

XDB Server Logging Parameter Enhancement

Within the Mainframe Express v3.0 release, the XDB Server logging parameters have been enhanced for ease of use. Prior to this enhancement, the server would use the values entered into the "Recovery" checkbox and the "Log File Size" entry of the Server Configuration Logging Tab to create new log files for a location. If the user wished to change the logging parameters, the server had to be shut down and the log files removed from the location. Once the server was restarted and the location re-opened, the server would create the new log files based upon the current settings in the Server Configuration dialog. After the log files were created for the location, the user had no way of verifying the settings other than examining the behavior of the log files for that location.

With this enhancement, new syntax has been added to the SET LOG command. The new syntax diagram is as follows:

```
SET LOG FOR location
      TO path
      ROLLFORWARD [ OFF | ON ]
      LOG FILE SIZE n

      WITH [ COPY | MOVE | REPLACE | RESTART ]
```

LOG FILE SIZE n --
value 'n' is in K bytes

ROLLFORWARD [OFF | ON] --
Off means old unneeded logs will be deleted automatically,
On means log files will be kept

When changing LOG FILE SIZE or ROLLFORWARD, you can't specify WITH COPY or WITH REPLACE. You must specify WITH REPLACE if the TO path has not been specified, otherwise you must specify WITH RESTART when moving the logs. In these two cases:

- WITH REPLACE means the old logs will be removed and replaced with new logs
- WITH RESTART means the old logs will be left in the old path and the new log files will be created in the new path.

In addition to the changes to the SET LOG command, a new "virtual" table has been added. The XDBSTAT.LOGINFO table will now be available in all local XDB Server locations. Querying this table will give the current settings for the log files in that particular location. The columns within the table are:

- LOG_PATH - Contains the path to the log files for the location
- LOG_STATE - Shows the state of the logs as either CLEAN or DIRTY to indicate whether a transaction has modified the log files
- LOG_VERSION
- Internal XDB logging version
- ROLLFORWARD_STATUS - Shows either OFF or ON, where OFF means that logs no longer required for transaction rollback will be purged at the next checkpoint and ON means that logs will never be purged by the XDB Server
- LOG_FILE_SIZE - Maximum size in bytes of an individual log file. New log files will be created once this limit has been reached.