

# CEITON Web Workflow PPS

*Design and run your perfect business process!*

## **About CEITON's Web Workflow PPS – a real Workflow management system**

CEITON technologies' Web Workflow PPS (short CTWS) is an advanced web-based Workflow management system for production scheduling and control. It can be customized for any workflow in administration or production in order to streamline and optimize entire business processes to save time and money. A unique 3D visualization engine provides a dynamic overview of any workflow – from a simple service procedure to the most complex production processes – unifying quotations, order production, scheduling, time and activity recording, contacts, QA, billing and content archiving in one powerful, completely generic system. It even connects easily to any other software or machine. Web Workflow PPS is the easiest way to build, visualize, plan, control, manage, integrate and bill all of today's business processes.

<http://www.workflow.tv>

## **Main Modules of Web Workflow PPS:**

- Project Management – for tracking, quotations, invoicing, settlement etc.
- Resource Scheduling – for planning productions and any kind of resources
- Workflow Engine – for defining human/technical workflows and forms
- EAI Interfacing – for defining custom interfaces to other systems
- Reporting – for defining plans, analysis, labels, quotes, prints
- Document Management – for managing files based on revision (versioning)
- Media Archives – for managing assets, contents and their meta data

## **Web Workflow PPS Technical Overview:**

- 3-tier architecture (GUI, APP, DB: MSSQL or Oracle)
- scalable from a single workstation up to thousands of users
- completely Web 2.0-based (dynamic thin-client)
- runs on MS Windows, Unix, Apple OSX etc.
- multi-tenancy and Cloud/SaaS/ASP enabled
- multi-lingual (Unicode) and exchangeable languages files
- exchangeable layout via CSS skins

## **Additional Information about CEITON's Web Workflow PPS**

1. Reliability and Stability
2. Workflow Platform
3. Human Workflows
4. Technical Integrations
5. Resource Scheduling
6. Contents and Documents
7. Analysis & Reporting
8. Technologies and Architecture

### **1. Reliability and Stability**

The CEITON technologies Workflow System (CTWS) is an established standardized software platform which is continuously being developed and improved in order to guarantee secure operation for years to come.

- The CTWS is standard software – no custom development.
- It is a platform on which customers can design their own workflows, interfaces, forms, reports etc.
- It has been in productive operation since 2001.
- It is specifically designed for demanding industries like M&E in mind.
- Full training is offered -- from end-user to admin level.
- An annual maintenance contract is offered.
- The release strategy involves new upgrades available for purchase.
- All following capabilities are included in the license at no extra cost.

### **2. Workflow Platform**

The CTWS is a process solution to enable unified integration of all sorts of applications and employee roles. The CTWS Workflow Engine can also manage many arbitrary work processes and forms. These can be modeled easily and without programming. The workflow system automatically informs employees and applications of results or orders and, conversely, is controlled by these.

- Several versions of a workflow can be used simultaneously in the production system.
- Workflow instances and forms can dynamically change at runtime.
- Workflow instances can be managed in the Admin section.
- External freelancers and suppliers can take part in workflows as well.
- The workflow statuses are visualized in 3D and color.
- The workflow definitions are saved in the database rather than in files.
- There is a dedicated project/order management module.

#### **4. Human Workflows**

Employees get work orders by means of web-forms and then make entries specifying the rule-based processing of further workflow execution, including system integration. Work order forms are dynamically adapted to requirements at run-time in order to model the required complexity. Also, the user interface designed in the workflow is inherently flexible.

- The CTWS Workflow Engine has an embedded form server.
- Forms can be dynamically modified at run-time.
- A history is recorded for all user interface elements.
- Users can sort and filter their task and result lists.
- Changes can be applied to multiple forms in one step.
- Template-based modification of forms (also across multiple forms) is enabled.
- Editable form lists span across workflows.
- E-mail integration with feedback links available.

#### **5. Technical Integrations**

The solution supports Enterprise Application Integration (EAI), in order to be able to integrate systems into workflows without programming (e.g. web services/SOAP but also files such as XML, CSV, etc.). Post-XSLT processing of the output files is enabled in order to create arbitrary, and in particular proprietary, target interface files. Single-Sign-On (SSO) with LDAP/Active Directory is possible. As well as back-end integration, a parameterizable front-end integration is also available in order to integrate different programs into a unified workflow on the client side.

- EAI is supported by the CEITON Technologies Workflow System.
- A Service Oriented Architecture (SOA) is provided.
- Interfaces can be freely defined.
- Supported protocols such as files (text, XML, Excel etc.), Web services, COM+, SQL included.
- Integrated XSLT processing.
- SSO through LDAP, Windows AD and other directory services is possible.
- Transfer and encoder systems etc. can be integrated.
- Front-end integration of desktop and web apps, e.g. SAP with SSO.
- The CTWS workflow system itself can be embedded into other systems.

## 6. Resource Scheduling

Workflow engine tasks from the CTWS can be automatically or manually assigned and distributed to employees or teams. Transparent overviews are made available in order to enable the quick creation of process-spanning status across the enterprise, department and resource levels.

- Resources can be scheduled web-based using customizable Gantt-chart views.
- Planning and scheduling can be done by various Drag'n'Drop operations.
- Duty roster planning of employees is possible.
- Rolling shift-planning is enabled.
- Qualifications, availabilities, statutory working time and company-specific rules are observed.
- Employees and freelancers can enter their own work hours, requested time off and available times.
- Planned and actual job and work-times can be compared.
- Internal Cost Accounting is supported using activity-based pricelists.
- Jobs and work times can be booked to ERP systems.

## 7. Contents and Documents

If contents and data carriers are in production and are no longer managed by DAM, these, as well as intermediate contents, can be tracked and controlled from the workflow system. Additionally manual and automatic workflow steps are necessary in order to ensure the quality of production. An integrated document management (with versioning, checking in/out, etc.) is an integral part of the solution. This facilitates attachment of documents and files (PDFs, pictures, sketches, reports, Office files etc.) to workflows, if additional information beyond the scope of the workflow's forms is required.

- Workflow-independent metadata is saved in the CTWS database.
- Metadata and contents can be re-used in workflows (e.g. trailers).
- MAM/DAMs can be integrated using interfaces.
- QC tasks are managed using the CTWS workflow engine.
- External QC systems can be integrated through EAI functions.
- Document management is integrated into the CTWS system.
- Files can be checked in and out.
- Files in document management have a version history.

## **8. Analysis & Reporting**

An integrated reporting module enables the easy definition of lists, plans, etc. which can then be printed off. It is possible to integrate these reports directly into the user interface so they are available in the appropriate location. Parameterized reports can be created automatically and displayed in portals.

- CTWS has an ActiveReports.NET reporting engine.
- Data can be visualized in charts, reports, spreadsheets, graphs and tables.
- Labels and delivery dockets can be printed.
- Reports are freely customizable using a programming language.
- Reports with individual input parameters can be integrated into the web user interface.
- Report generator can be run automatically through automated scheduling.
- The CTWS system supports regular bulk exports to a Business Intelligence (BI) / OLTP system.

## **3. Technologies and Architecture**

The CTWS provides a completely web-based front-end in order to work independent of location, without installation or updates. In addition an up-to-date desktop-like operation using Web 2.0 and AJAX is enabled. Internet Explorer and Firefox are both supported in order to achieve independence from any individual browser. The web application is secured against the usual attack scenarios such as cross-site scripting, SQL injection, etc. The entire system is Unicode-capable in order to support other languages. The system has full multi-client capability (including interfaces, reports and more) in order to be able to carry out tests and training without affecting the live production system.

- The CTWS architecture is 3-tier with load balancing.
- Technologies used in the CTWS include .NET and Java.
- Oracle and MSSQL databases are supported.
- The CTWS supports versions of Internet Explorer and Firefox browser.
- The CTWS is a Web 2.0 app with AJAX, windows and Drag 'n Drop capability.
- The system is secured against web-hacking.
- All input/output fields, the entire user interface, reports and interfaces fully support Unicode.
- A role-based access control system is provided.
- Custom role profiles can be created based on rights.
- There is consistent multi-tenant separation through all levels.
- The CTWS is ASP/SaaS/Cloud-capable.
- The system is virtualizable.
- Tenants for test and development are included at no extra cost in the license.