

OpenTURBO A.01.04 Release Notes:

1. Bug - 10-14-2002 SEDC

Description: Manual master dataset DBUPDATE SQL statement contains IMAXSOFT13\_PATH\_nn invalid columns.

Resolution: Fixed in libot and libotdbg. Manual master dataset has no path, the IMAXSOFT13\_PATH\_nn columns are only used for detail dataset.

2. Enhancement: 10-01-2002 SEDC

Description: DBINFO mode 406, returns the total number of concurrent database users.

Resolution: The return value is a 4-byte integer, they are the 25<sup>th</sup> and 26<sup>th</sup> half-word of return buffer; the half-word count starts from 1 of the return buffer.

3. Special AMISYS Version:

Description:

- o Column full/partial name replacement, such as # to \_NBR
- o IMAXSOFT13\_SEQ\_NO name replacement, such as IMAGE\_RECNUM
- o Path control column name prefix replacement, such as AMISYS instead of IMAXSOFT13
- o Position all internal generated columns at the beginning of the table
- o X-TO-NUMBER and CHAR type conversion

Resolution: A standalone version for AMISYS. All AMISYS related changes have no impact to the standard A.01.04 release. A new file CROSSREF.ORACLE is required for AMISYS only version.

4. Jumbo Dataset Support:

Description: Detail dataset size that is larger than MPE/XL file system maximum size (4GB). Program OTDRV detects jumbo detail dataset automatically.

Resolution: Same as TurboIMAGE, POSIX is needed to access the OpenTURBO unloaded files. The ORACLE loader script is one per chunk file, the first script uses TRUNCATE option, and all subsequent scripts use APPEND option for data loading.

5. TIFile and ORACLE database checksums for version and integrity control. New control table OT.TIBASE is added to the ORACLE.

Description: otSETChecksum and otCHECKChecksum are used to set and verify the checksums in ORACLE and TIFile to assure the integrity of OpenTURBO database environment.

Resolution: A.01.04 allows setting and checking checksums manually. In the next release, the very first DBOPEN will enforce the checksums checking.

6. ticopy utility for migrating a TIFile to a newer version and making a copy of TIFile for a different TurboIMAGE database name.

Description: ticopy is used for upgrading your current version of TIFile to a newer version without re-creating it from HP3000. And, ticopy is also used to make a copy of a TIFile with a different

TurboIMAGE database name, this is used in conjunction of otDBCOPYT to make a full or partial copy of your TurboIMAGE in ORACLE for testing or reporting.

Resolution: A.01.04 allows setting and checking checksums manually. In the next release, the very first DBOPEN will enforce the checksums checking.

7. otDBCOPY utility for making a TurboIMAGE full or partial database copy in the ORACLE database.

Description: You may use this tool to copy a full or partial TurboIMAGE database into another name in the same ORACLE instance.

Resolution: otDBCOPY provides 2 mode, interactive mode and batch mode, if you are omitting -x option then otDBCOPY will perform database copy immediately; if you use -x, then a set of scripts will be created for you to copy your database off-line. \* NOTE \*, if the copy-to database already exists, you need to purge it first via otDBPURGE utility.

8. OpenTURBO version of DBUTIL - otDBUTIL currently supports SHOW USERS and SHOW LOCKS only.

Description: You may use this tool to view database users and locks.

Resolution: otDBUTIL is similar to DBUTIL, but with limited capabilities. It will be your main tool for database administrative related tasks, such as structure change, checksum verification, database copy, database integrity reports, and etc.

9. DBERROR and DBEXPLAIN - we 100% map TurboIMAGE errors and messages to OpenTURBO emulator, except those of HP3000 specific errors. New OTERROR.ORACLE file is required.

Description: Bug fixing, calling DBEXPLAIN when DBOPEN fails, program was abnormally terminated. Same error number, different messages for different TurboIMAGE calls.

Resolution: New OTERROR.ORALCE is required. New TurboIMAGE and ORACLE error and message mapper is implemented in A.01.04 libot and libotdbg.

- 10.OT\_CONFIG environment variable for specifying a specific OpenTURBO configuration file (CONFIG) for a process.

Description: Default is \$\_OTB\_ROOT/conf/CONFIG.

Resolution: HP/3000, you may use :FILE CONFIG = or :SETVAR OT\_CONFIG= to redirect your CONFIG file. HP/900, you may use \$export OT\_CONFIG= to redirect your CONFIG file.

- 11.DEBUG13 - to trace TurboIMAHE API calls and their corresponding SQL statements.

Description: What TurboIMAGE calls are used in your applications and how are they translated to SQL statements?

Resolution: In the next release, all these information will be logged into a database for further analysis and OpenTURBO will use the results to generate your native ORACLE applications.

12.DEBUG7 - to trace long transactions, whose elapse times are longer than the pre-set threshold (in CONFIG file).

Description: Log transaction monitoring.

Resolution: For performance monitoring and benchmarking.

13.Bugs - otgenLOAD triggers for DBUPDATE:

If DBUPDATE's column-list contains path-columns; if values are changes, then their corresponding IMAXSOFT13\_PATH\_nn need to be re-set, otherwise, IMAXSOFT13\_PATH\_nn should remain the same values.

OpenTURBO control tables DBACCESS, DBLOCK, DBLOCK1, DBLOCK2 should be owned by the creator of each TurboIMAGE creator, which is the fully qualified TurboIMAGE database name, but they must also properly granted for other users for select and update.

libot and libotdbg exit-recovery routine - traps user program's abnormal termination, gracefully shuts down OpenTURBO server process and releases database resources.

dbsvr - traps abnormal termination, releases database resources, and shuts down itself.

listner - traps dbsvr abnormal termination and releases database resources.

14.DBCONTROL - New OpenTURBO modes:

88 Set OpenTURBO Debugger Level Remotely  
89 Set OpenTURBO Debugger Output Filename Remotely  
90 Set IGNORE\_RETURN\_STATUS ON  
91 Set IGNORE\_RETURN\_STATUS OFF  
92 Set ONE\_DIRECTION\_CHAIN\_GET ON  
93 Set ONE\_DIRECTION\_CHAIN\_GET OFF  
94 Enlarge MAX\_CURSOR\_ALLOWED

15.All passwords are mandatory encrypted in OpenTURBO scripts and control files; only exceptions are those scripts for ORACLE's SQLPLUS, it is user's responsibility to either plug passwords in during execution time or use 3<sup>rd</sup> party security software to manage them.