Open-Xchange Concepts Paper

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Wiki OXtender

The Open-Xchange™ Server Extension for Real-Time Exchange of proper Documents

v1.02

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Summary:

The Wiki OXtender is an extension for the world leading Open Source Collaboration Server to support Wiki functionality for information workers. It implements all the good stuff from Wikis - easy content creation, easy, hypertext based structuring and easy access - and combines it with additional hierarchical structuring capabilities and database-like form and query support to add creation and retrieval of structured information to the free-form nature of Wiki documents: Real-time sharing of proper documents.

What the Wiki OXtender does

The daily routine of the knowledge worker is about creating, sharing and finding documents and putting a collection of documents into a structure that represents the project she is working on.

Take for example a marketing person that needs to organize the launch of a new product release. Colleges from product management create feature & benefit documents which are turned into marketing collateral, the legal department creates a revision of the end-user licensing agreement (EULA), PR organizes the press release and analyst calls and the CEO needs numbers for the budget. All these documents are related to the product launch, but they are also related to the budget, the legal documentation, the product documentation and many other structures.

Today these documents are sent around by email, everybody individually tries to create an organisation around those that fits their needs – usually by detaching them from the emails and putting them in a directory structure on the hard drive. If somebody creates a revision of a document the cycle starts again.

Apart from being very cumbersome, time consuming and error prone this process is also dangerous as documents might end up with unwanted receivers or simply get lost in a spam filter or any of the plenty shortcomings that email has.

With the help of the Wiki OXtender Open-Xchange will change the way the information worker can run such projects. Documents will still be created and edited with the favourite word processor and spreadsheet program – but instead of storing them on the hard disk and sending them around by email they will get stored as a new Wiki document on the Open-Xchange server. This new document will be inside the project Wiki and linked to related documents. If a new revision is created this exact same document will be edited and stored once again, centrally and with a new revision number. If a colleague creates a new document, let's say Legal creates the EULA; this document can be linked to in the product launch Wiki of marketing. If legal creates a new revision the link from marketing will be automatically up to date.

If somebody want's to know how the product launch project is going pointing the browser to the Wiki will provide structured access to all this most current information – without having to open all individual documents because their content is displayed inside the Wiki.

Wikis like Wikipedia demonstrate how well this structuring works also for very large sets of complex information. Before the Wiki OXtender people had to learn new tools and new syntax to be able to create content – with the utilization of the Open Document data format the Wiki OXtender allows people to stick with Microsoft Word, Excel, OpenOffice, and enables the "recycling" of all documents that already exist.

But the Wiki OXtender is even more. A lot of information can not easily be managed in Word Documents or Excel sheets but are more like structured information from databases. Let's say for example that the HR department want's to manage vacation applications of all employees. The application from itself is a normal Word document with a couple of form fields in it. The Wiki OXtender allows for such forms and the creation and query of new instances of these forms. The HR department will have an entry page for holiday applications in the Wiki - with a "New Application" button. Pressing the button will fire up Word or OpenOffice on the applicants' computer where she can fill in the form fields and store it to the Wiki. HR can now create Wiki pages that contain "view queries" that for example list all open applications inside the Wiki document when viewed in the browser. Thus the Wiki OXtender enables the very easy automation of everyday tasks of a company.

To summarize: the Wiki OXtender implements all the good stuff from Wikis - easy content creation, easy, hypertext based structuring and easy access - and combines it with additional hierarchical structuring capabilities and database-like form and query support to add creation and retrieval of structured information to the free-form nature of Wiki documents.

An OX Wiki is made up of Folders that contain Documents or, again, Folders. Documents can contain simple text, Links to other Documents or external items. Documents can also contain complex, formatted pages in either HTML or OpenDocument format.

The core structuring features of Wikis are Links to other Documents inside the same Wiki, to a Document in another Wiki (InterWiki-Links) or to Internet pages. Thus the general structure of a Wiki is a network. Though a hierarchical structuring of Documents is possible by these means it seems that people have trouble understanding this. Links are the only general means for structuring information in a classical Wiki.

The Wiki OXtender adds hierarchical structuring capabilities - in addition to Links - by utilizing the folder metaphor. Each OX Wiki Document is contained in a Folder. A Folder can also contain Folders. To further allow hierarchical structuring - without breaking the free nature of Wikis - Documents have parents - either a Folder or another Document. So a Document can have child Documents - creating a hierarchy on the Document level as well.

The second form of OX Wiki structuring capabilities are Forms and Views. A Form is a Document that has additional, freely definable, attributes. A View is a query of Documents and Forms that returns a table of Documents. Views can be Form specific or generic for all Documents. Views can be embedded into any Document.

The Wiki OXtender takes all the companies information of the hundreds of hard disks and email accounts into a coherent, company wide knowledge base – gathering the company's knowledge into an easily accessible and well structured knowledge pool and at the same time simplifies daily tasks and adds a high degree of security.