

Writing Sample - Digital Payment Technology

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Background

To develop a user guide about a utility program which allows users to access financial transactions logged by a network node (gateway) that serves as an entry and exit point for two or more networks.

Audience

- Developers
- Service users and service administrators
- IAM administrators.

Scope

Explain Logreader, identify Logreader environment, and explain how to use the Logreader.

About hardware writing sample

This sample includes parts of the general information about the Logreader utility program as well as parts of instructions for using it.

Note: To prevent proprietary issues, I have removed the original formatting and changed the company name, document name, product names, licenses, trademarks, components (including third-party components), applications, guides, codes, and sample codes where applicable.

[Company] Logreader User's Guide

Document information:

Doc 2006-xx

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About this guide:

The [Company] Logreader User's Guide contains the following information:

- About Logreader
- Logreader Environment
- Using Logreader

About Logreader:

Logreader is a utility program which allows users to access financial transactions logged by Gateway. Gateway provides a mechanism to locally write financial messages into the file system which can be viewed or accessed by Logreader.

A single operation center, such as Center One or Center Two, may have several Gateway instances. A single Gateway writes to its own log files. A log file contains log entries captured at a specific time, for the messages that are processed by a Gateway instance.

Each log file entry consists of the following segments:

- heading
- frame-in
- xmf-in
- imf
- frame-out
- xmf-out

Table 1-1 describes each of these segments.

Table 1-1: Segment descriptions

Segment	Description
heading	Every log entry contains the heading segment. <ul style="list-style-type: none">- XYZ, an internal unique identification for a processed message in a USMG instance.- Station ID- Second Station ID- MTI (Message Type ID)- PAN (Primary Account Number)- RRN (Retrieval Reference Number)- Processing Time (when message was processed)
frame-in	Contains the message header length, the length of the xmf-in message.
xmf-in	<i>Continued...</i>

Using Logreader:

This chapter describes how to access Logreader and use this utility to conduct searches and format the results from a specified log file (or files) or directory (or directories).

Usage: logreader

- [-f schema_]+
- [-a _date] [-b _date] [- count]
- [-h _filter]+
- [-l]+ [-L _file]+
- [-Matches]
- [-o output_] [-s output_]
- [-xmfin _filter]+ [-xmfout body_filter]+
- log_path+
- *Continued...*

Among the above command options, the -o and -s options are for formatting output, and the rest of the options are used for filtering.

Output samples:

The search results are formatted as hdr, xml, txt output samples as shown in **Appendix A, Formatted Output**.

Search samples:

The search samples, which apply to the command options mentioned above, are separated.

Searching log path:

The searching log path could be single file or multiple files or directory or directories, as shown in Table 3-1.

Table 3-1: Log

Command line	Expected results
file1	All messages in file1 and format output as xyz
file1, file2	All messages in file1, file2, and format output as xyz
directory1	All messages in directory1 and format output as xyz
<i>Continued...</i>	

Time filtering:

There are three options for time filtering:

1. Option x, to filter messages time stamped on `_date`.
2. Option y, to filter messages time stamped before `_date`.
3. Option By.

Option By tells Logreader to not quit the current searching process until the given scanning count is reached (for example, `--bound 325` means scanning up to 325 messages which were later `_date` to find the messages which match the filtering pattern). Table 3-2 describes the time filtering command lines and their expected results.

Table 3-2: Time filtering

Command line	Expected results
<code>o_heading file1</code>	All messages in file1, output formats as hdr; all headers in file1
<code>o_xml file1</code>	All messages in the file1, output formatted as xml
<i>Continued...</i>	

Header filtering:

There is only one option: `-h`.

With the option of `-h` filter, format is `<xyz>=<value>` where: xyz is one of aai, dan, zrn, pr, dsd, mti, time, flowname.

Table 3-3 explains the header filtering command lines, descriptions, and their expected results.

Table 3-3: Header filtering

Command line	Description	Expected results
<code>-h mti=12[xx]+ -o hdr</code>	Given header filter of aai, dan, zrn, pr, dsd, mti with regular expression and format output as hdr from file.	All headers with mti is xxx or xxx in file.
<i>Continued...</i>		

Body Filtering

There are two options.

1. With option of `-xmf-in`, or `-xmf-out`, filter format is `<xyz>=<value>` where:
 - field can be specified by field name (for example, `Iso::MessageMaps`), or by field ID (for example, `F1`).
 - value can be a regular expressions (for example, `x[0-x]+xx`)
2. *Continued...*

Appendix A, Formatted Output

There are two options for formatted output:

1. With option of -o to ..., hdr, xml, hex, bin or count
2. With option of -s to ... message segments; any combination of heading, frame-in, xmf-in, frame-out, xmf-out

Table 3–2: Formatted Output

Command line	Expected results
o_heading file1	All messages in file1, output formats as hdr; all headers in file1
o_xml file1	All messages in the file1, output formatted as xml
<i>Continued...</i>	