

ZAPTHINK ZAPNOTE™

FOCUS SOFTWARE *MAKING FORMS MORE INTELLIGENT*

Analyst: Ronald Schmelzer

Abstract

Web-based forms are a particularly crude way of soliciting data from users. In HTML, the fields of data that a form solicits, the presentation of that form to the user, and the way that form elements bind to data and send them back to the server are all tightly coupled to each other. It is very difficult to separate the way that a system represents a form from the information that the form contains.

The W3C hopes to change this reality by introducing an XML-based specification called XForms that separates form presentation, form logic, and data binding to form elements. In addition, vendors like Focus Software are building XForms-based solutions that enable companies to build and deploy dynamic electronic forms to a wide range of endpoints and devices such as Web browsers, cell phones, and interactive voice systems.

All Contents Copyright © 2004 ZapThink, LLC. All rights reserved. Reproduction of this publication in any form without prior written permission is forbidden. The information contained herein has been obtained from sources believed to be reliable. ZapThink disclaims all warranties as to the accuracy, completeness or adequacy of such information. ZapThink shall have no liability for errors, omissions or inadequacies in the information contained herein or for interpretations thereof. The reader assumes sole responsibility for the selection of these materials to achieve its intended results. The opinions expressed herein are subject to change without notice. All trademarks, service marks, and trade names are trademarked by their respective owners and ZapThink makes no claims to these names.



Forms-based Interaction over Multiple Devices, Interfaces, and Systems

Web-based forms, and in particular those based on HTML, are a particularly crude way of soliciting data from users. In HTML, the fields of data solicited by a form, the presentation of that form to the user, and the means by which data is bound to form elements and sent back to the server are all tightly coupled to each other. There simply is no way to separate the way that a form is represented from the information that the form contains.

A new set of specifications and products aim to change the status quo of electronic and Web-based forms. Maintained by the W3C, the XForms standard focuses specifically on providing interactive forms-based interaction with users across multiple interfaces, data types, and steps in a process. As opposed to HTML or other tightly-coupled electronic forms, XForms separates the description of what the form does, from how the form looks, and how it submits data back to the server. As such, XForms aims to support the widest range of input types, provide rich user interfaces for intelligent forms interaction, and decouple the forms data, logic and presentation from each other. In addition, XForms aims to improve internationalization of forms, support structured forms data and advanced forms logic, provide a means to support multiple forms on a page and multiple pages per form, and include ability to suspend and resume any forms entering capabilities, using an XML-based language.

XForms expresses the collection of data from online forms as XML instance data, which are described using XForms syntax. XForms supports workflow, auto-fill, and pre-fill form applications through the use of instance data. Finally, the XForms Submit Protocol defines how XForms send and receive data, including the ability to suspend and resume the completion of a form. However, XForms by itself doesn't offer companies a solution to their electronic form collection and display needs. In this vein, **Focus Software** is targeting the need for development, deployment, and management of electronic forms across a wide array of endpoints.

Focus Software: Rich Clients based on Browser Technology

Focus Solution's XFormation solution is an Integrated Development Environment (IDE) that enables users to construct XForms-based applications and test them for deployment on various platforms. The solution also provides a set of visual tools that enable non-developers to create data capture forms that they can link to the presentation layer of choice.

The XFormation product supports XHTML 1.0, XForms 1.0, and the use of XML Schemas to define how to capture data and send them back to a processing server. XFormation simplifies the process of building XML based XForms documents by providing a common tree view, so that users can create forms visually, rather than using programming or development tools. XFormation also includes formsPlayer version 1.0, which provides both a rich debugging environment and the ability to preview a form as it is developed.

Other features of XFormation include wizard-based, assisted XForms document creation,

TAKE CREDIT FOR READING ZAPTHINK RESEARCH!

Thank you for reading ZapThink research! ZapThink is an IT market intelligence firm that provides trusted advice and critical insight into XML, Web Services, and Service Orientation. We provide our target audience of IT vendors, service providers and end-users a clear roadmap for standards-based, loosely coupled distributed computing – a vision of IT meeting the needs of the agile business.

Earn rewards for reading ZapThink research! Visit www.zapthink.com/credit and enter the code **FOCSNOTE**. We'll reward you with ZapCredits that you can use to obtain free research, ZapGear, and more! For more information about ZapThink products and services, please call us at +1-781-207-0203, or drop us an email at info@zapthink.com.



Schema-generated XForms, forms Debugging tools, and search capabilities for form elements. XFormation also allows XML from any external source to be pasted directly into an open XForms document where XFormation will parse it against the appropriate schema. Likewise any structure copied from XFormation can be pasted out into any external tool as XML.

Focus Software Products

Focus Software	Availability: Now
Overview: XFormation provides developers of forms based solutions with a complete Integrated Development Environment (IDE) for building XForms solutions. It will enable users to rapidly design, develop, manage, preview, and debug XForms.	
Details: <ul style="list-style-type: none">➤ <i>XFormation Standard Edition</i> – XFormation is one of the first integrated development environments (IDE) for the development of XForms-based e-Forms. A Professional version that includes productivity wizards, XPath editing, enhanced debugging, source control, and support for additional schemas is also under development.	
Key Differentiators: <ul style="list-style-type: none">➤ <i>Visual development of XForms</i> – Provides a visual editor for development of XForms-based electronic forms for deployment onto a wide range of endpoints.➤ <i>Supports latest XForms spec versions</i> – Focus Software is an aggressive implementer of the W3C XForms specs and will continue to support those specs as they develop.	
Value Proposition: Key Focus Software benefits include: <ul style="list-style-type: none">➤ Greater end-user productivity by providing forms that enable rich user interactivity across a wide range of devices and endpoints.➤ Faster e-Forms application development through the use of standard XML, XForms, and Schema-based technologies.	

The ZapThink Take

Currently, there are a few approaches towards providing electronic forms, or e-Forms, capabilities that vendors like Focus Software and other backers of XForms promulgate. There are actually two main approaches to e-Forms:

- Proprietary solutions, such as those provided by Adobe Acrobat 6.0 and Microsoft InfoPath.
- Standards-based approaches, mainly from vendors who are proponents of the XForms specification.

Right now, the e-Forms market is still very nascent, with few vendors and end-user implementations as of the first quarter of 2004. However, ZapThink sees some trends that

will accelerate the adoption of e-Forms technology, and therefore Focus Software products over the next 12-18 months:

- Governments are starting to mandate the use of electronic forms technologies in their citizen, inter-agency, and business communication.
- As companies look to involve human-based workflow and processes in their automated interaction, rich electronic forms will become increasingly necessary.
- Companies like Novell are including support for XForms-based applications in their Web Services and SOA suites.

As companies and other organizations look to improve their interaction with their customers, partners, employees, and/or citizens, they will seek user interface technologies that provide robust support for electronic forms processing. Given that the Web makes a poor forms processing interface, the rich client approaches discussed in this report will become very appealing for companies looking to solve distributed, document-based user interfaces requiring client-side intelligence and processing.

Profile: Focus Software	March 2004
Date Founded: 1995	
Funding: Focus Software Ltd is part of Focus Software Group (London: FSG), the specialist provider of XML technology toolkits for the financial services industry.	
Employees: N/A	
CEO: John Streets	
Products: <ul style="list-style-type: none">➤ <i>XFormation Standard Edition</i>	
Address: Cranford House, Kenilworth Road Leamington Spa CV32 6RQ United Kingdom	
URL: http://www.xformation.com	
Main Phone: +44 (0) 1482 328120	
Contact: Jessica Lindridge marketing@xformation.com +44 (0) 1926 468300	

Related Research

- *Rich and Smart Clients for Service-Oriented Architectures* Foundation (ZTR-WS111)
- *Service Orientation Market Trends* Foundation Report (ZTR-WS110)
- *DreamFactory* ZapNote (ZTZN-1138)
- *JackBe* ZapNote (ZTZN-1141)
- *Curl* ZapNote (ZTZN-1142)
- *Macromedia Flex* ZapNote (ZTZN-1143)
- *Laszlo Systems* ZapNote (ZTZN-1144)
- *General Interface* ZapNote (ZTZN-1145)



About ZapThink, LLC

ZapThink is an IT market intelligence firm that provides trusted advice and critical insight into XML, Web Services, and Service Orientation. We provide our target audience of IT vendors, service providers and end-users a clear roadmap for standards-based, loosely coupled distributed computing – a vision of IT meeting the needs of the agile business.

ZapThink's role is to help companies understand these IT products and services in the context of SOAs and the vision of Service Orientation. ZapThink provides *market intelligence* to IT vendors who offer XML and Web Services-based products to help them understand their competitive landscape and how to communicate their value proposition to their customers within the context of Service Orientation, and lay out their product roadmaps for the coming wave of Service Orientation. ZapThink also provides *implementation intelligence* to IT users who are seeking guidance and clarity into how to assemble the available products and services into a coherent roadmap to Service Orientation. Finally, ZapThink provides *demand intelligence* to IT vendors and service providers who must understand the needs of IT users as they follow the roadmap to Service Orientation.

ZapThink's senior analysts are widely regarded as the "go to analysts" for XML, Web Services, and SOAs by vendors, end-users, and the press. They are in great demand as speakers, and have presented at conferences and industry events around the world. They are among the most quoted industry analysts in the IT industry.

ZapThink was founded in October 2000 and is headquartered in Waltham, Massachusetts. Its customers include Global 1000 firms, public sector organizations around the world, and many emerging businesses. ZapThink Analysts have years of experience in IT as well as research and analysis. Its analysts have previously been with such firms as IDC and ChannelWave, and have sat on the working group committees for standards bodies such as RosettaNet, UDDI, CPExchange, ebXML, EIDX, and CompTIA.

Call, email, or visit the ZapThink Web site to learn more about how ZapThink can help you to better understand how XML and Web Services impact your business or organization.

ZAPTHINK CONTACT:

ZapThink, LLC
11 Willow Street, Suite 200
Waltham, MA 02453
Phone: +1 (781) 207 0203
Fax: +1 (786) 524 3186
info@zapthink.com
www.zapthink.com

