

Job SARJARC2

Job SARJARC2 creates records in the Control-D History User file based on input from job SARJARC1. For additional information, see the discussion about setting default parameters in member SARDEFAR before starting job SARJARC2. This discussion is outlined on page 1-20, in item 6 of Special Considerations (on page 14)Set the default parameters in member SARDEFAR before job SARJARC2 is started.

User Exit CTDX004

Adjust User Exit CTDX004 if archived reports are converted. Exit CTDX004 receives control during the restore request and starts a process for restoring reports from CA-View tapes. A sample of User Exit CTDX004 is supplied in the IOA SAMPEXIT library as the CTDX004L source.

Exit CTDX004 submits a job to locate the corresponding report on the tape, writes this report directly to a CDAM file, and creates new user and sysdata records in the Active User file.

The programs invoked by this job are located in the IOA LOAD library.

SARSKL Skeleton Job

SARSKL is a skeleton for building a job to restore reports from CA-View tapes. This skeleton is located in the Control-D SKL library.

Special Considerations

1. The USER NAME in the CA-View report has the same characteristics as the USER NAME in CA-View files (16 characters maximum, blanks allowed). To adjust the USER NAME to the Control-D environment, the name is truncated to 8 characters and blanks are replaced by underscores ("_"). This process is applied to the Recipient Tree conversion, but the full USER NAME is set to one of the synonyms in the tree.

2. The function of the PAGE FLAG in CA-View is implemented by AND/OR logic in the WHEN statement, and by the following Control-D parameters:

```
CONTID (Y/N)
REFER TO NEXT PAGE (Y/N)
PRINT (Y/N)
```

Special user name NULL must be defined in the Recipient Tree to support the REFER TO NEXT PAGE option.

3. The ARCHIVE option in CA-View is converted to the BACKUP option in Control-D. When N (No) is specified in the CA-View report definition, no backup mission name is inserted in the report decollation definition. Otherwise, the default BACKUP mission name, specified as an external parameter in member SARDEFDM in the IOA SAMPLE library, is used in the DO BACKUP statement.

4. The DO NAME statement in each Control-D report decollation definition is set to the CA-View report name.

5. There is a maximum default value for the number of statements for each member built by this conversion. This number is specified in routine SARSREP7 in the #CARDS and AREALEN constants. If necessary, this value is locally tailored.

6. Set the default parameters in member SARDEFAR before job SARJARC2 is started.

   Do not change the statements PRODUCT=CA-VIEW and CATEGORY=SAR-CONVERTED. The CATEGORY field is inserted in the corresponding field in the USER records for additional analysis by User Exit CTDX004. Based on this parameter, Exit CTDX004 determines whether a special restore process is used.

7. The report definition conversion program creates ON CLASS or ON DSN decollation missions, depending on the value of parameter ONDSN in member SARDEFDM in the IOA SAMPLE library. When ON DSN decollation missions are created, the ON DSN statements have the format:

   `ON DSN=DDNAME=`*ddname*`,PGMSTEP=`*pgmstep*

8. DO MIGRATE statements are generated if the name of the migration mission is defined in member SARDEFDM in the IOA SAMPLE library.

2   Conversion Steps

This chapter includes the following topics:

Overview of the conversion process steps

The conversion process consists of the following steps, which can be implemented separately according to the needs of the report distribution environment.

1. Tailor and Run Member SARJASML.

2. Create the Control-D Recipient Tree from CA-View recipient reports. The Control-D Recipient Tree is a very important element of Control-D. It is used by almost all Control-D processes. Therefore, the Recipient Tree should include all Control-D recipients before you begin testing Control-D functions.

3. Create Control-D decollation mission definitions from CA-View information. To accomplish this, do the following:

   a. Extract Report Definitions From the CA-View Database

   b. Check or Modify Options Specified in Member SARDEFDM

   c. Tailor and Run Jobs SARJDEC1 and SARJDEC2

4. Create the Control-D History User file from CA-View information, to enable access to reports archived by CA-View. Do the following:

   a. Tailor and Run Jobs SARJRPA1 and SARJRPA2

    b. Tailor and Run Jobs SARJARC1 and SARJARC2

    c. Tailor and Recompile User Exit CTDX004

5. Test the Conversion.

Step 1 Tailor and Run Member SARJASML

1. Use member ASMLINK to assemble and link-edit the conversion programs.

    Tailor the JCL of this member according to your naming conventions.

2. Submit the job for execution and check the sysout for error messages. A condition code not higher than 4 indicates the proper completion of the job.

Step 2 Create the Control-D Recipient Tree

1. Use program CTDBLDTR from the IOA SAMPLE library to create the Control-D Recipient Tree.

2. Submit the job for execution and check the sysout for error messages. Condition code 0 indicates the proper completion of the job.

Step 3 Convert Report Definitions

Step 3.A Extract the Report Definitions From the CA-View Database (job SARJRPA1)

1. The following table describes the input and output for this step:

Table 1   **Input and Output for the job SARJRPA1**

Data	Description
Input	CA-View Database.
Output	A sequential file containing the report.
	Name the output file SAR.OUTREP. Otherwise, you must change the name in the job that extracts the data.
	The output file must have the following characteristics: physical sequential, record format FBA, logical record length 250.
	The file records layout is mapped in the supplied SARLDECM member.

2. Submit the job for execution and check the sysout for error messages. Condition code 0 indicates the proper completion of the job.

Step 3.B Extract the Listing of the Bundles From the CA-View Database (job SARJRPA3)

1. The following table describes the input and output for this step:

Table 2   CA-View Listing of the Bundles

Data	Description
Input	CA-View Database.
Output	Name the output file SAR.BANDLREP. Otherwise, you must change the name in the job that extracts the data.
	The output file must have the following characteristics: physical sequential, record format FBA, logical record length 133.
	The file records layout is mapped in the supplied SARLDECM member.

2. Submit the job for execution and check the sysout for error messages. Condition code 0 indicates the proper completion of the job.

3. This step is optional. If it is performed, the bundle names are used as Control-D print mission names during creating decollation mission definitions by the job SARJDEC2.

Step 3.C Check or Modify Options Specified in Member SARDEFDM

Tailor the Control-D options specified in member SARDEFDM in the IOA SAMPLE library. Adjust the options according to your needs. The default values of the options are listed in A   Default Conversion Parameters (on page 26).

Step 3.D Tailor and Run Jobs SARJDEC1 and SARJDEC2

Jobs SARJDEC1 and SARJDEC2 build the Control-D decollation mission definitions.

1. The following table describes the input and output for this step:

Table 3   Jobs SARJDEC1 and SARJDEC2 Input and Output

Data	Description
Input	File SAR.OUTREP is extracted from the CA-View database by the job SARJRPA1. File SAR.BANDLREP is extracted from the CA-View database by the job SARJRPA3 (optional). Member SARDEFDM in the IOA SAMPLE library contains external parameters for the conversion. These parameters are used as defaults for the report decollation definitions. Make the necessary changes before you run job SARJDEC1.

2. Tailor members SARJDEC1 and SARJDEC2 in the IOA SAMPLE library.

3. Submit the jobs for execution and check the sysout for error messages. Condition code 0 indicates the proper completion of the job.

Note: Ensure the SPACE parameter specified for the DAREPMIS file contains enough directory blocks, and that the primary allocation value is large enough.

Step 4 Archive Conversion

Step 4.A Tailor and Run Jobs SARJRPA1 and SARJRPA2

1. Tailor members SARJRPA1 and SARJRPA2 in the IOA SAMPLE library. These jobs create the relevant reports for the Archive conversion. The following table describes the input and output for this step:

Table 4   Jobs SARJRPA1 and SARJRPA2 Input and Output

Data	Description
Input	CA-View database.
Output	Two sequential files containing the reports. Name the first output file (created by job SARJRPA1) SAR.OUTREP. Otherwise, you must change the name in job SARJRPA1. The first output file must have the following characteristics: physical sequential, record format FB, logical record length 250. Name the second output file (created by job SARJRPA2) SAR.ARCHIVE. Otherwise, you must change the name in job SARJRPA2. The second output file must have the following characteristics: physical sequential, record format FBA, logical record length 121.

2. Submit the job for execution and check the sysout for error messages. Condition code 0 indicates the proper completion of the job.

Step 4.B Tailor and Run Jobs SARJARC1, SARJAR11, and SARJARC2

1. SARJARC1 uses files SAR.OUTPUT and SAR.ARCHIVE prepared by the jobs SARJRPA1 and SARJRPA2 and creates the file CTD.SAR.HISREP that is the input for the job SARJARC2. If SAR.OTPUT is missing, use the job SARJAR11 instead of SARJARC1. This job creates the CTD.SAR.HISREP using only one input file SAR.ARCHIVE. In this case, the default user name is taken from the definitions member SARDEFAR instead of taking different user names for each report from SAR.OUTPUT.

2. SARJARC2 adds records to an existing History User file. If this job is rerun, reformat the History User file to prevent the addition of duplicate records. Use job CTDUFDBF from the Control-D JCL library to reformat the History User file.

3. Submit the jobs for execution and check the sysout for error messages. Condition code 0 indicates the proper completion of the job.

4. Run the CTDUFSR utility to resort the data portion of the History User file. A sample job can be found in member CTDUFSR in the CTD JCL library.

Step 4.C Tailor and Recompile User Exit CTDX004

Adjust User Exit CTDX004 using Sample Exit CTDX004L supplied in the IOA SAMPEXIT library.

Step 4.D Tailor Skeleton SARSKL in Control-D SKL Library

Tailor skeleton SARSKL in the Control-D SKL library.

Step 5 Test the Conversion

Test the conversion.

3 Building a Control-D Recipient Tree

This chapter includes the following topics:

Overview of the CTDBLDTR utility

Use utility CTDBLDTR to create or modify the Control-D Recipient Tree. This utility uses input from two sources: a report (referenced by DD statement REPORT), and a set of instructions (referenced by DD statement SYSIN) specifying how the data in the report is used to create users in the Recipient Tree.

This utility produces a list (referenced by DD statement SYSPRINT) summarizing the structure (input supplied by the user in SYSIN), and the Recipient Tree (referenced by DD statement TREE). TREE is a member of a partitioned dataset. If TREE is an empty member, the utility creates the Recipient Tree. If TREE contains an existing Recipient Tree, the utility modifies it.

The utility scans each line of the REPORT input and processes it according to the specifications included in the SYSIN data.

For sample JCL programs to execute utility CTDBLDTR, see members CTDBLDDC and CTDBLDJB in the IOA SAMPLE library.

Defining the Levels

The instruction syntax for building the Recipient Tree is as follows:

```
LEVEL=xx
USER  -
POS=n
LENGTH=n
{     DEFAULT=ccc }
{         POS=n
LENGTH=n
{     DEFAULT=ccc } }
.
.
.
{         POS=n
LENGTH=n
{     DEFAULT=ccc } }
{ PARENT  -
PLEVEL=xx
POS=n
LENGTH=n
{     DEFAULT=ccc }
{     TRANSLATE=tabledd } }
{ ADDRESS  -
POS=n
LENGTH=n
{     DEFAULT=ccc } }
{ SYNONYM -
POS=n
LENGTH=n
{     DEFAULT=ccc } }
{ SYNONYM -
POS=n
LENGTH=n
{     DEFAULT=ccc } }
END
```

Each LEVEL command can contain four types of paragraphs:

Table 5   LEVEL Command Paragraphs

Paragraph	Description
USER	Instructions to construct the user name. Mandatory.
PARENT	Instructions to construct the parent name. Optional.
ADDRESS	Instructions to construct the address text. Optional.
SYNONYM	Instructions to construct synonyms. Optional. Can be used more than once to construct more than one synonym for each user.

Parameters define how to process the paragraph. These parameters are repeated for the same paragraph if the data to be constructed consists of data contained in more than one string in the report line.

The use of these parameters is as follows:

Table 6   LEVEL Command Parameters

Parameter	Description
POS	Starting character position of the string in the input report. A value of 0 (zero) indicates that the default value is used. Data from the report is not used for this parameter.
	The POS value is relative to the first print column of the report (that is, for the first column of the report, POS is set to 1) and does not include print control characters or variable record length values.

The combined total length of the data constructed from all the repetitions of the parameters, for each paragraph, must not exceed the number of characters shown in the table below:

Table 7   Maximum Number of Characters for Paragraph Types

# Characters	Paragraph Type
8	USER
8	PARENT
52	ADDRESS
20	SYNONYM

The utility constructs the users based on these definitions and searches the Recipient Tree to see if the constructed user is already defined. If the user is not found, the utility adds the user. If the user is found, the utility updates the Recipient Tree. This utility is especially useful if the only changes required are the addition of synonyms.

Additional Considerations for the PARENT Paragraph

The PARENT paragraph has two additional parameters:

Table 8   PARENT Paragraph Parameters

Parameter	Description
PLEVEL	Mandatory. Level at which the parent is located.
TRANSLATE	Optional. DD name referencing a file containing the USER/PARENT correspondence.

If the parent of a user cannot be identified from the data on the report line, but can be determined from the user name, a file containing a table relating parent names to user names is supplied.

Each line in the external table is in the format USER=*usermask* PARENT=*parent*

In the *usermask* field, masking characters have the following meaning:

- *—Matches any number of consecutive characters.

- ?—Matches any one character.

Examples

- USER=ABC*D matches users ABC*123*D, ABC*12*D, and ABC*X*D.

- USER=ABC?D only matches user ABC*X*D from the above set.

TREE Construction Example

Suppose that the SYSIN file contains the following statements:

```
LEVEL=20
USER  -
POS=0
LENGTH=1
DEFAULT=L
POS=10
LENGTH=2
DEFAULT=03
PARENT  -
PLEVEL=10
POS=0
LENGTH=6
DEFAULT=CDTREE
LEVEL=30
PARENT  -
PLEVEL=20
POS=0
DEFAULT=L
LENGTH=1
POS=10
LENGTH=2
TRANSLATE=TABLE1
USER  -
POS=0
LENGTH=1
DEFAULT=L
POS=1
LENGTH=4
DEFAULT=CKJ
SYNONYM -
POS=0
LENGTH=4
DEFAULT=USER
POS=1
LENGTH=4
SYNONYM -
POS=0
LENGTH=5
DEFAULT=SYN1-
POS=1
LENGTH=4
```

The Recipient Tree is constructed as follows:

For each line in REPORT file:

1. For a user at level 20 with the name L*xy*, where *xy* are the contents of columns 10 and 11 in the report line:

- If column 10 is blank, the name is 'L0*y*'

- If column 11 is blank, the name is 'L*x*3'

- If both are blank, the name is 'L03'

2. The parent of this user is at level 10 with the name CDTREE.

3. For a user at level 30 with the name L*abcd*, where *abcd* are the contents of columns 4 through 7 in the report line:

    Default CKJ is used in a manner similar to default 03 in item 1 above.

4. An attempt is made to determine a level 20 parent from the value 'L' plus the contents of columns 10 and 11. If this does not succeed, then the file referenced by DDNAME TABLE1 is scanned line by line until a match is found for the user name and the parent name are taken from the file.

    Two synonyms are created: 'USER*abcd*' and 'SYN1-*abcd*', where abcd represents the contents of columns 1 through 4 in the report line.

A   Default Conversion Parameters

Default definition parameters for decollation missions are contained in member SARDEFDM in the IOA SAMPLE library. These parameters can be tailored according to site requirements.

Table 9   Member SARDEFDM Default Decollation Definition Parameters

Parameter	Description
ON CLASS	Mandatory. Describes the classes on which this report can be located. Maximum length: 8 characters. At least one class should be specified.
DEFAULT USER	Optional. Specifies a valid user name, defined in the Control-D Recipient Tree, that gets the unidentified pages of a report. Maximum length: 8 characters.
DEFAULT COPIES	Optional. Defines the default number of copies to produce when printing the report. If not specified, the value 098 is taken from the DEFAULTS definitions. For more information, see the *Control-D User Guide*. Parameter length: 3 characters. Leading zeroes must be used.
MAX COPIES	Optional. Defines the maximum number of copies. If not specified, the value of 098 is taken from the DEFAULTS definitions. For more information, see the *Control-D User Guide*. Parameter length: 3 characters. Leading zeroes must be used.
CATEGORY	Mandatory. Defines a report decollation mission category name. By default, the category name is set to a JOBNAME if one exists in the CA-View report. If not, the category name is taken from this parameter. Maximum length: 20 characters.
OWNER	Mandatory. Defines the default USER ID to which reports should be assigned. Maximum length: 8 characters.
PRINT BY FORM	Optional. Indicates whether the printing mission name should be set to (1) the FORM name taken from the CULPRIT report or (2) the default printing mission name (set to STD). Valid values: Y (for the FORM name) or N (for STD).
BACKUP MISSION	Optional. Specifies the BACKUP MISSION name to be used if the Archive option is set to Y in the CULPRIT report. Maximum length: 8 characters.

Parameter	Description
MIGRATION MISSION	Optional. Specifies the MIGRATION MISSION name to be used if the Archive option is set to Y in the CULPRIT report. Maximum length: 8 characters.
#LINES RANGE	Number of lines preceding the testing line specified in the CA-View report that must be included in the search window. For example, if the line 3 is specified in CA-View report and #LINES RANGE =1, the lines 2-3 are included in the search window. A value of 000 indicates that only the line specified in the CA-View report will be searched.
RETRO	Optional. Retroactive scheduling. Specifies whether or not to schedule a report decollation mission when its original schedule date has passed. Default: * (do not schedule the mission)
ONDSN	Optional. Specifies whether or not ON DSN decollation missions should be created. Valid values: Y (Yes), N (No). Default: N (No)
MAXWAIT	Optional. Number of days to wait for report decollation completion. Specifies the number of "extra" days a decollation mission should wait in the Active Missions file to be executed, after which the mission is deleted. Default: 0 (days)
GENERIC	Do not modify this parameter.
VERSION	Do not modify this parameter.
MONTHS	For future use. Do not modify this parameter.
COPIES	Optional. Sets the default number of copies in case this parameter is not specified in member INPARM. Default: 98
DEFPRT	Default print mission name to be used in the DO PRINT statement in the decollation definition.

Default Archive Conversion parameters are contained in member SARDEFAR in the IOA SAMPLE library. These parameters can be tailored according to site requirements.

Table 10   Member SARDEFDM Default Archive Conversion Parameters

Parameter	Description
PRODUCT	Default: CA-View Do not modify this parameter.
CATEGORY	Default: CA-View Do not modify this parameter.
CLASS	Optional.
COPY#	Optional.
FORM	Optional.
CHARS	Optional.
MODIFY	Optional.
DEFPREF	Default prefix of the file on archive tapes.
DEFRETP	Default retention period (days) for all reports being converted from CA-View. This value must be four digits with leading zeros. Examples: 0110, 0400, 2525
DATUNTIL	Last archive index creation date. Indexes created after this date are not converted.

B   Utility CTDSARRS - Massive restore CA-View archived reports to Control-D

Overview of CTDSARRS

The utility restores reports from CA-View archive tapes to Control-D Active User file in order to backup them by the Control-D tools.

The CA-View archived reports are read from the tape one after another as they are located on the tape volume. The reports existing in the History User file created during Step 4-Archive Conversion are restored by one tape volume scanning. The number of reports restored by one utility run can be limited by an input parameter MAXN.

Then the restored reports will be backed up by Control-D backup (or migration) mission specified in a parameter to the utility. After the restored reports have been backed up by the Control-D and Control-V tools and CTDDELRP is performed, the User and SYSDATA records in the History User File will point to the new Control-D archives and the old CA-View archive tapes will be unavailable from Control-D. The old SYSDATA records pointed to CA-View archives can be then deleted from the History User file by the CTDCLHST utility with the parameter NOSYS=S as orphan records.

Parameters

The input parameters for the utility are specified in the stream referred by the SYSIN DD statement. All parameters have keyword format. They are described in Table 11.

Table 11   CTDSARRS input parameters

Parameter	Description
TSEQ	The input CA-View archive tape dataset seq. number. Maximum length is 5 digits. Obligatory.
BKPMIS	The Control-D backup mission name. Maximum length is 8. Optional. This name is stored to the created $SYSDATA records. Then the reports will be picked up by this backup mission.
MIGMIS	The Control-V migration mission name. Maximum length is 8. Optional. This name is stored to the created $SYSDATA records. Then the reports will be picked up by this migration mission.
PREF	The high level qualifier (prefix) of the created Control-D CDAM files. Maximum length is 7. Optional. If it is not specified the AMPREF parameter from CTDPARM is used.

Parameter	Description
MAXN	Maximum number of the reports to be restored from the specified CA-View archive tape file. Maximum length is 6 digits. Optional. If it is not specified, all reports are restored.
FORCE	Valid values are: ■ NO - the utility does not take for restoring the reports restored in the previous utility runs. Default. So, if not all reports from a CA-View archive tape file are restored in one utility run because the limitation specified in the MAXN parameter is reached, the next utility run will not take the restored reports again but will take other reports for restoring. ■ YES - the restored reports are taken for restoring again if they have not been backed up by the Control-D tools yet. The reports which are already backed up by the Control-D tools cannot be restored again from the CA-View tape, even if FORCE=YES is specified.

Activating the utility

```
//CTDSARRS EXEC CTDSARRS
//TAPE      DD DISP=SHR,DSN=<input CA-View archive dataset name>
//SYSIN DD *
     TSEQ=CA-View archive file seq. number
     [BKPMIS=backup mission name]
     [MIGMIS=migration mission name]
     [PREF=CONTROL-D CDAM files prefix]
     [MAXN=maximum number of restored reports]
     [FORCE=NO|YES]
```

Return codes

Table 12 provides a description of the return codes of the CTDSARRS utility.

Table 12   Return codes for the CTDSARRS utility

Code	Description
0	The utility ended successfully.
4	The utility ended with warnings.
8	The utility ended with errors.
12	An error is detected in the input parameter.

Example

The following example illustrates the use of the utility's control statements.

```
//CTDSARRS  EXEC    CTDSARRS
//TAPE      DD  DISP=SHR,DSN=SAR.PROD.SARTAPE.T0004179
//SYSIN     DD   *
TSEQ=4179
 BKPMIS=BKPSAR
 PREF=CTD.SAR
 MAXN=100000
 FORCE=NO
//
```

In this example, the reports are from the CA-View archive tape file SAR.PROD.SARTAPE.T0004179. If the input file contains more then 100000 reports only 100000 will be restored. The created Control-D CDAM files will have the prefix CTD.SAR. The restored reports are scheduled to be backed up by the Control-D backup mission BKPSAR.

C   Messages

CTDSAR01S   CTDSAR01S: BAD RC= *rc* **FROM PUTMEM FUNCTION. MEMBER** - *memname***.**

Explanation: An error occurred while processing routine CADSMEM. The error probably occurred as a result of insufficient space in the Control-D REPORTS library or the DJDEPARM, APAPARM, or OUTPARMS library. Routine CADSMEM is used to perform all the required operations on PDS libraries and members.

System Action: The job terminates.

User Response: Determine which library member was being processed and take appropriate corrective action.

CTDSAR02E   INVALID INPUT PARM *param*

Explanation: The external input parameters list contains an invalid parameter. Valid options for input parameters are listed in the conversion routine.

User Response: Determine which parameter is not valid and correct it.

CTDSAR03E   MISSING VALUE FOR PARM *param*

Explanation: The parameter listed in this message is mandatory.

User Response: See the description of the missing or invalid input parameter elsewhere in this guide. Specify a valid value for the required parameter.

CTDSAR04E   MISSING OBLIGATORY PARAMETER

Explanation: Member SARDEFDM in the IOA SAMPLE library contains several mandatory parameters. At least one of them is missing.

User Response: See the description of the missing parameters elsewhere in this guide. Specify a valid value for the parameters.

CTDSAR05E   NO MORE SPACE FOR REPORT: *rpt***. PROCESSING NEXT REPORT**

Explanation: Report definition member *rpt* contains more lines than specified in conversion routine SARSREP7, constants #CARDS, and AREALEN.

System Action: The member is processed only to the specified line limit. The remaining lines are skipped. Processing continues with the next report.

User Response: Increase the value of the parameter, rerun job ASMLINK, and rerun SARJDEC2.

CTDSAR06E   GETMAIN FOR AREA FAILED

Explanation: A memory acquisition MVS function failed. The value specified for JCL parameter REGION is not large enough.

User Response: Increase the value of parameter REGION and rerun the failing job.

CTDSAR07E   FREEMAIN OF AREA FAILED

Explanation: Allocated memory cannot be freed.

System Action: The conversion routine terminates with a non-zero return code.

CTDSAR08E   DD CARD *ddname* **COULD NOT BE OPENED**

Explanation: A required DD statement is probably missing from the JCL of job SARJDEC2.

User Response: Supply the missing DD statement and rerun the job.

CTDSAR09S   ERROR PROCESSING DIRECTORY

Explanation: This WTO message is generated by routine CADSMEM, which handles PDS operations. The Control-D REPORTS library reached its directory limit.

User Response: Reallocate the REPORTS file with a larger number of directory blocks and resubmit job CADIDMIS.

CTDSAR10S   DEFAULT COPIES NUMBER IS GREATER THEN THE MAX COPIES NUMBER. 98 IS ASSUMED

Explanation: The default value of parameter DEFAULT COPIES in member SARDEFDM in the IOA SAMPLE library is greater than the value specified for parameter MAX COPIES.

User Response: Specify compatible values for parameters DEFAULT COPIES and MAX COPIES.

CTDCA0I   HISTORY FILE CONVERSION STARTED

Explanation: This information message indicates that the archive conversion process has started.

CTDCA1I   HISTORY FILE CONVERSION ENDED RC=*rc*

Explanation: This information message indicates that the archive conversion process has ended with a return code of *rc*.

CTDCA2I   DEFPARS / DCBOUT OPEN ERROR

Explanation: This information message indicates that an attempt to open a file with ddname DEFPARS or DCBOUT failed.

System Action: The job terminates.

User Response: Correct the job and rerun it.

CTDCA3I   CANNOT LOAD CTMPARM / CTDPARM

Explanation: This information message indicates that module CTMPARM or CTDPARM cannot be loaded.

System Action: The job terminates.

User Response: Correct the job and rerun it.

CTDCA4I   HSTREP OPEN ERROR

Explanation: This information message indicates that the file referenced by DD statement HSTREP cannot be opened.

System Action: The job terminates.

User Response: Correct the job and rerun it.

CTDCA5I   RC=*rc* **DURING** *operation-type* **OPERATION**

Explanation: This information message indicates that an error occurred during access to the Control-D History User file.

System Action: The job continues processing.

User Response: Analyze the return code from this message and rerun the job in case of a severe error.

CTDCA6I   **CONVERTED:**

Explanation: This information message provides a header for statistics messages about converted records.

System Action: The job continues processing.

CTDCA7I   *record-type* **RECORDS:** *num-records*

Explanation: This information message provides statistics about converted records.

CTDCA8S   **NUMBER OF CONVERSION ERRORS EXCEEDS THE MAXIMUM ALLOWED**

Explanation: This message is issued if the number of errors is more than 20.

System Action: The job terminates.

User Response: Analyze the reasons for the errors and rerun the job.

CTDCA9I   **INCORRECT DEFAULT PARAMETER:** *parm*

Explanation: This information message indicates that a parameter specified in member SARDEFAR is invalid.

System Action: The job terminates.

User Response: Analyze the reason for the error and rerun the job.