



## EMC Integrates Content Management Functionality into Microsoft Office 2007

### Overview

**Country or Region:** United States  
**Industry:** Professional services—IT services

### Partner Profile

EMC Corporation is the world's leading provider of information infrastructure technologies, services, and solutions that help organizations transform the way they create value from their information.

### Business Situation

As companies use the 2007 Microsoft® Office system to access line-of-business systems, Office Business Applications (OBAs) need more-integrated functionality for handling many types of content.

### Solution

EMC created EMC Documentum ApplicationXtender for Microsoft Office 2007, an add-in module for the popular ApplicationXtender software, which brings rich content management capabilities to a customizable OBA.

### Benefits

- Simplifies document management
- Helps users locate documents faster
- Improves productivity, customer support
- Supports rapid deployment
- Reduces development effort for vertical solutions

“ApplicationXtender for Microsoft Office 2007 is being embraced by our clients because it gives them rich content management services in an environment that they are already familiar with.”

*Chad Zerangue, Senior Vice President of Sales, the Windward Group*

EMC Corporation offers IT products and services that help businesses make the most of their information assets. For years, the company's EMC Documentum ApplicationXtender software has helped organizations to better manage images, reports, documents, and other critical content. Now, many companies are using Office Business Applications (OBAs) to build on the clients, servers, services, and tools of the 2007 Microsoft® Office system to simplify accessing information in line-of-business (LOB) systems. To bring the content management functionality of ApplicationXtender to an easy-to-use OBA, the company created EMC Documentum ApplicationXtender for Microsoft Office 2007 (AXO). With AXO, organizations can access LOB information faster, which improves productivity and customer service, and they can customize AXO to create new vertical solutions with minimal development effort.



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## Situation

Many thousands of EMC customers have relied on the EMC Documentum ApplicationXtender line of software for comprehensive, integrated information management. At its most basic level, ApplicationXtender is an electronic filing cabinet: It stores, organizes, and manages virtually any kind of business content and provides role-based access to this content from either a desktop interface or a Web browser. As an integral part of the EMC portfolio of information management products, ApplicationXtender helps connect an organization's employees to the information that they need.

Similarly, many companies are taking advantage of the familiarity of the 2007 Microsoft® Office system to more easily access mission-critical, line-of-business (LOB) systems such as accounting and customer service applications. These companies are increasingly deploying Office Business Applications (OBAs) to transform document-based tasks into more efficient, automated processes that align with a particular LOB function.

OBAs help organizations to bridge the “results gap”—the difference between expected and actual gains in efficiency that LOB systems foster. All too often, returns on LOB investments are diminished because the systems aren't designed to accommodate the working styles, skill levels, and functional requirements of different users. OBAs unlock the value of LOB systems by exposing LOB-based information through technology that employees already use every day—the clients, servers, services, and tools of the Microsoft Office system.

To help customers more effectively bridge the results gap, EMC sought to create an OBA solution that would take full advantage ApplicationXtender capabilities.

## Solution

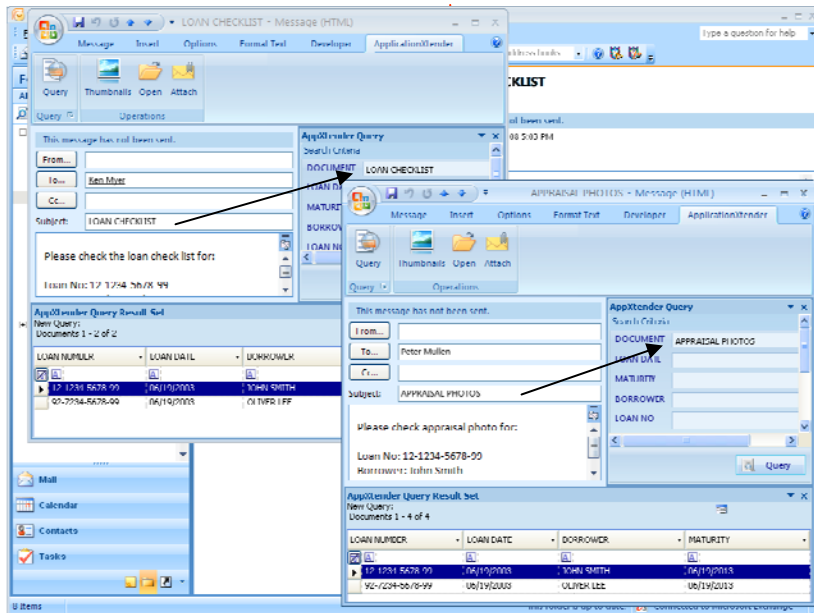
EMC Documentum ApplicationXtender for Microsoft Office 2007 (AXO) is a new add-in module for the popular EMC Documentum ApplicationXtender software. As an Office Business Application, AXO exposes the rich content management functionality of ApplicationXtender through a familiar, easy-to-use interface.

EMC has worked closely with Microsoft to develop AXO and add value to customers' investments in Microsoft business software. Just as OBAs build on the Microsoft Office system to support line-of-business processes, AXO extends the OBA concept to support integrated imaging, report management, workflow, archiving, and document management services.

Now, for example, a customer service representative can use an AXO-based solution to access customer information that is managed through ApplicationXtender. The rep could then respond to customer inquiries using the Microsoft Office Outlook® 2007 messaging and collaboration client and Microsoft Office Word 2007. Similarly, an accountant can access invoices, time cards, and checks—also managed through ApplicationXtender—for inventory, payroll, and payment transactions. The accountant could then analyze them within Microsoft Office Excel® 2007 spreadsheet software. Results could even be displayed in the Microsoft Office PowerPoint® 2007 presentation graphics program.

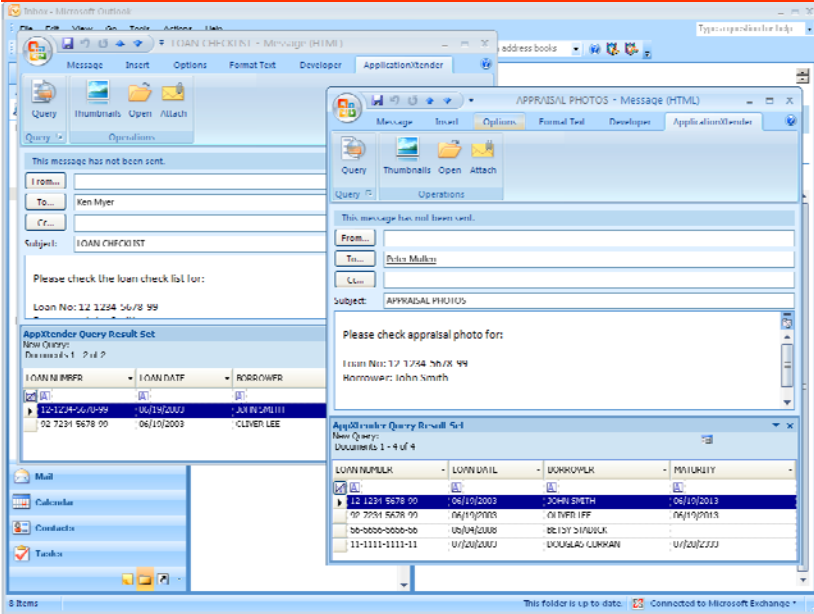
## Benefits

By integrating the rich content management functionality of ApplicationXtender into an Office Business Application, AXO helps to simplify the process of managing documents throughout an organization. Employees can more quickly access information that is stored in documents of almost any type, which improves productivity and customer



Example: A customized implementation of AXO can automatically fill in an ApplicationXtender query field based on the subject line of an e-mail message.

The entire process—receiving the request, locating relevant documents, and sending a reply—takes place within Office Outlook 2007.



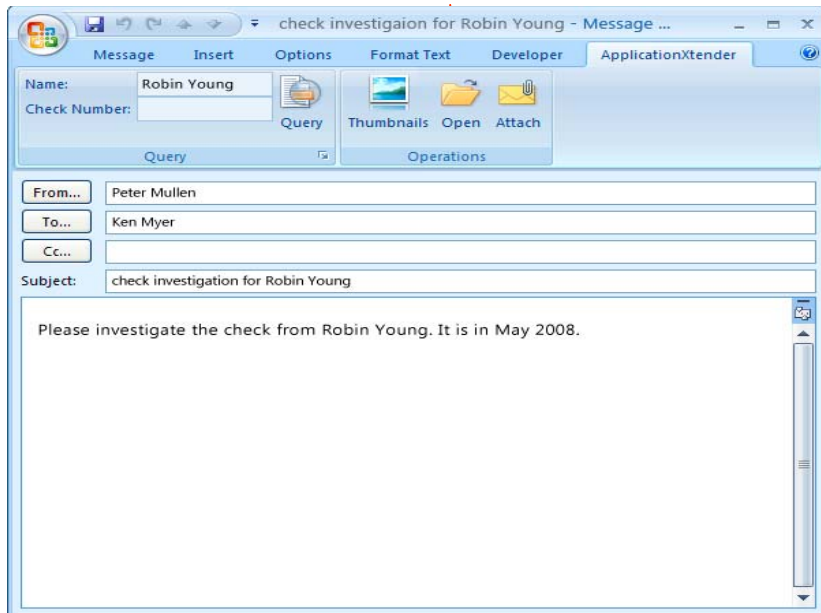
service. With its support for Microsoft ClickOnce technology, AXO also streamlines deployment and update procedures, saving time and effort for IT departments. Additionally, AXO can be easily customized to create specific vertical solutions and to streamline archiving and compliance requirements.

**Simplifies Document Management Across an Organization**

With ApplicationXtender, organizations can create a central, easily managed repository of many different types of information—everything from reports, spreadsheets, and photos to computer-aided design (CAD) and Portable Document Format (PDF) files. ApplicationXtender supports hundreds of file extensions and can open these files even if the original applications that created the documents aren't installed on the user's computer. The AXO add-in module for ApplicationXtender now exposes this document management capability as an OBA. This means that companies can locate, display, and change almost any type of document—and create new documents or collections of them—through familiar Microsoft Office programs.

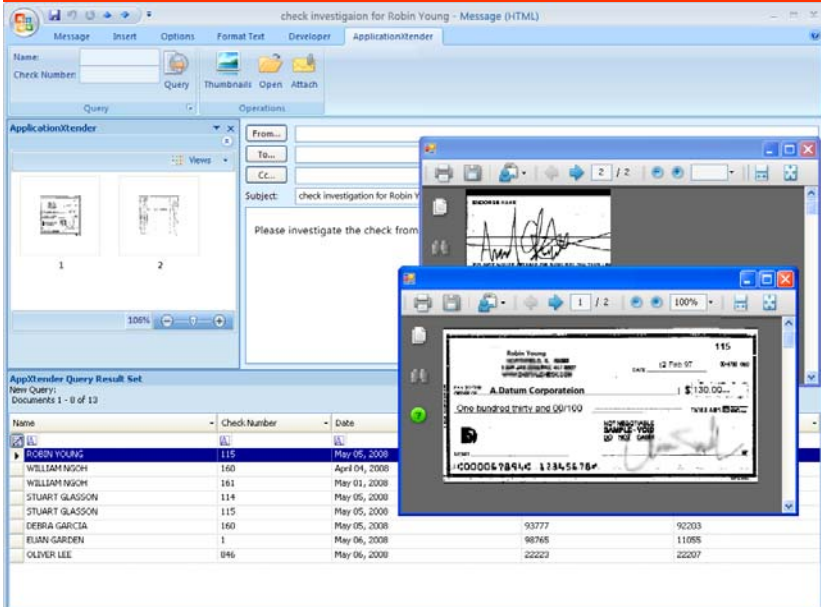
As a hypothetical example, suppose a bank loan officer receives e-mail requests to check a customer's loan application documents. The requests include one message asking about a loan checklist and another message asking about an appraisal photo. AXO can be customized so that it will automatically fill in ApplicationXtender query fields based on the subject line of each e-mail message and locate the relevant documents. The entire process takes place within Office Outlook 2007, as shown in the illustrations.

This example also illustrates how ApplicationXtender can associate several different document types with the same customer record. In this case, the loan officer



Organizations can easily customize AXO with ribbons to perform specific business tasks—in this case, performing ApplicationXtender queries to locate a check.

ApplicationXtender can display search results as thumbnail images. Users can open most of these images even if the document's native application isn't installed on the user's computer.



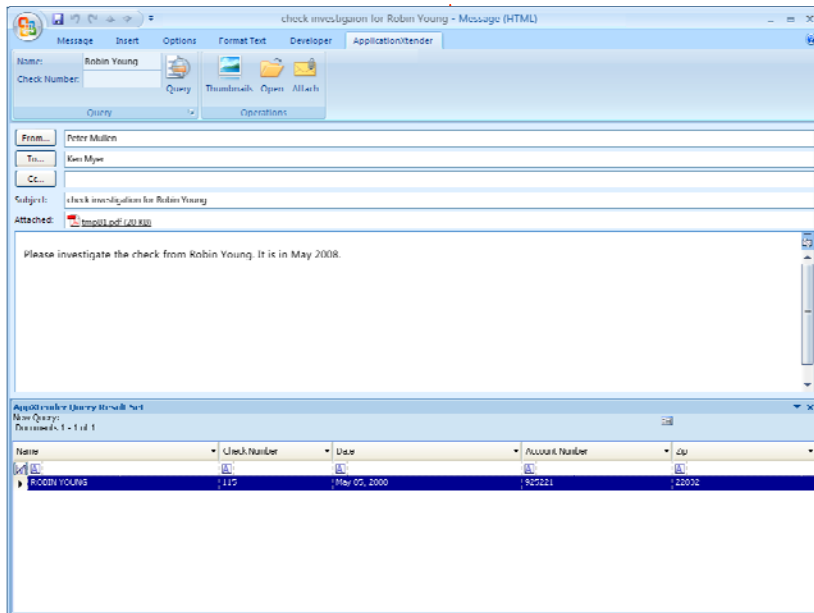
might review the application in Office Outlook 2007 and then automatically generate an approval letter in Office Word 2007. Fields in the letter are filled in with the customer's information and the final letter becomes part of the customer record.

ApplicationXtender also keeps up with the changes that multiple users make to documents (version control), which helps organizations track document histories and promote collaboration. In this way, ApplicationXtender complements functionality in Microsoft Office SharePoint® Server 2007 with an emphasis on managing large repositories (up to 100 million documents) of many different types.

As an example that's in use today, consider the Windward Group, a comprehensive provider of document imaging and document management solutions. Its clients are already benefiting from extending ApplicationXtender into business groups that haven't previously been able to use it. "Many of our clients have ApplicationXtender solutions in place, but only certain departments or group functions have had full access to them," says Chad Zerangue, Senior Vice President of Sales at the Windward Group. "Because AXO requires little to no training, ApplicationXtender is now stretching across multiple departments. ApplicationXtender for Microsoft Office 2007 is being embraced by our clients because it gives them rich content management services in an environment that they are already familiar with."

### Helps Users Locate Critical Documents Faster

AXO helps employees find information in several ways, quickly and with minimal effort. First, because users can directly access many types of documents from the 2007 Office system, they spend less time switching among other applications. Also, their familiarity with Microsoft Office programs



With AXO, attaching ApplicationXtender search results to an e-mail message, for example, is a simple drag-and-drop operation.

reduces training time for AXO. AXO does introduce new user interface elements for querying and processing information, but these elements seamlessly and intuitively complement functionality in the Microsoft Office system.

For example, Office Outlook 2007 presents folders for e-mail messages, tasks, and calendar entries that users are already familiar with searching. AXO can use folders like these to represent complex queries to the ApplicationXtender repository. Now, looking for anything from enterprise resource planning documents to customer relationship management records is handled just like looking for an e-mail message.

AXO can also be used to customize ribbons and toolbars for specific business tasks, as shown in the accompanying illustrations. Continuing with the previous hypothetical

bank example, a customer service representative receives an e-mail message requesting that a processed check be investigated, which requires locating the check's image. This customized version of AXO makes it easy to search for names and check numbers, view thumbnail images of checks, and attach the images to follow-up e-mail messages.

This example also illustrates how a predefined query can reduce searching time. Because the user will enter only a name or check number into the Query ribbon—and because only check images will be included in the results—ApplicationXtender doesn't have to search through the entire document repository. Similarly, developers can make AXO customizations more secure by using predefined queries to limit the areas of the document repository that ApplicationXtender exposes.

ApplicationXtender also speeds up searches by supporting rich indexing when users enter new documents into the repository. Along with the document, users enter values into forms (templates) that the organization defines, with fields for names, addresses, descriptive comments, the document type, and so on. AXO further simplifies this process by displaying and managing the document-entry forms within the 2007 Office system. Without index-based searching, organizations would have to depend on naming their files very carefully to identify what the files contain, which is not a workable option for a repository that contains millions of documents.

The accompanying illustrations include a hypothetical form based on Office Outlook 2007 that a clerk uses as part of scanning and uploading a check into the repository.

As an example that's in use today, Business Imaging Systems is a systems integration firm



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Business Imaging Systems

that supplies specialized micrographics products. Its customers appreciate being able to find and modify documents faster than ever before. Jason McManus, Manager for Major Accounts at Business Imaging Systems, says, “Customers who previously implemented ApplicationXtender are now experiencing greater efficiencies with AXO because content in the ApplicationXtender repository has become so easy to locate, view, change, and attach—all through the Microsoft Office system interface. What’s especially helpful is that most employees are so familiar with the Microsoft Office 2007 suites that AXO gives entire organizations access to ApplicationXtender. Everyone is finally on the same page.”

#### **Improves Productivity and Customer Support**

Because AXO makes it easier and faster to create, search for, and work with many types of documents, the technology can help organizations save time, increase employee productivity, and serve customers better.

For example, Daniel Su, Database Administrator for the nonprofit organization First 5 LA, describes how the simpler document management, the integration with Microsoft Office 2007, and the readier access to information that AXO offers are translating directly into greater efficiency for his staff. Su says, “The primary software that we use in our day-to-day work is Microsoft Office 2007. With our new AXO-based solution, our entire staff of 100 can access and store documents, reports, images, and more, in a central repository. Finding those documents later is a snap. The learning curve is drastically reduced because the functionality of Microsoft Office programs is both intuitive and consistent, and their integration into ApplicationXtender is seamless. We love it!”

He continues, “In the past, processing financial data between departments that required making decisions on passing funds to our grantees took a couple of days. Now, with ApplicationXtender, AXO, and Microsoft Office 2007, that process takes a couple of hours. This increased efficiency and productivity gets funds in the hands of our grantees more quickly, allowing them to continue to provide their essential and valuable services to the community.”

To achieve this positive result, First 5 LA had worked with ViaTRON Systems, an IT partner of EMC with expertise in content management. “It was a challenging project because we had to find a single solution to address the needs of multiple departments in First 5 LA,” explains Kala Devan, President of ViaTRON Systems. “We are happy that our company was able to team up with EMC to bring First 5 LA what I consider the best solution in the industry. The unique features of the AXO software open up new, more efficient methods of document management. After extensive research, we believe we have provided First 5 LA with a solution that they will be thrilled with.”

#### **Supports ClickOnce Technology for Rapid Deployment**

With AXO, organizations can take advantage of the built-in support for Microsoft ClickOnce technology to streamline the deployment and update process. ClickOnce applications can be conveniently distributed by using a Web page, a network file share, or physical media. After they are installed, they can check for and download new application components as necessary.

Because ClickOnce applications are self-contained, they do not rely on shared components, which means that updates are unlikely to cause version conflicts with other programs that do rely on shared components. This advantage—combined with simplified

deployment and automatic updating—helps minimize human involvement in the version management process, improving usability for employees and saving time and effort for IT departments.

#### **Simplifies Archiving and Compliance**

AXO helps LOB systems comply with specific industry regulations by taking advantage of the support for EMC Centera in ApplicationXtender. As employees process documents using Microsoft Office programs, the documents can be simultaneously indexed and stored in the EMC Centera information archive. ApplicationXtender Retention Management with EMC Centera ensures that documents cannot be altered and can only be removed when they reach their respective expiration dates. (Note that ApplicationXtender Retention Management with EMC Centera and the EMC Centera content-addressed storage solution are separately purchased products.)

For example, First 5 LA uses ApplicationXtender for records management and archiving, helping the organization stay regulatory-compliant. Says Su, “ApplicationXtender makes it easy to set policies and manage the various records we are required to keep per state and federal regulation, saving us time and money.”

#### **Reduces Development Effort for Vertical Solutions**

Customizations to AXO are based on XML. Because customers (or their partners) that work with OBAs are generally proficient in XML, they can easily extend AXO functionality and adapt it for their vertical-market needs without additional training. Additionally, AXO offers sample XML code for common business scenarios, and customers and partners are welcome to incorporate this code into their own solutions.

EMC Documentum ApplicationXtender is supported by a strong value-added partner community that has considerable domain expertise. An installed base of more than 8,000 active customers across a variety of industries and applications is a testament to the product’s value. Many of these organizations already use the 2007 Microsoft Office system and can benefit from accessing their line-of-business systems through Office Business Applications. As a result, deploying and supporting the AXO add-in module for ApplicationXtender makes good business sense not only for EMC customers but also for solution partners.

## For More Information

For more information about Microsoft products and services, call the Microsoft Sales Information Center at (800) 426-9400. In Canada, call the Microsoft Canada Information Centre at (877) 568-2495. Customers who are deaf or hard-of-hearing can reach Microsoft text telephone (TTY/TDD) services at (800) 892-5234 in the United States or (905) 568-9641 in Canada. Outside the 50 United States and Canada, please contact your local Microsoft subsidiary. To access information using the World Wide Web, go to: [www.microsoft.com](http://www.microsoft.com)

For more information about EMC Corporation products and services, call (508) 435-1000 or visit the Web site at: [www.emc.com/applicationxtender](http://www.emc.com/applicationxtender)

## Microsoft Office System

The Microsoft Office system is the business world's chosen environment for information work, providing the programs, servers, and services that help you succeed by transforming information into impact.

For more information about the Microsoft Office system, go to: [www.microsoft.com/office](http://www.microsoft.com/office)

### Software and Services

- Microsoft Office
  - 2007 Microsoft Office system
- EMC Documentum ApplicationXtender for Microsoft Office 2007

- Technologies
  - Microsoft ClickOnce