



MDI Maintenance User Guide

(version 1.1)

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Table of Contents

1. Introduction	1
2. Overview	2
3. JCL Parameters and Arguments	3
3.1 -DD_<DD name> keyword	3
3.2 -PARM keyword	3
4. Actions and Parameters	4
4.1 DCBTABLE	4
4.2 AUDIT	4
4.2.1 MDI Profile Audit Log	5
4.2.2 PDQ Audit Log	5
4.3 TRANSID	5
4.4 SLPCHECK	5
5. Sample JCL	6
5.1 TRANSID	6
5.2 AUDIT	7
5.3 DCBTABLE	7
5.4 SLPCHECK	9
6. Results	10
7. RACF Profile Security	11

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1. Introduction

This document will describe the Maintenance Profile for the Luminex MDI Platform. This Profile provides a means to perform previously defined actions on the MDI platform. These actions can include: uploading log information, downloading specific files or tables, or perform actions on the MDI platform. This document augments information in *MDI Batch Interface User Guide*, which is required reading for this document.

The use of the Maintenance, or MAINT, Profile does not require licensing. This document assumes that the user is familiar with the use and execution of the SecureTransfer, XPDS, and other primary profiles.

2. Overview

The MAINT Profile can move data to and from the mainframe. Typically, this data takes the form of a report. A report sent to the mainframe will reside on a VOLSER in a predefined dataset that will be defined in the JCL. The data transfer can be performed by any application or utility, such as IEBGENER.

Unlike other Profiles, the MAINT profile will allow just 1 input or output defined by the JCL DD statement.

3. JCL Parameters and Arguments

Sample JCL for specific actions is included at the end of this document. This section will describe the fields of importance. Below is a sample section of the JCL.

```
000017 //FILEA      DD  DISP=(NEW,CATLG),DSN=&F1DSN,
000018 //              DCB=(RECFM=FB,LRECL=255,BLKSIZE=0),
000019 //              UNIT=&UNIT
000020 //SYSIN      DD  *
000021 -DD_FILEA=TRANSID
000022 -PARM TID=1705115235436550 LOGTYPE=MDI
```

3.1 -DD_<DD name> keyword

Unlike other profiles, the -DD_<DD name> keyword for MAINT provides a keyword that will be used to determine the action to be performed on the MDI platform. Note that the -DD_<DD name> follows the convention where <DD name> must exist in the JCL (see line 00017 in the example). In this example, the action keyword is TRANSID (line 000021).

3.2 -PARM keyword

The -PARM keyword indicates that special operating parameters follow. Each action keyword can have their own unique parameters. In the TRANSID action example above, the values of TID=1705115235436550 and LOGTYPE=MDI provide specific information for the TRANSID action.

4. Actions and Parameters

This section describes the currently supported actions of the MAINT profile. It is likely that new actions have been recently developed that are not documented in this manual. The customer should contact Luminex support for any new actions.

4.1 DCBTABLE

This action will download a specifically formatted table that will be used by the PDQ File Mover. This action should not be used without in-depth knowledge of the table format. The format is not described in this document. This action requires a WATCHER_NAME argument. Below is an example.

```
-DD_FILEA=DCBTABLE -PARM WATCHER_NAME=SYSPLEX2
```

4.2 AUDIT

This action will upload report information. It is specified by the action AUDIT as shown in the example below:

```
-DD_FILEA=AUDIT
```

Audit logs are permanent logs that are kept on the MDI server that log actions, jobs, or transactions, whose permanent information may be required for auditing. There 2 reports that are currently supported under the MAINT profile, the MDI Profile audit log and the PDQ File Mover audit log. These are specified in the -PARM LOGTYPE= field.

Additionally, a -PARM TIMEFRAME= field will specify the date range in which the audit logs will be pulled. The format of this field is variable but must be double-quoted. Below are some examples of the format:

TIMEFRAME="4 days ago" – This will return the logs from the last 4 days

TIMEFRAME="12/1/16" – This will return the logs from the specified date to the current time.

TIMEFRAME="12/1/16 – 1/3/17" – This will return the logs specified in the date range up to, but not including, the second date.

If no TIMEFRAME is specified, the entire set of logs will be returned.

The FILTER=ERROR parameter cause only audit logs indicating failures to be returned.

An example of a -PARM line is as follows:


```
-PARM LOGTYPE=MDI TIMEFRAME="7 days ago"
```

4.2.1 MDI Profile Audit Log

This audit log is specified by LOGTYPE=MDI

4.2.2 PDQ Audit Log

This audit log is specified by LOGTYPE=PDQ

4.3 TRANSID

The TRANSID action will return information on the specified Transaction ID. A Transaction ID is associated with every MDI Profile job and every PDQ file transfer. Information regarding the transaction will be returned. This action is defined by action TRANSID as shown in the example below:

```
-DD_FILEA=TRANSID
```

The -PARM values are TID=<Transaction ID> and the type of log that will be searched. For example, to get information on the Transaction ID of 10223948843773 from the MDI Profile logs:

```
-PARM TID=10223948843773 LOGTYPE=MDI
```

To get a Transaction ID of 171200349934088 from the PDQ logs:

```
-PARM TID=171200349934088 LOGTYPE=PDQ
```

4.4 SLPCHECK

The SLPCHECK action will perform a confidence check for SLP from the mainframe. The action is to run a small script to verify the SLP program is installed and licensed. The output of the SLP script or any errors messages received are returned. The -PARM LOGTYPE=SLP is used with this action.

5. Sample JCL

The sample JCL shown here will require some changes to work in the customer environment. For example, the SET UNIT= directive is set to use Luminex lab devices.

5.1 TRANSID

The following sample JCL will retrieve information on a single Transaction ID. In most cases it will return the information that resides in the audit log. If an error occurred with the job associated with the Transaction ID, additional information will also be returned.

Note in this JCL a print of the dataset is included in the job output. This step is optional.

```
000001 //TRANSIDG JOB 0,0,CLASS=T,MSGCLASS=T,NOTIFY=&SYSUID,REGION=0M
000002 //*
000003 // JCLLIB ORDER=(LUMENG.MDI.JCL)
000004 //*
000005 //*****
000006 //*
000007 // SET UNIT=MDI9900
000008 //*
000009 // SET F1DSN=TEST.TRANSIDG.&SYSUID..FILE1
000010 //*
000011 //CLEANUP EXEC PGM=IEFBR14 delete dsn from possible prior runs
000012 //DD1 DD DSN=&F1DSN,DISP=(MOD,DELETE),UNIT=(SYSDA,,DEFER),
000013 // SPACE=(TRK,0)
000014 //*
000015 //XPROC EXEC LUMXPROC,PROFILE=MAINT
000016 //*
000017 //FILEA DD DISP=(NEW,CATLG),DSN=&F1DSN,
000018 // DCB=(RECFM=FB,LRECL=255,BLKSIZE=0),
000019 // UNIT=&UNIT
000020 //SYSIN DD *
000021 -DD_FILEA=TRANSID -PARM TID=1705115235436550 LOGTYPE=MDI
000022 //*
000023 //*
000024 //PRINT EXEC PGM=ICEGENER print uploaded file
000025 //SYSPRINT DD SYSOUT=*
000026 //SYSOUT DD SYSOUT=*
000027 //SYSIN DD DUMMY
000028 //*
000029 //SYSUT1 DD DISP=(OLD,DELETE),DSN=&F1DSN,UNIT=&UNIT
000030 //*
000031 //SYSUT2 DD SYSOUT=*
000032 //*
```

Line 15 specifies the Profile name of MAINT.

Line 21 specifies the unique information to execute this profile. In this case, information on the MDI Transaction ID of 1705115235436550 is requested. The results are in the specified DSN shown on line 9 and in the PRINT output.

5.2 AUDIT

The following JCL will upload audit logs to the mainframe. In this example, the PDQ audit log is retrieved. The timeframe is from 12/1/16 to 12/1/17. See the JCL from the TRANSID and the use of the PRINT statement. It can also be used here (but is omitted for brevity).

```
000001 //AUDITG JOB 0,0,CLASS=T,MSGCLASS=T,NOTIFY=&SYSUID,REGION=0M
000002 //*
000003 // JCLLIB ORDER=(LUMENG.MDI.JCL)
000004 //*
000005 //*****
000006 //*
000007 // SET UNIT=MDI9900
000008 //*
000009 // SET F1DSN=TEST.MDIPAUDIT.&SYSUID..FILE1
000010 //*
000011 //CLEANUP EXEC PGM=IEFBR14      delete dsn from possible prior runs
000012 //DD1      DD  DSN=&F1DSN,DISP=(MOD,DELETE),UNIT=(SYSDA,,DEFER),
000013 //           SPACE=(TRK,0)
000014 //*
000015 //XPROC      EXEC LUMXPROC,PROFILE=MAINT
000016 //*
000017 //FILEA      DD  DISP=(NEW,CATLG),DSN=&F1DSN,
000018 //           DCB=(RECFM=FB,LRECL=255,BLKSIZE=0),
000019 //           UNIT=&UNIT
000020 //SYSIN      DD *
000021 -DD_FILEA=AUDIT -PARM LOGTYPE=PDQ TIMEFRAME="12/1/16 - 12/1/17"
000022 //*
```

Line 15 specifies the Profile name of MAINT.

Line 18 indicates a record size of 255. Audit log lines are longer than the standard 133.

Line 21 specifies the unique information to execute this profile. In this case, information on the PDQ Audit logs for the timeframe 12/1/16 to 12/1/17 is requested. The results are in the specified DSN shown on line 9.

5.3 DCBTABLE

This sample JCL will download the DCBTABLE from the mainframe. The table will be associated with the File Watcher configuration SYSPLEX2.

```
000001 //DCBTABLE JOB 0,0,CLASS=T,MSGCLASS=T,NOTIFY=&SYSUID,REGION=0M
000002 //*
000003 // JCLLIB ORDER=(LUMENG.MDI.JCL)
000004 //*
000005 //*****
000006 //*
000007 // SET UNIT=MDI9900
000008 //*
000009 // SET F1DSN=TEST.DCBTABLE2.&SYSUID..FILE1
```

```

000010 //*
000011 //CLEANUP EXEC PGM=IEFBR14      delete dsn from possible prior runs
000012 //DD1      DD  DSN=&F1DSN,DISP=(MOD,DELETE),UNIT=(SYSDA,,DEFER),
000013 //              SPACE=(TRK,0)
000014 //*
000015 //XPROC      EXEC LUMXPROC,PROFILE=MAINT
000016 //*
000017 //FILEA      DD  DISP=(NEW,CATLG),DSN=&F1DSN,
000018 //              DCB=(RECFM=FB,LRECL=1200,BLKSIZE=12000),
000019 //              UNIT=&UNIT
000020 //SYSIN      DD  *
000021      -DD_FILEA=DCBTABLE -PARM WATCHER_NAME=SYSPLEX2
000022 //*

```

5.4 SLPCHECK

This sample JCL will perform a confidence check for SLP from the mainframe. The action is to run a small script to verify the SLP program is installed and licensed. The output of the SLP script or any errors received are printed to the sysout.

```
000001 //SLPCHK JOB SLPCHK,'MDI9900',CLASS=T,MSGCLASS=A
000002 //    REGION=OM
000003 /**
000004 /** USES MAINT PROFILE TO CHECK SLP INSTALLED AND LICENSED
000005 /**
000006 // JCLLIB ORDER=(LUMENG.MDI.JCL)
000007 // SET PROFILE=MAINT
000008 /**
000009 // SET DEV=MDI9900
000010 /**
000011 // SET F1DSN=TEST.SLPCHK.DATA.FBA
000012 /**
000013 //*****
000014 /**
000015 /** CLEAN UP FROM PRIOR RUN AND DEFINE ALL TEMP DSNS
000016 //D          EXEC PGM=IEFBRI4
001100 // SET F1DSN=TEST.SLPCHK.DATA.FBA
001200 /**
001300 //*****
001400 /**
001500 /** CLEAN UP FROM PRIOR RUN AND DEFINE ALL TEMP DSNS
001600 //D          EXEC PGM=IEFBRI4
001700 //SYSPRINT DD  SYSOUT=*
001800 //TEMP1     DD  DSN=&F1DSN,DISP=(MOD,DELETE),
001900 //          UNIT=(&DEV,,DEFER)
002000 /**
002100 //*****
002200 /**
002300 //XPROC1 EXEC  LUMXPROC,PROFILE=&PROFILE
002400 //XPROCLOG DD   SYSOUT=*
002500 //SYSPRINT DD   SYSOUT=*
002600 //FBIN      DD  DISP=(NEW,CATLG),DSN=&F1DSN,
002700 //          DCB=(RECFM=FB,LRECL=255,BLKSIZE=0),
002800 //          UNIT=&DEV
002900 //SYSIN     DD  *
002910 -PARM=LOGTYPE=SLP ;
003000 -DD_FBIN=SLPCHECK ;
003100 /**
003200 /**
003300 //PRINT     EXEC PGM=ICEGENER
003400 //SYSPRINT DD  SYSOUT=*
003500 //SYSOUT    DD  SYSOUT=*
003600 //SYSIN     DD  DUMMY
003700 /**
003800 //SYSUT1    DD  DISP=(OLD,DELETE),DSN=&F1DSN,UNIT=&DEV
003900 /**
004000 //SYSUT2    DD  SYSOUT=*
004100 /**
```

6. Results

Any failure to transfer data to or from MDI will result in ABEND codes associated with that transfer program. The entire batch program will abend if any step fails. If the LUMXPROC step fails, an MDI code will be returned, and the appropriate ABEND code delivered.

7. RACF Profile Security

Mainframe profile execution requires the setup of RACF permissions. Refer to *MDI Batch Interface Installation Guide* for details. The Class of SFTP will need to be defined. The direction of PUT or GET is also required.



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