# Oracle® Fusion Middleware Logdump Reference for Oracle GoldenGate





Oracle Fusion Middleware Logdump Reference for Oracle GoldenGate, 19c (19.1.0)

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# Contents

# Preface

Audience	Vİ
Documentation Accessibility	vi
Related Information	vi
Conventions	vii
Using the Logdump Utility	
Getting Started with Logdump	1-1
Executing Basic Logdump Tasks	1-1
Finding the Next Good Record Header	1-2
Finding the Beginning, Middle, and End of a Transaction	1-2
Scanning for the End of a Transaction	1-3
Going to a Specific RBA in the File	1-3
Filtering Based on a Table or Data File Name	1-3
Removing the Current Filter Criteria	1-3
Filtering on Multiple Conditions	1-4
Count the Records in a Trail File	1-4
Saving Records to a New Trail File	1-4
Closing the Current File and Opening the Next One in the Trail	1-4
Keeping a Log of Your Session	1-4
Seeing the Current Logdump Environment	1-4
Getting Online Command Help	1-5
To Exit Logdump	1-5
Evaluating Transaction Size	1-5
Maintaining Command History	1-6
Viewing Logdump Command Information and Syntax	1-6
Viewing the First Record	1-6
Running Logdump	1-6
Setting Up the View	1-6
Opening a Trail File	1-7



# 2 Logdump Commands

Logdump Command Summary	2-3
ARGETNONDATACHANGES   ARSTOPNONDATACHANGES	2-6
ASCIIDATA   EBCDICDATA	2-6
ASCIIDUMP   EBCDICDUMP	2-7
ASCIIHEADER   EBCDICHEADER	2-7
BEGIN	2-7
BULKIOSTATS	2-7
CALCTLFKEY	2-8
CD	2-8
COMPUTETIMESTAMP	2-8
COUNT	2-9
CTIME	2-13
DATAFILE	2-14
DEBUG	2-14
DECRYPT	2-14
DETAIL	2-15
DUMP	2-16
ENCRYPT	2-16
ENV	2-17
ESBLOCK	2-18
EXIT	2-18
FC	2-18
FILEHEADER	2-20
FILES	2-27
FILTER	2-28
FLOAT	2-34
GGSAUDITREAD	2-35
GGSTOKEN	2-35
GGSTOKEN	2-36
GHDR	2-37
HASHCLEAR	2-37
HASHSTATS	2-38
HEADERTOKEN	2-38
HELP	2-39
HISTORY	2-39
INTERPRETINTERVAL	2-40
INTERPRETTIMESTAMP	2-40
LOG	2-41
Metadata ddlformat	2-41



Metadata defgenformat	2-42
Metadata detail	2-42
Metadata sqlformat	2-42
NEXT	2-42
NEXTTRAIL	2-43
NOTIFY	2-43
OBEY	2-44
OPEN	2-44
POSITION	2-45
RECLEN	2-45
SAVE	2-46
SCANFORENDTRANS	2-47
SCANFORHEADER	2-47
SCANFORMETADATA	2-48
SCANFORRBA	2-48
SCANFORTIME	2-49
SCANFORTYPE	2-49
SCANSCROLLING	2-50
SHOW	2-50
SKIP	2-53
TIME	2-53
TIMEOFFSET	2-53
TMFBEFOREIMAGE	2-54
TMFBEFOREIMAGE	2-54
TMFGETRECADDR   NOTMFGETRECADDR	2-55
TMFIGNORERECCOUNT	2-55
TRAILFORMAT	2-55
TRANSBYTELIMIT	2-56
TRANSHIST	2-56
TRANSRECLIMIT	2-57
USERTOKEN	2-57
VOLUME	2-58
WRITELOG	2-58
Υ	2 50



# **Preface**

This guide contains guidelines for using the Oracle GoldenGate Logdump utility. This utility is mainly used by Oracle Support to resolve an Oracle GoldenGate support case. Experienced systems or database administrators who are familiar with the internal structures of Oracle GoldenGate trail records can use Logdump to troubleshoot and resolve errors or other problems encountered during processing.

- Audience
- Documentation Accessibility
- Related Information
- Conventions

## **Audience**

This guide is intended for the person or persons who are responsible for operating Oracle GoldenGate and maintaining its performance. This audience typically includes, but is not limited to, systems administrators and database administrators. It also is intended to help Oracle support technicians and other technical representatives when working with Oracle GoldenGate customers.

# **Documentation Accessibility**

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## **Related Information**

The Oracle GoldenGate Product Documentation Libraries are found at

https://docs.oracle.com/en/middleware/goldengate/index.html

Additional Oracle GoldenGate information, including best practices, articles, and solutions, is found at:

Oracle GoldenGate A-Team Chronicles



# Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, such as "From the File menu, select <b>Save</b> ." Boldface also is used for terms defined in text or in the glossary.
italic italic	Italic type indicates placeholder variables for which you supply particular values, such as in the parameter statement: TABLE table_name. Italic type also is used for book titles and emphasis.
monospace MONOSPACE	Monospace type indicates code components such as user exits and scripts; the names of files and database objects; URL paths; and input and output text that appears on the screen. Uppercase monospace type is generally used to represent the names of Oracle GoldenGate parameters, commands, and user-configurable functions, as well as SQL commands and keywords.
UPPERCASE	Uppercase in the regular text font indicates the name of a utility unless the name is intended to be a specific case.
{}	Braces within syntax enclose a set of options that are separated by pipe symbols, one of which must be selected, for example: {option1   option2   option3}.
[]	Brackets within syntax indicate an optional element. For example in this syntax, the SAVE clause is optional: CLEANUP REPLICAT group_name [, SAVE count]. Multiple options within an optional element are separated by a pipe symbol, for example: [option1   option2].



# Using the Logdump Utility

Learn how to use the Logdump utility. This utility enables you to open files, control the display, navigate through a file, and search, filter, view, and save data that's stored in a trail or extract file.



#### Important:

To avoid any adverse effects on the data or checkpoints in your trails, use Logdump only with guidance from an Oracle support analyst or an experienced Oracle GoldenGate user.

This chapter includes the following sections:

- Getting Started with Logdump
- Viewing the First Record
- **Executing Basic Logdump Tasks**
- **Evaluating Transaction Size**
- **Maintaining Command History**
- Viewing Logdump Command Information and Syntax
- Getting Started with Logdump
- Viewing the First Record
- **Executing Basic Logdump Tasks**
- **Evaluating Transaction Size**
- **Maintaining Command History**
- Viewing Logdump Command Information and Syntax

# Getting Started with Logdump

This section introduces you to basic Logdump commands that enable you to open files, control the display, navigate through a file, and filter for specific information, among other basic tasks. It also illustrates and explains the components of a record.

# **Executing Basic Logdump Tasks**

The following are some basic tasks that can be performed with Logdump. For detailed information about the commands shown and other available options, see the alphabetical reference in Logdump Commands.

Finding the Next Good Record Header

- Finding the Beginning, Middle, and End of a Transaction
- Scanning for the End of a Transaction
- Going to a Specific RBA in the File
- Filtering Based on a Table or Data File Name
- Removing the Current Filter Criteria
- Filtering on Multiple Conditions
- Count the Records in a Trail File
- Saving Records to a New Trail File
- Closing the Current File and Opening the Next One in the Trail
- · Keeping a Log of Your Session
- Seeing the Current Logdump Environment
- Getting Online Command Help
- To Exit Logdump

# Finding the Next Good Record Header

To find the next good record header, enter the following command:

Logdump 8> SCANFORHEADER

Alternatively, you can simply enter SFH.

# Finding the Beginning, Middle, and End of a Transaction

To find the beginning, middle, and end of a transaction, complete the following steps:

1. Show headers and detail.

```
Logdump 9> GHDR ON
Logdump 10> DETAIL ON
```

2. Go to the next record.

Logdump 11> N

3. View the TransInd field in the record header. The following table explains where the record is in relation to the transaction.

Transactio	on Indi	cator	Description
TransInd	: .	(x00)	First statement in transaction
TransInd	: .	(x01)	Statement in middle of transaction
TransInd	: .	(x02)	Last statement in transaction
TransInd	: .	(x03)	Sole statement in transaction



4. Move through subsequent records by pressing N, and refer to the TransInd field to determine where each one is within the transaction. When TransInd is either x02 or x03, the TransInd of the next record should be x00, starting a new transaction.

# Scanning for the End of a Transaction

To scan for the end of a transaction, enter the following command:

```
Logdump 20> SCANFORENDTRANS
```

Alternatively, you can simply enter SFET.

The record shown will be the first one in the next transaction. To confirm, the TransInd field should be x00.

# Going to a Specific RBA in the File

To go to a specific RBA in the file, you can do either of the following:

• To go to an RBA anywhere in the file:

```
Logdump 35> POS rba
Logdump 36> N
```

This displays the record located at that RBA.

To go to the first record in the file:

```
Logdump 37> POS FIRST
```

Alternatively, you can enter the following command:

```
Logdump 37> POS 0
```

## Filtering Based on a Table or Data File Name

To filter out everything except records containing a specific NonStop data file name, enter the following command:

```
Logdump 60> FILTER INCLUDE FILENAME $volume.subvolume.file
```

To filter out everything except records containing a specific table name:

On a NonStop system:

```
Logdump 60> FILTER INCLUDE ANSINAME catalog.schema.table
```

On a Windows or UNIX system:

```
Logdump 60> FILTER INCLUDE FILENAME [container | catalog] schema.table
```

Now, when you use the  $\tt N$  command, you will only see records that satisfy this filter. Conversely, to filter out records containing a specific table or file name, but show everything else, use the <code>EXCLUDE</code> option instead of <code>INCLUDE</code>.

## Removing the Current Filter Criteria

To remove the current filter criteria, enter the following command:



Logdump 62> FILTER CLEAR

# Filtering on Multiple Conditions

To filter on multiple conditions, enter one of the following commands:

- Logdump 60> FILTER INCLUDE FILENAME \$volume.subvolume...file..; FILTER RECTYPE record\_type; FILTER MATCH ALL
- Logdump 60> FILTER INCLUDE ANSINAME catalog.schema.table; FILTER RECTYPE record\_type; FILTER MATCH ALL
- Logdump 65> FILTER INCLUDE FILENAME schema.table; FILTER RECTYPE record\_type; FILTER MATCH ALL

Use MATCH ANY OF MATCH ALL depending on whether you want the search to match any or all of the filter conditions, respectively, when multiple conditions are specified. The preceding example filters on a name and record type, typically an operation type such as INSERT.

### Count the Records in a Trail File

The following command shows a count summary followed by counts for each table or data file:

Logdump 67> COUNT

# Saving Records to a New Trail File

To save a subset of records, enter the following command:

Logdump 68> SAVE file n RECORDS

# Closing the Current File and Opening the Next One in the Trail

To close the current file and open the next one in the trail, enter the following command:

Logdump 69> NEXTTRAIL

# Keeping a Log of Your Session

To start logging, enter the following command:

Logdump 70 > LOG TO filename.txt

To write text to the log:

Logdump 71> WRITELOG "text"

To stop logging:

Logdump 72> LOG STOP

# Seeing the Current Logdump Environment

To see the current Logdump environment, enter the following command:



```
Logdump 73> ENV
```

This shows which features are enabled, such as filtering and header views, and it shows environment information such as the current trail and position.

# **Getting Online Command Help**

To get online command help, enter the following command:

```
Logdump 74> HELP
```

# To Exit Logdump

To exit Logdump, enter either of the following commands:

- Logdump 100> EXIT
- Logdump 100> QUIT

# **Evaluating Transaction Size**

Use Logdump's TRANSHIST command in conjunction with other Logdump commands to determine whether or not your applications generate large transactions and to identify their relative size. TRANSHIST causes Logdump to track the size of transactions contained in a trail file or extract file in an internal history table. The transactions are ranked in descending order of size, in bytes. When the history table is full, the smallest transaction is removed to allow a larger transaction to be added to the list.

To use statistics generated by  ${\tt TRANSHIST}$ , issue the following series of commands in Logdump:

1. Use TRANSHIST to set the size of the history table that tracks transaction size. The maximum size is 200 bytes. A value of 0 turns off the tracking.

```
TRANSHIST n
```

2. Use either the TRANSRECLIMIT or TRANSBYTELIMIT command to set a lower boundary for what is considered a normal sized transaction. These commands prevent normal-sized transactions from being tracked. Eliminating normal-sized transactions reduces the amount of data that must be reviewed.

```
{TRANSBYTELIMIT n bytes | TRANSRECLIMIT n records}
```

3. Use Logdump's COUNT command to display the statistics on transaction size, which appear at the end of the output and look like the following excerpt:

```
Transactions with at least 100 records or 100000 bytes

2011/02/01 09:31:24.000.000 00:00:00.000, Seq 0, RBA 13101

Bytes/Trans .... 1168167

Records/Trans .... 1

2011/02/01 09:31:35.000.000 00:00:11.000, Seq 0, RBA 1205292

Bytes/Trans .... 1168167

Records/Trans .... 1001

Files/Trans .... 1001

Files/Trans .... 1
```

Logdump scans the file(s) and reports the information.



4. Use Logdump's POSITION RBA command to go to each RBA listed in the COUNT output to find out the name of the table that generated the transaction. You can group these tables into their own processing group so that they do not affect processing of other tables that generate normal sized transactions.

# **Maintaining Command History**

On Windows and UNIX systems, command history is stored in a file named logdump.hst. On NonStop systems, command history is stored in a file named logduhst. The file is created in the home location of the user who first started Logdump.

When Logdump starts up, it looks for the history file in one of the following locations, depending on the platform:

- The USERPROFILE environment variable.
- The \$HOME environment variable.
- The default \$vo1.subvo1.

If the file exists, Logdump loads the command history into a buffer. The command history buffer holds 400 commands. Upon termination of the Logdump session, the session's history is appended to the file.

# Viewing Logdump Command Information and Syntax

To learn more about Logdump commands, see the alphabetical reference documentation in Logdump Commands.

# Viewing the First Record

The steps in this section explain how to set up the Logdump environment and start viewing records.

- Running Logdump
- Setting Up the View
- Opening a Trail File

# **Running Logdump**

Run the logdump program from the Oracle GoldenGate installation location. Logdump command lines are numbered so that you can use edit and history commands.

# Setting Up the View

The following commands set up a Logdump environment that shows the information most commonly used when analyzing Oracle GoldenGate trail records.

1. To view the record header with the data:

Logdump 1> GHDR ON

The record header contains information about the transaction.



2. To add column information:

```
Logdump 2> DETAIL ON
```

Column information includes the number and length in hex and ASCII.

3. To add hex and ASCII data values to the column information:

```
Logdump 3> DETAIL DATA
```

To view user tokens:

```
Logdump 4> USERTOKEN ON
```

User tokens are custom user-defined information that is specified in a TABLE or FILE mapping statement and stored in the trail file for specific purposes.

**5.** To view automatically generated tokens:

```
Logdump 4> GGSTOKEN ON
```

Oracle GoldenGate automatically generated tokes include the transaction ID (XID), the row id for DML operations, the fetching status (if applicable), and tag value.

6. To control how much record data is displayed:

```
Logdump 5> RECLEN length
```

# Opening a Trail File

To open a trail file, complete the following steps:

1. Open a file with the following command:

```
Logdump 6> OPEN file_name
```

#### Where:

file\_name is either the relative name or fully qualified name of the file, including the file sequence number. For example:

```
open /home/ggs/dirdat/jd000000
open $data01.glogggl.aa000000
```

**2.** To go to the first record and then move through records in sequence:

```
Logdump 7> NEXT
```

Alternatively, you can simply enter N.



Figure 1-1 Logdump Record as Seen on a Windows System

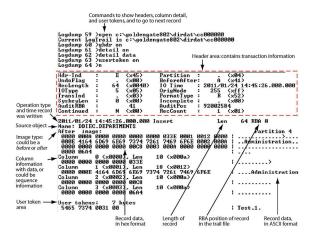
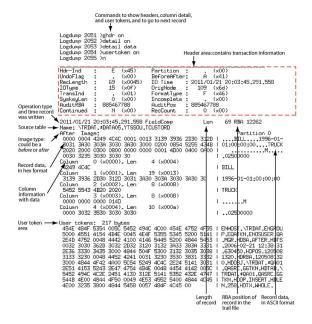


Figure 1-2 Trail Record as Seen on NonStop





# **Logdump Commands**

Here you see an alphabetical reference for syntax and usage of the Logdump utility commands.

For Logdump usage instructions, see Using the Logdump Utility.

- Logdump Command Summary
- ARGETNONDATACHANGES | ARSTOPNONDATACHANGES
- ASCIIDATA | EBCDICDATA
- ASCIIDUMP | EBCDICDUMP
- ASCIIHEADER | EBCDICHEADER
- BEGIN
- BULKIOSTATS
- CALCTLFKEY
- CD
- COMPUTETIMESTAMP
- COUNT
- CTIME
- DATAFILE
- DEBUG
- DECRYPT
- DETAIL
- DUMP
- ENCRYPT
- ENV
- ESBLOCK
- EXIT
- FC
- FILEHEADER
- FILES
- FILTER
- FLOAT
- GGSAUDITREAD
- GGSTOKEN
- GGSTOKEN



- GHDR
- HASHCLEAR
- HASHSTATS
- HEADERTOKEN
- HELP
- HISTORY
- INTERPRETINTERVAL
- INTERPRETTIMESTAMP
- LOG
- Metadata ddlformat
- Metadata defgenformat
- Metadata detail
- Metadata sqlformat
- NEXT
- NEXTTRAIL
- NOTIFY
- OBEY
- OPEN
- POSITION
- RECLEN
- SAVE
- SCANFORENDTRANS
- SCANFORHEADER
- SCANFORMETADATA
- SCANFORRBA
- SCANFORTIME
- SCANFORTYPE
- SCANSCROLLING
- SHOW
- SKIP
- TIME
- TIMEOFFSET
- TMFBEFOREIMAGE
- TMFBEFOREIMAGE
- TMFGETRECADDR | NOTMFGETRECADDR
- TMFIGNORERECCOUNT
- TRAILFORMAT



- TRANSBYTELIMIT
- TRANSHIST
- TRANSRECLIMIT
- USERTOKEN
- VOLUME
- WRITELOG
- X

# **Logdump Command Summary**

The following are category summaries of the Logdump commands.

Table 2-1 Working with Files

Commands	Description
CD	Sets the default directory, volume or subvolume.
DATAFILE	Opens an Enscribe file from within Logdump.
GGSAUDITREAD	Reads the TMF audit trail.
LOG	Writes a session log.
NEXTTRAIL	Closes the current file and opens the next file in the trail sequence.
OPEN	Opens a trail file or extract file.
POSITION	Sets the read position in the file.
SAVE	Writes record data to another file.
WRITELOG	Writes text to a session log.
VOLUME	Sets the default directory, volume or subvolume.

**Table 2-2 Viewing Information** 

Command	Description
BULKIOSTATS	Displays bulk I/O statistics.
COUNT	Displays record count information.
FILES	Displays file names in the current directory or subvolume.
ENV	Displays current Logdump settings.
FILEHEADER	Displays file header information.
HASHCLEAR	Clears the memory allocated to hash statistics generated when HASHSTATS is enabled.
HASHSTATS	Enables or disables the display of statistics about file name when a COUNT DETAIL command is issued.
NOTIFY	Displays the number of records scanned, the trail position, and the record timestamp at specified intervals when using COUNT and records are being suppressed from display through filtering options.



Table 2-2 (Cont.) Viewing Information

Command	Description
SHOW	Displays internal information such as the current Logdump environment, a list of Oracle GoldenGate record types, and current filter settings.
TIME	Displays the current time in local and GMT formats.

Table 2-3 Selecting Data and Records

Command	Description
BEGIN	Searches through a TMF or Oracle GoldenGate trail to locate a record at or near the specified time.
ARGETNONDATACHANGES   ARSTOPNONDATACHANGES	Includes or excludes records that did not result in a change to the database.
DUMP	Displays the specified number of bytes of data from the current position in the file.
FILTER	Filters the display of records.
NEXT	Displays the next record(s) in the file.
SCANFORENDTRANS	Finds a record that is the last record of, or the only record in, a transaction, and then displays the first record of the next transaction.
SCANFORHEADER	Finds the start of the next record header.
SCANFORMETADATA	Finds a specific metadata record.
SCANFORRBA	Finds a specific relative byte address.
SCANFORTIME	Finds the next record with a specific timestamp.
SCANFORTYPE	Finds the next record of a specific type.
SKIP	Skips a specified number of records.
TMFBEFOREIMAGE	Sets the TMFARLIB to fetch the before image of a record and display it with the after image.

**Table 2-4 Caking Conversions** 

Command	Description
CALCTLFKEY	Calculates a unique key for TLF/PTLF records in ACI's BASE24 application.
COMPUTETIMESTAMP	Converts a datetime string to a Julian timestamp.
CTIME	Converts a C timestamp to an ASCII timestamp.
DECRYPT	Decrypts data before displaying it in Logdump.
ENCRYPT	Encrypts file data.
ESBLOCK	Displays NonStop entry-sequenced syskeys as a block number and record number.
FLOAT	Displays a number or hex string as a hex representation and a floating point number.



Table 2-4 (Cont.) Caking Conversions

Command	Description
INTERPRETINTERVAL	Displays a 64-bit Julian interval as dd-hh:mm:ss:ms:us.
INTERPRETTIMESTAMP	Displays a 64-bit Julian timestamp in ASCII format.

 Table 2-5
 Controlling the Logdump Environment

Command	Description
ASCIIDATA   EBCDICDATA	Controls whether data is displayed in ASCII or EBCDIC format on an IBM mainframe.
ASCIIDUMP   EBCDICDUMP	Sets the character set on an IBM mainframe.
ASCIIHEADER   EBCDICHEADER	Controls whether the table name is displayed in ASCII or EBCDIC format on an IBM mainframe.
DETAIL	Controls the display of detailed record information.
GGSTOKEN	Controls the display of Oracle GoldenGate token data.
GGSTOKEN	Controls the display of automatically generated token data.
GHDR	Controls the display of header information.
HEADERTOKEN	Controls the display of header token indicators.
Metadata ddlformat	Displays the TDR columns in Nonstop DDL format.
Metadata defgenformat	Displays the columns in a TDR in the format of a GG def from a definition file.
Metadata detail	Displays tokens and values that make up a metadata record.
Metadata sqlformat	Displays the columns in a TDR in the format of a SQL table create.
RECLEN	Sets the maximum data output length.
SCANSCROLLING	Controls whether a count notification displays on one line or multiple lines.
TIMEOFFSET	Sets the time offset from GMT.
TMFBEFOREIMAGE	Controls whether or not the before image is displayed for update operations from TMF audit.
TMFGETRECADDR   NOTMFGETRECADDR	Controls Logdump's ability to call the ARGETRECADDR() function of TMFARLIB.
TMFIGNORERECCOUNT	Sets the number of records that the TMFARLIB can ignore before returning a CURRENTPOSITION record.
TRAILFORMAT	Sets the trail format to the old version (pre-Oracle GoldenGate 6.0) or the new version.
TRANSBYTELIMIT	Sets a byte-count threshold for what is defined as a normal-sized transaction.
TRANSHIST	Sets the size of the transaction history table that is used for tracking transaction size.
TRANSRECLIMIT	Sets a record-count threshold for what is defined as a normal-sized transaction.



Table 2-5 (Cont.) Controlling the Logdump Environment

Command	Description
USERTOKEN	Controls the display of user token data.

Table 2-6 Miscellaneous Commands

Command	Description
DEBUG	Turns on Logdump debugging.
EXIT	Exits Logdump.
FC	Edits a previous command.
HELP	Shows syntax for Logdump commands.
HISTORY	Lists previously issued commands.
OBEY	Executes a series of commands stored in a file.
X	Executes a program from within Logdump.

# ARGETNONDATACHANGES | ARSTOPNONDATACHANGES

Use ARGETNONDATACHANGES and ARSTOPNONDATACHANGES when reading TMF trails to direct TMFARLIB to include or exclude records that did not result in a change to the database.

#### **Default**

ARGETNONDATACHANGES

#### **Syntax**

ARGETNONDATACHANGES | ARSTOPNONDATACHANGES

#### ARGETNONDATACHANGES

Includes non-change records.

#### ARSTOPNONDATACHANGES

Suppresses non-change records.

# ASCIIDATA | EBCDICDATA

Use ASCIIDATA or EBCDICDATA to control whether record data is displayed in ASCII or EBCDIC format on an IBM mainframe. You may need to use the ASCIIDUMP command to set the character set first.

#### Default

ASCIIDATA ON (same as EBCDICDATA OFF)



#### **Syntax**

ASCIIDATA {ON | OFF} | EBCDICDATA {ON | OFF}

# ASCIIDUMP | EBCDICDUMP

Use  ${\tt ASCIIDUMP}$  or  ${\tt EBCDICDUMP}$  to set the character set for the output of the  ${\tt DUMP}$  command on an IBM mainframe. The hex part of the dump display is not affected by this command.

#### **Default**

ASCIIDUMP ON (same as EBCDICDUMP OFF)

#### **Syntax**

ASCIIDUMP {ON | OFF} | EBCDICDUMP {ON | OFF}

# ASCIIHEADER | EBCDICHEADER

Use ASCIIHEADER or EBCDICHEADER to control whether or not the table name in the record header is in ASCII or EBCDIC format on an IBM mainframe. You may need to use the ASCIIDUMP command to set the character set first.

#### **Default**

None.

#### **Syntax**

ASCIIHEADER {ON | OFF} | EBCDICHEADER {ON | OFF}

## **BEGIN**

Use BEGIN to do a binary search through a TMF or Oracle GoldenGate trail to locate a record at or near the specified time.

#### Default

None

#### **Syntax**

BEGIN timestamp

#### timestamp

The timestamp for which to search.

## **BULKIOSTATS**

Use BULKIOSTATS to display statistics for bulk I/O records, including the number of physical and logical reads and current and average read times.



**Default** 

None

**Syntax** 

BULKIOSTATS

# **CALCTLFKEY**

Use CALCTLFKEY to work around the <code>@GETENV</code> ("TLFKEY", SYSKEY " $unique\_key$ )" function when it generates duplicate keys. The <code>TLFKEY</code> option associates a unique key with <code>TLF/PTLF</code> records in ACI's BASE24 application. CALCTLFKEY performs the calculation and displays the value for each record.

Without an argument, CALCTLFKEY displays whether this feature is enabled or disabled.

#### **Default**

OFF

#### **Syntax**

CALCTLFKEY {ON | OFF}

## CD

Use  ${\tt CD}$  to set the default directory, volume, or subvolume. An alias for this command is  ${\tt VOLUME}.$ 

**Default** 

None

**Syntax** 

CD {directory | volume | subvolume}

# **COMPUTETIMESTAMP**

Use COMPUTETIMESTAMP to convert a datetime string to Julian format.

Default

None

**Syntax** 

 ${\tt COMPUTETIMESTAMP}\ string$ 

string

A datetime string in the format of:

[[yy]yy-mm-dd] [hh[:mm][:ss]]



#### **Example**

COMPUTETIMESTAMP 2005-01-01 12:00:00

This example returns the following:

2005-01-01 12:00:00 is JulianTimestamp 211971340800000000

## COUNT

Use COUNT to produce a record count summary and other information related to the amount of data in the file. The basic output, without options, shows the following:

- The RBA where the count began
- The total data bytes and average bytes per record
- Information about the operation types
- Information about the transactions

When the DETAIL command is issued prior to issuing COUNT, the information includes a count for each table or data file. COUNT options allow you to show table detail without using the DETAIL command first, set a start and end time for the count, filter the count for a table, data file, trail file, or extract file, and specify a time interval for counts. You can use the DETAIL OFF command to turn off the collection of this detailed information.

For arguments that take a time string, use the following format:

```
[[yy]yy-mm-dd] [hh[:mm][:ss]]
```

#### **Default**

Produce a count summary of all records.

#### **Syntax**

```
COUNT
[, DETAIL]
[, END[TIME] time_string]
[, INT[ERVAL] minutes]
[, LOG] wildcard]
[, START[TIME] time_string]
```

#### DETAIL

Adds a count for each table or data file that was processed by Extract to the summary count. The information includes the total and average number of data bytes and information about the operations that were performed. This data can also be obtained by using the DETAIL command before issuing COUNT.

#### END[TIME] time\_string

Stops the count with the last record written at the specified time.

#### INT[ERVAL] minutes

Displays statistics for total bytes, average bytes, and number of each type of operation that occurred within a specified interval of time, in minutes. Then it displays the totals for those statistics.



#### LOG wildcard

Produces a count for multiple trail or extract files specified with a wildcard.

#### START[TIME] time\_string

Begins the count with the first record written at the specified time.

#### **Examples**

#### **Example 1**

COUNT START 2011-01-11 12:00:00 , END 2011-01-12 12:00:00

#### **Example 2**

COUNT INTERVAL 4

This displays something similar to the following. Individual table or data file count has been truncated due to space constraints.

On Windows or UNIX (file names will differ):

```
Interval from 2011/02/28 11:30:00.000 to 2011/02/28 11:34:00.000,
Total Data Bytes
                             120
                             40
 Avg Bytes/Record
Delete
                              3
Before Images
                              3
LogTrail /home/ggs/dirdat/rt000000 has 304 records
Total Data Bytes 12120
Avg Bytes/Record
                            39
                              3
Delete
Insert
                            300
FieldComp
                             1
Before Images
                              3
                             301
After Images
Average of 303 Transactions
                            88
   Bytes/Trans .....
   Records/Trans ...
                             1
                            1
   Files/Trans .....
                                               Partition 4
HR.JOBS
                      5911
Total Data Bytes
 Avg Bytes/Record
                             68
Insert
                              86
After Images
HR.REGIONS
                                               Partition 4
Total Data Bytes
                            512
 Avg Bytes/Record
                             32
Insert
                             16
After Images
                             16
```

#### On NonStop:

LogTrail \GGQA.\$QA01.QADAT.LS000000 has 29656 records
Total Data Bytes 3561022
Avg Bytes/Record 120
Delete 50
Insert 21221
Update 8379
GSSPurgedata 6



Before Images 50 After Images 29606 Average of 3621 Transactions Bytes/Trans .... 1376 Records/Trans ... 8  ${\tt Files/Trans}~\dots.$ 1 \GGQA.\$QA01.QAESRC.ACCTS Partition 0 286414 Total Data Bytes Avg Bytes/Record 142 Delete 17 Insert 2000 Before Images 17 2000 After Images Partition 0 \GGQA.\$QA01.QAESRC.ACCTN 281700 Total Data Bytes Avg Bytes/Record 100 Delete 17 Insert 2000 Update 800 Before Images 17 After Images 2800

#### Example 3

COUNT LOG ls\*

This produces a count for all files whose names begin with LS. (Individual table or data file count has been truncated due to space constraints.)

On NonStop:

Current LogTrail is \GGQA.\$QA01.QADAT.LS000000 Bad record found at RBA 5287, format 5.50) 2A56 623F \*Vb? LogTrail \GGQA.\$QA01.QADAT.LS000000 has 33 records LogTrail \GGQA.\$QA01.QADAT.LS000000 closed Current LogTrail is \GGQA.\$QA01.QADAT.LS000001 LogTrail \GGQA.\$QA01.QADAT.LS000001 has 99 records LogTrail \GGQA.\$QA01.QADAT.LS000001 closed Current LogTrail is \GGQA.\$QA01.QADAT.LS000002  $\label{logTrail \GGQA.$QA01.QADAT.LS000002 has 0 records} % \end{substitute} % \label{logTrail \GGQA.$QA01.QADAT.LS000002 has 0 records} % \end{substitute} % \end{$ LogTrail \GGQA.\$QA01.QADAT.LS000002 closed Current LogTrail is \GGQA.\$QA01.QADAT.LS000003 LogTrail \GGQA.\$QA01.QADAT.LS000003 has 0 records LogTrail \GGQA.\$QA01.QADAT.LS000003 closed LogTrail \GGQA.\$QA01.QADAT.LS\* has 132 records 9468 Total Data Bytes 71 Avg Bytes/Record Insert 132 After Images 132 Average of 4 Transactions 3951 Bytes/Trans .... Records/Trans ... 33 Files/Trans ..... 3



Partition 4

QAHRIS.UUBS		Partition '
Total Data Bytes	5220	
Avg Bytes/Record	68	
Insert	76	
After Images	76	
	70	
On Windows or UN	IX (file names will differ):	
Bad record found at 2A56 623F  LogTrail c:\goldeng  LogTrail c:\goldeng  Current LogTrail is  LogTrail c:\goldeng  LogTrail c:\goldeng  LogTrail c:\goldeng	c:\goldengate802\dirdat\ls00 RBA 5287, format 5.50)  ate802\dirdat\ls000000 has 33 ate802\dirdat\ls000000 closed c:\goldengate802\dirdat\ls00 ate802\dirdat\ls000001 has 99 ate802\dirdat\ls000001 closed c:\goldengate802\dirdat\ls00 ate802\dirdat\ls000002 has 0: ate802\dirdat\ls000002 closed c:\goldengate802\dirdat\ls00 ate802\dirdat\ls000003 has 0: ate802\dirdat\ls000003 closed ate802\dirdat\ls000003 closed ate802\dirdat\ls000003 closed	*Vb? records 0001 records 0002 records
LogTrail c:\goldeng	ate802\dirdat\ls* has 132 rec	ords
Total Data Bytes Avg Bytes/Record Insert After Images	9468 71 132 132	
Average of 4 Transa	ctions	
Bytes/Trans Records/Trans Files/Trans	3951 33	
HR.JOBS	F220	Partition 4
Total Data Bytes Avg Bytes/Record	5220 68	
Insert	76	
After Images	76	
Example 4		
COUNT DETAIL		
	ething similar to the following: IX (file names will differ):	
LogTrail /home/ggs/ Total Data Bytes Avg Bytes/Record Delete Insert FieldComp Before Images After Images Average of 303 Tran Bytes/Trans Records/Trans	88	ds

QAHRTS.JOBS



Files/Trans ..... GGS.TCUSTMER Partition 4 Total Data Bytes 12120 Avg Bytes/Record 39 Delete 3 300 Insert FieldComp 1 3 Before Images After Images 301 0, Chain Files 1, Coll

#### On NonStop:

LogTrail \GGQA.\$QA01.QADAT.LS000000 has 29656 records Total Data Bytes 3561022 Avg Bytes/Record 120 50 Delete 21221 Insert Update 8379 GSSPurgedata 6 Before Images 50 After Images 29606 Average of 3621 Transactions Bytes/Trans .... 1376 Records/Trans ... 8 Files/Trans ..... 1 Partition 0 \GGQA.\$QA01.QAESRC.ACCTS Total Data Bytes 286414 Avg Bytes/Record 142 Delete 17 Insert 2000 Before Images 17 After Images 2000

# **CTIME**

Use CTIME to convert a C timestamp to an ASCII timestamp.

#### Default

None

#### **Syntax**

CTIME C\_timestamp\_string

#### **Example**

CTIME 1109823330

#### This returns the following:

timestamp = 1109823330 (0x42268f62) localtime = Wed Mar 2 20:15:30 2005 gmtime = Thu Mar 3 04:15:30 2005



# **DATAFILE**

Use DATAFILE to open an Enscribe data file from within Logdump



You can use the  ${\tt WRITEREC}$  command to write a Oracle GoldenGate record to the Enscribe file.

#### **Default**

None

#### **Syntax**

DATAFILE file

#### **Example**

DATAFILE \SYSA.\$DATA04.SALES.CUSTMER

## **DEBUG**

Use  $\tt DEBUG$  to run debugging for Logdump. Use this command with the guidance of a Oracle GoldenGate support analyst.

#### Default

Disabled

#### **Syntax**

DEBUG

# **DECRYPT**

Use  $\tt DECRYPT$  to decrypt data that was encrypted with Oracle GoldenGate trail encryption, so that it can be viewed with Logdump.

#### **Default**

OFF

#### **Syntax**

DECRYPT {OFF | ON [KEYNAME key\_name]}

#### OFF

No decryption. This is the default.



#### ON [KEYNAME key\_name]

- ON without the KEYNAME clause decrypts data that was encrypted with the ENCRYPTTRAIL parameter without options (256-key byte substitution).
- ON with the KEYNAME clause decrypts data that was encrypted with ENCRYPTTRAIL
  using an AES algorithm and a KEYNAME clause. For key\_name, supply the logical
  name of the encryption key that was used in the KEYNAME keyname clause of
  ENCRYPTTRAIL.

For more information about ENCRYPTTRAIL, see ENCRYPTTRAIL.

• ON also works to decyrpt records that were encrypted using the Oracle wallet and master key methods; similar to how the DECRYPTTRAIL parameter for Replicat or Pump behaves.

#### **Example**

DECRYPT ON

#### **Example**

DECRYPT ON KEYNAME mykey

## **DETAIL**

Use DETAIL to include additional information in the Logdump output. By default, Logdump only shows the hex and ASCII representation of the record.

Without options, DETAIL displays the status of record detail (ON or OFF). Options do the following:

- DETAIL ON displays a list of columns that includes the column ID, length, and value in hex and ASCII.
- DATA adds hex and ASCII data values to the column list.
- DETAIL OFF turns off detailed display; OFF is the default.

DETAIL can be shortened to DET.

#### Default

Display a column list

#### **Syntax**

```
DETAIL {ON | OFF | DATA}
```

#### ON

Shows detailed column information.

#### OFF

Suppresses detailed column information.

#### DATA

Adds the hex and ASCII data values to the column information.



## **DUMP**

Use DUMP to display a HEX/ASCII or HEX/EBCDIC dump of the specified number of bytes from the open trail or extract file, starting at the current RBA.

 ${\tt DUMP}$  does not work when reading TMF audit trails, because I/O to the TMF trails is done by TMFARLIB.

#### Default

256

#### **Syntax**

DUMP bytes

#### bytes

The number of bytes forward to display. Valid values are from 1 through 28672.

#### **Example**

DUMP 300

This produces something similar to the following example. Note: This example shows only a few lines of the record.

## **ENCRYPT**

Use ENCRYPT to encrypt text supplied as an argument. The encryption method is 256-key byte substitution. The results are printed to screen.

#### **Default**

None

#### **Syntax**

ENCRYPT text

#### **Example**

ENCRYPT 123456789

#### This produces the following:

```
Before 3132 3334 3536 3738 39 | 123456789 After EF2E C1DC E4A7 68B4 14 | .....h..
```



### FNV

Use ENV to show current Logdump settings.

#### Default

None

#### **Syntax**

ENV

#### **Example**

The following shows typical ENV settings on Windows and on NonStop.

#### Windows (UNIX is similar except for file names):

: C:\GoldenGate 002 Current Volume

: C:\goldengate002\dirdat\jd000001 LogTrail

Trail Format : New End of File : 15861 Current Position : 0

: 2013/01/01 13:45:51.000.000

Next Position : 0
Last Modtime : 2013
Display RecLen : 140
Logtrail Filter : On Show Ghdr : On Detail : On

Trans History : 0 Transactions, Records 100, Bytes 100000
LargeBlock I/O : 0n, Blocksize 57344
Local System : Little Endian
Logtrail Data : Big Endian/ASCII
Logtrail Headers : ASCII

Dump : ASCII : LOCAL Timeoffset

Scan Notify Interval : 10000 records, Scrolling On

#### NonStop:

Current Volume : \$QU01.QAGGS

LogTrail : \TRGGS.\$QA01.QADAT.LS000000

Trail Format : Ne
End of File : 58
Current Position : 0 : New : 5831722 : 0

: 2013/01/01 12:47:11.686.219

Next Position
Last Modtime
Display RecLen
Logtrail Filter : 140 : On

Detail : On
Trans History : 0 Transactions, Records 100, Bytes 100000
LargeBlock I/O : On, Blocksize 57344
Local System : Big Endian
Logtrail Data : Big Endian/ASCII
Logtrail Headers : ASCII

: ASCII Dump Timeoffset : LOCAL

Scan Notify Interval : 10000 records, Scrolling On



## **ESBLOCK**

Use ESBLOCK for debugging on a NonStop system. It displays an entry-sequenced syskey as a block number and record number.

#### **Default**

None

#### **Syntax**

ESBLOCK entry\_sequenced\_RBA

#### **Example**

ESBLOCK 4294967302

This produces the following. It shows that the syskey value 4294967302 evaluates to block 1, record 6.

Interpreted	4294967302	0x0000001000000060	1.6
64-bit Syskey	4294967302	0x0000001000000060	
ES64_TO_RBA64	4102	0x00000000000010060	
RBA64 TO ES64	4294967302	0×00000001000000060	

# **EXIT**

Use EXIT to exit Logdump and terminate the process. An alias for EXIT is QUIT.

#### Default

None

#### **Syntax**

EXIT

## FC

Use FC to edit a previously issued Logdump command and then execute it again. Previous commands are stored in the memory buffer and can be displayed by issuing the HISTORY command (see "HISTORY"). Issuing FC without arguments executes the most recently used command. By using options, you can retrieve a specific command by specifying its line number or a text substring.

#### **Using the Editor**

The FC command displays the command and then opens an editor with a prompt containing a blank line starting with two dots. To edit a command, use the space bar to position the cursor beneath the character where you want the change to begin, and then enter one of the following arguments. Arguments are not case-sensitive and can be combined.



**Table 2-7 FC Command Options** 

Argument	Description	
i text	Inserts text. For example:	
	Logdump 24> fc 9	
	> count	
	i detail	
	count detail	
r text	Replaces text. For example:	
	Logdump 25> fc 10	
	> timeoffset local	
	rgmt	
	timeoffset gmt	
d	Deletes a character. To delete multiple characters, enter a d for each one. For example:	
	Logdump 26> fc 11	
	> scanforrrbba	
	dd	
	scanforrba	
replacement_text	Replaces the displayed command with the text that you enter on a one-for-one basis. For example:	
	Logdump 26> fc 10	
	> scanforrba 107	
	127	
	scanforrba 127	

To execute the command, press <code>Enter</code> twice, once to exit the editor and once to issue the command. To cancel an edit, type a forward slash (/) twice.

#### **Default**

Execute the most recent command again

#### **Syntax**

FC  $[n \mid -n \mid string]$ 

#### n

Returns the specified command line. Each Logdump command line is sequenced, beginning with 1 at the start of the session.

#### -r

Returns the command that was issued n lines before the current line.

#### string

Returns the last command that starts with the specified text string.



#### **Examples**

**Example 1** 

FC 9

**Example 2** 

FC -3

Example 3

FC sca

## **FILEHEADER**

Use FILEHEADER to display the contents of the header of the currently open trail file.

The file header is stored as a record at the beginning of a trail file preceding the data records. The information that is stored in the trail header provides enough information about the records to enable an Oracle GoldenGate process to determine whether the records are in a format that the current version of Oracle GoldenGate supports.

The trail header fields are stored as tokens, where the token format remains the same across all versions of Oracle GoldenGate. If a version of Oracle GoldenGate does not support any given token, that token is ignored. Deprecated tokens are assigned a default value to preserve compatibility with previous versions of Oracle GoldenGate.

The current fileheader command applies globally to the Logdump session, until a different fileheader command is issued.

#### To View the File Header

To view the file header:

1. Position to the beginning of the trail file with the following Logdump command.

pos 0

2. Issue the following Logdump command to see the first record of the file, the one that contains the file header.

next

#### To Retrieve the File Header Tokens

To retrieve file header values as input parameters, use the <code>@GETENV</code> function with the <code>GGFILEHEADER</code> option. See <code>GETENV</code>.



The Logdump command Headertoken also shows trail tokens, but it shows a brief summary of each one. FILEHEADER shows actual token values.



Table 2-8 Oracle GoldenGate File Header Tokens

Token/subtoken	Data Type	Description
Signature	UINT32	Internal use.
Compatibility	UINT16	The version of the trail. The compatibility level of the Oracle GoldenGate software must be greater than, or equal to, that of the trail file for a process to be able to read the trail file.
		Current valid values are 0 to 5.
CharSet	INT32	The global character set of the trail file, as defined in the parameter file or the default value. For example:
		WCP1252-1
		-3 indicates the system default.
CreationTime	Timestamp	The time that the trail file was created, in local GMT Julian time, INT 64.
URI	String	The universal resource identifier of the process that created the trail file, in the format of:
		host_name:dir:[:dir][:dir_n]group_name
		Where:
		<ul> <li>host_name is the name of the server that hosts the process</li> </ul>
		• dir is a subdirectory of the Oracle GoldenGate installation path.
		• group_name is the name of the process group that is linked with the process.
		Example:
		sys1:home:oracle:v9.5:extora
		Shows where the trail was processed and by which process. This includes a history of previous runs.
URIHistory	String array	List of the URIs of processes that wrote to the trail file before the current process.
	1	<ul> <li>For a primary Extract, this field is empty.</li> </ul>
		<ul> <li>For a data pump, this field is URIHistory + URI of the input trail file.</li> </ul>
FileName	String	Name of the trail file. Can be absolute or relative path, with forward or backward slash depending on the file system.
MultiPart	Boolean	True/False flag indicating whether the trail file is a single file (such as one created for a batch run) or a sequentially numbered file that is part of a trail for online, continuous processing. If False, the SeqNum subtoken is not valid.
SeqNum	UINT32	The sequence number of the file in the trail, if MultiPart is true. Invalid if multipart is false. The value is the numerical sequence number, without any zero padding.
FileSize	UINT64	Size of the trail file. Value is NULL until the trail file is completed. Non-NULL values are in bytes.
FirstRecordCSN	CSN	The commit sequence number (CSN) of the first record in the trail file.Value is NULL until the trail file is completed.



Table 2-8 (Cont.) Oracle GoldenGate File Header Tokens

Token/subtoken	Data Type	Description	
LastRecordCSN	CSN	The commit sequence number (CSN) of the last record in the trail file.Value is NULL until the trail file is completed.	
FirstRecordIOTime	Timestamp	The time that the first record in the trail file was written. Value is NULI until the trail file is completed.	
LastRecordIOTime	Timestamp	The time that the last record in the trail file was written. Value is NULL until the trail file is completed.	
SysName	String	The name of the operating system, for example:	
		SunOS	
		Linux	
		Microsoft Windows	
NodeName	String	The name of the machine, for example sys1.	
Release	String	The release level of the operating system, for example:	
		5.10	
		2.6.9-11.ELsmp	
Version	String	The version of the operating system, for example:	
		s10_69	
		#1 SMP Fri Feb 24 16:56:28 EST 2006	
Hardware	String	The hardware type of the processor, for example:	
		sun4u	
		x86_64	
		x86	
Vendor	UINT16	The name of the database vendor. Some (but not all) examples are:	
		DB2 ZOS	
		CTREE MSSQL	
		MYSQL	
		ORACLE	
		SQLMX SYBASE	
		TERADATA	
		TIMESTEN	
		NONSTOP	
		ENSCRIBE	
Name	String	The name of the database, for example findb.	
Instance	String	The name of the database instance, if applicable to the database type, for example ORA1022A.	
Charset	INT32	The character set of the database. Currently, the valid value is -1 (unknown). (For some databases, this will be empty.)	
MajorVersion	UINT16	The major version of the database.	
MinorVersion	UINT16	The minor version of the database.	
VerString	String	The maintenance (patch) level of the database.	



Table 2-8 (Cont.) Oracle GoldenGate File Header Tokens

Token/subtoken	Data Type	Description	
ClientCharset	INT32	The character set of the database client. Currently, the valid value is -1 (unknown). (For some databases, this will be empty.)	
ClientVerString	String	The maintenance (patch) level of the database client. (For some databases, this will be empty.)	
Name	String	The group name that is associated with the process.	
DataSource	UINT16	<ul> <li>The data source that was read by the process. Can be one of:         <ul> <li>DS_EXTRACT_TRAILS (source was an Oracle GoldenGate extract file, populated with change data)</li> <li>DS_LOG_TABLE (source was an Oracle GoldenGate log table, used for trigger-based extraction)</li> <li>DS_DATABASE (source was a direct select from database table written to a trail, used for SOURCEISTABLE-driven initial load)</li> <li>DS_TRAN_LOGS (source was the database transaction log)</li> <li>DS_INITIAL_DATA_LOAD (source was Extract; data taken directly from source tables)</li> <li>DS_VAM_EXTRACT (source was a vendor access module)</li> <li>DS_VAM_TWO_PHASE_COMMIT (source was a VAM trail)</li> </ul> </li> </ul>	
MajorVersion	UINT16	The major version of the process (xx).	
MinorVersion	UINT16	The minor version of the process (xx.xx).	
MaintenanceLevel	UINT16	The maintenance version of the process (xx.xx.xx).	
PatchLevel	UINT16	The patch version of the process (xx.xx.xx).	
BuildNumber	UINT16	The build number of the process.	
VerString	String	The version string of the process. For example: 11.1.1.17A not for production	
LastCompletedCSN	CSN	Internal use	
LastCompletedXids	Xid	Internal use	
LastSCN	CSN	Internal use	
LastXid	Xid	Internal use	

### Default

OFF

### **Syntax**

FILEHEADER {ON | OFF | DETAIL}

#### ON

Enables the display of the file header, showing the main header tokens.

### OFF

Disables the display of the file header.



#### DETAIL

Provides detailed information that includes the sub-tokens.

#### **Examples**

#### **Example 1**

```
FILEHEADER ON
TokenID x46 'F' Record Header Info x00 Length 587
                          Info x00 Length 303
TokenID x30 '0' TrailInfo
TokenID x31 '1' MachineInfo
                            Info x00 Length 103
                          Info x00 Length
TokenID x32 '2' DatabaseInfo
TokenID x33 '3' ProducerInfo
                            Info x00 Length
TokenID x34 '4' ContinunityInfo Info x00 Length
TokenID x5a 'Z' Record Trailer Info x00 Length 587
2011/1/18 13:39:18.951.346 FileHeader
                                        Len 587 RBA 0
Name: *FileHeader*
3000 012f 3000 0008 660d 0a71 3100 0006 0001 3200 | 0../0...f..q1.....2.
0008 0000 0016 3300 000c 02f1 7834 eac7 7f3f 3400 | .....3....x4...?4.
0037 0031 7572 693a 7465 6c6c 7572 6961 6e3a 3a68 | .7.1uri:tellurian::h
6f6d 653a 6d63 6361 7267 6172 3a67 6773 3a67 6773 | ome:mccargar:qqs:qqs
 4f72 6163 6c65 3a73 6f75 7263 6536 0000 1700 112e | Oracle:source6.....
 2f64 6972 6461 742f 6572 3030 3030 3030 3700 0005 | /dirdat/er0000007...
 0138 0000 0800 01e2 4039 0000 0c00 0000 0000 001d | .8.....@9......
GroupID x30 '0' TrailInfo
                            Info x00 Length 303
 3000 012f 3000 0008 660d 0a71 3100 0006 0001 3200 | 0../0...f..q1.....2.
 0008 0000 0016 3300 000c 02f1 7834 eac7 7f3f 3400
                                              .....3....x4...?4.
0037 0031 7572 693a 7465 6c6c 7572 6961 6e3a 3a68
                                              .7.1uri:tellurian::h
 6f6d 653a 6d63 6361 7267 6172 3a67 6773 3a67 6773
                                              ome:mccargar:ggs:ggs
 4f72 6163 6c65 3a73 6f75 7263 6536 0000 1700 112e
                                              Oracle:source6.....
 2f64 6972 6461 742f 6572 3030 3030 3030 3700 0005
                                              /dirdat/er0000007...
 0138 0000 0800 01e2 4039 0000 0c00 0000 0000 001d
                                              .8.....@9......
 a33b 0000 450a 3634 3136 3138 3936 3932 0000 0000
                                              .;..E.6416189692....
 0000 0000 0000 0000 0000 3aff 0045 0000 0000 0000
                                              ......:..:..E.....
 . . . . . . . . . . . . . . . . . . . =
 0000 0c02 f178 34eb 556a 403c ff00 0c00 0000 0000
                                             ....x4.Uj@<.....
0000 00
GroupID x31 '1' MachineInfo
                           Info x00 Length 103
 3100 0067 3000 000b 0005 4c69 6e75 7831 0000 0f00 | 1..q0....Linux1....
 0974 656c 6c75 7269 616e 3200 0014 000e 322e 362e | .tellurian2.....2.6.
392d 3131 2e45 4c73 6d70 3300 0029 0023 2331 2053 | 9-11.ELsmp3..).##1 S
 4d50 2046 7269 204d 6179 2032 3020 3138 3a32 353a | MP Fri May 2018:25:
 3330 2045 4454 2032 3030 3534 0000 0c00 0678 3836 | 30 EDT 20054.....x86
 5f36 34
                                             _64
GroupID x32 '2' DatabaseInfo
                            Info x00 Length
                                             88
 3200 0058 3000 0006 0007 3100 000e 0008 4f52 4131 | 2..x0....1....ORA1
 3032 3241 3200 000e 0008 6f72 6131 3032 3261 3300 | 022A2.....ora1022a3.
 0008 ffff ffff 3400 0006 0000 3500 0006 0000 3600
                                             .....4....5....6.
 0006 0000 3700 0008 ffff ffff 3800 0010 000a 3130 |
                                              ....7......8.....10
 2e32 2e30 2e32 2e30
                                             1 .2.0.2.0
```



```
GroupID x33 '3' ProducerInfo
                           Info x00 Length
 3300 0055 3000 000a 0004 4546 4152 3100 0006 0003 | 3..U0.....EFAR1.....
3200 0006 0000 3300 0006 0000 3400 0006 0000 3500 | 2....3....4....5.
0006 0000 3600 0006 0017 3700 0023 001d 5665 7273 | ....6.....7..#..Vers
696f 6e20 5374 2e20 416e 6472 6577 7320 4275 696c | ion St. Andrews Buil
6420 3032 33
                                           | d 023
GroupID x34 '4' ContinunityInfo Info x00 Length
                                             4
                                           4...
3400 0004
Example 2
FILEHEADER DETAIL
TokenID x46 'F' Record Header
                          Info x00 Length 587
TokenID x30 '0' TrailInfo Info x00 Length 303
TokenID x31 '1' MachineInfo
                          Info x00 Length 103
TokenID x32 '2' DatabaseInfo Info x00 Length 88
TokenID x33 '3' ProducerInfo Info x00 Length 85
TokenID x34 '4' ContinunityInfo Info x00 Length 4
TokenID x5a 'Z' Record Trailer Info x00 Length 587
2011/01/18 13:40:26.034.631 FileHeader
                                         Len 587 RBA 0
Name: *FileHeader*
3000 012f 3000 0008 660d 0a71 3100 0006 0001 3200 | 0../0...f..q1....2.
0008 0000 0016 3300 000c 02f1 7834 eac7 7f3f 3400 | .....3....x4...?4.
0037 0031 7572 693a 7465 6c6c 7572 6961 6e3a 3a68 |
                                             .7.1uri:tellurian::h
6f6d 653a 6d63 6361 7267 6172 3a67 6773 3a67 6773 | ome:mccargar:ggs:ggs
4f72 6163 6c65 3a73 6f75 7263 6536 0000 1700 112e | Oracle:source6.....
2f64 6972 6461 742f 6572 3030 3030 3030 3700 0005 | /dirdat/er0000007...
0138 0000 0800 01e2 4039 0000 0c00 0000 0000 001d | .8.....@9......
GroupID x30 '0' TrailInfo
                           Info x00 Length 303
3000 012f 3000 0008 660d 0a71 3100 0006 0001 3200 | 0../0...f..q1....2.
0008 0000 0016 3300 000c 02f1 7834 eac7 7f3f 3400 | .....3....x4...?4.
0037 0031 7572 693a 7465 6c6c 7572 6961 6e3a 3a68 | .7.1uri:tellurian::h
6f6d 653a 6d63 6361 7267 6172 3a67 6773 3a67 6773 | ome:mccargar:qqs:qqs
4f72 6163 6c65 3a73 6f75 7263 6536 0000 1700 112e | Oracle:source6.....
2f64 6972 6461 742f 6572 3030 3030 3030 3700 0005 | /dirdat/er0000007...
0138 0000 0800 01e2 4039 0000 0c00 0000 0000 001d | .8.....@9......
a33b 0000 450a 3634 3136 3138 3936 3932 0000 0000
                                             .;..E.6416189692....
0000 0000 0000 0000 0000 3aff 0045 0000 0000 0000 |
                                             .......:..E....
0000 0c02 f178 34eb 556a 403c ff00 0c00 0000 0000 |
                                             ....x4.Uj@<.....
0000 00
                                             . . .
TokenID x30 '0' Signature
                          Info x00 Length
                                             8
660d 0a71
                                            | f..q
TokenID x31 '1' Compatibility
                          Info x00 Length
                                             6
0001
                                             . .
TokenID x32 '2' Charset
                           Info x00 Length
0000 0016
                                           | ....
TokenID x33 '3' CreationTime
                            Info x00 Length
                                            12
02f1 7834 eac7 7f3f
                                           | ..x4...?
TokenID x34 '4' URI
                            Info x00 Length
                                           55
0031 7572 693a 7465 6c6c 7572 6961 6e3a 3a68 6f6d | .1uri:tellurian::hom
653a 6d63 6361 7267 6172 3a67 6773 3a67 6773 4f72 | e:mccargar:ggs:ggsOr
6163 6c65 3a73 6f75 7263 65
                                           acle:source
```



	7264 6174 2f65		/dirdat/er000000
TokenID x38 '8'	Seqno	Info x00 Length	!
TokenID x39 '9'		Info x00 Length	T. Control of the Con
TokenID x3b ';'	LastCSN	Info x00 Length	69
		0000 0000 0000 0000	.6416189692
		0000 0000 0000 0000	
0000 0000 00		- 5 - 55 - 11	j
		Info xff Length	
		0000 0000 0000 0000	
		0000 0000 0000 0000	
0000 0000 00			
		Info x00 Length	
02f1 7834 eb55	6a40	Info xff Length	x4.Uj@
0000 0000 0000		IIIIO XII Lengun	
			1
		Info x00 Length	
			1g0Linux1
			.tellurian22.6.   9-11.ELsmp3).##1 S
			MP Fri May 20 18:25:
			30 EDT 20054x86
5f36 34			_64
TokenID x30 '0'	Sysname	Info x00 Length	
0005 4c69 6e75	78		Linux
0005 4c69 6e75 TokenID x31 '1'	78 Nodename	Info x00 Length	Linux 15
0005 4c69 6e75 TokenID x31 '1' 0009 7465 6c6c	78 Nodename 7572 6961 6e	Info x00 Length	Linux 15  tellurian
0005 4c69 6e75 TokenID x31 '1' 0009 7465 6c6c TokenID x32 '2'	78 Nodename 7572 6961 6e Release	Info x00 Length	Linux 15  tellurian 20
0005 4c69 6e75 TokenID x31 '1' 0009 7465 6c6c TokenID x32 '2'	78 Nodename 7572 6961 6e Release 392d 3131 2e45	Info x00 Length Info x00 Length 4c73 6d70	Linux   15  tellurian   20  2.6.9-11.ELsmp
0005 4c69 6e75 TokenID x31 '1' 0009 7465 6c6c TokenID x32 '2' 000e 322e 362e TokenID x33 '3' 0023 2331 2053	78 Nodename 7572 6961 6e Release 392d 3131 2e45 Version 4d50 2046 7269	Info x00 Length  Info x00 Length 4c73 6d70  Info x00 Length 204d 6179 2032 3020	Linux 15  tellurian 20  2.6.9-11.ELsmp 41   .##1 SMP Fri May 20
0005 4c69 6e75 TokenID x31 '1' 0009 7465 6c6c TokenID x32 '2' 000e 322e 362e TokenID x33 '3' 0023 2331 2053 3138 3a32 353a	78 Nodename 7572 6961 6e Release 392d 3131 2e45 Version 4d50 2046 7269 3330 2045 4454	Info x00 Length  Info x00 Length  4c73 6d70  Info x00 Length  204d 6179 2032 3020  2032 3030 35	Linux 15  tellurian 20  2.6.9-11.ELsmp 41   .##1 SMP Fri May 20   18:25:30 EDT 2005
0005 4c69 6e75 TokenID x31 '1' 0009 7465 6c6c TokenID x32 '2' 000e 322e 362e TokenID x33 '3' 0023 2331 2053 3138 3a32 353a TokenID x34 '4'	78 Nodename 7572 6961 6e Release 392d 3131 2e45 Version 4d50 2046 7269 3330 2045 4454 Hardware	Info x00 Length  Info x00 Length 4c73 6d70  Info x00 Length 204d 6179 2032 3020	Linux 15  tellurian 20  2.6.9-11.ELsmp 41   .##1 SMP Fri May 20   18:25:30 EDT 2005
0005 4c69 6e75 TokenID x31 '1' 0009 7465 6c6c TokenID x32 '2' 000e 322e 362e TokenID x33 '3' 0023 2331 2053 3138 3a32 353a	78 Nodename 7572 6961 6e Release 392d 3131 2e45 Version 4d50 2046 7269 3330 2045 4454 Hardware	Info x00 Length  Info x00 Length  4c73 6d70  Info x00 Length  204d 6179 2032 3020  2032 3030 35	Linux 15  tellurian 20  2.6.9-11.ELsmp 41   .##1 SMP Fri May 20   18:25:30 EDT 2005
0005 4c69 6e75 TokenID x31 '1' 0009 7465 6c6c TokenID x32 '2' 000e 322e 362e TokenID x33 '3' 0023 2331 2053 3138 3a32 353a TokenID x34 '4' 0006 7838 365f	78 Nodename 7572 6961 6e Release 392d 3131 2e45 Version 4d50 2046 7269 3330 2045 4454 Hardware 3634	Info x00 Length  Info x00 Length  4c73 6d70  Info x00 Length  204d 6179 2032 3020  2032 3030 35	Linux 15  tellurian 20  2.6.9-11.ELsmp 41   .##1 SMP Fri May 20   18:25:30 EDT 2005 12  x86_64
0005 4c69 6e75 TokenID x31 '1' 0009 7465 6c6c TokenID x32 '2' 000e 322e 362e TokenID x33 '3' 0023 2331 2053 3138 3a32 353a TokenID x34 '4' 0006 7838 365f  GroupID x32 '2' 3200 0058 3000	78 Nodename 7572 6961 6e Release 392d 3131 2e45 Version 4d50 2046 7269 3330 2045 4454 Hardware 3634  DatabaseInfo 0006 0007 3100	Info x00 Length  Info x00 Length 4c73 6d70 Info x00 Length 204d 6179 2032 3020 2032 3030 35 Info x00 Length  Info x00 Length 000e 0008 4f52 4131	Linux 15  tellurian 20  2.6.9-11.ELsmp 41   .##1 SMP Fri May 20   18:25:30 EDT 2005 12  x86_64
0005 4c69 6e75 TokenID x31 '1' 0009 7465 6c6c TokenID x32 '2' 000e 322e 362e TokenID x33 '3' 0023 2331 2053 3138 3a32 353a TokenID x34 '4' 0006 7838 365f  GroupID x32 '2' 3200 0058 3000 3032 3241 3200	78 Nodename 7572 6961 6e Release 392d 3131 2e45 Version 4d50 2046 7269 3330 2045 4454 Hardware 3634  DatabaseInfo 0006 0007 3100 000e 0008 6f72	Info x00 Length  Info x00 Length 4c73 6d70 Info x00 Length 204d 6179 2032 3020 2032 3030 35 Info x00 Length  Info x00 Length 000e 0008 4f52 4131 6131 3032 3261 3300	Linux 15  tellurian 20  2.6.9-11.ELsmp 41   .##1 SMP Fri May 20   18:25:30 EDT 2005 12  x86_64 88   2x01ORA1   022A2ora1022a3.
0005 4c69 6e75 TokenID x31 '1' 0009 7465 6c6c TokenID x32 '2' 000e 322e 362e TokenID x33 '3' 0023 2331 2053 3138 3a32 353a TokenID x34 '4' 0006 7838 365f  GroupID x32 '2' 3200 0058 3000 3032 3241 3200 0008 fffff ffff	78 Nodename 7572 6961 6e Release 392d 3131 2e45 Version 4d50 2046 7269 3330 2045 4454 Hardware 3634  DatabaseInfo 0006 0007 3100 000e 0008 6f72 3400 0006 0000	Info x00 Length  Info x00 Length 4c73 6d70 Info x00 Length 204d 6179 2032 3020 2032 3030 35 Info x00 Length  Info x00 Length 000e 0008 4f52 4131 6131 3032 3261 3300 3500 0006 0000 3600	Linux 15  tellurian 20  2.6.9-11.ELsmp 41   .##1 SMP Fri May 20   18:25:30 EDT 2005 12  x86_64 88  2x010RA1  022A2ora1022a3.  456.
0005 4c69 6e75 TokenID x31 '1' 0009 7465 6c6c TokenID x32 '2' 000e 322e 362e TokenID x33 '3' 0023 2331 2053 3138 3a32 353a TokenID x34 '4' 0006 7838 365f  GroupID x32 '2' 3200 0058 3000 3032 3241 3200 0008 ffff ffff 0006 0000 3700	78 Nodename 7572 6961 6e Release 392d 3131 2e45 Version 4d50 2046 7269 3330 2045 4454 Hardware 3634  DatabaseInfo 0006 0007 3100 000e 0008 6f72 3400 0006 0000 0008 ffff ffff	Info x00 Length  Info x00 Length 4c73 6d70 Info x00 Length 204d 6179 2032 3020 2032 3030 35 Info x00 Length  Info x00 Length 000e 0008 4f52 4131 6131 3032 3261 3300 3500 0006 0000 3600	Linux
0005 4c69 6e75 TokenID x31 '1' 0009 7465 6c6c TokenID x32 '2' 000e 322e 362e TokenID x33 '3' 0023 2331 2053 3138 3a32 353a TokenID x34 '4' 0006 7838 365f  GroupID x32 '2' 3200 0058 3000 3032 3241 3200 0008 fffff ffff	78 Nodename 7572 6961 6e Release 392d 3131 2e45 Version 4d50 2046 7269 3330 2045 4454 Hardware 3634  DatabaseInfo 0006 0007 3100 000e 0008 6f72 3400 0006 0000 0008 ffff ffff 2e30	Info x00 Length  Info x00 Length 4c73 6d70 Info x00 Length 204d 6179 2032 3020 2032 3030 35 Info x00 Length  Info x00 Length 000e 0008 4f52 4131 6131 3032 3261 3300 3500 0006 0000 3600	Linux 15  tellurian 20  2.6.9-11.ELsmp 41   .##1 SMP Fri May 20   18:25:30 EDT 2005 12  x86_64 88  2x010RA1  022A2ora1022a3.  456.
0005 4c69 6e75 TokenID x31 '1' 0009 7465 6c6c TokenID x32 '2' 000e 322e 362e TokenID x33 '3' 0023 2331 2053 3138 3a32 353a TokenID x34 '4' 0006 7838 365f  GroupID x32 '2' 3200 0058 3000 3032 3241 3200 0008 ffff ffff 0006 0000 3700 2e32 2e30 2e32	78 Nodename 7572 6961 6e Release 392d 3131 2e45 Version 4d50 2046 7269 3330 2045 4454 Hardware 3634  DatabaseInfo 0006 0007 3100 000e 0008 6f72 3400 0006 0000 0008 ffff ffff 2e30	Info x00 Length  Info x00 Length 4c73 6d70 Info x00 Length 204d 6179 2032 3020 2032 3030 35 Info x00 Length  Info x00 Length 000e 0008 4f52 4131 6131 3032 3261 3300 3500 0006 0000 3600 3800 0010 000a 3130	Linux
0005 4c69 6e75 TokenID x31 '1' 0009 7465 6c6c TokenID x32 '2' 000e 322e 362e TokenID x33 '3' 0023 2331 2053 3138 3a32 353a TokenID x34 '4' 0006 7838 365f  GroupID x32 '2' 3200 0058 3000 3032 3241 3200 0008 ffff ffff 0006 0000 3700 2e32 2e30 2e32 TokenID x30 '0'	78 Nodename 7572 6961 6e Release 392d 3131 2e45 Version 4d50 2046 7269 3330 2045 4454 Hardware 3634  DatabaseInfo 0006 0007 3100 000e 0008 6f72 3400 0006 0000 0008 ffff ffff 2e30 Vendor	Info x00 Length  Info x00 Length 4c73 6d70 Info x00 Length 204d 6179 2032 3020 2032 3030 35 Info x00 Length  Info x00 Length 000e 0008 4f52 4131 6131 3032 3261 3300 3500 0006 0000 3600 3800 0010 000a 3130	Linux
0005 4c69 6e75 TokenID x31 '1' 0009 7465 6c6c TokenID x32 '2' 000e 322e 362e TokenID x33 '3' 0023 2331 2053 3138 3a32 353a TokenID x34 '4' 0006 7838 365f  GroupID x32 '2' 3200 0058 3000 3032 3241 3200 0008 ffff ffff 0006 0000 3700 2e32 2e30 2e32 TokenID x30 '0' 0007 TokenID x31 '1' 0008 4f52 4131	78 Nodename 7572 6961 6e Release 392d 3131 2e45 Version 4d50 2046 7269 3330 2045 4454 Hardware 3634  DatabaseInfo 0006 0007 3100 000e 0008 6f72 3400 0006 0000 0008 ffff ffff 2e30 Vendor  Name 3032 3241	Info x00 Length  Info x00 Length  4c73 6d70 Info x00 Length  204d 6179 2032 3020  2032 3030 35 Info x00 Length  Info x00 Length  000e 0008 4f52 4131 6131 3032 3261 3300 3500 0006 0000 3600 3800 0010 000a 3130  Info x00 Length  Info x00 Length	Linux
0005 4c69 6e75 TokenID x31 '1' 0009 7465 6c6c TokenID x32 '2' 000e 322e 362e TokenID x33 '3' 0023 2331 2053 3138 3a32 353a TokenID x34 '4' 0006 7838 365f  GroupID x32 '2' 3200 0058 3000 3032 3241 3200 0008 ffff ffff 0006 0000 3700 2e32 2e30 2e32 TokenID x30 '0' 0007 TokenID x31 '1' 0008 4f52 4131 TokenID x32 '2'	78 Nodename 7572 6961 6e Release 392d 3131 2e45 Version 4d50 2046 7269 3330 2045 4454 Hardware 3634  DatabaseInfo 0006 0007 3100 000e 0008 6f72 3400 0006 0000 0008 ffff fffff 2e30 Vendor  Name 3032 3241 Instance	Info x00 Length  Info x00 Length  4c73 6d70 Info x00 Length  204d 6179 2032 3020  2032 3030 35 Info x00 Length  Info x00 Length  000e 0008 4f52 4131 6131 3032 3261 3300 3500 0006 0000 3600 3800 0010 000a 3130  Info x00 Length	Linux
0005 4c69 6e75 TokenID x31 '1' 0009 7465 6c6c TokenID x32 '2' 000e 322e 362e TokenID x33 '3' 0023 2331 2053 3138 3a32 353a TokenID x34 '4' 0006 7838 365f  GroupID x32 '2' 3200 0058 3000 3032 3241 3200 0008 ffff ffff 0006 0000 3700 2e32 2e30 2e32 TokenID x30 '0' 0007 TokenID x31 '1' 0008 4f52 4131 TokenID x32 '2' 0008 6f72 6131	78 Nodename 7572 6961 6e Release 392d 3131 2e45 Version 4d50 2046 7269 3330 2045 4454 Hardware 3634  DatabaseInfo 0006 0007 3100 000e 0008 6f72 3400 0006 0000 0008 ffff fffff 2e30 Vendor  Name 3032 3241 Instance 3032 3261	Info x00 Length  Info x00 Length  4c73 6d70 Info x00 Length  204d 6179 2032 3020  2032 3030 35 Info x00 Length   Info x00 Length  000e 0008 4f52 4131 6131 3032 3261 3300 3500 0006 0000 3600 3800 0010 000a 3130  Info x00 Length  Info x00 Length  Info x00 Length	Linux
0005 4c69 6e75 TokenID x31 '1' 0009 7465 6c6c TokenID x32 '2' 000e 322e 362e TokenID x33 '3' 0023 2331 2053 3138 3a32 353a TokenID x34 '4' 0006 7838 365f  GroupID x32 '2' 3200 0058 3000 3032 3241 3200 0008 ffff ffff 0006 0000 3700 2e32 2e30 2e32 TokenID x30 '0' 0007 TokenID x31 '1' 0008 4f52 4131 TokenID x32 '2' 0008 6f72 6131 TokenID x33 '3'	78 Nodename 7572 6961 6e Release 392d 3131 2e45 Version 4d50 2046 7269 3330 2045 4454 Hardware 3634  DatabaseInfo 0006 0007 3100 000e 0008 6f72 3400 0006 0000 0008 ffff fffff 2e30 Vendor  Name 3032 3241 Instance 3032 3261	Info x00 Length  Info x00 Length  4c73 6d70 Info x00 Length  204d 6179 2032 3020  2032 3030 35 Info x00 Length  Info x00 Length  000e 0008 4f52 4131 6131 3032 3261 3300 3500 0006 0000 3600 3800 0010 000a 3130  Info x00 Length  Info x00 Length	Linux
0005 4c69 6e75 TokenID x31 '1' 0009 7465 6c6c TokenID x32 '2' 000e 322e 362e TokenID x33 '3' 0023 2331 2053 3138 3a32 353a TokenID x34 '4' 0006 7838 365f  GroupID x32 '2' 3200 0058 3000 3032 3241 3200 0008 ffff ffff 0006 0000 3700 2e32 2e30 2e32 TokenID x30 '0' 0007 TokenID x31 '1' 0008 4f52 4131 TokenID x32 '2' 0008 6f72 6131	78 Nodename 7572 6961 6e Release 392d 3131 2e45 Version 4d50 2046 7269 3330 2045 4454 Hardware 3634  DatabaseInfo 0006 0007 3100 000e 0008 6f72 3400 0006 0000 0008 ffff ffff 2e30 Vendor  Name 3032 3241 Instance 3032 3261 Charset	Info x00 Length  Info x00 Length  4c73 6d70 Info x00 Length  204d 6179 2032 3020  2032 3030 35 Info x00 Length   Info x00 Length  000e 0008 4f52 4131 6131 3032 3261 3300 3500 0006 0000 3600 3800 0010 000a 3130  Info x00 Length  Info x00 Length  Info x00 Length	Linux



```
0000
TokenID x36 '6' VerString
                                Info x00 Length
                                                  | ..
TokenID x37 '7' ClientCharset
                                Info x00
                                         Length
ffff ffff
                                                  | ....
TokenID x38 '8' ClientVerString Info x00 Length
                                                   16
000a 3130 2e32 2e30 2e32 2e30
                                                  | ..10.2.0.2.0
GroupID x33 '3' ProducerInfo
                                Info x00 Length
                                                   85
3300 0055 3000 000a 0004 4546 4152 3100 0006 0003 | 3..U0.....EFAR1.....
3200 0006 0000 3300 0006 0000 3400 0006 0000 3500
                                                    2.....3.....4.....5.
0006 0000 3600 0006 0017 3700 0023 001d 5665 7273
                                                    ....6....7..#..Vers
696f 6e20 5374 2e20 416e 6472 6577 7320 4275 696c
                                                    ion St. Andrews Buil
6420 3032 33
                                                   d 023
TokenID x30 '0' Name
                               Info x00 Length
                                                   10
                                                  ..EFAR
0004 4546 4152
TokenID x31 '1' DataSource
                               Info x00 Length
0003
TokenID x32 '2' MajorVersion
                                Info x00 Length
                                                    6
0000
TokenID x33 '3' MinorVersion
                                Info x00
                                         Length
0000
TokenID x34 '4' MaintLevel
                                Info x00
                                         Length
0000
TokenID x35 '5' BugFixLevel
                                Info x00
                                         Length
TokenID x36 '6' BuildNumber
                                Info x00 Length
0017
TokenID x37 '7' VerString
                                Info x00 Length
001d 5665 7273 696f 6e20 5374 2e20 416e 6472 6577 | ..Version St.Andrew
7320 4275 696c 6420 3032 33
                                                  s Build 023
GroupID x34 '4' ContinunityInfo Info x00 Length
3400 0004
                                                  4...
```

## **FILES**

Use FILES to display summary file information for files on the local system. The default command displays all files in the current directory or subvolume. To constrain the display to specific files, you can supply a wildcarded name.

This command can be shortened to FI. An alias for this command is DIR or FILEINFO.

#### **Default**

Show all files in current directory or subvolume

### **Syntax**

FILES [directory | subvolume | volume.subvolume]

### directory | subvolume | volume.subvolume

The name of a directory or subvolume or a wildcard for specific files.

If any file or directory in the specified path contains spaces, the entire path must be enclosed within double quotation marks.

### **Example**

FILES "c:\goldengate ver802\dirdat\cc\*"



### **Example**

FILES \$QAGG.QA01.\*

## **FILTER**

Use FILTER to filter the display based on one or more criteria.

 You can string multiple FILTER commands together, separating each one with a semi-colon, as in:

FILTER INCLUDE FILENAME fin.act\*; FILTER RECTYPE 5; FILTER MATCH ALL

#### Or...

FILTER INCLUDE FILENAME \$QA01.QAESRC.ACCTN; FILTER SYSKEY 4294967302; FILTER MATCH ALL

• To avoid unexpected results, avoid stringing filter options together with one FILTER command. For example, the following would be *incorrect*:

FILTER INCLUDE FILENAME fin.act\*; RECTYPE 5; MATCH ALL

#### Or...

FILTER INCLUDE FILENAME \$QA01.QAESRC.ACCTN; SYSKEY 4294967302

Without arguments, FILTER displays the current filter status (ON or OFF) and any filter criteria that are in effect.

### **Comparison Operators**

For options that take comparison operators, the following standard operators may be used. The absence of an operator implies Equal.

**Table 2-9 Filter Option Comparison Operators** 

Operator	Example
Equal	=
	EQ
	==
Less than	<
	LT
To a the control of t	
Less than or equal	<=
	LE
Greater than	
Greater man	>
	GT
Greater than or equal	>=
	GE



Table 2-9 (Cont.) Filter Option Comparison Operators

Operator	Example	
Not equal	<>	
	NE	
	!=	

#### **Default**

Shows current filter settings

### **Syntax**

```
FILTER [INCLUDE] [EXCLUDE] filter_option
Where:
filter_option can be one of:
ANSINAME name [, name] |
AUDITRBA rba [comparison_operator] |
CLEAR {filter_spec | ALL} |
CSN | LogCSN [comparison_operator] [value]
ENDTIME time_string |
FILENAME name [, name]
GGSTOKEN token_name [comparison_operator] [token_value] |
HEX "hex_string" [byte_range][, "hex_string" [byte_range]] [...] |
INT16 16_bit_integer
INT32 32_bit_integer |
IOTYPE operation_type [, operation_type] |
MATCH {ANY | ALL} |
OFF |
ON
PROCESS process name
RBA byte_address [comparison_operator] [...] |
RECLEN length [comparison_operator] |
RECTYPE {type_number | type_name} |
SHOW
STARTTIME time_string |
STRING [BOTH] [B], text [
                          column_range
   [[B],text [column_range]] [...] |
SYSKEY system_key [comparison_operator] [...] |
TRANSID transaction_identifier |
TRANSIND indicator [comparison_operator] |
TYPE type
UNDOFLAG type [comparison_operator] |
USERTOKEN token_name [comparison_operator] [token_value]
}
```

### ANSINAME name [, name]

Filters based on the ANSI name of a SQL/MX table or a table from a Windows or UNIX source system. For use on NonStop systems. The format for name is:

```
catalog.schema.table
```

Up to eight name specifications may be supplied. The command is case-sensitive. To filter based on the name of a data file, use the FILENAME option.

#### AUDITRBA rba [comparison operator]

Filters based on the relative byte address of a commit record. For *comparison\_operator*, see "Comparison Operators".

### CLEAR {filter\_spec | ALL}

Removes filtering criteria.

- ALL removes all filter criteria.
- filter\_spec removes only the specified criterion. Specify any FILTER option, but not the value. The following example is valid:

```
FILTER CLEAR STRING
```

The following example is not valid:

```
FILTER CLEAR STRING "Denver"
```

An alias for CLEAR is RESET.

#### CSN | LogCSN [comparison operator] [value]

Filters based on a commit sequence value.

For comparison operator, see "Comparison Operators".

### ENDTIME time\_string

Ends the filter at the last record written at the specified time. For the time string, use the format of:

```
[[yy]yy-mm-dd] [hh[:mm][:ss]]
```

### Example:

```
ENDTIME 2011-01-31 23:59:59
```

This command can be shortened to ENDTS or END.

#### FILENAME name [, name]

Filters based on the name of a SQL table, or a group of names, with the name format being:

```
[catalog.]owner.table
[catalog.]owner.string*
```

Also filters on the name of a NonStop data file, or a group of names, with the name format being:

```
volume.subvolume.file
volume.subvolume.string*
```

On Windows and UNIX, both types of objects are supported. On NonStop, only viewing NonStop files is supported. To view SQL tables on NonStop, use the ANSINAME option.

FILENAME is case-sensitive on Windows and UNIX systems. If the database requires quote marks around a name If opening a NonStop data file on Windows or UNIX, the file name is converted to upper case. FILENAME can be shortened to FILE or FI.



Up to eight name specifications may be supplied.

### GGSTOKEN token\_name [comparison\_operator][token\_value]

Filters based on a specific Oracle GoldenGate token in the record header.

- For token\_name, provide the name of the token, such as TRANSID.
  - To view a list of possible tokens and values, see "GGSTOKEN".
- For token\_value provide the actual value for this token that is to be the filter string.

For comparison\_operator, see "Comparison Operators"

HEX "hex\_string" [byte\_range] [, "hex\_string" [byte\_range]] [...]
Filters based on a hex string and, optionally, a range of columns. To specify a range of columns, use the format of:

start column:end column

#### Example:

10:35

This option allows up to eight hex string and column arguments. Hex strings must be enclosed within quotes.

Hex filter strings must be in double quotes.

#### INCLUDE

Specifies that the filter will include the information specified with other options in the current <code>FILTER</code> statement. Can be shortened to <code>INC</code>.

#### EXCLUDE

Specifies that the filter will exclude the information specified with other options in the current FILTER statement. Can be shortened to EXC.

### INT16 16 bit integer

Filters based on a 16-bit integer. Use with 16-bit processors.

### INT32 32 bit integer

Filters based on a 32-bit integer. Use with 32-bit processors.

### IOTYPE operation\_type [, operation\_type]

Filters based on the type of operation. A list of record types can be viewed with the SHOW RECTYPE command in Logdump. Up to 32 operation types can be specified with IOTYPE.

### MATCH {ANY | ALL}

Controls filtering response when multiple filters have been specified. Can be shortened to MAT or MA.

- ANY includes a record for display or counts if the condition matches any of the filter conditions. This is the default.
- ALL includes a record for display or counts only if the condition matches all of the filter conditions.

#### OFF

Disables record filtering. By default, filtering is disabled. An alias for this option is <code>DISABLE</code>.



#### ON

Enables record filtering. An alias for this option is **ENABLE**.

### RBA byte\_address [comparison\_operator] [...]

Filters based on a relative byte address. Accepts either a 32-bit or 64-bit value. Up to 32 specifications can be supplied.

### RECLEN length [comparison\_operator]

Filters based on a record length, in bytes. For *comparison\_operator*, see "Comparison Operators".

### RECTYPE {type\_number | type\_name}

Filters based on the type of record. Can be either of the following:

The number assigned to the record type.

```
FILTER RECTYPE 10
```

The name of the record type.

```
FILTER RECTYPE Update
```

To view the record type names and numbers, issue the SHOW RECTYPE command. (See "SHOW".)

#### SHOW

Displays filter settings. Same as using FILTER without any options.

#### STARTTIME time string

Starts the filter with the first record written at the specified time. For the time string, use the format of:

```
[[yy]yy-mm-dd] [hh[:mm][:ss]]
```

### Example:

STARTTIME 2011-01-01 00:00:00

Can be shortened to STARTTS or START.

```
STRING [BOTH] [B], "text" [column_range] [[B], text [column_range]] [...]
```

- text filters based on a string. Enclose the string within double quotes.
- column\_range filters based on a range of columns. Use the format of:

```
start_column:end_column
```

### Example:

10:35

- BOTH filters on both a string and a column range.
- [B] specifies a case-insensitive match. You can match up to eight string and column arguments.

If the trail data is EBCDIC, issue the EBCDICDATA ON or ASCIIDATA OFF command before using FILTER STRING to ensure the correct matching. STRING can be shortened to STR.



### SYSKEY system\_key [comparison\_operator] [...]

Filters based on a NonStop source key. Accepts either a 32-bit or 64-bit value. Up to 32 specifications can be supplied.

### TRANSIND indicator [comparison\_operator]

Filters based on the TransInd field of the record header. Valid values:

- 0 = start of transaction
- 1 = middle of transaction
- 2 = end of transaction
- 3 = only record in transaction

For example, to filter for the end of a transaction, use the following command, including the spaces in the syntax:

```
FILTER INCLUDE TransInd > = 2
```

For comparison\_operator, see "Comparison Operators"

#### TRANSID 'transaction identifier'

Filters on the TMF transaction identifier when reading a TMF trail, for example:

```
FILTER INCLUDE TRANSID \GGQA(2).0.12792182.
```

#### UNDOFLAG type [comparison\_operator]

Filters based on the NonStop undo flag. The undo flag is set for records that are undone when a TMF transaction is aborted. Normally, <code>UndoFlag</code> is set to zero, but if the record is the backout of a previously successful operation, then <code>UndoFlag</code> will be set to 1. An undo that is performed by the disc process because of a constraint violation is not marked as an undo.

For comparison operator, see "Comparison Operators"

# USERTOKEN token\_name [comparison\_operator] [token\_value] Filters based on a specific user token in the trail file header.

- token\_name is the name of any token that is defined with the TOKENS clause of a TABLE statement of the Extract parameter file. It is not case-sensitive.
- token\_value is either a constant that is enclosed within double quotes or the result of an Oracle GoldenGate column-conversion function, depending on what was specified in the TOKENS clause for token name.
- For comparison\_operator, see "Comparison Operators"

The following shows filter options modified by comparison operators.

```
FILTER INCLUDE RECLEN > 400

FILTER INCLUDE RECLEN < 200

FILTER INCLUDE TRANSIND <> 1

FILTER INCLUDE SYSKEY > 202172700557313
```

The following filters for a data file name and for a relative key 19446, which has a hex value of 00004bf6. Because MATCH ALL is used, a record must meet all of the filter specifications to be included in the filter.

```
FILTER INCLUDE FILENAME $QA01.QAESRC.ACCT*
FILTER INCLUDE HEX "00004bf6" 0:3
FILTER MATCH ALL
```



The following filters for tables that start with ACC except for the ACCDET table, and for records that contain a timestamp between the specified start and stop times. By default, if a record matches any of the INCLUDE specifications, it is included in the filter.

```
FILTER INCLUDE FILENAME SALES.ACC*
FILTER EXCLUDE FILENAME SALES.ACCDET
FILTER INCLUDE STARTTIME 2011-01-11 17:00:00
FILTER INCLUDE ENDTIME 2011-01-11 19:00:00
```

The following shows filter options with multiple specifications. By default, a record that matches any of these specifications will be included in the filter. Note that in the STRING filter, two of the criteria are not case-sensitive, while one is, and the filter is confined to a column range.

```
FILTER INCLUDE IOTYPE insert,update,delete
FILTER INCLUDE STRING b"String1" "string2" b"String3" 25:50
FILTER INCLUDE FILENAME $QA01.QAESRC.ACCT1, $QA01.QAESRC.ACCT2, $QA01.QAESRC.ACCT3
```

## **FLOAT**

Use FLOAT to display a number or hex string in both its hex representation and as a floating-point number. This command is useful when looking for a specific floating-point number and you need the hex representation of that number. This command does not require a trail file to be opened.

The output of this command is hex\_value float\_string.

FLOAT assumes the floating point representation is the default for the current platform. It will not make a conversion between a Tandem floating point number (which is not IEEE-754) and a IEEE-754 floating point number, which is supported on UNIX and Windows systems.

#### **Default**

None

### **Syntax**

```
FLOAT input_string [format]
```

### input\_string

Can be one of the following:

- A valid floating point number as a string in the format of the following: an optional sign character (+ or -), followed by a sequence of decimal digits, which can contain a decimal-point followed by an exponent (an e or E character, followed by an optional sign and a sequence of digits.
- A valid hexadecimal number as a string formed by the following: 0x, H, h, x, h or h, followed by a sequence of hexadecimal digits (1-9, a-f).

### format

Can be one of the following:

• One of the following to specify the output format sizing: IEEE, TDM, TANDEM, NSK, 64bit, 64-bit, F64, 32bit, 32-bit or F32.



• A format specifier formed by the string FMT followed by any valid C99 Print Format specifier (for example, \$1x, \$e, \$g).

### Example

The following examples are different results that can be obtained for the same values 2.1 and 2.2.

```
Logdump 58 >float 2.1
4000cccccccccd 2.100000
Logdump 59 >float 2.2
400199999999999 2.200000
Logdump 60 >float 0x4000cccccccccd
4000cccccccccd 2.100000
Logdump 61 >float 0x400199999999999
400199999999999 2.200000
Logdump 62 >float %H400199999999999
400199999999999 2.200000
Logdump 63 >float 2.2 FMT %e
400199999999999 2.200000e+00
Logdump 64 > float 2.2 FMT %g
400199999999999 2.2
Logdump 65 >float 0x4000cccccccccd FMT %g
4000cccccccccd 2.1
Logdump 66 >float 2.2e+01
403600000000000 22.000000
Logdump 67 >float 2.2e-05
3ef711947cfa26a2 0.000022
```

## **GGSAUDITREAD**

Use ggsauditread to read the TMF audit trail. ggsauditread bypasses TMFARLIB and causes Logdump to open and read the TMF trail directly. This command is strictly for use by Oracle GoldenGate support analysts.

### Default

Disabled

### **Syntax**

GGSAUDITREAD audit\_trail\_file

## **GGSTOKEN**

Use GGSTOKEN to include Oracle GoldenGate tokens in the record display. An Oracle GoldenGate token is internal information that the Oracle GoldenGate application places in the record for its own use. Oracle GoldenGate tokens are not for use by Oracle GoldenGate users.

Without arguments, GGSTOKEN displays the status of Oracle GoldenGate token display (ON or OFF).

Oracle GoldenGate tokens on NonStop are:

```
"TRANSID"
```

<sup>&</sup>quot;BEGINRBA"



<sup>&</sup>quot;BEGINSEQNO"

```
"BEGINTIMESTAMP"
"PARENTNODE"
"PROCESSNAME"
"PROGRAMNAME"
"HOMENODE"
"CHILDLIST"
```

### Oracle GoldenGate tokens on Windows and UNIX are:

```
"ORAROWID"
"TRANID"
"MARKER"
"FETCHEDDATA"
"FORCEDCOMMIT"
"DDL"
"LOGCSN"
"GROUPNAME"
"VAMSEQID"
```

### **Default**

OFF

### **Syntax**

```
GGSTOKEN {ON | OFF | DETAIL}
```

#### ON

Enables the display of Oracle GoldenGate tokens.

#### ਜਜ਼0

Disables the display of Oracle GoldenGate tokens.

#### DETAIL

Adds the token ID and length to the display.

### **Examples**

### **Example 1**

GGSTOKEN ON

### This shows something similar to the following:

```
GGS tokens:
5200 1400 4141 4148 6561 4141 4641 4141 4141 4F41 : R...AAAHeaAAFAAAAAAAA
4143 0001 : AC..
```

### **Example 2**

GGSTOKEN DETAIL

### This shows something similar to the following:

```
GGS tokens:
TokenID R (x52), Info 0, Length 20
4141 4148 8561 4141 4641 4141 4141 4F41 4144 0001 : AAAHeaAAFAAAAA0AAD..
```

## **GGSTOKEN**

Valid for Oracle.

Use GGSTOKEN to control whether or not Oracle GoldenGate automatically generated token data is displayed with each record. It applies to the automatically generated tokens like the transaction id, row id, fetching status and tag value. These values are stored in the record header and can be mapped to a target column or used for some other purpose during Oracle GoldenGate processing.

Without arguments, GGSTOKEN displays the status of user token display (ON or OFF). With the ON option, the name of the token and its length are displayed. The DETAIL option shows the actual token data.

#### Default

Display token name and length.

### **Syntax**

```
GGSTOKEN {ON | OFF | DETAIL}
```

#### ON

Enables the display of automatically generated tokens.

#### OFF

Disables the display of automatically generated tokens.

#### DETAIL

Displays the automatically generated tokens including the transaction ID (XID), the row id for DML operations, the fetching status (if applicable), and tag value.token data.

## **GHDR**

Use  $\tt GHDR$  to control whether or not the record header is displayed with each record. Each record contains a header that includes information about the transaction environment. Without arguments,  $\tt GHDR$  displays the status of header display ( $\tt ON$  or  $\tt OFF$ ).

### **Default**

OFF

### **Syntax**

GHDR {ON | OFF}

## **HASHCLEAR**

Use HASHCLEAR to release memory allocated to the hash list that is generated by the HASHSTATS command.

An alias for hashclear is hashreset.

### Default

None



### **Syntax**

HASHCLEAR

## **HASHSTATS**

Use HASHSTATS to enable or disable the display of statistics about file name hashing after a COUNT DETAIL command. The command without arguments displays whether the hash statistics are enabled or disabled. Use the HASHCLEAR OF HASHRESET command to clear the memory allocated to the hash list.

### **Default**

OFF

### **Syntax**

```
HASHSTATS {ON | OFF}
```

### **Example**

The following is the result when HASHSTATS is enabled. It appears at the end of the COUNT DETAIL display.

```
Files 7, Coll 0, Chain 0
Avg Hash lookup time 5 across 1093 lookups
```

## **HEADERTOKEN**

Use HEADERTOKEN to control whether or not header token indicators are displayed with each record. The header token indicators are the following:

- G record header (begin of record)
- н header area
- D data area
- T Oracle GoldenGate internal token
- U user token area (does not display if user tokens are not in use)
- z end of record

Without arguments, HEADERTOKEN displays the status of header token indicators (ON or OFF).

### Default

OFF

### **Syntax**

```
HEADERTOKEN {ON | OFF | DETAIL}
```

### ON

Enables the display of header tokens.



#### OFF

Disables the display of header tokens.

#### DETAIL

Provides detailed token values.

### **Examples**

### **Example 1**

HEADERTOKEN, without DETAIL

```
TokenID G, Info 0, Length 117
TokenID H, Info 0, Length 45
TokenID D, Info 0, Length 28
TokenID T, Info 0, Length 24
TokenID Z, Info 0, Length 117
```

### **Example 2**

HEADERTOKEN with DETAIL

```
TokenID G, Info 0, Length 146
TokenID H, Info 0, Length 42
   4504 0041 3C00 05FF 402F AE6C 572A F102 F818 8F02 : E..A<...@/.lW*.....
0000 0000 1000 0000 0152 0000 0001 4852 2E4A 4F42 : .......R...FR.JOB 5300
TokenID D, Info 0, Length 60
TokenID T, Info 0, Length 24
TokenID Z, Info 0, Length 146
```

## **HELP**

Use HELP to view the syntax of Logdump commands.

### Default

None

### **Syntax**

HELP

## **HISTORY**

Use HISTORY to view the most recently issued Logdump commands since the session started, or to reset the command count starting at line 1 again. HISTORY can be shortened to HIST.



You can use the FC command to re-execute a command in the list. See "FC"

### **Default**

Display recent commands



### **Syntax**

HISTORY [n] [CLEAR]

#### n

Returns the specified number of previously issued commands, where  $\it n$  is any positive number.

#### CLEAR

Deletes the command history buffer and reverts the command line to 1.

### **Example**

HISTORY 3

The results of this command would be similar to:

```
1: ghdr on
2: detail on
3: scanforheader
```

## INTERPRETINTERVAL

Use INTERPRETINTERVAL to display a 64-bit Julian time interval in the format of days-hh:mm:ss.ms.us.

#### Default

None

### **Syntax**

INTERPRETINTERVAL interval\_string

### interval\_string

A string representing the interval to be converted.

### **Example**

INTERPRETINTERVAL 1234567

### This produces the following result:

Interval 1234567 is 0-00:00:01.234.567

## **INTERPRETTIMESTAMP**

Use Interprettimestamp to display a 64-bit Julian timestamp as an ASCII value.

#### **Default**

None

### **Syntax**

INTERPRETTIMESTAMP timestamp



### timestamp

A JULIANTIMESTAMP value.

### **Example**

INTERPRETTIMESTAMP 211976584185800569

#### This produces the following result:

```
2005/03/03 04:29:45.800.569 GMT 2005/03/02 20:29:45.800.569 LCT
```

## LOG

Use LOG to start and stop the logging of Logdump sessions. When enabled, logging remains in effect for all sessions of Logdump until disabled with the LOG STOP command. Without arguments, LOG displays the status of logging (ON or OFF). An alias for LOG is OUT.

#### **Default**

Disabled

### **Syntax**

```
LOG {file_name | STOP}
```

### file\_name

Specifies the name of the log file. Specify a full path name to store the file in a directory other than the current working directory.

### STOP

Stops logging.

### **Example**

LOG /home/ggs/dirrpt/logdumpout.txt

### **Example**

LOG \$data01.glogggl.sesslog

## Metadata ddlformat

Use  ${\tt Metadata}$   ${\tt ddlformat}$  on a NonStop system to display the TDR columns in Nonstop DDL format.

#### **Default**

OFF

### **Syntax**

Metadata ddlformat {ON | OFF}



# Metadata defgenformat

Use Metadata defgenformat on a NonStop system to display the columns in a TDR in the format of a GG definition from a definition file.

**Default** 

**OFF** 

**Syntax** 

Metadata defgenformat {ON | OFF}

## Metadata detail

Use  ${\tt Metadata}$  detail on a NonStop system to display the tokens and values that make up a metadata.

**Default** 

**OFF** 

**Syntax** 

Metadata detail {ON | OFF | DATA}

# Metadata sqlformat

Use Metadata sqlformat on a NonStop system to display the columns in a TDR in the format of a SQL table create.

**Default** 

**OFF** 

**Syntax** 

Metadata sqlformat {ON | OFF}

## **NEXT**

Use NEXT to display the next record or records in the file. The default displays only the next record. NEXT can be shortened to N. An alias for NEXT is RECORD.

**Default** 

Display the next 1 record

**Syntax** 

NEXT [n]



n

Displays the specified number of subsequent records.

### **Example**

NEXT 10

## **NEXTTRAIL**

Use NEXTTRAIL to close an open trail file and open the next one in the sequence. An alias for NEXTTRAIL is NT.

### Default

None

### **Syntax**

NEXTTRAIL

## **NOTIFY**

Use NOTIFY to display the number of records scanned, the trail position, and the record timestamp at specified intervals when using COUNT and records are being suppressed from display through filtering options. An alias for NOTIFY is NOTIFYINTERVAL.

Instead of displaying each notify interval on a separate line, you can configure Logdump to simply update a single line with each new scan result. See "SCANSCROLLING".

### **Default**

None

### **Syntax**

NOTIFY interval

#### interval

The notification interval expressed as a number of records.

### **Example**

The following shows the usage and result of this command.

```
Logdump 26> NOTIFY 1000
Logdump 27> FILTER INCLUDE FILE sales.res*
Logdump 28> COUNT
Scanned 1000 records, RBA 160380,2011/02/01 08:53:47.768.255
Scanned 2000 records, RBA 729961,2011/02/01 08:56:09.916.128
Scanned 3000 records, RBA 2032683,2011/02/01 08:56:09.916.128
Scanned 4000 records, RBA 3244585,2011/02/01 08:56:09.916.128
Scanned 5000 records, RBA 4568766,2011/02/01 08:56:09.916.128
```



## **OBEY**

Use OBEY to process a file that contains a list of Logdump commands. OBEY is useful for executing commands that are frequently used in sequence.

OBEY can be shortened to O. An alias for OBEY is SOURCE.

#### **Default**

None

### **Syntax**

OBEY file\_name

#### file name

The fully qualified name of the file containing the list of commands.

### **Example**

This is a UNIX example.

OBEY ./ldcommands.txt

### **Example**

This is a NonStop example.

OBEY \$DATA01.GGSPARM.OBEY1

The preceding command executes a file that might look something like this:

ghdr on
usertoken on
detail
filter enable
filter clear
filter match all

## **OPEN**

Use open to open a trail file or extract file in Logdump. Without arguments, the command displays the name of the file that is currently open. Aliases for open are from and LOGTRAIL.

### **Default**

None

### **Syntax**

OPEN file\_name



### file\_name

The fully qualified path name of the trail file or extract file to be opened. To specify a trail file, specify the trail name (a two-character prefix) and the sequence number, for example jd000000.

### **Example**

This is a UNIX example.

OPEN /home/ggs/dirdat/jd000000

### **Example**

This is a NonStop example.

OPEN \$data01.glogggl.aa000000

## **POSITION**

Use POSITION to set the read position in the file. The position of a record in the file is noted in the record header in the AuditPos field.

Without options, POSITION displays the current read position. Options let you specify an exact position. After you set the position, issue the NEXT command to view the record at that position.

POSITION can be shortened to POS.

#### **Default**

None

### **Syntax**

```
POSITION [bytes | {0 | FIRST}]
```

#### bytes

Specifies the number of bytes into the file at which to read. Use the  ${\tt NEXT}$  command to view the specified record.

### 0 | FIRST

Positions Logdump at the beginning of the file.

### **Syntax**

POS 77580548

## **RECLEN**

Use RECLEN to control how much of the record data is displayed. You can use RECLEN to control the amount of scrolling that must be done when records are large, while still showing enough data to evaluate the record. Data beyond the specified length is truncated.

### **Default**

140 bytes



### **Syntax**

RECLEN n

#### n

The number of bytes of the record that is displayed.

### **Example**

RECLEN 280

## SAVE

Use SAVE to write a subset of the records to a new trail or extract file. By saving a subset to a new file, you can work with a smaller file that is easier to debug. Saving to another file also enables you to extract valid records that can be processed by Oracle GoldenGate, while excluding records that may be causing errors.

To set the version of the trail or file (to old or new format), use the TRAILFORMAT command.

### **Default**

None

### **Syntax**

```
SAVE file_name [!] {n records | n bytes}
[NOCOMMENT]
[OLDFORMAT | NEWFORMAT]
[TRANSIND indicator]
[TRUNCATE]
```

### file\_name

The name of the new file. To specify a trail file, specify the two-character trail name and a sequence number, for example rt000001.

!

Overwrites the specified file, if the same file already exists. First a purge is done, and then the specified records are saved to the file.

### n records | n bytes

Specifies either a number of records or a number of data bytes to write to the new file. The n number of records or bytes are taken forward from the current position in the file. You can change the position with the POSITION command. See "POSITION".

```
EXT ( pri, sec [, max])
```

Specifies savefile extent sizes. This option is valid on NonStop only.

#### MEGABYTES n

Specifies the size of a savefile extent. This option is valid on NonStop only.

#### NOCOMMENT

Suppresses the leading and trailing comment records that are placed by default in the new file. These records describe the context of the file. The begin comment record



contains source trail information and the position where the save started. The end comment record identifies the end of the saved data. These headers are useful to separate different sets of records that are saved to the same file, but can be omitted.

### OLDFORMAT | NEWFORMAT

Writes the data in either the current trail format (NEWFORMAT, the default) or the format that was used for Oracle GoldenGate versions 6.0 and earlier (OLDFORMAT).

#### TRANSIND indicator

Sets the TransInd header field in the records written to one of the following:

FIRST MIDDLE END ONLY

This allows you to reorder records in a transaction. TRANSIND applies to all records written by a SAVE command.

#### TRUNCATE

Purges an existing file before saving new information to it.

### **Example**

SAVE /home/ggs/dirdat/rt000001 10 records nocomment

### **Example**

SAVE \$data01.glogggl.ss000000 100 records

## SCANFORENDTRANS

Use SCANFORENDTRANS to scan for a record that has a transaction indicator of 2 or 3, as shown in the TransInd field of the header. When one of those indicators is found, Logdump displays the first record of the next transaction.

The indicators represent the following:

- 2 last record in the transaction
- 3 only record in the transaction

SCANFORENDTRANS can be shortened to SFET.

### **Default**

None

### **Syntax**

SCANFORENDTRANS

## **SCANFORHEADER**

Use SCANFORHEADER to go to the next record header. Before using this command, use the GHDR ON command to show record headers (see "GHDR"). SCANFORHEADER can be shortened to SFH.



### **Default**

None

### **Syntax**

SCANFORHEADER [PREV]

#### PREV

Displays the previous record header.

## **SCANFORMETADATA**

Use SCANFORMETADATA to scan for a specific metadata record. SCANFORMETADATA can be shortened to SFMD.

#### Default

None

### **Syntax**

```
SCANFORMETADATA [DDR|TDR] [Index|NEXT]
SFMD [DDR|TDR] [Index|NEXT]
```

### DDR | TDR

Specifies the type of metadata record to search for, either a Database Definition Record (DDR) or Table Definition Record (TDR)..

### Index | NEXT

Specifies an index to go to or the next record in the file.

### **Example**

scanformetadata tdr

## **SCANFORRBA**

Use SCANFORRBA to scan for the record at a relative byte address specified by the Auditrba field of the record header. Before using this command, use the GHDR command to show record headers (see "GHDR"). SCANFORRBA can be shortened to SFR.

### Default

None

#### **Syntax**

SCANFORRBA relative\_byte\_address [file\_name]

### relative byte address

Specifies the relative byte address to find.



### file\_name

Constrains the search to an Enscribe or SQL data file. A file name is required even if you are searching a file that is open in Logdump.

### **Example**

SCANFORRBA 321 /home/ggs/dirdat/rt000000

### **Example**

SCANFORRBA 321 \$data01.glogggl.rt000000

## **SCANFORTIME**

Use SCANFORTIME to scan for a record that contains a specific timestamp. The timestamp is contained in the IO Time field of the record header. Before using this command, use the GHDR command to show record headers (see "GHDR"). SCANFORTIME can be shortened to SFTS.

#### **Default**

None

### **Syntax**

SCANFORTIME time\_string [, name]

#### time\_string

Scans for a specific timestamp. For the time string, use the format of:

```
[[yy]yy-mm-dd] [hh[:mm][:ss]]
```

#### name

Constrains the search to a specific table or data file name, or a group of names specified with a wildcard.

#### **Example**

SCANFORTIME 2011-01-27 14:33:57

## **SCANFORTYPE**

Use  ${\tt SCANFORTYPE}$  to scan for the next record of the specified type.  ${\tt SCANFORTYPE}$  can be shortened to  ${\tt SFT}$ .

### Default

None

### **Syntax**

SCANFORTYPE {type\_name | type\_number}



### type\_name | type\_number

Specifies the type of record to search for, either by type name or type number. To view a list of record types and their associated numbers, use the SHOW RECTYPE command (see "SHOW").

### **Example**

Both of the following commands return the same result: They display commit records.

```
SCANFORTYPE Commit SFT 2
```

## **SCANSCROLLING**

Use SCANSCROLLING to configure Logdump to update a single line after COUNT scans when NOTIFY is enabled. Otherwise, each scan notification appears on a different line. See "NOTIFY" for more information.

### **Default**

OFF

#### **Syntax**

```
SCANSCROLLING {ON | OFF}
```

#### ON

Enables the use of a single line for count notification results.

#### OFF

Disables the use of a single line, causing a separate line to be used for each notification.

## **SHOW**

Use  ${\tt SHOW}$  to display internal Logdump information, including files that are open if the system is NonStop, the current Logdump environment, a list of Oracle GoldenGate record types, and current filter settings.  ${\tt SHOW}$  can be shortened to  ${\tt SH}$  or  ${\tt SHO}$ .

#### **Default**

None

### **Syntax**

SHOW
[ENV]
[FILTER]
[OPEN]
[RECTYPE]

### ENV

Displays the current Logdump environment. Same as the ENV command (see "ENV").

### FILTER

Displays current filter settings.



#### OPEN

Shows all NonStop files that are open in Logdump.

#### RECTYPE

Displays a list of Oracle GoldenGate record types that can be displayed with Logdump.

### **Examples**

### **Example 1**

SHOW FILTER

This shows something similar to the following on Windows or UNIX:

```
Data filters are ENABLED
Include Match ALL
Filename-0: $QA01.QAESRC.ACCT*
HEX-0: (4), Col 0:3
0000 4BF6
Exclude Match ANY
```

It shows something similar to the following on NonStop:

```
Data filters are ENABLED
Include Match ALL
Rectypes : Delete
Filename-0 : hr.regions
Exclude Match ANY
```

### **Example 2**

SHOW OPEN

This shows something similar to the following:

```
0 : $RECEIVE
1 : \GGS2.$ZTN2.#PTW6EUX
2 : \GGS2.$DATA4.#0009047
3 : \GGS2.$ZTN2.#PTW6EUX
4 : \GGS2.$DATA4.CPSDAT.TM000000
```

### Example 3

SHOW RECTYPE

This shows results similar to the following. (This list might not reflect all possible record types. New types are added when needed to support new functionality.)

```
1 - Abort
2 - Commit
3 - Delete
4 - EndRollBack
5 - Insert
6 - Prepared
7 - TMF-Shutdown
8 - TransBegin
9 - TransRelease
```



- 10 Update
- 11 UpdateComp
- 12 FileAlter
- 13 FileCreate
- 14 FilePurge
- 15 FieldComp
- 16 FileRename
- 17 AuxPointer
- 18 NetworkCommit
- 19 NetworkAbort
- 20 CurrentPos
- 89 SQL/MX DDL OP
- 90 GGSSQLCol
- 100 GGSPurgedata
- 101 GGSPurgeFile
- 102 GGSCreateFile
- 103 GGSAlterFile
- 104 GGSRenameFile
- 105 GGSSetmode
- 107 GGSControl
- 106 GGSChangeLabel
- 160 DDL OP
- 115 GGSKeyFieldComp
- 117 GGSKeyFieldComp32
- 161 RecordFragment
- 116 LargeObject
- 132 GGSCreateSequence
- 133 GGSAlterSequence
- 134 GGSDropSequence
- 150 RestartAbend
- 151 RestartOK
- 152 RecoveryEnd
- 200 GGSBulkio
- 201 GGSFileClose
- 202 GGSLoggerTS
- 203 GGSExtractTS
- 204 GGSCollectTS
- 205 GGSComment
- 250 LibOpenTrace
- 251 LibCloseTrace
- 252 LoggerOpenTrace
- 253 LoggerCloseTrace
- 254 LoggerAddedInfo
- 249 LoggerAddedStats



## SKIP

Use SKIP to skip the specified number of records.

#### **Default**

None

### **Syntax**

SKIP n

#### n

The number of records to skip.

### **Example**

SKIP 50

## TIME

Use TIME to display the current time in local and GMT formats.

#### **Default**

None

### **Syntax**

TIME

## **TIMEOFFSET**

Use TIMEOFFSET to set the Logdump time format. Without arguments, TIMEOFFSET displays the current time offset. Options enable you to set the time to the local time, Greenwich Mean Time (GMT), or a specific offset from GMT. The specified time format applies to the timestamps shown in records as well as any Logdump commands that accept a time string argument.

### Default

LOCAL

### **Syntax**

```
TIMEOFFSET {LOCAL | GMT | GMT + hh[:mm] | GMT - hh[:mm]}
```

### LOCAL

Sets the time to that of the local system.

### GMT

Sets the time to Greenwich Mean Time (GMT).



### GMT + hh[:mm]

Sets the time ahead of GMT by the specified number of hours and, optionally, minutes

### GMT - hh[:mm]

Sets the time behind GMT by the specified number of hours and, optionally, minutes.

### **Example**

TIMEOFFSET GMT -01

## **TMFBEFOREIMAGE**

Use TMFBEFOREIMAGE on a NonStop system to view the before image for update operations from TMF audit.

#### **Default**

OFF

### **Syntax**

TMFBEFOREIMAGE {ON | OFF}

#### ON

Displays the before image for update operations from the TMF audit.

#### OFF

Displays only the after image for update operations from the TMF audit.

### **Example**

A sample display for TMFBEFOREIMAGE ON is shown below.

## **TMFBEFOREIMAGE**

Use TMFBEFOREIMAGE on a NonStop system to set the TMFARLIB to fetch the before image of the record and display it with the after image. Without an argument, this command displays whether the fetching of before images is on or off.

### **Default**

OFF



### **Syntax**

TMFBEFOREIMAGE {ON | OFF}

# TMFGETRECADDR | NOTMFGETRECADDR

Use  ${\tt TMFGETRECADDR}$  and  ${\tt NOTMFGETRECADDR}$  on a NonStop system to control the ability of Logdump to call the  ${\tt ARGETRECADDR}()$  function of TMFARLIB. This function is used when examining a TMF audit trail.

#### **Default**

None

### **Syntax**

TMFGETRECADDR | NOTMFGETRECADDR

#### TMFGETRECADDR

Enables the use of the ARGETRECADDR() function.

#### NOTMFGETRECADDR

Disables the use of the ARGETRECADDR() function.

## **TMFIGNORERECCOUNT**

Use TMFIGNORERECCOUNT on a NonStop system to set the number of records that the TMFARLIB can ignore before returning a CURRENTPOSITION record.

### **Default**

None

### **Syntax**

 ${\tt TMFIGNORERECCOUNT}$  n

## **TRAILFORMAT**

Use TRAILFORMAT to set the version of the Oracle GoldenGate trail or extract file that is being saved when using the SAVE command.

#### **Default**

NEW

### **Syntax**

TRAILFORMAT {NEW | OLD}

#### NEW

Sets the format to that used by Oracle GoldenGate version 6.0 and later.



#### OLD

Sets the format to that used by Oracle GoldenGate versions earlier than 6.0.

## TRANSBYTELIMIT

Use TRANSBYTELIMIT to prevent normal-sized transactions from being tracked in the transaction table specified with the TRANSHIST command. It sets a lower boundary for the number of bytes in a transaction and should be set to represent a normal-sized transaction for the environment being evaluated with Logdump. Setting a boundary reduces the amount of data that is stored and, consequently, the amount that must be reviewed when troubleshooting.

### **Default**

10000 bytes

### **Syntax**

TRANSBYTELIMIT n

 $\boldsymbol{n}$ 

The number of bytes in a normal-sized transaction.

### **Example**

TRANSBYTELIMIT 9000

## **TRANSHIST**

Use TRANSHIST to keep track of the size of transactions in a trail or file. Logdump tracks the transactions in an internal history table in descending order according to the number of bytes of data in each one. When the history table is full, the smallest transaction is removed to allow a larger transaction to be added to the list.

Use TRANSHIST in conjunction with other Logdump commands to determine whether or not your applications generate large transactions and to identify their relative size. This information can be used when deciding how to group tables into different processing groups for faster throughput. For more information, see "Evaluating Transaction Size".



You can use the SEND EXTRACT command with the SHOWTRANS option to view a list of long-running transactions. Other options enable you to control whether those transactions are ignored or processed by Oracle GoldenGate.

### **Default**

0 (do not maintain history)

### **Syntax**

TRANSHIST n



n

Sets the size of the history table, in bytes. Valid values are 0 through 200 bytes. A value of 0 means that no transaction history is maintained.

### **Example**

TRANSHIST 150

## TRANSRECLIMIT

Use TRANSRECLIMIT to prevent normal-sized transactions from being tracked in the transaction table specified with the TRANSHIST command. It sets a lower boundary for the number of records in a transaction and should be set to represent a normal-sized transaction for the environment being evaluated with Logdump. Setting a boundary reduces the amount of data that is stored and, consequently, the amount that must be reviewed when troubleshooting.

### **Default**

100 operations

### **Syntax**

TRANSRECLIMIT n

n

The number of records in a normal-sized transaction.

### **Example**

TRANSRECLIMIT 90

## **USERTOKEN**

Use USERTOKEN to control whether or not user token data is displayed with each record. A user token is data specified by an Oracle GoldenGate user that is stored in the record header and can be mapped to a target column or used for some other purpose during Oracle GoldenGate processing.

Without arguments, USERTOKEN displays the status of user token display (ON or OFF). With the ON option, the name of the token and its length are displayed. The DETAIL option shows the actual token data.

### **Default**

Display token name and length.

### **Syntax**

```
USERTOKEN {ON | OFF | DETAIL}
```

#### ON

Enables the display of user tokens.

### OFF

Disables the display of user tokens.



#### DETAIL

Displays the token data.

## **VOLUME**

Use  ${\tt VOLUME}$  to set the default directory, volume or subvolume. An alias for this command is  ${\tt CD}$ .

### **Default**

None

### **Syntax**

VOLUME {directory | volume | subvolume}

## **WRITELOG**

Use  $\mathtt{WRITELOG}$  to write text to the session log. Before using this command, start logging with the  $\mathtt{LOG}$  command (see " $\mathtt{LOG}$ ").

### **Default**

None

### **Syntax**

WRITELOG text

#### text

Any text string. Quotes are optional.

### **Example**

WRITELOG "Customer name is ABC Company."



Use  $\ensuremath{\mathtt{X}}$  to execute a program from within Logdump. When you exit the program, the Logdump prompt returns.

### **Default**

None

### **Syntax**

X program [string]

#### command

The program to run.

### string

A character string, such as input arguments.

### Example

The following series of commands and output shows how you can exit Logdump, issue other commands from the shell or within GGSCI, and then return to the Logdump command line.

```
Logdump 696 >x ggsci

GoldenGate Command Interpreter
Version .....

GGSCI (sysa) 1> status er *
GGSCI (sysa) 2> start er *
GGSCI (sysa) 3> info er *
GGSCI (sysa) 4> exit
Logdump 697 >
```



# Index

A	S
audit trail TMF reading, <i>2-35</i>	statistics file name hashing, <i>2-3</i> 8
G	<u>T</u>
GGSAUDITREAD command Logdump, 2-35 GGSTOKEN command Logdump, 2-35	TMF audit trail reading, 2-35 tokens internal Oracle GoldenGate, 2-35
Н	V
HASH commands Logdump, <i>2-37</i> HASHSTATS command Logdump, <i>2-38</i>	viewing tokens, 2-35
M	
memory releasing from Logdump hash, 2-37	_

