

SharePoint and DocAve: The Future of Enterprise Content Management



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The goal of an enterprise content management (ECM) system is to seamlessly connect a company's business processes, knowledge workers, and organization-wide information. Not just an application that simply organizes and stores content, ECM constitutes a fully integrated platform and architectural framework that brings about total collaboration, intelligent content lifecycle management, and greater productivity.

Microsoft SharePoint Server 2010 is well positioned to act as the foundation for organizations' next-generation ECM systems. Fully integrated with the productivity tools knowledge workers are already familiar with, complete with robust enterprise search functionality, easily customizable and scalable, SharePoint is considered by many to be the backbone of ECM initiatives moving forward.

While there are many native platform features that make SharePoint an optimal choice for launching a true ECM initiative, there are several areas in which the platform can be enhanced with infrastructure management support – particularly in terms of capture, storage and access, delivery, preservation, and management. In order to meet the objectives of a successful ECM project, SharePoint must be enhanced with powerful data protection, administration, content management, storage optimization, compliance, and deployment tools.

In the coming pages, we will discuss ECM's key objectives, vital ECM functions, SharePoint's native ECM capabilities, and how AvePoint's DocAve Software Platform helps unleash the platform's full potential with regard to ECM initiatives.

About AvePoint

AvePoint is a global technology company and software innovator headquartered in the United States. Since its founding in 2001, AvePoint has become the world's largest provider of infrastructure management software solutions for Microsoft SharePoint Products and Technologies. Propelled by the world's largest SharePoint-exclusive research & development team, AvePoint is the premier provider for EPG, SMB, Mid-Market and Government organizations demanding the most powerful and flexible infrastructure management solutions for their SharePoint environments and assets. AvePoint's award-winning DocAve Software Platform is recognized as the industry standard for comprehensive and scalable SharePoint backup and recovery, administration, replication, migration, archiving, deployment management, reporting, storage optimization, and content lifecycle management.

AvePoint is headquartered and maintains its principle engineering center in Jersey City, NJ, with wholly owned sales and engineering centers in the USA - San Jose, Los Angeles, Seattle, Chicago, Washington DC, Houston, Boston; Ontario, Canada; Melbourne, Australia; London, United Kingdom; Munich, Germany; Johannesburg, South Africa; Tokyo, Japan; Singapore; and China - Beijing, Changchun, Dalian. AvePoint's global team, fortified by an expansive network of certified partners, helps more than 6,000 enterprise customers – including many Fortune 500 companies and government agencies – to protect, manage, optimize, and integrate their mission-critical SharePoint environments. AvePoint is a Depth Managed Gold Certified Microsoft Partner and GSA provider.

Defining Enterprise Content Management

So, what exactly is ECM? Is it collaboration? Records management? Content management? Centralized document repository? The answer, in a word, is “yes”. Today’s successful ECM systems not only tackle document, records, and web management, but they also serve as the underlying infrastructure upon which formerly vertical applications and distributed groups of knowledge workers can seamlessly exchange information and collaborate. These ECM systems truly act as ecosystems where people, processes, and information connect.

While ECM can mean something different to virtually any organization depending on their specific business needs, there are several key objectives that must be met by all:

- Establish control over ever-growing volume of records and documents to mitigate task duplication and minimize time spent searching for information.
- Automate business processes to replace manual paper processing, thereby increasing productivity and enabling online collaboration.
- Streamline the authoring and publishing of information to knowledge workers, customers, and partners.
- Flexibly meet evolving regulatory compliance obligations, including document retention policies, unstructured information management, and records management.

The primary functions of an ECM system are to capture, store, preserve, manage, and deliver enterprise content. With that said, there are four core attributes beneath the surface that every ECM system must possess in order to be successful:

Integration	ECM is not an application – it is a platform that manages, organizes, and delivers data from various productivity applications and multiple data stores. This integration should be virtually transparent and highly adoptable for end-users.
Scalability	ECM systems must be able to handle large amounts of data without degrading system viability, and must be architected so that it can be efficiently, securely, and cost-effectively deployed to new working groups regardless of their location.
Flexibility/ Extensibility	ECM empowers organizations to deliver content and manage processes in the precise way their business units and external stakeholders require, providing intuitive tools to customize elements of the platform for specific business needs.
Usability/ Adoptability	ECM systems must be built with an emphasis on collaboration and teamwork. It must be intuitive, easy to use, and deliver the same look-and-feel as the business applications workers already use for their day-to-day tasks.

Microsoft Office SharePoint Server (MOSS) 2007 was renowned for its ability to help organizations manage their information and bridge the oft-dreaded divide among structured content, unstructured content, and social computing. Many industry experts, however, felt that MOSS 2007 did not have enough features allowing the platform to truly help organizations with their ECM initiatives.

Microsoft's latest platform release, SharePoint Server 2010, has numerous enhancements seeking to tie together traditional content management, social capabilities, and search with simple management in order to drive ECM initiatives worldwide. According to the Association of Information and Image Management (AIIM), there are eight major improvements that help position the platform as an optimal home for ECM:

1. An absolute, persistent link reference to objects in SharePoint – regardless of file renames or content moves – with **Document ID**. In MOSS 2007, there was no way to directly link to a unique object ID – the link would break if a file was moved or renamed. Given that one of the greatest benefits of ECM systems is their ability to send content in a link rather than email attachments, Document ID represents a monumental leap forward.
2. Related documents can be grouped together so they share metadata, have a common homepage, same workflows, and integrated archival process with **Document Set**. In MOSS 2007, content would be copied throughout the system instead of having pointers to a single source for the content. For example, the "Send to ... Records Center" feature would place a copy of a document in the Records Center while leaving the original in place instead of moving the document or changing the state of the document to indicate its changed status.
3. Allow SharePoint documents, blogs, wikis, web pages, and list items to be declared records in SharePoint Server 2010 with **In-Place Records Management**. With **Hierarchical File Plans**, lists can be created that can run up to the millions of items, essential for managing physical objects on any sort of scale. MOSS 2007 did not allow users to seamlessly manage physical objects without heavy customizations or solutions from third-party vendors.
4. Establish an enterprise-level taxonomy by enabling users to create the structure – including hierarchy, product categories, and worldwide locations – and publish it to SharePoint by utilizing **Metadata Store**. MOSS 2007, while having Content Types, did not enable the management of metadata across multiple site collections.
5. True enterprise-level search capabilities, with metadata-driven refinement panels, content indexing, and the ability to search and retrieve data from content sources both inside and outside of SharePoint with **SharePoint 2010 Enterprise Search** and **FAST Search**. In MOSS 2007, there was no way to store a snapshot of search results for future reference or enable users to create reusable search templates.
6. Continued, robust security, permission, and policy parameters using the **SharePoint Admin Toolkit**, though the process is still granular and can become time-consuming for truly global, complex deployments. MOSS 2007 did not enable farm-level administrators to seamlessly preside over all permissions and securities without having to delve into each individual site or site collection.
7. At the site collection, site, list/library, and/or item level, SharePoint provides a number of reports based upon **audit data** – rather than just at the site collection level as in MOSS 2007. Another challenge in MOSS 2007 with regard to auditing was the fact that only some events would be logged, and files opened in the browser did not have the same level of security – i.e. would not offer the user to view in read-only or edit mode.
8. Greater extensibility, presentation, and editing for line-of-business applications and data with **Business Connectivity Services**. In MOSS 2007, the Business Data Catalog enabled users to connect data from CRM and ERP systems into SharePoint, but just in read-only mode.

While SharePoint Server 2010 has made several large improvements enabling organizations to utilize the platform for ECM, there are some challenges that still remain. In the next section, we will outline the different objectives necessary to successfully implement ECM with SharePoint Server 2010 and AvePoint's DocAve Software Platform.

ECM Unleashed with SharePoint & DocAve

Utilizing SharePoint Server 2010 as your organization's ECM solution demands proper planning. We will now review the general guidelines, objectives, and proven practices necessary for deploying SharePoint as your ECM system with DocAve by going through each of the core competencies of ECM.

There are five stages that must be comprehensively addressed when crafting an ECM system:

Capture	Centralize company-wide digital assets into one repository.
Storage & Access	Efficiently manage SQL Server content database storage and unify enterprise content residing on numerous, disparate legacy systems.
Delivery	Ensure the proper stakeholders have access to the right content, at the right time.
Preservation	Protect content and information against accidental deletion or corruption, meet compliance obligations, and institute an automated end-of-life strategy dependent upon specific business requirements.
Management	Monitor and manage the ECM system without overburdening IT resources or exposing the enterprise to unnecessary risk.

Now, let's dive deeper into each of these stages, outlining the key objectives and proven practices necessary to ensure SharePoint Server 2010 deployments are optimized to truly launch effective, robust ECM initiatives succinctly tying together an organization's people, processes, and information.

Capture

By infusing SharePoint with the DocAve Software Platform, the platform will truly become the singular home for the creation, presentation, and management for all content – regardless of where it originally resides.

Objectives
<ul style="list-style-type: none"> • Digitize paper media and upload it to the ECM system efficiently • Associate metadata to this digitized media for indexing and enterprise search • Migrate legacy data stores into SharePoint while maintaining all associated metadata in order to consolidate enterprise content and reduce legacy licensing costs • Present data residing in legacy stores – including file shares – directly through SharePoint, providing a single point of access for end-users to interact with all enterprise content
Proven Practices
<ul style="list-style-type: none"> • Upload any type of digitized media/asset into SharePoint from any internet-accessible workstation. Deliver and present data from legacy stores directly through SharePoint, providing a single point of access for end-users to interact with enterprise content (DocAve Connector for SharePoint) • Create custom applications for streaming documents, audio files, and video clips in bulk to selected SharePoint locations (DocAve Connector Software Development Kit) • Utilize SharePoint to enable indexing and enterprise search of all uploaded content (Metadata Store) • Migrate legacy data stores – including file shares, Exchange Public Folders, Lotus Notes, Documentum eRoom, and more – and legacy content metadata into SharePoint, granularly or in bulk, according to business demands and schedules. (DocAve Migrator) • Implement an imaging solution with dedicated SharePoint connectors (provided by all major imaging vendors, including eCopy and Kodak) to enable scan and upload of paper-sourced content to the SharePoint platform • Implement a capture solution fully integrated into the SharePoint user interface – SharePoint ISV's Atlasoft and KnowledgeLake enable direct upload to SharePoint from the imaging device, as well as intelligent optical character recognition (OCR) with automated metadata-field population functionality

Storage & Access

By enhancing the SharePoint deployment with the DocAve Software Platform, organizations can rest assured that they are intelligently storing enterprise-wide content, optimizing the usage of SQL Server content databases, and enabling unfettered access to SharePoint by all relevant stakeholders regardless of location.

Objectives
<ul style="list-style-type: none">• Manage the growing amount of unstructured data – including documents, audio files, video files, and PDFs – stored in the ECM system in order to maximize its potential for scalability and performance• Efficiently archive content in a manner that ensures satisfaction of all internal and external compliance objectives, as well as optimizing the ECM system’s performance• Deliver real-time access to up-to-date ECM data to geographically dispersed knowledge workers, regardless of location• Ensure unified accessibility rights management of all end-users
Proven Practices
<ul style="list-style-type: none">• Offload to tiered storage all discrete enterprise content exceeding a custom-set rule utilizing full support of Microsoft’s EBS and RBS APIs (DocAve Extender for SharePoint)• Perform enterprise-wide archiving operations with a unified business-rule engine to optimize storage (DocAve Archiver for SharePoint)• Replicate all ECM content, configurations, and securities to all regional SharePoint farms in real-time, with customizable throttle controls, compression, and two-way synchronization (DocAve Replicator for SharePoint)• Centrally manage all user permissions, settings, and configurations, granularly or in bulk, across the entire multi-farm environment (DocAve Administrator for SharePoint)

Delivery

What is an ECM system if it cannot provide the content to the people who need it, when they need it? By using SharePoint and DocAve in tandem for an ECM strategy, organizations have a unified presentation platform for all legacy enterprise content, be it in file shares or legacy databases, and it is subject to enterprise-content search. Content and customizations can be propagated automatically from staging/testing to production, and are all easily accessible when necessary for regulatory compliance obligations.

Objectives
<ul style="list-style-type: none">• Unified and appropriately governed delivery of enterprise-wide content, regardless of source and type• Timely delivery of comprehensive reporting for management and compliance purposes• Efficient of ECM system services to new members and units of the organization
Proven Practices
<ul style="list-style-type: none">• Utilize SharePoint’s web-based interface to provide secure access to the ECM system from any computer with internet connectivity – including native support for the latest versions of Firefox and Safari in SharePoint Server 2010• Scale the ECM system with relative ease due to its distributed architecture, cost-effective licensing model, and automated deployment and application lifecycle management tools (DocAve Deployment Manager for SharePoint)• Expose all networked file shares and legacy database content via SharePoint (DocAve Connector)• Analyze and report upon all platform activity, content access/modification histories, and end-user activities for management analyses and compliance satisfaction (DocAve Report Center for SharePoint; DocAve Auditor for SharePoint)• Synchronize SharePoint content among multiple farms to ensure delivery of the most up-to-date content to all end-users (DocAve Replicator)

Preservation

End-users must have the confidence that all content and data in an ECM system – as well as the ECM system itself – is fully protected against accidental deletion or corruption. All enterprise content must be protected in a manner conserving storage resources while enabling fast, full-fidelity restoration. The ECM platform itself must also be fully protected – including system configurations, customizations, and workflows – via customizable, synchronous system backups.

With DocAve providing the protection framework for your SharePoint ECM deployment, there is absolutely minimal downtime and manual restoration efforts should the platform fail. To ensure zero productivity loss, a fully synchronized, stand-by ECM environment can be readied to assume ECM production tasks should the production system fail. All data and platform protection processes are fully customizable, and piloted via an integrated, centralized interface.

Furthermore, everything must be easily discoverable, depending upon business-specific needs, for regulatory compliance purposes. By enhancing SharePoint's native data protection, compliance, and archiving features with DocAve, organizations can move forward confidently in their pursuit of successful ECM.

Objectives
<ul style="list-style-type: none">• Maintain digital assets in accordance with business needs and compliance requirements• Ensure swift restoration of ECM content items following corruption or accidental deletion• Maintain all object metadata during and after recovery events• Ensure seamless transition to a warm, stand-by system should the main production system fail• Maximize platform up-time and swift restoration of platform following a disaster event
Proven Practices
<ul style="list-style-type: none">• Ensure fast, full-fidelity recovery of any lost or corrupted ECM documents, objects, sites, and site collections directly to the production environment or to any other SharePoint location with no need for staging (DocAve Backup and Restore for SharePoint; DocAve SiteBin for SharePoint)• Utilize granular, intelligent backup capabilities to optimize backup strategies by prescribing variable backup routines/frequencies to content sets in order to aggressively protect critical ECM data (DocAve Backup and Restore)• Establish a warm, stand-by ECM system environment for one-switch disaster recovery (DocAve High Availability for SharePoint)• Architect an intelligent, automated end-of-life strategy for old and stale content according to business-specific requirements, while optimizing storage of SharePoint's SQL Server (DocAve Archiver)• Conduct unified, automated eDiscovery across all active and archived enterprise content, via search and identification using keyword search, user, group, object, or metadata field. Output eDiscovery reports and records in all industry-accepted formats for third-party review (DocAve eDiscovery for SharePoint)• Satisfy all regulatory compliance obligations with full auditing of all ECM system and user activities, immutable content capture, and comprehensive, customizable report generation (DocAve Auditor; DocAve Vault for SharePoint)

Management

DocAve enhances SharePoint's ECM management capabilities by enabling organizations to design an ECM topology aligned with their specific processes and unit structure, and easily scale the system with automated deployment management, unified user and settings management, real-time content replication, and system-wide reporting.

Objectives
<ul style="list-style-type: none">• Manage the organization of unstructured enterprise content via an ECM system architecture that aligns with enterprise operations and business units• Administration of systematic metadata tagging to facilitate search and navigation of enterprise content• Efficient document versioning and check-in/check-out management for information consistency• Robust administration of end-users, to ensure each has access/modification rights for only those SharePoint elements for which they are authorized• Management of collaboration and workflow tools, for controlled simultaneous information processing, including management of information from integrated business applications
Proven Practices
<ul style="list-style-type: none">• Utilize SharePoint's site-based architecture to design an ECM system aligned with organizational structure and can evolve as the organization does – nimbly move and transfer this content on-demand or according to customizable schedules with point-and-click ease (DocAve Content Manager for SharePoint)• Take advantage of enterprise-wide metadata tagging and management to better organize enterprise content with SharePoint Server 2010's Metadata Store• Utilize legacy content metadata by migrating and mapping it directly to managed metadata in the Metadata Store (DocAve Migrator)• Use SharePoint 2010 Enterprise Search and FAST Search to identify and locate content based on metadata tag and/or keyword• Meet reporting and eDiscovery obligations to identify, quarantine, and/or hold content for review (DocAve Vault; DocAve eDiscovery)• Facilitate synchronous information access and end-user collaboration with SharePoint Server 2010's Versioning, Check-in/Check-out, and Workflow (via SharePoint Designer 2010) features, and ensure end-users worldwide have the same level of access (DocAve Replicator)• Move and replicate enterprise content throughout the ECM system in real-time (DocAve Content Manager)• Scale ECM deployment efficiently with automated propagation of farm server customizations, solutions, and SharePoint Designer 2010 elements (DocAve Deployment Manager)• Centrally discover and manage all ECM system users across the entire SharePoint deployment (DocAve Administrator)• Monitor ECM system performance and activity from a single dashboard to prevent performance bottlenecks, non-compliance events, and to assist in future scaling planning (DocAve Report Center)

Two Platforms, One Integrated ECM Solution

With an ever-growing volume of records and documents to tame, myriad business processes to automate, constantly evolving compliance regulations to meet, and an onus to constantly author and publish fresh content, today's business environment demands a robust ECM solution.

Successful ECM systems foster transparency and collaboration, and because of its singular capacity to connect an organization's knowledge workers, streamline its business processes, and manage and store its information, SharePoint Server 2010 is the platform upon which ECM systems of the future should be built.

There is no one, de facto way to fully utilize ECM systems, nor is there a silver bullet for crafting a perfect ECM initiative. Regardless the ECM project's end-product, organizations must ensure it captures, stores, preserves, manages, and delivers enterprise content quickly and seamlessly to its end-users.

In order to get there, many have turned to SharePoint Server 2010 to reinforce their ECM project's integration, scalability, flexibility, extensibility, usability, and adoptability. There are many feature enhancements in Microsoft's latest platform release to help in this regard, but some crucial challenges still remain at each step. When fortified with the AvePoint's DocAve Software Platform, SharePoint provides the reliability, flexibility, scalability, and security organizations require for truly successful ECM.

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