Extending Microsoft SharePoint Environments with EMC Documentum ApplicationXtender Document Management

A Detailed Review

Abstract

By combining the universal access and collaboration features of Microsoft SharePoint with the proven document management features of EMC® Documentum® ApplicationXtender®, organizations can address the content management challenge.

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Executive summary

It is no secret that Microsoft SharePoint sites have become commonplace in today’s businesses. SharePoint offers the promise of being an inexpensive, easy-to-deploy, easy-to-use solution that addresses the complex requirements that organizations have for managing and collaborating on business documents.

But the reality is that while many organizations inherit SharePoint licenses with their purchase of Microsoft Office, Microsoft SharePoint is far from a “free” solution to these challenges. When you consider the total cost of ownership – including server hardware acquisition, complementary software, and implementation and customization services – the decisions that organizations make regarding solution requirements and SharePoint implementation choices become extremely important.

A key limitation that demands consideration is Microsoft SharePoint’s challenge to support large amounts of content. While capable of managing scanned document images – such as paper invoices, healthcare claims documents, legal contracts, or correspondence – in low quantities or within smaller organizations, SharePoint rapidly reaches its limits when storing the large document volumes typical in most organizations.

EMC® Documentum® ApplicationXtender® provides the ideal complement to Microsoft SharePoint for these types of applications. For SharePoint-centric organizations, ApplicationXtender enables organizations to better support larger volumes of documents. It can automatically preserve inactive documents or large volumes of static documents. For organizations that already have ApplicationXtender solutions, SharePoint integration makes these repositories available to the entire organization via easy-to-use SharePoint interfaces. This results in better performance, improved content management and security, and lower overall cost of ownership.

Introduction

This white paper explains the growth behind SharePoint and the challenges of using it. It then explains how ApplicationXtender provides instant document management and how it can integrate with SharePoint.

Audience

The audience for this white paper includes the owners of small to medium-size businesses and managers in the departments of large organizations.

Why SharePoint?

It is no secret that most organizations rely far too heavily on shared drives and e-mail as the primary mechanisms for storing and sharing documents. While these solutions work effectively when dealing with small volumes of documents, they cannot scale to meet the evolving needs of most companies. In today’s world, document volumes are growing exponentially, resulting in skyrocketing management costs and an inability to readily find relevant information.

While any number of different solutions to address these challenges has been successfully deployed, the availability and simplicity of Microsoft SharePoint have made it an attractive choice for smaller workgroups and departments to quickly store and retrieve records and collaborate on business documents.

Fueling SharePoint growth

Since its introduction in 2001, Microsoft Office SharePoint has been widely used to build team collaboration sites and portals, most frequently to address content access and document collaboration for smaller workgroups. With the release of Microsoft Office SharePoint Server 2007, the product has expanded beyond its portal roots to include more complete capabilities for content management, business intelligence, search, and electronic forms creation and management.
The inclusion of these capabilities has accelerated the interest in and adoption of Microsoft Office SharePoint solutions. Business users have adopted the product to provide a collaborative environment for creating, managing, and sharing documents. Since it is relatively quick and cost-effective to deploy, SharePoint has become the de facto standard for workgroup collaborative sites.

Going forward, research from leading analysts shows that organizations are planning to expand their SharePoint deployments to reach a broader set of users, and to integrate more data sources into their SharePoint environment to enable centralized access to more and different types of information. As SharePoint deployments grow in size and are deployed across multiple departments, customers increasingly require solutions that both enhance and extend SharePoint capabilities.

**Challenges with SharePoint**

While individual workgroups benefit from easy-to-implement, easy-to-use SharePoint team sites, these sites tend to be created to address individual workgroup or department requirements, rather than with a strategic, company-wide view toward managing important business documents. In addition, SharePoint installations tend to mushroom within organizations, making it impossible to effectively manage and protect your information.

**Information silos**

Since SharePoint sites are typically deployed at the department or workgroup level, a single company may have hundreds, or even thousands of SharePoint sites; in fact, Microsoft has over 100,000! How can this information be effectively managed, secured, and retained? How can valuable business information be quickly found? How much important data is hidden in disconnected SharePoint “silos”?

The lack of control over these many SharePoint silos of information is a significant risk. Especially within larger organizations, departmental use of SharePoint introduces a significant blind spot for corporate information governance. Information stored in these silos cannot easily be found across the entire organization, and information protection activities, including backup and retention, cannot be ensured.

**Confronting SharePoint implementation challenges**

While SharePoint has a number of strong features to support portal and collaborative requirements, organizations often find that SharePoint does not address all of the requirements organizations have for content management solutions, especially when deployed across larger organizations.

- SharePoint relies upon Microsoft SQL Server databases for storing both content and metadata. This reliance upon SQL databases makes SharePoint difficult to manage and back up, especially as it scales to store large numbers of documents. In addition, high-availability requirements, such as replication, mirroring, and clustering, are limited and difficult to configure.
- For customers that scan moderate to high volumes of documents or need to store millions of documents, SharePoint may require more than one repository. This introduces challenges to organizations that need to provide a single point of access for all documents.
- SharePoint does not provide imaging features. SharePoint user interfaces are not able to view all common image formats nor does it support image enhancement functions required to improve the quality of scanned images, such as line and border removal, deskewing, noise removal, and rotation.
- SharePoint has limited facilities for developing and executing complex processes in highly scalable environments, requiring extensive customization or reliance upon third-party tools to provide effective automation and routing.
- SharePoint provides no capability for archiving old, infrequently accessed content that must be retained for e-discovery, compliance, or long-term preservation. Disconnected silos of SharePoint content are rarely controlled in accordance with corporate policies and external regulations.
Without relying upon third-party applications, SharePoint does not address the lifecycle of content, especially at its “beginning” (document capture) and “end” (publishing, retention management, and archiving).

SharePoint provides no capabilities to support COLD (Computer Output to Laser Disk) print streams.

**Understanding the long-term costs**

Despite common perception that SharePoint is the “free” content management solution, the reality is that “there is no such thing as a free lunch.” IT departments are dedicating an increasing amount of their budgets to maintaining and expanding SharePoint deployments. In a recent survey, participants averaged budgets of over $250,000 for SharePoint and related services over the next two years. In addition, approximately a third were using outside vendors for deployment, custom development, and management of SharePoint and nearly two-thirds were acquiring additional hardware and software to support their SharePoint deployments.

**Instant document management with ApplicationXtender**

With EMC Documentum ApplicationXtender, organizations can capture, organize, route, deliver, and preserve business-critical information. EMC Documentum ApplicationXtender is easy to implement, integrate, and manage, providing instant, role-based access to content from either a desktop interface or web browser. ApplicationXtender provides market-leading document management solutions for midsize organizations and departments.

ApplicationXtender provides out-of-the-box capabilities that allow healthcare organizations to quickly create “electronic file cabinets” to capture and store all paper-based patient records, healthcare claims forms, and other associated patient information in a digital format. Built on a central repository, ApplicationXtender enables quick access to information from a browser or desktop interface. Now, departments and organizations can avoid fines and embarrassment that happens when critical information can’t be located in response to an e-discovery or litigation request.

Based on an easy-to-use Microsoft® Windows/.NET-optimized system, ApplicationXtender can be quickly deployed through a network of value-added partners in the Microsoft environment. End users can easily access document management technology from familiar, easy-to-use Microsoft Office business applications, including Microsoft SharePoint, with little to no training and limited requirements for IT departments. Employees both within and outside of the department can benefit from a unified platform that aggregates, manages, and preserves all paper and electronic patient information, and presents it via an intuitive user interface.

**Using ApplicationXtender and SharePoint together**

To address the challenges that organizations face by relying upon SharePoint repositories, EMC Documentum ApplicationXtender extends SharePoint repositories by providing document management and workflow and long-term retention capabilities, and enabling you to integrate access to ApplicationXtender documents within ubiquitous and ease-to-use SharePoint portals.

By providing complete access to all ApplicationXtender documents, existing SharePoint implementations can quickly access and leverage all business-critical documents, regardless of where they are stored. SharePoint has search capabilities to search within SharePoint, and similarly, ApplicationXtender can search within the ApplicationXtender repository. By utilizing the portal, users can create an interface that will provide both search capabilities.

While SharePoint provide ubiquitous access for users throughout an organization, its architecture was built for collaboration, not for large-scale document management. ApplicationXtender SharePoint integration enables you to leverage ApplicationXtender’s strength in document management without sacrificing easy access from within SharePoint.
In addition to providing more secure and scalable document management, by adding ApplicationXtender to a SharePoint site, organizations can add the following capabilities:

- ApplicationXtender provides high-volume scanning capabilities, both through the QuickScan Pro desktop scanning and EMC Captiva® enterprise capture.
- ApplicationXtender provides comprehensive image viewing capabilities, with support for over 250 file formats.
- Ability to launch a workflow within ApplicationXtender once a document is stored in SharePoint, and assuming that the ApplicationXtender SharePoint integration module is installed and configured, to initially move/copy that same document to the ApplicationXtender repository first.
- Support for capturing COLD and ERM print streams, as well as the ability to support display of green bar documents and form overlays.
- Complete SharePoint search capabilities to search within SharePoint, and similarly, ApplicationXtender can search within the ApplicationXtender repository by utilizing the portal.
- Once documents are migrated to the ApplicationXtender repository, ApplicationXtender retention policies can be applied to ensure appropriate security and compliance steps are taken.

As documents within ApplicationXtender must be retrieved, SharePoint users have full access to ApplicationXtender documents from within the SharePoint browser-based user interface. In addition to downloading these documents for local use, SharePoint users can view these documents within the browser, including the ability to view thumbnails of multiple page documents or zoom into specific areas of a single page.

ApplicationXtender SharePoint integration enables organizations to provide integration with ApplicationXtender repositories from within Microsoft SharePoint. ApplicationXtender Web Parts and External Content Management Lists provide a direct portal into ApplicationXtender content, including the ability to perform fully customizable queries and access ApplicationXtender documents.

**Extending SharePoint content management**

As discussed earlier, Microsoft SharePoint has challenges when it comes to managing high volumes of documents. With ApplicationXtender SharePoint integration, ApplicationXtender can both support and extend the functionality provided by SharePoint.

To improve storage management and performance for scanned document images, high volumes of content, and other fixed document types, ApplicationXtender SharePoint integration enables files to be automatically transferred to an ApplicationXtender repository. ApplicationXtender integration enables SharePoint implementations to effectively manage a SharePoint site’s requirement for storage of fixed document types.

Once transferred to an ApplicationXtender repository, documents benefit from ApplicationXtender’s document management services optimized for these types of documents. This includes secure storage and management, as well as application of both workflow processes and retention policies.

To effectively manage the coordination of content between SharePoint and ApplicationXtender, the ApplicationXtender SharePoint integration module enables administrators to schedule document archiving or manually select documents to be transferred. Integrators and administrators are able to define rules to select the documents to be moved to a purpose-built repository for long-term preservation as well as aggregate fixed content from multiple SharePoint sites. These rules can be based on document type, size, metadata, location, or other values.
Figure 1. Manage content coordination between SharePoint and ApplicationXtender

In addition to the documents themselves, metadata associated with the original SharePoint document is also transferred to ApplicationXtender. These metadata values may be mapped to the appropriate ApplicationXtender content type, and SharePoint integration includes several options to manage potential data collisions, including skipping the step, creating new versions, or overwriting existing values.

When used to support SharePoint-centric requirements, ApplicationXtender SharePoint integration enables organizations to implement effective document management solutions, using the strength of ApplicationXtender to extend SharePoint implementations past its inherent limitations.

**Leveraging ApplicationXtender investment within SharePoint**

For ApplicationXtender customers, integration with SharePoint user interfaces enables organizations to leverage critical business documents stored within ApplicationXtender repositories, directly within SharePoint. Instead of being forced to develop a content migration strategy or addressing the challenges that SharePoint presents for managing high volumes of documents, organizations can continue to leverage your investment in ApplicationXtender while providing access to content through common, user-friendly SharePoint user interfaces.

Using this configuration, organizations can leverage the strengths of both SharePoint and ApplicationXtender. Microsoft SharePoint provides a unified interface to search, access, and work with office document types. Business documents that benefit from workgroup collaboration are managed by SharePoint, while fixed assets, such as scanned documents, are stored in ApplicationXtender and seamlessly accessed through the SharePoint interface.
To support comprehensive access to ApplicationXtender documents within Microsoft SharePoint, ApplicationXtender provides two methods of viewing ApplicationXtender content within SharePoint:

- **ApplicationXtender Web Parts** provide the ApplicationXtender look and feel, directly within a SharePoint portal. ApplicationXtender searches may be performed and results lists – including those returning thousands of documents – may be displayed.
- **External Content Management Lists** enable ApplicationXtender documents to participate in SharePoint search, event notifications, and workflows, and to be linked with other SharePoint lists and items.

These lists may be kept in sync if metadata changes are made by a SharePoint user or by ApplicationXtender end users with other AX client applications such as desktop, web, or workflows. With both options, a generic ApplicationXtender viewer is provided to display documents without requiring the native application. Additionally, the viewer can display redactions and annotations on the images.

ApplicationXtender SharePoint integration enables organizations to both leverage their existing ApplicationXtender investments as well as extend the value of ApplicationXtender, providing a solution for managing high volumes of SharePoint content, aggregating content from multiple SharePoint sites, and enhancing SharePoint’s ECM functionality, including workflow, imaging, and retention.
Conclusion

Next steps

EMC Documentum ApplicationXtender is the perfect complement to Microsoft SharePoint both for managing large quantities of documents in a single SharePoint site and for ApplicationXtender installations that must work within a SharePoint environment. ApplicationXtender enables SharePoint-centric organizations to leverage its ability to manage very high volumes of documents and to preserve and apply retention to inactive documents, while allowing ApplicationXtender-centric content to be completely accessible within SharePoint user interfaces. By leveraging the strengths of both SharePoint and ApplicationXtender, organizations can not only provide ease of use and complete document access through SharePoint; they can leverage the strong document management and workflow capabilities in ApplicationXtender.

To learn more EMC Documentum ApplicationXtender SharePoint integration and Web Parts, call your EMC account manager or EMC partner today.