**How to use BVI logs**

# The purpose of the BVI logging function

All business views operations are through graphical interface. For troubleshooting purpose, it is necessary to trace exactly how each object is created. The BVI logging function is to answer this need.

# Requirement

This function is only available to DUAS V533 + FX24716 and later.

# Implementation

A variable, UX\_BV\_LOG\_LEVEL, needs to be defined only on the Windows BVI node. It has to be defined in the %UXMGR%\uxsetenv.bat, the %UXEXE%\UNIVERSE.def and the %UXEXE%\[Company\_name].def files.

There are 5 possible values for this variable:

OFF - The logging system is down

DEFAULT - The logging system is on, and logs some basic information, e.g. opening and closure of the interface of BV

MODERATE - The logging system is on, and logs more users' operations, this level also logs default level information

AUDIT - The logging system is on, and logs users' drag, drop, creation, copy and paste etc. of elements, including moderate level

HIGH - The logging system is on, and logs all information. The values are case insensitive.

After defining the variable, the DUAS needs to be restarted.

Once the variable has been enabled, one new directory "bvi" will be created for each area, within %UXLEX%, %UXLAP%, %UXLSI% and %UXLIN%. BVI logs will be saved in them.

# How to understand the result

## How to find specific logs

Normally, a new log file is created when the current operation is more than 1 hour later than the previous operation. It is possible that the operations on the same window were recorded in different log files. It is also common that the operations on different BV windows are recorded in the same log files.

The only way to identify the operations in a specific window is through the "Process ID" of a record. We will look into the detail in the coming sections.

To find the process ID, we can use the time stamp of a log file and key words used in the records to find relevant records. Once we know the process ID, we can find out all related records from available logs.

## Log file naming convention

The log file name comes with 2 types. CREATE\_[time\_stamp].log or [BV\_NAME]\_[time\_stamp].log. When creating a new BV the first naming convention is used; when working on an existing BV, the second way is used.

## Record structure

Each record is displayed in 2 lines. The first line presents the source of the log record. The second line presents the log message.

For example:

[Level]: AUDIT [Time]: 27/04/2009 11:21:53. [Seq Num]: 3 [User]: univa [Thread ID]: 3036 [Process ID]: 1160

[Message]: Drag task from the list object: C69095 Version:000, target node: calpmzwa.

In the first line:

The 1st field: display the minimum log level required to generate this message

The 2nd field: time stamp of the message

The 3rd field: is the operation sequence number within this BVI window

The 4th field: Dollar Universe user name

The 5th field: thread ID of the process

The 6th field: process ID of the BVI window

In the second line:

The 1st field: the operation description

The 2nd field: the object name

The 3rd field: the target node name

## Cases study

The following is a sample log records of one complete BV window operation. Please note that all of the records have the same Process ID.

The content shows exactly which steps are followed to create this view.

[Level]: DEFAULT [Time]: 23/04/2009 16:16:58. [Seq Num]: 1 [User]: univa [Thread ID]: 4912 [Process ID]: 280

[Message]: OPEN business view with create mode.

[Level]: DEFAULT [Time]: 23/04/2009 16:17:02. [Seq Num]: 2 [User]: univa [Thread ID]: 4912 [Process ID]: 280

[Message]: The view's panels will display:

[Level]: MODERATE [Time]: 23/04/2009 16:17:08. [Seq Num]: 3 [User]: univa [Thread ID]: 4912 [Process ID]: 280

[Message]: Activate job panel.

[Level]: AUDIT [Time]: 23/04/2009 16:17:11. [Seq Num]: 4 [User]: univa [Thread ID]: 4912 [Process ID]: 280

[Message]: Drag uproc from the list object: F Version:000, target node: calpmzwa.

[Level]: AUDIT [Time]: 23/04/2009 16:17:32. [Seq Num]: 5 [User]: univa [Thread ID]: 4912 [Process ID]: 280

[Message]: Drop uproc into the view object: F Version:000, target node: calpmzwa.

[Level]: DEFAULT [Time]: 23/04/2009 16:17:41. [Seq Num]: 6 [User]: univa [Thread ID]: 4912 [Process ID]: 280

[Message]: SAVE business view.

[Level]: MODERATE [Time]: 23/04/2009 16:17:52. [Seq Num]: 7 [User]: univa [Thread ID]: 4912 [Process ID]: 280

[Message]: Start saving new uproc object: F Version:000, target node: calpmzwa.

[Level]: HIGH [Time]: 23/04/2009 16:18:23. [Seq Num]: 8 [User]: univa [Thread ID]: 4912 [Process ID]: 280

[Message]: End saving new uproc object: F Version:000, target node: calpmzwa.

[Level]: DEFAULT [Time]: 23/04/2009 16:18:28. [Seq Num]: 9 [User]: univa [Thread ID]: 4912 [Process ID]: 280

[Message]: CLOSE business view.