



Oracle to Oracle Online migration at Carl Zeiss

SAP platform migration completed over one weekend

Carl Zeiss is one of the world's leading optical and opto-electronic firms, with a workforce numbering more than 24,000. IT infrastructure is of great importance for such an innovative company with such a global reach. When the company decided to outsource to Siemens IT Solutions and Services, one of its main concerns was an optimum SAP migration process.

Carl Zeiss set aside one weekend for the downtime of the key SAP platform for the markets (EMEA, USA and APAC). System stability and reliability also needed to be ensured after migration. Oracle addressed both these concerns with its latest "Triple-O" online migration technology.

The project

Carl Zeiss uses SAP ECC 6.0 with SAP NetWeaver 7.0 and Oracle Database 10g Release 2 (10.2.04). The largest platform covered in this article is based on a 2.5 TB database. If the traditional approach of SAP LOAD had been used to migrate this hefty database, it would have taken around 40 hours to transfer the data alone. The subsequent interface adaptations and other follow-up work required would have made the original requirement of migrating over one weekend impossible.

This migration project included various challenges:

- Migration of a database of this size, including interface adaptations and corrections, over one weekend
- Large number of interfaces (more than 200)
- Inclusion of EMEA, USA and APAC at the same time

Oracle to Oracle Online migration (Triple-O) is a new technical way of carrying out large system migrations. This process enabled Carl Zeiss to migrate its global ERP system in just one weekend and without any noteworthy availability restrictions.

Implementation

The project was started in July and the actual cut over took place in mid-August.

In order to satisfy the requirements of Carl Zeiss, Siemens IT Solutions and Services therefore used Oracle Triple-O for the migration. This is available for a wide range of system platforms (UNIX, Linux, Windows) which support SAP.

Triple-O consists of two components:

- O2O

Migration from the source to the target database is started at a defined time. Once complete, the new database is fully synchronized with the old one – although only to the status at the start of migration. But since operations have continued during the migration, there is a delta which is usually very small in terms of the volume of data concerned compared with the actual size of the database.

- This final update for the new target database is undertaken online using the Triple-O component. To do this, Triple-O records all the changes which occur during O2O migration in the source database. Once the migration is completed with O2O and the IT operation has been closed for the migration – as planned – the database changes recorded are then updated in the target database. It is estimated that this will take around 30 minutes, freeing up a lot of time for interface adaptations, corrections, tests and the decision to go live.

An SAP target system was produced. The source system was migrated into this. The corrections expected during a migration at basic SAP level and interface adaptations then had to be undertaken.

To ensure a successful migration, the actual process was tested twice with the assistance of Carl Zeiss experts; once as part of a test migration to the future target system and once to the new test management system.

Everyone involved in the project was therefore fully prepared when the actual migration started as planned on Friday. The final posting date was 9 pm. The system was powered down. And it was soon made available again for testing.

Synchronization took 30 minutes. The financial and compliance checks and user acceptance tests required in the APAC, Americas and EMEA regions were then undertaken.

Just before midnight on Saturday, the team decided to go live.

Technological platform: Oracle Triple-O

The new “Oracle Triple-O” online migration technology is recommended when undertaking a whole host of recurring requirements in data centers:

- Migration of large Oracle database environments to new system platforms in short periods of time
- Reorganization of the database environment
- Database upgrades
- RAC implementations
- Installation of new and more powerful system platforms
- Realization of new storage solutions

Quote from Siemens

Oracle to Oracle Online migration (Triple-O) is an innovative further development of O2O which allowed us to move several hours of weekend work forward in the week for this project.

Oracle Triple-O offers efficient functions for ensuring the transfer of data from source to target system and uses the Golden Gate component for data synchronization. Oracle migration can be interrupted at any time. The actual production platform is not restricted in any way at any time.

Oracle Triple-O is SAP-certified.

For more information, please consult SAP Note 1508271 or go to www.oracle.com/sap.

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