Mozquito XML WebAccess 2.0

Making XML Interactive

XML is great – no doubt! The impact it has had on the Web has been tremendous. All kinds of computer systems understand XML. It is said that the eXtensible Markup Language is the solution to the problem of data exchange. It is non-proprietary, meaning there is no interference necessary from third parties, no inherent dependencies on large software vendors, no required bindings to specific tools. But is that really true? The best XML solution is really at a loss when it comes to integrating the user into the process. XML data exchange between computers and individuals is still a serious open issue.
But Mozquito has come up with the missing link between XML and the user – XML WebAccess. Mozquito has developed a revolutionary user interface that actually enables everybody - you, your employees, your customers, your business partners - to communicate easily and quickly using XML – even without knowing a thing about XML!

What is XML WebAccess?

Mozquito XML WebAccess is the first user interface for native XML data. It puts XML power directly into the hands of the user. XML-UI, the new markup language behind XML WebAccess, enables common Web browsers to interact with XML instance data. With Mozquito XML WebAccess, you are not only able to render XML in a browser but also to exchange XML data with Web users.

Why should I use XML WebAccess?

- XML WebAccess allows you to create and deploy interactive XML applications quickly and easily.
- XML WebAccess makes your company independent of other XML software vendors.
- XML WebAccess empowers you in sharing XML data fluidly across the Web.
- XML WebAccess opens XML up not only to enterprises, but also to individuals.

The Idea behind XML WebAccess

The connectivity of XML data to any kind of system makes data exchange easy and keeps companies from being "locked into" a proprietary system. As long as XML is used for system-to-system communication, the open standard ensures complete freedom. But since most business processes need user interaction, the use of XML implies a serious barrier – the creation and maintenance of effective interfaces for user interaction with the data. Developing user interfaces for XML processes is currently a difficult, costly and time-consuming task. While XML keeps companies from server-side lock-in, it does not alleviate the challenges on the client side. But what's the use of an open data standard, if you're going to be locked in by the interfaces to that data anyway? Mozquito addresses this problem. As XML ensures

interoperability in the virtual world, Mozquito XML WebAccess ensures interoperability between XML and the real world. With XML-UI, you can design extensible XML interfaces easily and quickly. Since the interfaces run in the browser without any additional software, XML-UI provides even greater benefit: This new technology runs within the existing IT infrastructure. There is no need to distribute new client tools throughout the company.

Examples of XML-UI Integration

Scenario 1: Extending XML Applications

Consider a business that deploys a 3rd party XML application for internal order servicing. Six months later, during business reengineering activities, the management realizes that the off-the-shelf application is not really appropriate for the newly designed order process. It turns out that in order to adjust the IT infrastructure to the reengineered business process, the management would be forced to either restrict the process to the parameters dictated by the 3rd party software or to buy a new 3rd party XML application.

With Mozquito, the management is free to define the user interface they consider most appropriate for any of the processes in question. Mozquito XML WebAccess provides the power to extend or customize any XML application according to the individual needs of the user. Using a WYSIWYG editor, the average Web designer can create an individual access layer between the XML data and processes of the company. By designing user interfaces inhouse, Mozquito XML WebAccess makes XML users independent of any 3rd party software vendor. With XML and Mozquito, you not only get rid of proprietary data but also other proprietary software solutions in your business processes.

Scenario 2: Business Syndication (New EDI)

Consider a computer hardware reseller that sells electronic components on the Internet. The reseller offers components from 20 different manufacturers. Each manufacturer provides access to its product catalogue and a Web service for product orders – all based on XML. Here are the challenges involved: On one hand, the reseller has to cope with the different data structures of each manufacture - different product specifications, different product categories providing various product information, as well as each Web service interface for product orders. On the other hand, the reseller's online store has to offer all these products to the customer without the customer having to now what is going on behind the scenes. The user interface as well as the business processes of the store have to be uniform no matter what kind of XML data is behind the application.

The are two solutions for this problem:

1. The reseller contracts an IT Integrator that is experienced in XML applications to design 20 XML connectors for the shop's product catalogue and again 20 XML connectors to forward customer orders to the manufacturer's Web services.

The reseller deploys Mozquito XML WebAccess for his online store. With XML-UI, an average Web designer is capable of developing a front-end for these XML

processes. Usually a single XML-UI interface is also powerful enough to handle different data structures within the same interface. Instead of designing 20 different connectors, the reseller only has to pay for the user interface itself. He can even modify this interface himself using Mozquito's WYSIWYG tools.

Other possible use cases:

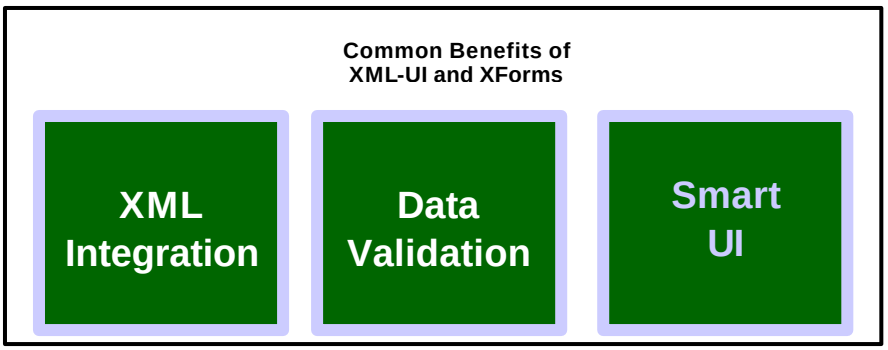
- create forms and reports for XML databases
- administration interface for XML processes
- ...

The benefits of Mozquito XML WebAccess are obvious:

- fast deployment
- easy maintenance
- significantly lower costs
- no lock-in
- higher usability

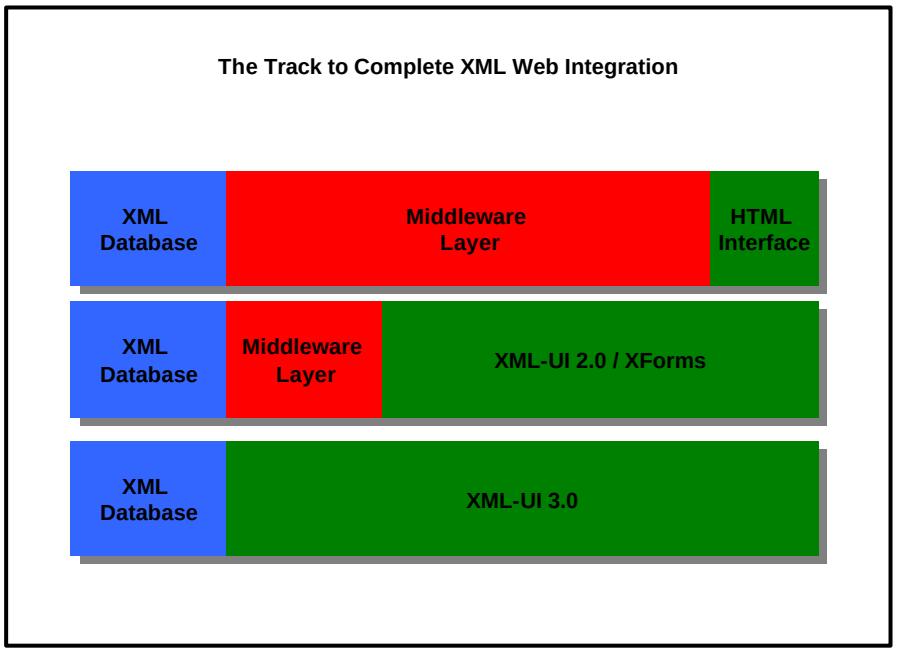
XML-UI - The Technology behind XML WebAccess

XML WebAccess comes with its own markup language. XML-UI is based on Mozquito FML technology and the concepts of the W3C's cutting-edge XForms, the upcoming Web standard for XML-based user interfaces.
The common goal of XForms and XML-UI is to provide a comprehensive Web interface for XML data. The user input collected is represented as XML instance data This data is then submitted to the server. In addition to its XML capability, XML-UI as well as XForms provide a powerful user interface, one which is much smarter and more flexible than normal Web interfaces. User input is validated in real-time within the browser. This guides the user to interact with the data structure in a manner, which conforms to the business rules of the application. Smart interface logic and new control elements in the user interface make interaction easier.

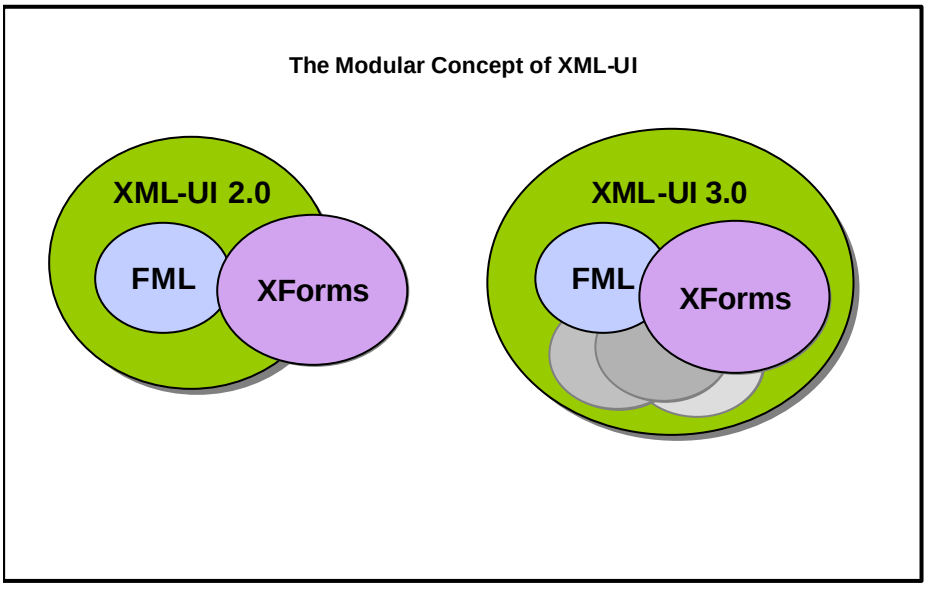


[1] FML™ (Form Markup Language): the XHTML language extension for Web-based user interfaces

Mozquito XML WebAccess 2.0 is the most recent milestone along the track to XForms. Currently no other technology has implemented the concept of XForms better than Mozquito. As soon as W3C's XForms is a standard, Mozquito will release a feature-complete implementation of XForms as a part of Mozquito XML WebAccess 3.0. But Mozquito XML WebAccess goes beyond XForms – Mozquito is targeting a complete and seamless XML integration between browsers and XML databases:



The following picture points out the evolving concept of XML-UI as a modular framework for markup languages:



The XML WebAccess Software Architecture

The XML WebAccess product family consists of a development suite (XML WebAccess Factory 2.0) and a server solution (XML WebAccess Server 2.0).

XML WebAccess 2.0

The server component of Mozquito XML WebAccess 2.0 can be seamlessly snapped into the Web server without any changes to the existing server environment. The server runs under Windows (with IIS) as well as under Linux and Solaris (Apache Web Server). The XML WebAccess Server is responsible for making XML interactive. It retrieves the XML instance data and generates a user interface that can be rendered by current browsers.

XML WebAccess Factory 2.0

The development suite for XML WebAccess includes XML-UI plug-ins for the leading 3rd party development environments on the market. Developers can start using XML-UI in a familiar development environment. Since XML-UI is the bridge between XML and other Web technologies like XHTML, the development suite comes with XML-UI plug-ins for Web developers as well as for XML developers.

XML WebAccess Factory 2.0 delivers the following components:

- XML WebAccess Server 2.0 Single User
- Plug-In for Macromedia Dreamweaver
- Plug-In for Allaire ColdFusion and JRun Studio
- Plug-In for Allaire Homesite
- Plug-In for Altova XMLSpy