

Hannover Messe 2014 Pressemitteilung CWSM GmbH Software Solutions Dresden

Building meets Industry Intelligent, innovativ, flexibel, individuell, efficient ...

New applications of the **bcs::**® system as **bcs::**® bimT or **bcs::**® plan are based on BIM, INDUSTRIAL 4.0 and ERP 2020. Working as an intelligent user interface to CAD (AutoCAD® MEP, PLANT 3D), ERP (Mitan® 4T) and relevant data sources.

1. Current Trends

INDUSTRY and BUILDING conquer today "new bank" - it is about increasing competitiveness with increasing globalization and complexity of projects to increase efficiency, to reduce costs and time ...

Modern concepts such as **BUILDING INFORMATION MODELING (BIM)** and **INDUSTRY 4.0** include analog goals and visions for the further development in both areas: buildings and facilities arise before the assembly or manufacturing as smart objects in a virtual world - problems already before the realization be identified and resolved. All information about the buildings, machinery or equipment are available immediately after the handover to the operator or administrator for further processes. With RFID transponders installed objects are intelligently made and combines the real world with the virtual world. The implementation of these visions is across industries with innovative CAD and IT tools is possible.

2. BUILDING CONTENT SYSTEM **bcs::**® system – BIM-compliant information management

The group CWSM GmbH Software Solutions is Autodesk retailer and operates across industries as IT systems integrator and IT service providers. For over 20 years CWSM Software Solutions GmbH Dresden (formerly BCS CAD System GmbH) optimized in customer projects of building construction and plant processes "from the CAD point of view". In recent years, the focus is on the application of know-how in the engineering environment for the different areas of building construction. CWSM advises customers, optimize their CAD / IT processes and support them beyond by project-related training and services.

The specially formed for these tasks CWSM - range BCS CAD + INFORMATION TECHNOLOGIES®, the **BUILDING CONTENT SYSTEM **bcs::**® system** with the **expert system generator **bcs::**® basic** was developed as flexible functional core. This can, for example, specific user interfaces for tendering, planning and implementation of a building construction project are defined up to its management after construction is completed, can be linked and synchronized with all required data sets and data sources. It is operated with increasingly virtual 3D CAD buildings and equipment, from which automatically generate all component-related project information can be extracted.

In close cooperation with the Technical University of Dresden, the HTW Dresden and other companies created in the course of research and development projects, innovative technologies for the implementation of the concept **BUILDING INFORMATION MODELING (BIM) in practice**.

The joint project SARTIA were developed by CWSM Dresden KI - based tools for the control of concrete pump from a CAD model.

Currently, the **RFID technology is linked to the CAFM system **bcs ::**® fm** in the joint project **consortium RFIDimBau**.

The CAFM system **bcs::**® fm is an application of the **BUILDING CONTENT SYSTEM **bcs::**® system**. Further applications are, for example, for the documentation of buildings and industrial facilities as well as for CAD-based As Built-control available.

3. **bcscad :: @bimT - BIM-based optimization of production planning and maintenance of building services systems**

Especially for technical building equipment - Company was **developed together with the company MITAN AG Industry Solution bcscad::@bimT**. It is based on the ideas of BIM, INDUSTRY 4.0 and ERP 2020. **bcscad::@bimT** acts as an intelligent user interface to the object-oriented operating CAD system **AutoCAD® MEP**, the ERP system **Mitan® 4T** and other custom data sources. Buildings and facilities can be documented using the user-specific knowledge base.

About synchronization of the CAD objects get all the necessary information such as for

- **Production planning:** With a push of a button complete manufacturing documentation can be generated including BOMs
- **As Built-control:** About BARCODE or RFID - Scanning can oversizes are created within a short time
- **Maintenance and instant setting:** immediately all information about the component incl. place are available

Moreover, all functions for the production / assembly planning and control available - just to service directories are managed and kept up to date.

4. **bcscad::@plant - documenting systems intelligently**

bcscad::@plant is specifically tailored to the requirements of planning, testing and management of technical systems, individually customizable and extensible documentation system. the object-related data intelligently linked and a flexible, knowledge-based and platform-independent information management possible.

bcscad::@plant

- is the optimized and highly automated plant documentation.
- works based CAD and BIM-compliant (Building Information Modeling), is based on standard software from Autodesk (AutoCAD® PLANT 3D / P & ID) and Microsoft as well as on standard data interfaces.
- specializes in the integration into an existing IT landscape.
- thus supporting facility management as a holistic process and allows the integration of the acquired object information used in the following CAFM systems as **bcscad::@fm**.
- is a special application of the solution **BUILDING CONTENT SYSTEM bcscad::@system**, optimized for the particular application. Documentation of assets is based component based on the acquired property in CAD data with mapping of all system- and component- specific documentation. If necessary, component and service items can be included by attaching AVA or ERP systems. The integrated content management system makes it easy to create your own standardized documents.
- is focused on the intelligent acquisition, processing and management of large amounts of data. The components of the system to be documented are automatically read from the CAD project database and included in the information tree of **bcscad::@plant**. By synchronizing the factual data of the built in components with AutoCAD® PLANT 3D / P & ID data collection effort is reduced to a minimum. If necessary, this synchronization can be extended to other used when configuring CAD solutions.