

Developing standards-based, cross-platform Quark XTensions with DOM

Quark® XTensions® developers have always programmed in C or C++ — until now. You'll soon be able to develop Quark XTensions software using the Document Object Model (DOM). That means you'll be able to write XTensions modules for multiple, standards-based platforms in C++, Java, any language supported on the .Net platform (including C# and VB.Net), and scripting languages (including AppleScript®, Perl scripts, JScript®, and VBScript). To make development even easier, the QuarkXPress® DOM presents a QuarkXPress project as an Extensible Markup Language (XML) tree, and any modifications to the XML files change the project — in real time.

What QuarkXPress DOM means to developers

DOM is an open standard designated by the World Wide Web Consortium (W3C). W3C defines DOM as “a platform- and language-neutral interface that will allow programs and scripts to dynamically access and update the content, structure, and style of documents.” But what does this mean for XTensions developers?

Based on open standards

One of the goals of an open-standard DOM is to produce common methods for accessing, modifying, creating, and deleting content within a DOM schema. If you are familiar with one particular DOM, understanding and working with another DOM is easy because you are already familiar with the common methods and metaphors applicable to all DOMs. This commonality gives the DOM a distinct advantage over traditional C/C++ application programming interfaces (APIs).

The creation of the QuarkXPress DOM means that more developers will be able to develop custom XTensions software that adheres to industry standards. And because the QuarkXPress DOM is language and program neutral, you can develop XTensions software using languages other than C or C++.

Easier programming for multiple platforms

The QuarkXPress DOM makes writing an XTensions module much easier because you can use C++, Java, any language supported on the .Net platform (including C# or VB.Net), and scripting languages (including AppleScript, Perl Script, JScript, VBScript) to write QuarkXPress XTensions. The doors are now open for a host of new developers familiar with these languages.

For example, say you have a Java program that uses a Web services protocol to pull weather information into your Web site. You want to create printed tourist guides with this same information, but manually importing this data into QuarkXPress is cost prohibitive. You need an automated solution. With the current QuarkXPress XTensions interface, you will face fairly complex language bridge issues going from Java to C/C++. Essentially, you would need to rewrite the Java program in C/C++ and connect to the database via ODBC. The QuarkXPress DOM reduces the complexity of these language bridge issues and makes the task easier and much more manageable.

Full access to text, style sheets, and more

XTensions are more versatile with the QuarkXPress DOM because you can use and access a project's complete content, including all formatting, style sheets, and hyphenation and justification specifications — not just the text. That means you can export all of your QuarkXPress content — including formatting and character attributes — and make it available for use in other third-party applications. Of course, you can also import content, formatting, and character attributes from a third-party application into QuarkXPress.

For example, say you have a QuarkXPress table that includes pricing information in your corporate style (perhaps all cents are superscript — \$22⁹⁹), and you want to maintain that corporate style. Traditionally, exporting the content would result in \$2299, and nothing would indicate that the 99 represents cents. Of course, someone would have to go through the file and reformat all the cents to superscript. With the QuarkXPress DOM, the superscript formatting information is included, and when you import the content into another QuarkXPress layout, the 99 is automatically superscripted.

Simplified scripting

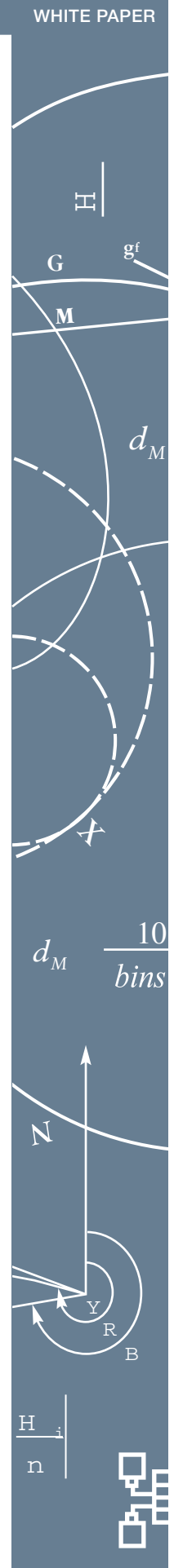
The QuarkXPress DOM takes some of the complexity out of importing or extracting data from a QuarkXPress project. With the DOM interface, you can take content — including text, style sheets, and formatting — from any source and create a QuarkXPress project, and you can extract any of that content and its formatting or structure from QuarkXPress into an XML file and allow this content to be used elsewhere.

Additionally, you can run powerful query expressions with just a few lines of code using XPath queries. The same query using C/C++ code would require pages of code.

For example, use DOM to easily generate a list of all picture files referenced by a project. Or, import data from a database into a QuarkXPress layout, print the project, and use the DOM to locate the page a certain part of that data is printed on.

The QuarkXPress DOM today and tomorrow

Today, you can use DOM to read a QuarkXPress file. Future versions of QuarkXPress DOM will allow you to





write to a QuarkXPress file. They will include a roundtrip function that lets you import XML content into QuarkXPress, modify the content, and select content to update in the original XML file.

Other enhancements to Quark's solutions will streamline and automate the tasks associated with making frequent, repetitive updates, distributing content to multiple mediums, and decreasing production costs and time-to-market. Quark intends to use tools such as XML, Simple Object Access Protocol (SOAP), and other industry standards to seamlessly meld the modules into a single system.

Quark is actively involved in and committed to industry initiatives that support open standards. Quark is an executive member of the Printing On Demand Initiative (PODi), the industry consortium that is developing standards for Personalized Print Markup Language (PPML) as part of the digital printing initiative. Quark is a member of Networked Graphic Production™ (NGP™), where members work together to develop systems and solutions based on Job Definition Format (JDF) and other open standards that enable plug-and-play integration of print and publishing systems and provide tight control over content creation and production. In addition, Quark is involved with Ifratrack, a standard communication platform for the production and distribution of daily newspapers that allows companies to exchange information across system boundaries.

CONTACTING QUARK

In North America

Quark, Inc.
1800 Grant St.
Denver, CO 80203
www.quark.com
solutions@quark.com
800.676.4575
303.894.8888

In Europe

Quark Media House Sarl
Rue de Saint Nicolas 7
2000 Neuchâtel
Switzerland
euro.quark.com
solutions@quark.ch
00800 1787 8275

©2004 Quark, Inc. and Quark Media House Sarl, Switzerland. All rights reserved. Information in this document is subject to change without notice and does not represent a commitment on the part of Quark, Inc. and/or Quark Media House Sarl, Switzerland.

Quark Products and materials are subject to the copyright and other intellectual property protection of the United States and foreign countries. Unauthorized use or reproduction without Quark's written consent is prohibited.

Quark, QuarkXPress, the Quark logo, The Art of Communication and XTensions are trademarks of Quark, Inc. and all applicable affiliated companies, Reg. U.S. Pat. & Tm. Off. and in many other countries. Java and all Java based marks are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States and other countries.

AppleScript is a registered trademark of Apple Computer, Inc. in the U.S.A. and other countries. All other marks are the properties of their respective owners. 60204WP