ADSTAR Distributed Storage Manager

Trace Facility Guide

Version 2

SH26-4057-00

Note!

Before using this information and the product it supports, be sure to read the general information under “Notices” on page v.

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Preface

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If the trace facility is being run on your system, you may receive output messages that are automatically generated by the process. The output is not documented because you can ignore it. The output is intended for service representatives, and is in a readable format so authorized users can isolate problems.

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Chapter 1. Client Trace Facility

You might find it necessary to trace what is going on in a particular client to help isolate a problem with the client or a related problem. The client trace facility is described here to aid in that process.

Diagnosing Client Problems with Trace Commands

The client trace facility helps diagnose client problems by tracing specific activities. You can trace events by initiating trace functions from the options file or the command line. Trace output can be sent to the client console or to a file that you specify. You can use tracing while in interactive mode or while using the graphical user interface.

Tracing is achieved by enabling trace flags. Each trace flag enables tracing for a specified functional area of the client. Some trace flags generate large amounts of data, while others produce relatively small amounts. Depending on which trace flags are enabled, you can expect small to moderate performance degradation in the client.

The tracing facility described in this document applies to all ADSM clients, including the backup-archive clients, the administrative client, the application programming interface (API), and the space management clients.

Performance Considerations

From a performance standpoint, you should not keep your trace settings activated if you are in a stable environment and are not experiencing problems. Trace routines require processing time and could slow down the response times of your workstation applications. If a problem occurs, you can always activate the trace routines in order to gather trace information for diagnostic purposes. Call your IBM Service Representative for assistance in diagnosing ADSM problems.

Using the Command Line

ADSM provides trace routines which can provide you with diagnostic information if you incur a processing problem at your workstation. This information can be extremely useful in resolving the problem.

Using the QUERY TRACE STATUS Commands

In order for ADSM to capture diagnostic information, you must activate trace settings or flags. You can use the QUERY TRACESTATUS command to display whether tracing is active for a specific trace flag or all flags. For example, to show a list of all trace flags that are currently active, use:

```
dsmc Query Tracestatus -ON
```

Other options are also available for the QUERY TRACESTATUS command. See “QUERY TRACESTATUS—Display Trace Status” on page 3 for more information.

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Using Tracing Options on Commands

The client trace facility provides these options: TRACEMAX, TRACEFILE, TRACEFLAGS, and NOTRACE. You can use these options with most ADSM commands. You can also use these options to override settings in the options file.

If you are in an interactive command session when you enter the options, they remain in effect until you end the session.

TRACEMAX

The TRACEMAX option enables you to specify the maximum size for the tracefile.

When you enter trace options from the command line or in the options file, we recommend the following sequence:

1. TRACEMAX
2. TRACEFILE
3. TRACEFLAGS

Following this order will ensure that all trace entries from the start of the trace will go into the file that you specify.

TRACEFILE

The TRACEFILE option enables you to save your trace output to a file instead of displaying it on the client console. For example, to archive the files in your **/u/user/prog** directory and save the trace output to a file, you can enter:

```
dsmc Archive -TRACEFIle=trace.out –TRACEFLags=all "/u/user/prog/*"
```

To save your trace output while you are using the graphical user interface, use the TRACEFILE option when you start the GUI:

```
dsm -TRACEFIle=trace.out –TRACEFLags=all
```

You can send the trace data to **dsmerror.log** so that you can see the relevant ANS error messages and how they relate to the trace data.

If you do not use the TRACEFILE option, the output is sent to your client console display.

TRACEFLAGS

The TRACEFLAGS option enables you to set specific trace flags. For example, if you are having a problem with the INCREMENTAL command, you might want to turn on the ERROR trace flag when you execute the command. The ERROR trace flag captures all severe error messages. You can turn it on by entering:

```
dsmc Incremental –TRACEFLags="error"
```

You can turn on all of the trace flags by using the ALL parameter. You can also use the ALL parameter with exceptions. For example, to back up a specific file and turn on all of the trace flags except COMMFULL and NLS (both of which generate a large amount of data), enter the following command:

```
dsmc Selective –TRACEFLags=all,-commfull,-nls /home/spot/myfile
```

To turn on particular trace flags while you are using the graphical user interface, specify the TRACEFLAGS option when you start the GUI:

```
dsm -TRACEFLags=general,session
```

NOTRACE

You can turn off all tracing by using the NOTRACE option. For example, to turn off the tracing when using the INCREMENTAL command, you can enter:

```
dsmc Incremental –NOTrace
```

To turn off tracing while you are using the graphical user interface, specify the NOTRACE option when you start the GUI:

```
dsm -NOTrace
```

Using the Options File

You can include TRACEMAX, TRACEFILE, and TRACEFLAGS, in your client options file. This enables the options to be in effect whenever you start an ADSM session. The options can be overridden during a session by using the same options in an ADSM command.

Client Commands and Options

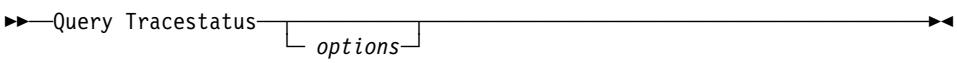
These are the commands and options available for tracing ADSM clients.

QUERY TRACESTATUS—Display Trace Status

Purpose

Use the QUERY TRACESTATUS command to display a list of available trace flags and their current settings.

Format



Parameters

dsmccmd
The ADSM command-line interface command, usually DSMC.

options
Any of the following:

QUERY TRACESTATUS

–ALl
Displays both active and inactive trace flag settings. This is the default unless you have specified another setting in a previous command in the same interactive command session. To display both your active and inactive trace flag settings, enter:

```
Query Tracestatus –ALl
```

–OFf
Displays only inactive trace flag settings; for example:

```
Query Tracestatus –OFf
```

–ON
Displays only active trace flag settings; for example:

```
Query Tracestatus –ON
```

–PASsword
Enters the password if ADSM requires one. If your password is *secret*, enter:

```
Query Tracestatus –PASsword=secret
```

–NOTrace
Turns tracing off if it has been enabled in the options file; for example:

```
Query Tracestatus –NOTrace
```

–TRACEFIle
Writes trace output to a specified directory and file name. If you do not specify a file or it has not been specified in the TRACEFILE option in the client options file that you use, output from active trace routines is only displayed on your client console display. For diagnostic purposes, you should save trace output to a file. For example, to save trace output to the **traceout** file in the **/u/user** directory, enter:

```
Query Tracestatus –TRACEFIle=/u/user/traceout
```

–TRACEFLags
Turns on specific flags; for example, to turn on the GENERAL and SESSION trace flags, enter:

```
Query Tracestatus –TRACEFLags=general,session
```

Examples

Task Display the status of your trace flags.

Command `dsmc Query Tracestatus`

NOTRACE—Turn Tracing Off

Use the NOTRACE option to turn tracing off if tracing is enabled on the client.

You can use NOTRACE on the command line as an option in an ADSM command, but you cannot use it in the client options file.

Syntax

Examples

Client user options file example: Not available

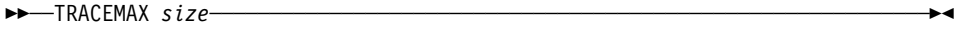
Command line example: `dsmc –NOTrace`

TRACEMAX

TRACEMAX—Specify Maximum Size of Output File

Use the TRACEMAX option to specify the maximum size, in kilobytes, that the tracefile can grow to.

Syntax



Parameters

size

The size, in kilobytes, for the maximum size of the trace file. The range of values is 0 to 10000.

The default is 0, which disables trace file wrapping and allows the trace file to grow indefinitely.

Examples

Client user options file example: `tracemax 4000`

Command line example: `dsmc –tracemax=4000`

TRACEFILE—Specify an Output File

Use the TRACEFILE option to place the trace output into a specified file. If the file does not already exist, then it is created. If the file exists, then the TRACE output is appended to the file.

If your trace file reaches the maximum size that you set with the TRACEMAX option, subsequent trace entries could wrap over previous entries in the file. In other words, wrapping would overwrite existing entries at the beginning of the current file.

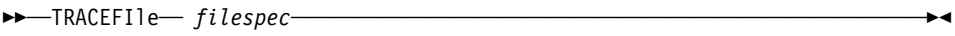
There are message indicators showing where new entries begin and where the oldest entry appears. The first trace entries follow the starting trace texts such as "Tracing is active..." or “Tracefile maximum ....” The last entry of the trace is followed by an eyecatcher text “end of data - close.” Shown below is an extract of a typical file as an example.

```
ADSM trace  3969        10240
04/22/1995 12:11:44.0449 : trace.c   (1140): Tracing is active to file 't.out'.
04/22/1995 12:11:44.0452 : trace.c   (1141): Tracefile maximum length set to 10k
04/22/1995 12:11:44.0453 : trace.c   (1150): ----------------------------------
04/22/1995 12:11:44  - Trace begun.
  .
  .  (trace entries here)
  .
04/22/1995 12:11:44.0548 : procopts.c(5907):

04/22/1995 12:11:44.0771 : anspsqry.c( 610): psqSendQuery: Using 'STANDARD' as t
  .
  .
  .

end of data - close
```

Figure 1. Example of a trace file

You can set TRACEFILE in your client options file or specify it as an option on an ADSM command.

Syntax



Parameters

filespec

The name of the trace file, in the client's file name format. If no directory is specified, then the file is placed in the current directory.

If TRACEFILE is not specified and tracing is active, trace statements are sent to standard output by default.

TRACEFILE

Examples

Client user options file example: `TRACEFIle /u/user/trace.out`

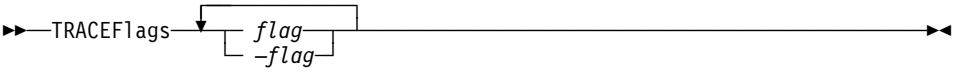
Command line example: `dsmc –TRACEFIle=trace.out`

TRACEFLAGS - Specify the Trace Flags

Numerous components in the system have informational tracing imbedded. Tracing is activated by specifying trace flags for the desired component or area.

You can use TRACEFLAGS in your client options file or as an option in an ADSM command.

Syntax



Parameters

flags

Possible values for the trace flags are listed in Figure 2.

To leave particular flags off, preface the flags with a dash (for example, `–txn`).

When using TRACEFLAGS on a command, use commas to separate the individual trace flag values.

The default value is no tracing.

Figure 2 (Page 1 of 3). Trace Flags. Trace flags are not case sensitive.

Flag	Description
ALL	Enables: All traceflags except INSTR, INSTR_CLIENT, INSTR_CLIENT_DETAIL, INSTR_VERBOSE
ADMIN	Administrative component
ALLCOMM	Enables: COMM, 3270COMM, EHLLAPI, 3270ERROR
ALLSESS	Enables: SESSION, VERBINFO, SESSVERB, VERBADMIN
ALLFILE	Enables: DIROPS, FILEOPS, FIOATTRIBS
ALLBACK	Enables: INCR, TXN, POLICY
ALLPROC	Enables: ALLBACK, ALLFILE, ALLSESS
API	API tracing
AUDIT	List files backed up or restored (Macintosh and Windows)
COMM	Communications interface
COMMFULL	Communications driver data This trace flag produces large amounts of trace data.

TRACEFLAGS

Figure 2 (Page 2 of 3). Trace Flags. Trace flags are not case sensitive.

Flag	Description
COMMDETAIL	Detailed communications When the communications buffer is larger than 192 bytes, this trace flag displays only the first and last 96 bytes of data.
COMPRESS	Compression, expansion processing
CONFIG	Configuration file processing
DIROPS	Directory operations
EHLLAPI	PC3270W V3.0 EHLLAPI tracing
ENTER	Entering or exiting a major function
ERROR	Severe errors tracing
FILELISTS	User interface file list processing
FILEOPS	File I/O operations
FIOATTRIBS	File and directory attributes during backup and archive
FS	File space processing
GENERAL	General process flow operations
INCR	Incremental process operations
INSTR	Instrumentation tracing
INSTR_CLIENT	Client entry or exit and network times
INSTR_CLIENT_DETAIL	Print detailed process information
INSTR_VERBOSE	Print all and final time statistics
LINK	Hard link processing (UNIX)
MEMDETAIL	Detailed memory tracing
MEMORY	Memory allocation, buffer pool
MESSAGES	User interface event messages
NLS	National Language Support processing This trace flag produces large amounts of trace data.
POLICY	Policy management tracing
PREFIX	Adds *module(line number)* tracing suffixes to messages Enabled by default. May be disabled by using –PREFIX in the TRACEFLAGS lists
SERVICE	Enables: ALL –NLS –COMMDETAIL
SESSION	Session layer tracing
SM	Space Management tracing (UNIX)
SMSDEBUG	Storage Management Services (NetWare)
SMVERBOSE	Space Management detailed tracing (UNIX)

Figure 2 (Page 3 of 3). Trace Flags. Trace flags are not case sensitive.

Flag	Description
TIMESTAMP	Timestamps on trace records Enabled by default. May be disabled by using –TIMESTAMP in the TRACEFLAGS lists
TRUSTED	Trusted Communications Agent specific tracing (UNIX)
TXN	Backup and Archive Transaction list processing.
VERBADMIN	Administrator Datastream tracing
VERBINFO	Client-server Verb fields contents tracing
3270COMM	Low-level 3270 for Windows tracing
3270ERROR	Low-level 3270 error tracing (Windows)

Examples

Client user options file examples:

```
TRACEFLags general config comm
TRACEFLags ALL -COMMDETAIL -nls
```

Command line examples:

```
dsmc –TRACEFLags=GENERAL,CONFIG,comm
dsmc –TRACEFLags=ALL,-commdetail,-nls
```

Tracing for the ADSM Lotus Notes Backup Agent

You can monitor the performance of the ADSM Lotus Notes Backup Agent (ADSM Notes) operations by setting up tracing. First, turn tracing on by setting the environment variable DSMNOTES_TRACE in the NOTES.INI file. For example:

```
DSMNOTES_TRACE=ON
```

The name of the trace file is TRACE.DSM. Its location is determined by the environment variable DSMNOTES_TRACEDIR in NOTES.INI. For example:

```
DSMNOTES_TRACEDIR=c:\mydir
```

TRACE.DSM does not wrap. Its contents are overwritten each time a new ADSM Notes operation, like an incremental backup or a single restore, is invoked.

Chapter 2. Server Trace Facility

The server trace facility helps you diagnose problems by tracing specific server activities. This chapter discusses how to diagnose server problems with trace commands.

Diagnosing Server Problems with Trace Commands

Administrators with analyst privilege can diagnose server problems by tracing server activity. Any administrator with general privilege can display information about trace activities.

You can trace ADSM events by initiating trace functions from the server console, or by putting the trace commands in the server options file. Putting trace commands in the server options file is the only way to trace functions as the server is coming up. Trace output is sent to the server console or to a file that you specified with the TRACE BEGIN command.

Tracing is achieved by enabling and disabling trace classes. Each trace class produces diagnostic messages for a functional area of the server. Some trace classes generate extremely large amounts of data, while others produce relatively small amounts. Depending on which trace classes are enabled, expect moderate to severe performance degradation in the server. For this reason, tracing the server should only be done in a controlled environment without general user access, and only at the request of an IBM service representative.

These are the trace functions:

Begin Start server tracing. The server writes trace information to the trace buffer according to the trace classes that are enabled. See “TRACE BEGIN—Start Server Tracing” on page 15.

Disable Deactivate trace classes that are specified in the trace class list. Trace classes are deactivated immediately; however, tracing continues for other active trace classes until the trace is ended with the TRACE END command. See “TRACE DISABLE—Deactivate Server Trace Classes” on page 17.

ENAble Activate trace classes. After a trace class is enabled, begin server tracing. See “TRACE ENABLE—Activate ServerTrace Classes” on page 18.

END Stop tracing. See “TRACE END—Stop Server Tracing” on page 20.

Flush Write any trace records left in the trace buffer when you end a trace to an output file. See “TRACE FLUSH—Write Contents of Trace Buffer” on page 21.

List List all common aggregate trace classes. See “TRACE LIST—List Trace Classes” on page 22.

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Query Query the status of enabled trace classes and trace activity. See “QUERY TRACE—Display Server Trace Classes” on page 23.

TRACE BEGIN—Start Server Tracing

Use the TRACE BEGIN command to start server tracing. Tracing can adversely affect the performance of the ADSM system. The TRace Begin command should only be used at the request of an IBM service representative. Trace output is sent to the server console or to a file that you specify with the TRACE BEGIN command, as illustrated below.

Privilege Class

Analyst

Syntax

Parameters

filespec

The name of the file for trace output. If you do not specify a file, output is sent to the server console. Use the following formats:

VM File Specification for Trace Output

On VM, files are typically specified in the format *filename filetype filemode*.

ADSM requires that the file specification be written as *filename.filetype.filemode*. The periods are required. However, the *filemode* is optional, and the default is **A**.

If you specify a filemode other than A, that minidisk must be linked and accessed in write mode.

For example:

Command	VM file created
TRace Begin trace.output	trace output a1
TRace Begin trace.output.b	trace output b1

MVS and VSE Dataset Specification for Trace Output

The *filespec* on an MVS or VSE system is appended to the user ID on the job statement if the ADSM server is run as a job or the RACF default task owner (site specified for RACF) when the ADSM server is run as a started task. When you want trace output directed to a file, you can specify a fully qualified file name such as 'HOLLAND.TRACE.OUTPUT' to override the default first level qualifier. The data set does not need to be preallocated. For example:

Command	MVS or VSE Dataset Created
TRace Begin trace.output	USERID.TRACE.OUTPUT The first level qualifier, USERID, is that of the user ID on the job statement when the ADSM server is run as a job.

TRACE BEGIN

TRace Begin trace.output	RRRRRR.TRACE.OUTPUT The first level qualifier, RRRRRR, is what was specified by your site for the RACF default owner on a started task when the ADSM server is run as a started task.
TRace Begin 'holland.trace.output'	HOLLAND.TRACE.OUTPUT The first level qualifier, HOLLAND, is specified on the command and is not appended to any other qualifier.

AIX, OS/2, HP-UX, and SunOS File Specification for Trace Output

On AIX, OS/2, HP-UX, and SunOS, files are typically specified *trace.out*.

Use the file naming conventions associated with the platform.

Command	File created
TRace Begin trace.out	trace.out

Examples

Task: Start server tracing with the currently enabled trace classes. All trace information is written to the console.

Command:
```
TRace Begin
```

Task: Start server tracing with the currently enabled trace classes. All trace information is written to the file named in *filespec*, in this case the file **trace.output**.

Command:
```
TRace Begin trace.output
```

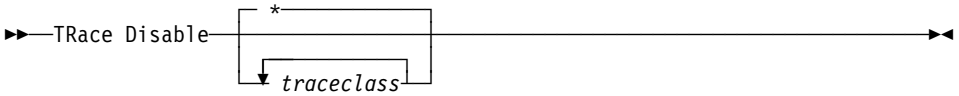
TRACE DISABLE—Deactivate Server Trace Classes

Use the TRACE DISABLE command to deactivate server trace classes. Trace classes are deactivated immediately; however tracing continues for other active trace classes until the trace is ended with the TRACE END command.

Privilege Class

Analyst

Syntax



Parameters

*****

You want to deactivate all trace classes. This is the default.

traceclass

A list of the trace classes you want to deactivate. You must separate trace classes by spaces. See Figure 3 on page 18 for a list of the trace classes.

Examples

Task: Disable the TCPINFO trace class.

Command:

```
TRace Disable TCPINFO
```

TRACE ENABLE

TRACE ENABLE—Activate ServerTrace Classes

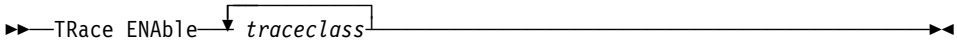
Use the TRACE ENABLE command to activate server trace classes. Tracing does not start until a TRACE BEGIN command is issued.

There are *aggregate* trace classes defined to enable multiple trace classes, grouped together for logical function tracing.

Privilege Class

Analyst

Syntax



Parameters

traceclass

Specifies particular trace classes to be activated. You must separate trace classes by spaces.

In some cases the trace class, or aggregate trace class, enables different tracing on the different platforms. You can activate as many trace classes as you want.

Figure 3 (Page 1 of 2). Server Trace Classes

Trace Class	Description
ADMCMD	Command tracing
APPCERROR	APPC driver error data tracing
APPCINFO	APPC driver general information tracing
BLKDISK	Block oriented disk driver
DIALERROR	DIAL driver error tracing (S/390)
DIALINFO	DIAL driver general information tracing (S/390)
IPXDATA	IPX driver data (OS/2, AIX)
IPXERROR	IPX driver errors (OS/2, AIX)
IPXINFO	IPX driver informational data (OS/2, AIX)
IUCVERROR	IUCV driver error tracing (S/390)
IUCVINFO	IUCV driver general information tracing (S/390)
LVM	Database/Recovery log management functions
MMSBASE	Entry points into mount management services component
NETBIOSDATA	(OS/2, AIX) - Netbios driver data
NETBIOSERROR	(OS/2, AIX) - Netbios driver errors
OPER	Operator interface tracing (S/390)
PID	Command Process ID (UNIX)

Figure 3 (Page 2 of 2). Server Trace Classes

Trace Class	Description
SCHED	Central Scheduling
SYSTIME	System time on trace records
TCPERROR	TCP/IP driver error tracing
TCPINFO	TCP/IP driver general information tracing

Note:

- S/390 means a server running on an IBM S/390 mainframe (VM, MVS, or VSE).
- OS/2 means a server running on an OS/2 workstation.
- UNIX means a server running on an AIX, HP-UX, or SunOS workstation.

Examples

Task Enable the OPER and APPCINFO trace classes.

Command

```
TRace ENAble OPER APPCINFO
```

TRACE END

TRACE END—Stop Server Tracing

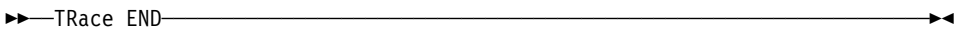
Use the TRace END command to stop server tracing.

After issuing a TRACE END command, all trace activities stop.

Privilege Class

Analyst

Syntax



Examples

Task Stop tracing

Command `TRace END`

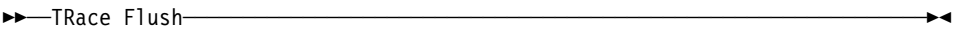
TRACE FLUSH—Write Contents of Trace Buffer

Use the TRace Flush command to write any trace records in the trace buffer to an output file. The trace buffer writes its contents to a file upon filling up its buffer. Unless you use this command, the contents in the buffer are not displayed except when TRACE END is issued. If you use the TRace Flush command, be sure to issue it first before any TRACE END command in order to prevent loss of any trace data in the last trace buffer.

Privilege Class

Analyst

Syntax



Examples

Task Flush the trace buffer.

Command `TRace Flush`

TRACE LIST

TRACE LIST—List Trace Classes

Use the TRACE LIST command to show the common aggregate trace classes.

Privilege Class

Analyst

Syntax

Examples

Task List the trace classes.

Command `TRace list`

QUERY TRACE—Display Server Trace Classes

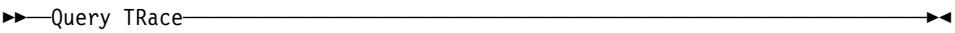
Use the QUERY TRACE command to display the currently enabled server trace classes and the status of trace activity.

You can only use the QUERY TRACE command from the server console.

Privilege Class

Analyst

Syntax



Examples

Task: Display all currently enabled trace classes.

Command:
```
Query TRace
```

QUERY TRACE

Chapter 3. Trace Messages

This section lists the client and server trace messages.

Time stamps are added to the beginning of each trace message. You can turn off time stamps by turning off the TIMESTAMP class for client trace messages, or SYSTIME for server trace messages.

You can remove the *module(line_number)* suffix from client trace messages by turning off the PREFIX class.

Client Trace Messages

ANS4110E Error setting trace classes.

Explanation: An improper or misspelled trace class name was entered.

System Action: Processing stopped.

User Response: Ensure that you have the correct trace class name and retry the operation.

ANS4901E Invalid trace keyword - '*keyword***'**

Explanation: A TRACEFLags option in the client options file, the client user options file (UNIX), or on the command line is incorrect.

System Action: Client program did not initialize.

User Response: Correct the value. See the entry for TRACEFLags in the *Trace Facility Guide* document for a list of valid trace flags.

ANS4907E Invalid trace file name (name too long).

Explanation: A TRACEFIle option in the options file used a file name that is too long.

System Action: Client program did not initialize.

User Response: Change the file name used as the TRACEFIle so that it is equal to or less than 255 characters in length.

ANS4909E Unable to close trace output file ***file-name*.**

Explanation: An error occurred during the closing of a trace output *file-name* (for example, not enough disk space).

System Action: Processing continues.

User Response: Check the client user options file for a description of possible causes of the error, or see your system administrator.

ANS4910E Unable to open trace output file ***file-name*.**

Explanation: A TRACEFIle option in the client options file, the client user options file (UNIX), or on the command line used a directory path and *file-name* combination to which you do not have write access.

System Action: Client program did not initialize.

User Response: Change the TRACEFIle value so that it is a location that you have write access to.

ANS4916E Unable to write to trace file ***tracefile*. Tracing disabled.**

Explanation: An error occurred when writing to the specified *tracefile.*

System Action: Tracing is disabled. Processing continues.

User Response: Ensure the device that the tracefile accesses is available and has sufficient space for the tracefile. Retry the command.

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Server Trace Messages

ANR0920I Tracing is active to standard output.

Explanation: In response to a TRACE BEGIN command, server trace records are being written to the standard output destination (usually the server console).

System Action: None.

User Response: None.

ANR0921I Tracing is active to file *file spec*.

Explanation: In response to a TRACE BEGIN command, server trace records are being written to the specified filename.

System Action: None.

User Response: None.

ANR0922I Trace ended.

Explanation: In response to a TRace END command, server trace records are no longer being written.

System Action: None.

User Response: None.

ANR0923E Tracing is inactive.

Explanation: A TRace END command has been entered, but tracing is not active.

System Action: The command is ignored.

User Response: If tracing is desired, use the TRace ENable and TRACE BEGIN commands to activate server tracing.

ANR0924E Tracing is already active to file *file spec*.

Explanation: A TRace Begin command has been entered, but tracing is already active to the specified filename.

System Action: The command is ignored.

User Response: If the current trace output file is acceptable, no action is required. Otherwise use the TRace END command to stop tracing and then reissue the TRace Begin command as desired.

ANR0925E Tracing is already active to standard output.

Explanation: A TRace Begin command has been entered, but tracing is already active to the standard output destination (usually the server console).

System Action: The command is ignored.

User Response: If the current trace output destination is acceptable, no action is required. Otherwise use the TRace END command to stop tracing and then reissue the TRace Begin command as desired.

ANR0926E Missing or invalid TRACE command parameter.

Explanation: The TRACE command issued contains an invalid parameter, or is missing a required parameter.

System Action: The command is ignored.

User Response: Re-enter the command with the proper parameters.

ANR0927E Unknown trace class keyword - *class*.

Explanation: A TRace ENable command has been entered which specifies an unknown trace class.

System Action: The command is ignored.

User Response: Re-enter the TRACE command with the correct class.

ANR0928E Unable to open trace file *file spec* for appending.

Explanation: A TRace Begin command specifies an output file, but the server cannot write to that file.

System Action: The command is ignored.

User Response: Check the file for proper access permissions, or reenter the TRACE command specifying a different output file.

ANR0929E Insufficient memory to activate tracing.

Explanation: A TRace Begin command has been entered, but the server has insufficient memory available to activate tracing.

System Action: The command is ignored.

User Response: If tracing is required, make more memory available to the server then restart the server. Please refer to the user responses suggested by other

messages in the dsmameng.msg file for more specific actions in adding memory to the server.

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Trace Facility Guide
Version 2

Publication No. SH26-4057-00

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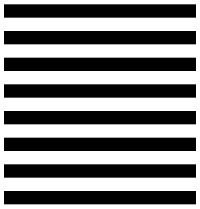

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