



CITRA in a Smallworld – Oracle Spatial Environment

CISS entered the market in 1987 with the CITRA application, and has continued to evolve and expand the capability. Presently there are over 5,000 licenses, primarily in the German market, but also international i.e. Turkey, Brazil, Ireland and Saudi Arabia.

From the beginning, the development focus has always been on strong data modelling tools rather than to accommodate formats. The reasoning for this direction is market driven due to the stringent requirements to supply accurate and high quality data to suffocated GIS environments, and complex data models, meeting the exacting standards of a typical German user.

Since the middle of the 90's bidirectional translators to Smallworld and to Oracle Spatial were developed and successfully utilized in several integration and migration projects within the CITRA environment. You can take advantage of our extensive project experience, to meet your requirements. CITRA is not an out of the box translator but a highly sophisticated data modelling and migration tool. Working with CISS and our CITRA tool set assures project success.

Following are a few of the clear advantages of utilizing CITRA in an Smallworld environment combined with Oracle Spatial.

- Smallworld's geometry based topology can be transferred to relations or mapped on the Oracle Spatial Network Model, thus accommodating multiple options for topological network functionality and enhancement. Stated another way Smallworld topology can be mapped on the Oracle Spatial network and thus Oracle methods or SQL can be utilized for i.e. sophisticated network tracing.
- Differential updates are possible, e.g. only those elements which have been inserted, deleted or replaced in Smallworld will be translated (so called difference stream of Smallworld GIS), and these elements are handled correctly in the Oracle data model. This functionality reduces translation and synchronization time.
- CITRA can extract and export a specified set of views and/or information. This is done via any (possibly spatial) filter that is defined by the users for specific requirements and output. Actual object visibilities may be taken into account. Exported data include for example view elements such as dimensions or so called internal worlds.
- The Smallworld Style System can be extracted completely. Facilitating automatic generation of (colour, line-types and styles etc.) presentations depending on the system capability. Smallworld symbols could be translated to other environments e.g. DXF-files or DXF-blocks.
- All implicit existing attribute information can be derived out of Smallworld and translated to alphanumeric values.



- Catalogues and Enumerators are easily delivered for use by Oracle. Alternatively catalogue values and enumerators can be transformed to clear text.
- Within CITRA different geometry fields (from the GIS) can be transferred to different geometry columns in Oracle.
- Different geometry fields can be mapped on one geometry field in Oracle, accommodating individual data modelling requirements i.e. one to many, or many to one.
- Data from different sources are normally stored in a data warehouse. CITRA accommodates mapping, out of diverse sources to a common data model, utilizing a well defined CITRA created data model.
- CITRA using its Data Modelling and Migration engine provides a high performance cost effective automated translation from source to target.

The following are a few CISS/CITRA references:

Smallworld

E.ON Avacon Braunschweig, Gelsenwasser Gelsenkirchen, N-ERGIE Nuernberg, State capital of Munich, NEW Moenchengladbach, ENSO Dresden DREWAG Dresden (Dresden utilities), STW Düsseldorf (Duesseldorf utilities), STAWAG Aachen (Aachen utilities). Wingas (gas transmission Gazprom is a shareholder), ExxonMobil Production Germany, RMR (gas transmission), STW Bielefeld (Bielefeld utilities), Erdgas Suedbayern (Natural Gas South Bavaria), Group City of Herten, MITGAS Mitteldeutsche Gasversorgung GmbH, RMR Rhein-Main-Rohrleitungstransportgesellschaft m.b.H (gas transmission).

Oracle

Group City of Herten, State Capital of Duesseldorf, KDZ WS Siegen, ENSO Dresden, Landesamt für Umwelt, Wasserwirtschaft und Gewerbeaufsicht, Rheinland-Pfalz (ministry of environment of Rhineland Palantine), Ordnance surveys of Baden-Wuerttemberg und Hesse, OVAG Friedberg (utility).

Customers using both Smallworld and Oracle

Group City of Herten
State capital of Munich
ENSO Dresden
Mettenmeier