

## NAAUG 2004 Topical Discussion: Oracle in Aleph

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Recorder: Dave Kennedy (USMAI)

ExLibris Representation: Luis Lacayo and Jerry Specht

Some notes from the session follow.

Luis Lacayo discussed the migration paths of Oracle with Aleph. ExLibris installed Oracle versions 8.0.6 and 8.1.7 with previous versions of Aleph. In an effort to keep up with technology, ExLibris is requiring that customers migrate to version 9.2.0 with version 16.02 of Aleph. Luis reported that ExLibris is starting to take advantage of more Oracle utilities with Oracle 9i. Some of the changes that Luis highlighted are:

- More tablespaces – from 2 tablespaces (ts0 and ts1) to 4 tablespaces (small, medium, large and huge)
- Uniform extent sizes
- Unlimited extents
- Locally managed tablespaces instead of dictionary managed tablespaces
- Reduced archive logging of indexes
- Language changed from US7ASCII to UTF8
- Introduction of more tables in version 16.02

It was asked of Luis if backup strategies have changed. The answer was no. ExLibris recommends using hot backups. The majority of the represented institutions are doing cold backups.

There was some discussion of Upgrade Express, and the experiences at Harvard and USMAI (Maryland). Harvard reported that they had to reindex headings and word indexes. They also reported that they did not upgrade Oracle to 9i. They upgraded to version 16.01. USMAI is testing ExLibris' new Upgrade Express product to 16.02. Reported that the Oracle table conversion scripts looked good, but involved exporting from one oracle instance and into another, which involves downtime. Jerry Specht commented on ExLibris' new plan for Upgrade Express using the 'delta' processing that is used for parallel indexing.

There were some questions about upgrading to 9i prior to upgrading to Aleph version 16.02. It is possible to do so, and in place, but Aleph would need to be recompiled for the new Oracle version. Compile scripts may need to be modified, depending on the version of Aleph.

Luis reported that Oracle 9i uses 'undos' as opposed to rollback segments.

ExLibris has done some space estimation, and estimates that 110K of disk space are needed per bib record in oracle 9i. They have also estimated that the size of the Z00R table is twice the size of the Z00 table.

Questions were asked about parallel indexing. It has been done at Harvard. It involves a new library, which needs to be set up for the actual indexing. A new table, Z07H, is used to keep track of changes to the old indexes. Once indexing is completed in the parallel indexing library, Z07H changes are queued up by ue\_01 on the new indexes and they are switched to be the production indexes.

It was asked of Luis and Jerry where parallel processing fits into the future. Jerry indicated that it is the general solution that would be recommended. But, it is not recommended for all sites, which is still an open question. The future plan for doing version upgrades will be to do them in place, rather than the exporting/importing that is part of the current Upgrade Express package.

Is anyone running a multi-tier Oracle installation? Yes, CUNY is.

It was noted that backup scripts are packaged with Aleph, but no recovery scripts. Luis indicated that customers would need to contact ExLibris to recover databases. ExLibris has tested hot backup recovery at CCLA.

There was some discussion about monitoring software and what can be expected from the Aleph Monitor product. Sites are using various methods of system and oracle monitoring, including nagios, orasnap, teamquest, and homegrown scripts.

Does anyone have a subset extract program? No.