

# SmartELCAD



***The integrated, windows based, connectivity tool, which brings the mechanical and electrical engineering worlds together***

## **SmartELCAD Benefits**

- *ELCAD projects can be managed with the same tool as the mechanical projects and the same revisioning rules can be applied.*
- *The relationship between mechanical and electrical projects can be presented and controlled.*
- *SmarTeam meta data and ELCAD properties can be synchronized.*
- *New ELCAD projects can either be based on templates or existing projects.*
- *The history of an ELCAD project becomes accessible because entire projects are saved and revisionized.*
- *The SmarTeam data security environment with vaults and access control becomes available for ELCAD projects.*
- *ELCAD projects are also saved as multi-page PDF files. Therefore ELCAD projects can easily be viewed and printed by non-ELCAD users and the creation of customer documentation becomes very simple.*
- *Item definitions can be synchronized between SmarTeam and ELCAD*
- *Item definitions and ELCAD projects become linked, so that use of an item within an ELCAD project can be indicated.*
- *Bill of materials for ELCAD projects can be generated.*

## **Introduction**

SmartELCAD integrates ELCAD projects into the overall engineering process. ELCAD projects are organized together with the other engineering data within the PDM system. Entire ELCAD projects can be checked-in, checked-out, released and made obsolete as other engineering data.

ELCAD projects become accessible as easy as WORD documents. ELCAD is launched out of the PDM system like any other integrated application. Project header information, like order numbers, customer names, etc. are synchronized between the PDM system and the ELCAD project.

Users with no write privileges can get read only access, which still provides all intelligence of ELCAD with respect to navigation and referencing.

## **Document Management in ELCAD**

An electrical documentation consists of a large quantity of drawings and documents, with many references between each other and links to a database. This complexity of showing components on several sheets (e.g. coil on one sheet and contact on a second sheet) forced the manufacturer of electrical CAE systems to introduce early on a document management system within their applications.

ELCAD contains a complete document management system including an automatic revision control, which works within one ELCAD project.

## **Document Management in SmartTeam**

SmartTeam considers an ELCAD project as one component of an overall project and treats and manages it as such. This besides mechanical design data, office documents, calculations, etc. SmartTeam will be used as common platform should it be required to exchange data between ELCAD and a mechanical CAD system or an ERP system.

## **Functions of SmartELCAD Level 1**

- Entire ELCAD projects are managed by SmartTeam. The SmartTeam life cycle functions become available for ELCAD projects.
- The electrical engineer has the choice of creating a new ELCAD project based on a template or on an existing project.
- ELCAD project header data and SmartTeam profile card attributes can be synchronized.
- ELCAD projects are stored as compressed (ZIP) files within SmartTeam. This saves disk space and

speeds up the data transfer to the vault in an impressive way. Once the project is stored in the vault it is available to other users for further processing.

- Users with read-only privileges can view and navigate through an ELCAD project by means of the guest function of ELCAD (or by ELCADviewer). The ELCAD project remains available for modifications by engineers.
- Multiple Page PDF files from entire ELCAD projects are created at the time of release and managed by SmartTeam. This allows viewing and printing by all SmartTeam users.

## **Functions of SmartELCAD Level 2**

All functions of level 1, plus:

- Synchronization of item definitions between ELCAD and SmartTeam.
- Linking items and ELCAD projects so "items used by..." searches can be run.
- Creation of bill of materials for ELCAD projects within SmartTeam.

## **Product and Company Background**

ELCAD is a product of Aucotec GmbH, used for the electrical design of control systems. SmartTeam is a PDM system of SmartTeam Ltd. SmartELCAD is a product of rotring data AG, which connects both products and provides an integrated engineering approach .

## **Licence**

One SmartELCAD licence is required per ELCAD workstation. SmartELCAD licenses are available as fix or floating licenses. A license pack consists of:

- SmartELCAD software
- SmartELCAD installation and user manual
- SmartTeam demo database which is configured to match the ELCAD 7 sample project.

## **System Requirements**

- Windows 2000, XP pro
- ELCAD Version 7.1 or higher
- ELCAD PDF license
- ELCAD EDM interface (for Level 1)
- ELCAD PDM interface (for Level 2)
- SmartTeam V5R12, SP4 or higher
- Opt. ELCADviewer for readonly users

All workstations must be installed identical.