



OWIS

Workflow management

Business process management is becoming more and more important to companies and organization that want to establish clear competitive advantage in terms of their effectiveness. Paradigm of synergy promoted by today's businesses needs to be supported with clear and understandable rules that streamline and direct business process. Management of workflow turns to be the key problem in full utilization of full advantages of business process streamlining. Workflow represents flow of documents and tasks through predefined procedures within the company. Features and functions OWIS system provides are identification of tasks, their streamlining, communication and grouping of information and documents around tasks.

Web based interface provides cases/actions grouped information through which one can see tasks that need his action to continue, as well as previous tasks a person has given certain action.

The screenshot shows the OWIS web interface in a Mozilla Firefox browser. The page title is "OWIS // Pregled predmeta - Mozilla Firefox". The URL is "http://owis.orka.lkk/private/cases.aspx". The user is logged in as "Edna Starčević" with "Administracija" permissions.

The interface is divided into several sections:

- Grupe predmeta:** A sidebar menu with "Odaberite kategoriju predmeta" and options for "Predmeti koji čekaju molu akciju" and "Svi predmeti".
- Predmeti:** A main section with a "Dodaj predmet" button and search filters. Below the filters is a table of cases.
- Akcije:** A section with "Dodaj grupu akcija" and "Dodaj akciju" buttons, followed by a table of actions.

| Broj predmeta | Naziv | Klasifikacija | Stranka | Datum početka | Referent | Status |
|---------------|--|--------------------------|---------------------------------|---------------|-----------------|------------------|
| 01-01-523/07 | KEIKO - izvještaj | Administrativni predmeti | ORKA | 15.05.2007 | Nihad Salkic | Zaprimljen |
| 02-02-522/07 | Recycle Bin za predmete | Change request | Ambasada Republike Turske u BiH | 14.05.2007 | Ilfad Hasanovic | Signiran |
| 02-02-521/07 | Revizija Web stranice | Change request | REZ // MEP | 14.05.2007 | Nihad Salkic | Signiran |
| 02-02-520/07 | Zamjeniti getStudentIdFromSmysId sa tijelom iste | Change request | ISSS // UTIC | 14.05.2007 | Nihad Salkic | Vraćen signaturu |

| Redni broj | Tip | Izvršio akciju | Datum akcije | Rok za postupanje | Delegirano |
|------------|---|----------------|--------------|-------------------|--------------|
| 2 | Rješavanje problema | Aja Mulić | 15.05.2007 | | Nihad Salkic |
| 1 | Signiranje / Proslijeđivanje developeru | Nihad Salkic | 14.05.2007 | | Aja Mulić |

Information accessible through the system are following:

- Pending and completed tasks

- Overview of the task, when, by whom and how was it initiated
- Who is delegated and who was delegated to perform which action in the process
- What is current status of certain task
- Historical information about execution of the task
- All of the informations (notes, emails, documents etc) needed for execution of a certain task are grouped and easilly accessible
- Ability to collect and generate electronic forms (metadata and annonations)
- Smart workflows that streamline tasks to only certain persons and allowing only certain tasks to be performed according to current status.
- Email notification mechanisms that inform the person that a certain task has been delegated

Example – Accounts Payable

1. Invoice comes via mail to an organization

Clerk that receives an invoice initates the task and performs first action (mail intake) and delegates the task to employee assigned with handling incoming invoices. Mail room officer can scan the paper and provide basic information that will allow persons involved in the process to have enough informations to handle the task.

2. Invoice is checked

Employee delegated to review invoices logges into the system and sees pending invoices that have to be payed. It needs an approval from its supervisor and perofms an action trough which he seeks approval from payment, and can provide additional structured or unstructured information.

3. Invoice payment is approved

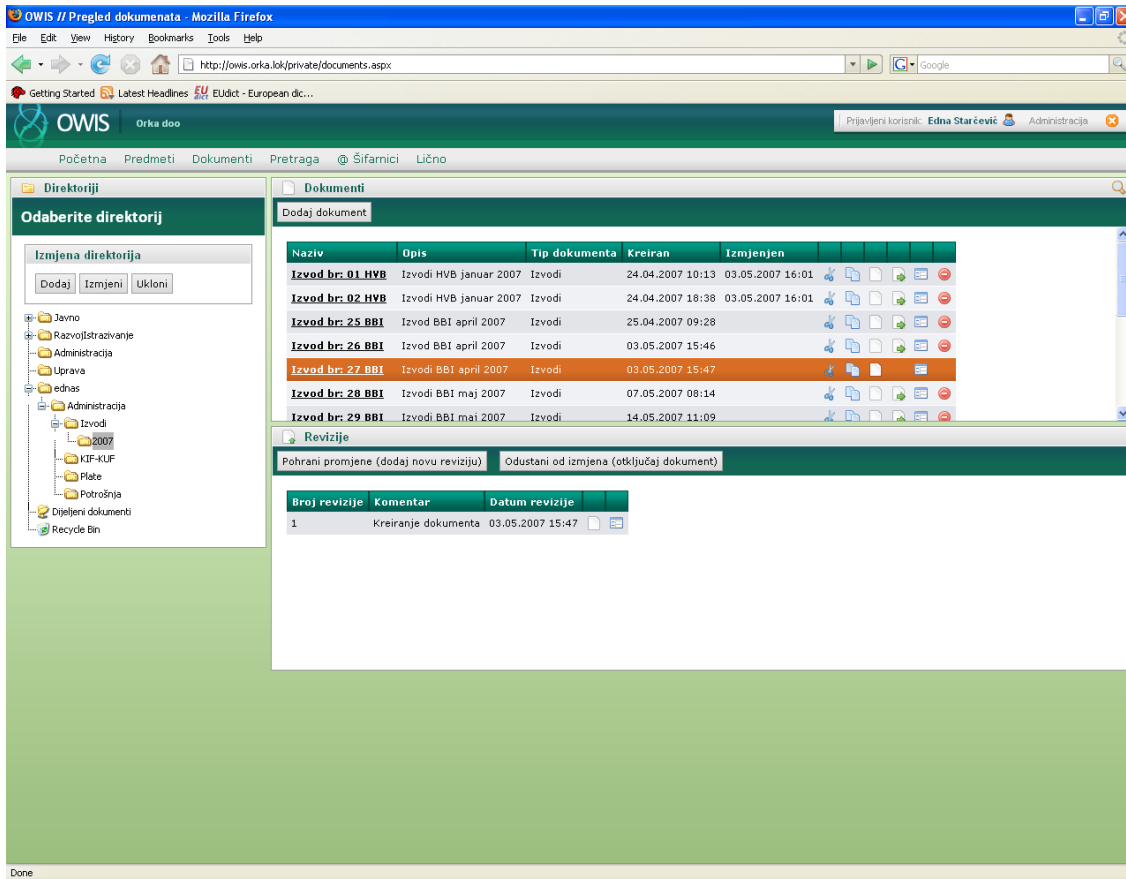
Supervisor in finance department approves payment and gives additional info to the clerk that is delegated to perform actual payment.

4. Invoice is payed and task is archived

Clerk that performs actual payment logs into the system and has all of the necessary information to perform payment.

Document Management

Document management tool provides web interface to digital documents accessible to employee. It is easy to use, explorer like interface that has organized folders to store documents. Documents are uploaded along with additional information and metadata that can be collected in the process.



Module has integrated support for DAV (Document Authoring and Versioning) along with audit mechanisms. Documents are separated into public, departmental and private documents, whilst rights to a certain document can be assigned individually.

Features are comprised of the following:

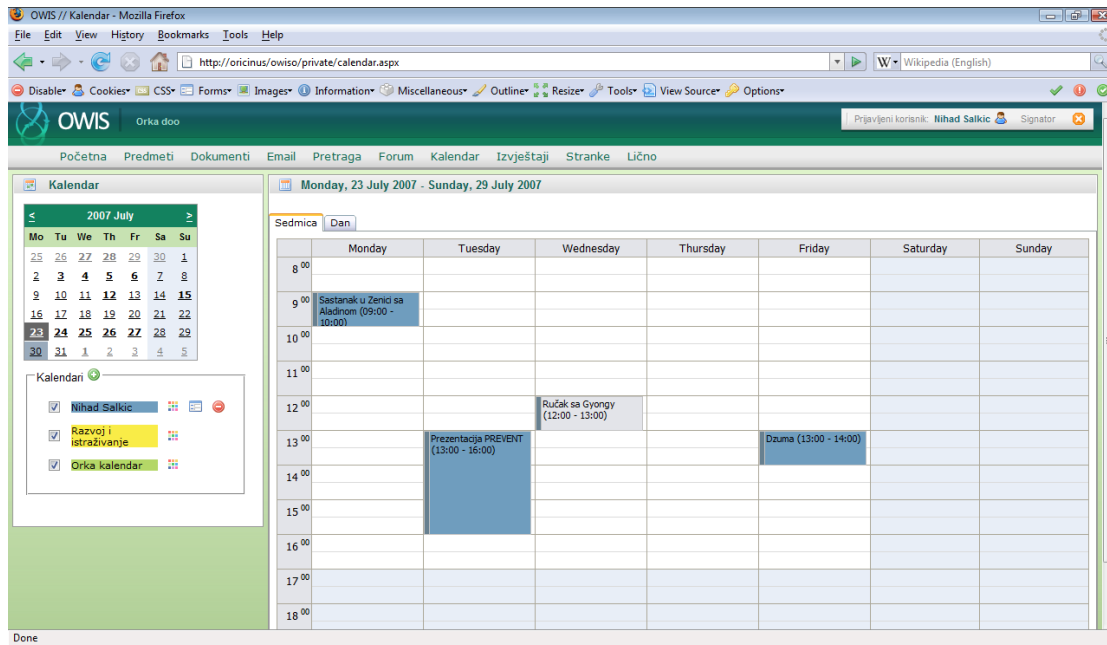
- Support for all types of files regardless of the extension and type
- Documents are stored in the central repository and accessible via internet in an explorer like environment
- Possibility to create folders
- Uploading and revisioning of documents
- Attaching forms and metadata to documents
- Documents are searchable through basic information as well as metadata
- Ability to share documents
- MS Office AddIn for OWIS enables users to access repository directly from standard Office applications

- Integration with workflow management

Groupware component

Calendar system

OWIS has integrated calendaring system that provides increased time planning and collaboration among employees. Through web interface it is possible to have timeline view of pending meetings and tasks, as well to set up email, popup and sms reminders. Various levels of calendar privacy enables company to establish public, departmental and private calendars that can be shared among employees.

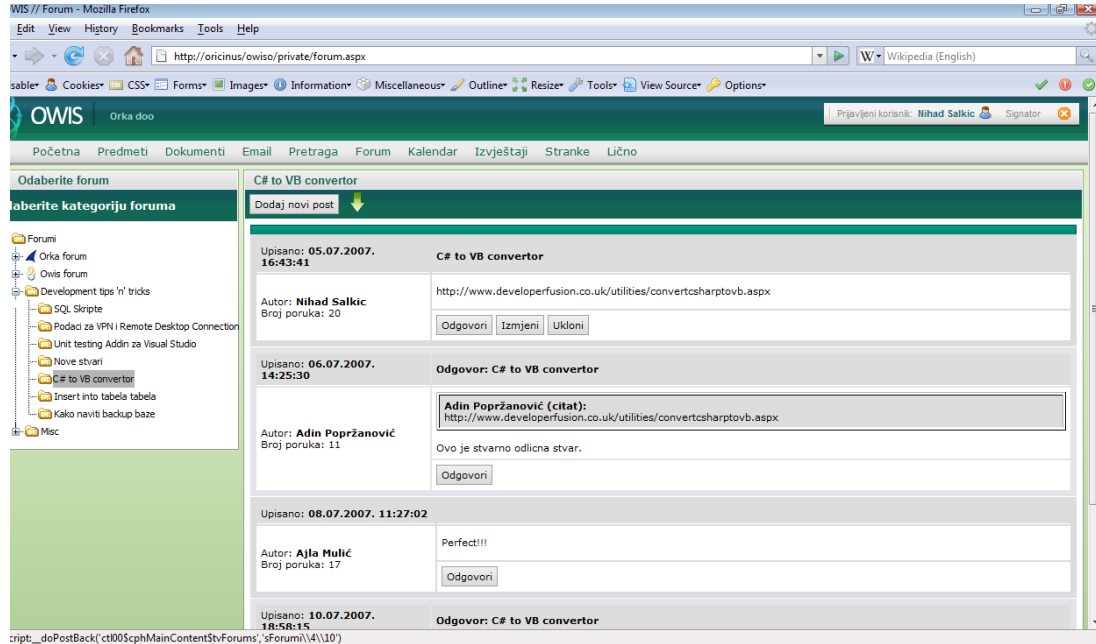


Features include:

- Timeview of tasks
- Ability to easily create events clicking on the timeline
- Creation of calendars
- Access to sector and public calendars
- Ability to share calendars
- Email, popup and sms notification
- Recurrence mechanisms that specify recurring tasks

Discussion board

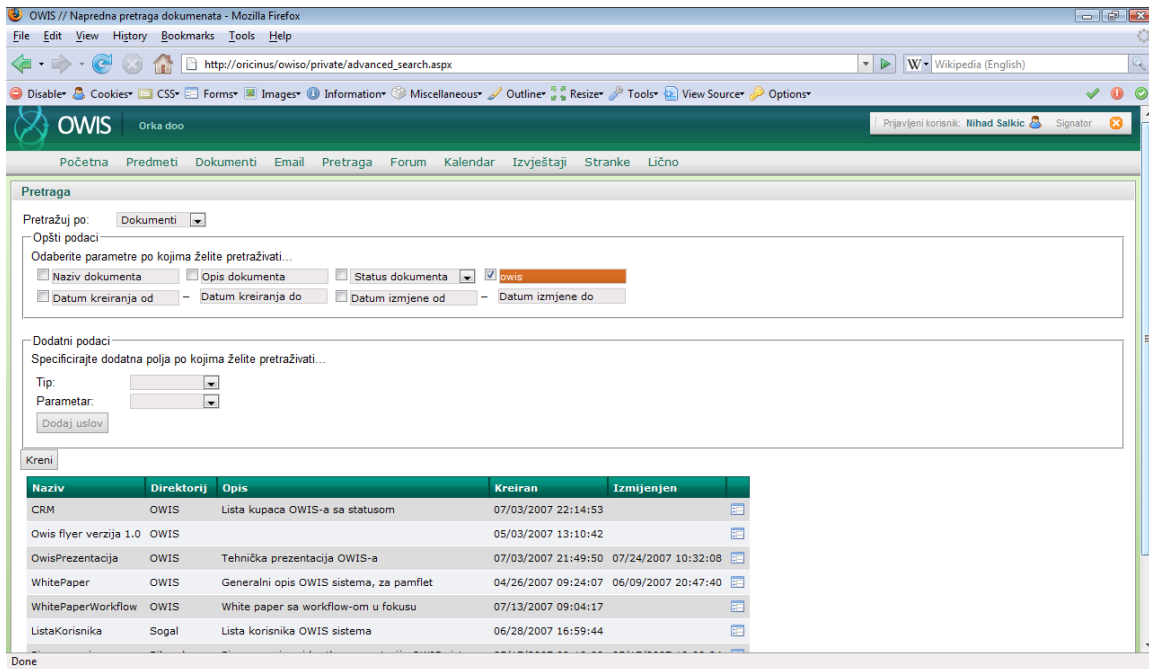
OWIS has integrated knowledge base in form of corporate forum where employees can exchange of messages and collaborate. These conversations can be arranged to provide topics that group information and knowledge sharing.



Integration with other components of the system provides ability not only to communicate and share knowledge, but to integrate this unstructured content with other corporate content and to provide additional level of description to specific information.

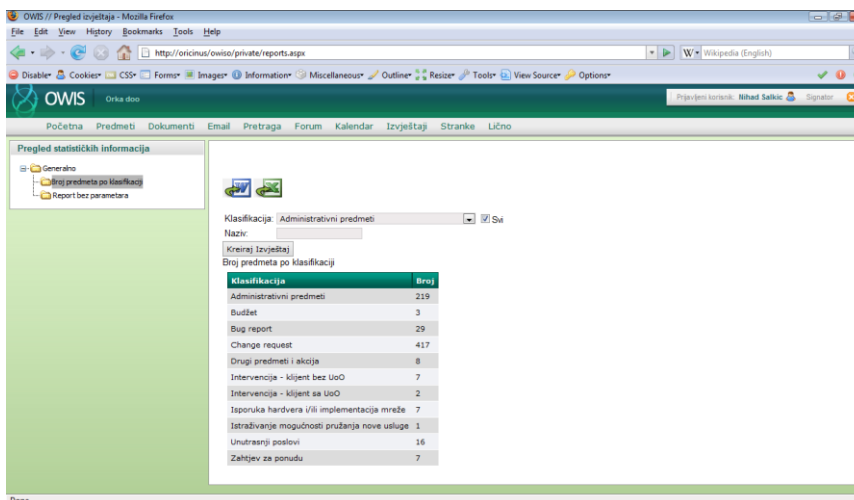
Search module

Entire stored content is searchable, structured as well as unstructured information. This enables users of the system to access content based on provision of search criteria and get results regardless of the type of the content that is in question. Users have access to documents, discussions, tasks, projects, events relating to specified search criteria.



Reports module

System has integrated reporting module that provides summary as well as listed information and presented in form of tables with possibility to export to Office package.



OWIS SOFTWARE SPECIFICATIONS

FUNCTIONALITY

GENERAL

- Web based .Net Framework 4.0 application
- Centralized DBMS utilizing SQL Server 2008 database
- Web Service support
- Multi language support
- Supports integration of custom developed controls
- Modular system

WORKFLOW MANAGEMENT

- Custom workflow categories
- Automatic generation of case numbers
- Classification of cases according to classification marking prescribed by Law on Administrative Procedure
- Cases CRUD (Create, Retrieve, Update, Delete) cycle supported
- Quick search and quick add functions for external parameters at cases creation
- Storing of referential information from external parties
- Priority management implemented
- Autocomplete feature for descriptive entries at cases creation
- Grouping cases at a provisional level. Supported features for case group management.
- Integrity checks for case numbers and case names, prohibiting double entries
- Support for annotations and eForms management implemented through metadata
- Email notification
- Workflow implementation through actions for corresponding cases
- Definition of desired number of action types
- Smart streamlining of delegation implemented through user access rights
- Sequential and parallel workflow supported implemented through 'one must approve', 'any can approve' and 'all must approve' mechanism
- Deadline mechanism with tickers and alerts
- Document based workflow supported
- Enabled attachment of multiple electronic documents within one case
- Direct EMail2WF and Scanner2WF functions that enable easy integration of documents sent via email and from TWAIN compatible scanner into cases
- Extensive search based on all case parameters
- Custom workflow procedures available directly after administrative configuration
- Provision of hard copy traces on all actions as required by Law on Administrative Procedure

- Retrieval of deleted cases through Recycle Bin functions
- Multiple workflow forwarding
- Execution by proxy enabled, including transfer of application rights from one user to another

DOCUMENT MANAGEMENT

- Easy to use, explorer like interface for document management
- Sets no limit on the number of folders
- Audit trails and document tracking of edits and changes to documents
- DAV (Document Authoring and Versioning) supported
- Version View History (view log)
- Storing different types of files
- Review and approval history of each version of a document.
- Sharing with custom groups and users
- Access to all prior versions of a document.
- Versioning of documents
- Rollback to previous versions
- AddIn for Microsoft Office applications for fast integration of documents
- Advanced versioning, you can easily access the older version of a document at any time
- Integration with WF Management
- Supports attaching multiple documents from DM to each case action
- Use the check-in/checkout feature to block others users on the network from trying to edit a document that you are currently working on
- Scan and upload via Web Browser
- Support for TWAIN compatible scanners
- Search for documents matching given conditions
- Document action notification on specific events
- Definition of user permission rights
- Document LOG
- Version Comments

GROUPWARE COMPONENT

WEBMAIL CLIENT

- Receiving and sending mails using POP3 and SMTP
- Unlimited number of mail accounts
- Multiple Domain Support
- MIME support for both incoming and outgoing Email
- Popup mail notifications

- Integrated with WF Management, supports attaching received mail to case action
- Gmail and Outlook email look and feel

FORUM

- Easy post writing and editing
- Organizing posts into groups and themes
- Inserting pictures and links into posts
- Latest posts view
- Reply to topics of discussion
- Sorting posts by date

CALENDAR

- Personal calendars
- Sharing calendars with custom users
- Group calendars
- Event reminding using popup, email, SMS
- Multiple calendars

OWIS DASHBOARD

- Enables preview of OWIS modules through drag panels
- Availability of extension kit for development of custom, third party modules
- Enables creating custom Dashboard controls using Dashboard framework
- Developed widget include:
 - Notes
 - Cases
 - Calendar
 - Assignments
 - Latest forum posts
 - Contacts
 - Google search
 - Bookmarks
 - RSS Feeds
 - Image gallery
 - Emails

REPORTING ENGINE

- Extensive report generation features
- XML report definition coupled with SQL stored procedures
- Easy reports maintenance
- Report generation available without modification of application source code
- Exporting reports to Microsoft Word, Microsoft Excel and Portable Document Format (PDF)

PERSONAL

- Changing user data:
 - Editing mail account
 - Editing user's language, webmail appearance
 - Email account password
 - Email accounts
 - Transferring user cases rights, enables action by proxy
- Detailed user's manual

ADMINISTRATION

- Code table defining:
 - Parties
 - Sectors
 - Departments
 - Statuses
 - Classifications
 - Types of documents
 - Application modules
- Detailed user management:
 - Adding, editing and deleting users
 - Changing user's group
 - Editing all of user's data
- Ensuring access rights at various levels such as:
 - Classification rights
 - Group rights
 - Department rights
 - Procedure rights
 - Module rights
- WorkFlow engine administrative panel
 - Finite automata engine
 - Creating action types
 - Creating status translations
 - Editing and deleting actions
 - Specification of 'master', 'modifiable' and 'self-referring' action types
 - User action rights
 - Procedure rights
- Additional custom data administration

- Visual process designer
- Visual forms designer

EXTERNAL INTERFACES

USER REQUIREMENT

- Web browser
- Supported web browsers:
 - Mozilla Firefox
 - Internet Explorer 7.0
 - Opera
- Optimized for mobile phone browsers

SERVER REQUIREMENTS

- Windows platform
- IIS service
- MS SQL 2005
- ASP.NET Ajax Toolkit
- WSE 3.0
- .Net Framework 3.5

PERFORMANCE

- Web application supports unrestrained access via Internet
- Highly scalable and configurable
- Client installation is not required
- Application performance is limited to hardware resources

ATTRIBUTES

MAINTENANCE AND SECURITY

- Uses .Net security and password protection

DESIGN CONSTRAINTS

- No special requirements