

# Maximize Performance and Minimize Costs in SharePoint Environments

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## Maximize Performance and Minimize Costs in SharePoint Environments

See how Hitachi Data Discovery for Microsoft SharePoint gives SharePoint users a secure, Microsoft oriented interface to access essential productivity, business improvement and cost saving features.

By attending this webcast, you'll learn how to:

- Improve SharePoint performance
- Reduce SharePoint costs
- Allow for greater SharePoint growth



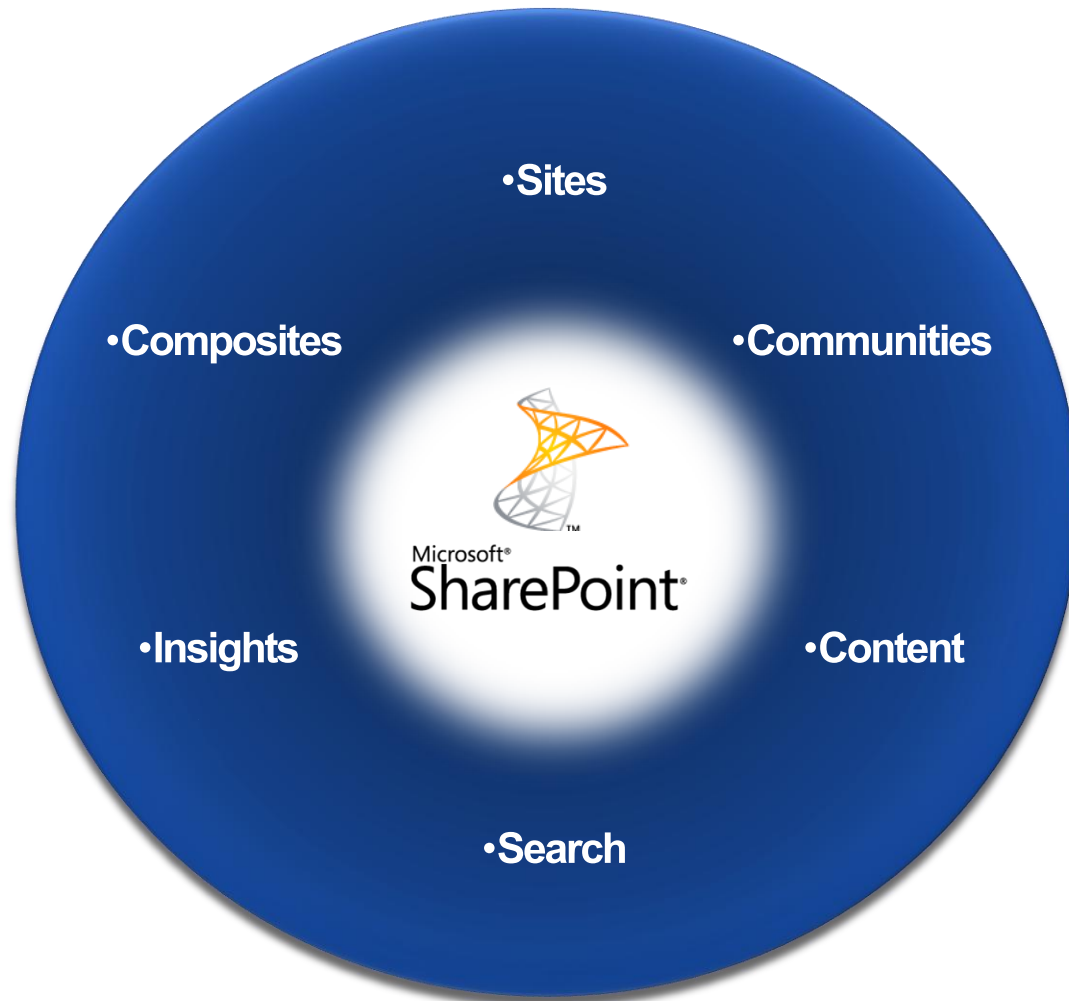
- Microsoft SharePoint Overview
  - Customer Challenges
  - Introducing Hitachi Data Discovery for Microsoft® SharePoint®
  - Use Cases
  - Business Impact
  - Technical Details



**Information is fast becoming  
our most valuable corporate  
commodity and asset**

# Growth of All Data Types





## Enterprise Content Management

Make it simple to author and manage content and documents

## Collaboration

Keep coworkers, partners and customers in sync

## Knowledge Discovery and Insight

Make the right information available to more people

## Fundamentals

Make it more secure, manageable and reliable

## Information Worker Solutions

Build client and web-based applications with workflow and line-of-business interoperability

- Microsoft SharePoint Overview



- Customer Challenges

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- Use Cases

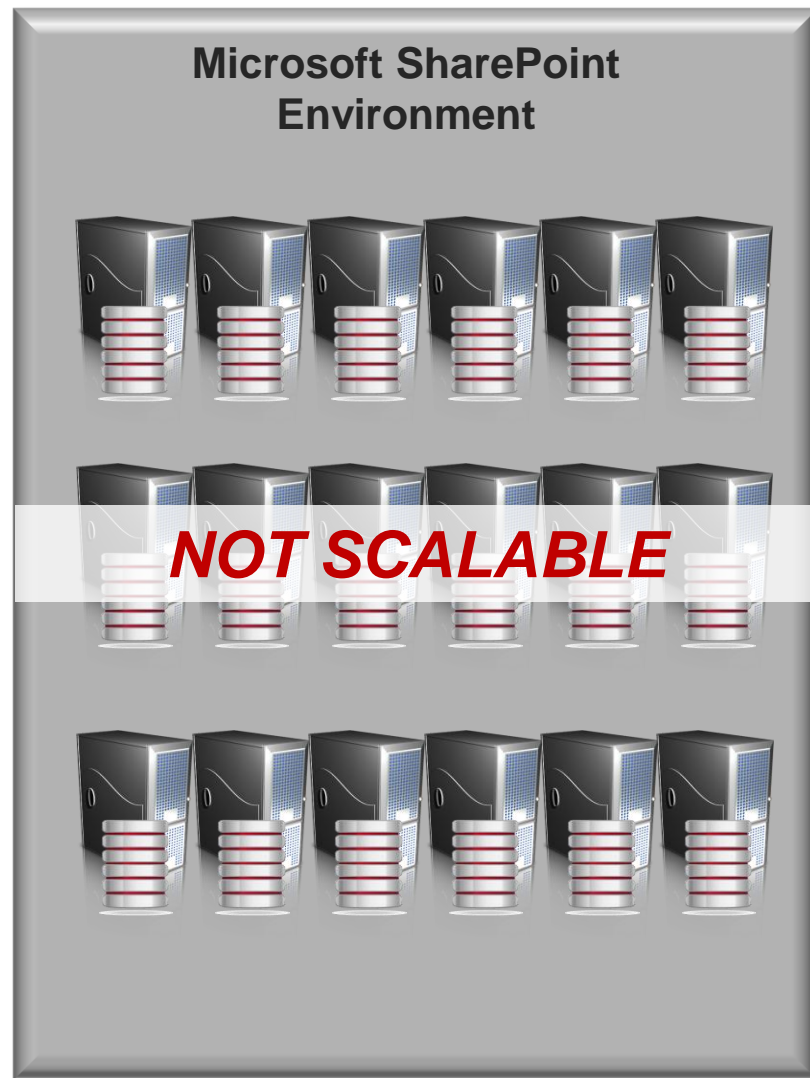
- Business Impact

- Technical Details

SharePoint allows for the quick and easy creation of central document repositories – accessed from anywhere

▪ **However, customers face several challenges**

- Data growth and redundancy (another silo)
- Lack of compliance, governance and security practice
- Difficulty searching across SharePoint sites
- Increasing management costs and complexity
- Infrastructure costs (servers, licenses, backup hardware and software)
- Lengthy backup and restore processes
- Scarcity of SharePoint expertise



- Microsoft SharePoint Overview

- Customer Challenges



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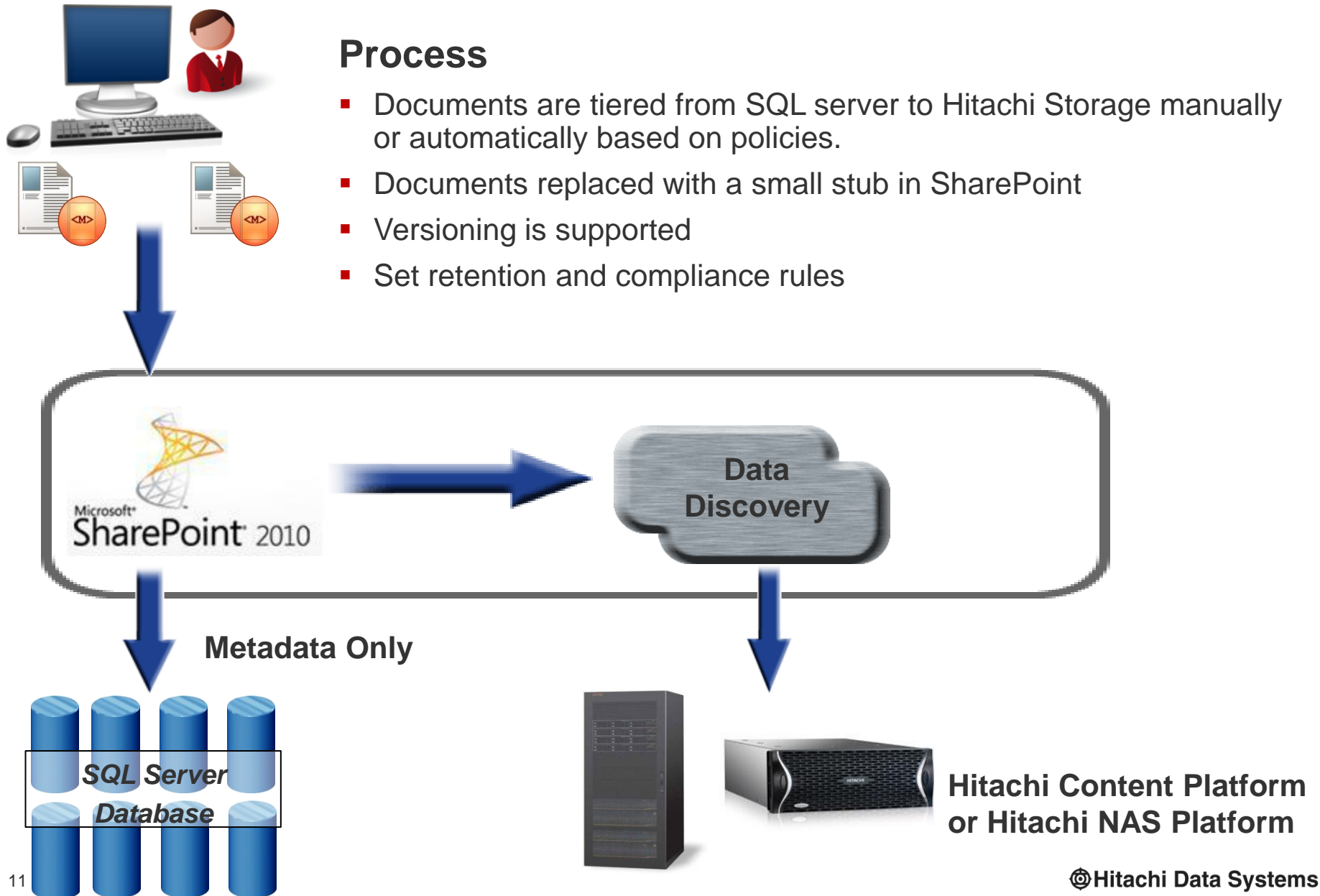
- Technical Details

## Hitachi Data Discovery for Microsoft SharePoint (HDD-MS) gives SharePoint users a secure, Microsoft oriented interface to essential productivity and business improvement features:

- **Reduce SharePoint SQL storage footprint**
  - Current and required SQL storage
- **Reduce SharePoint SQL backup requirements**
  - Move SQL data to an archive platform
- **Improve SharePoint SQL performance**
  - Query and retrieval time
  - Data movement transparent to user
- **Dramatically improve SharePoint scalability**
  - Grow and consolidate
  - Cloud enabled

## Process

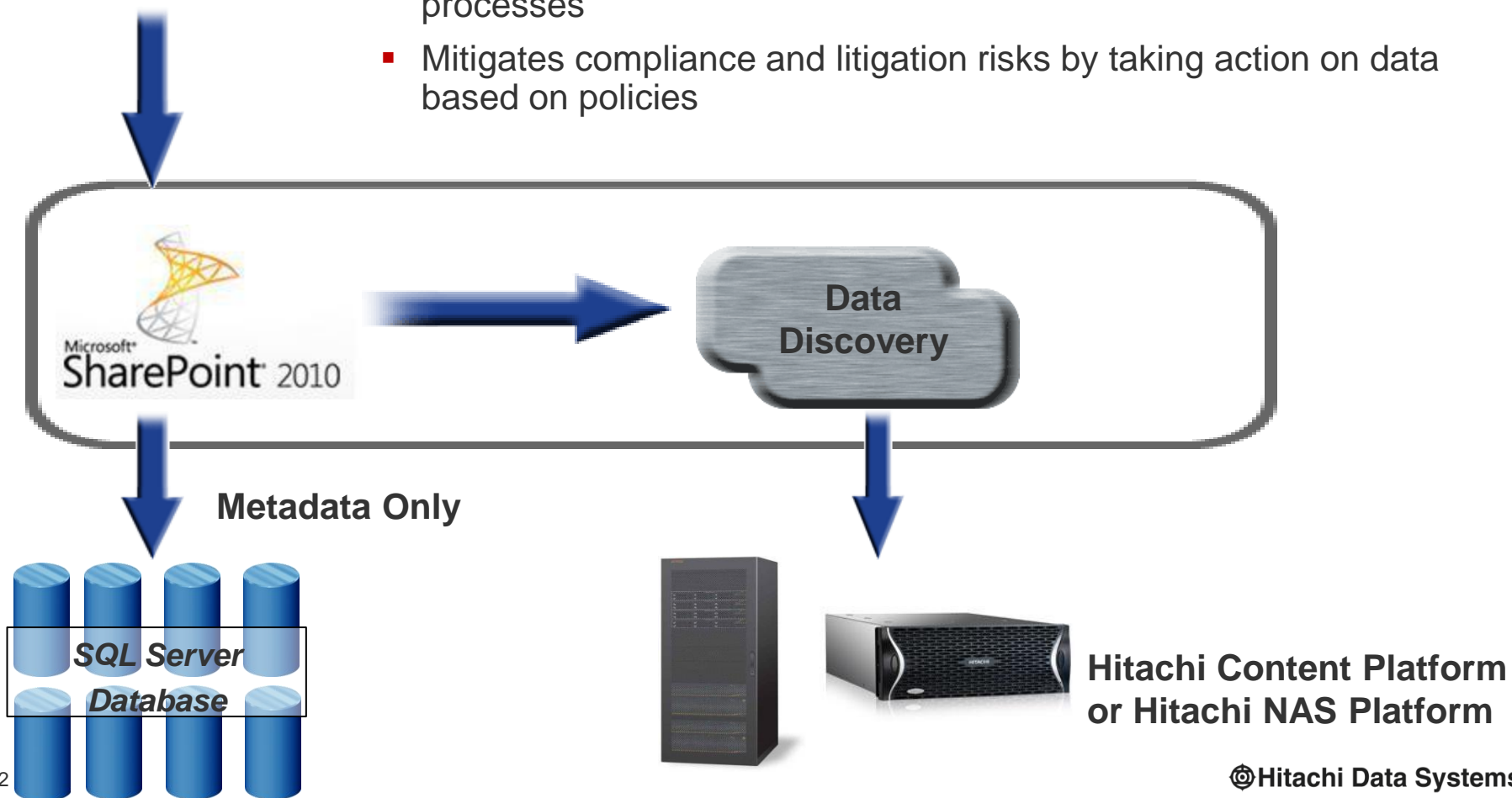
- Documents are tiered from SQL server to Hitachi Storage manually or automatically based on policies.
- Documents replaced with a small stub in SharePoint
- Versioning is supported
- Set retention and compliance rules





## Results

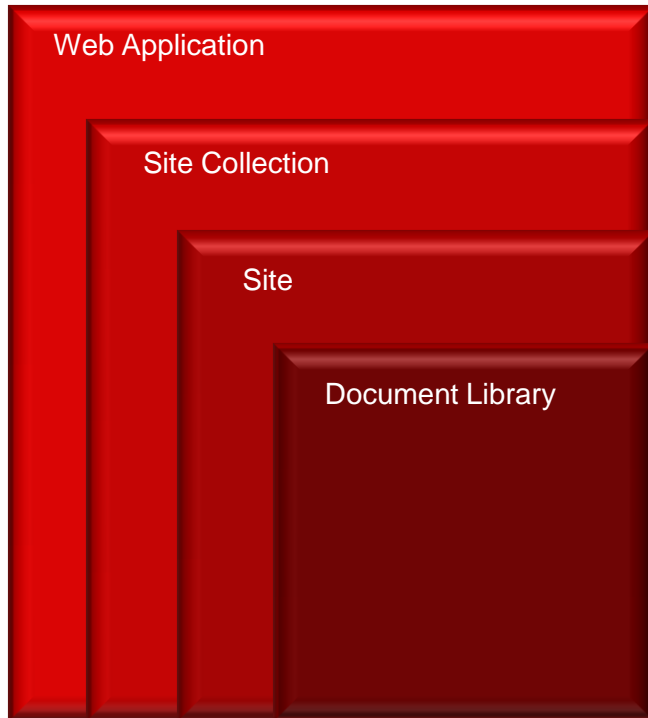
- Decreases TCO of SharePoint as fewer SQL Servers, licenses, Windows OS and hardware are required
- Improves efficiency by automating data archiving and management processes
- Mitigates compliance and litigation risks by taking action on data based on policies



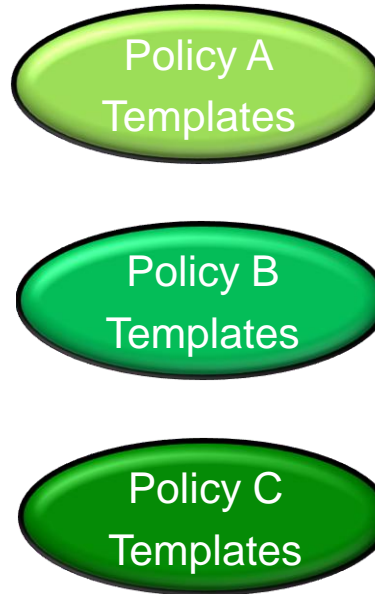
# Features and Benefits

Feature	Capabilities	Benefit
Single File Recovery	<ul style="list-style-type: none"> <li>Ingested files can be retrieved from Hitachi Content Platform back into SharePoint</li> <li>Retrieved files can be versioned and ingested back into Hitachi Content Platform</li> </ul>	<ul style="list-style-type: none"> <li>Users can recover files themselves, offloading IT from recovering backups</li> </ul>
User Roles	<ul style="list-style-type: none"> <li>Three predefined user roles: SharePoint administrator; site administrator; end user</li> </ul>	<ul style="list-style-type: none"> <li>Restrict user management based on roles</li> </ul>
Litigation Hold or Release	<ul style="list-style-type: none"> <li>Manage retention, litigation hold or release, shredding per library</li> <li>Set through SharePoint interface for files on Hitachi Content Platform</li> </ul>	<ul style="list-style-type: none"> <li>Documents within Hitachi Content Platform can be put on litigation hold based on search results</li> </ul>
“Stub” files in SharePoint Database	<ul style="list-style-type: none"> <li>Stubs preserve access to archived data</li> <li>Stubs are a fraction of the size of the original file</li> </ul>	<ul style="list-style-type: none"> <li>Access to offloaded content is seamless and transparent to end users via SharePoint</li> <li>SharePoint backups are reduced significantly</li> </ul>
Ingestion	<ul style="list-style-type: none"> <li>Individual file or bulk data ingestion</li> <li>Policy-based with versioning (retention and shredding*)</li> <li>Full audit logging for object ingestion</li> </ul>	<ul style="list-style-type: none"> <li>Simplify archival of large data volumes</li> <li>Retain versioning within archive</li> <li>Improved object monitoring, security, and provenance</li> </ul>
Custom Metadata	<ul style="list-style-type: none"> <li>Ingest SharePoint metadata into Hitachi Content Platform metadata</li> <li>Future changes are synced</li> </ul>	<ul style="list-style-type: none"> <li>Retains original SharePoint metadata</li> </ul>
Cloud Support	<ul style="list-style-type: none"> <li>Support for Hitachi Content Platform multitenancy and namespaces</li> </ul>	<ul style="list-style-type: none"> <li>Allows administrators to specify namespaces as a target storage for archiving</li> </ul>

## Microsoft SharePoint 2010



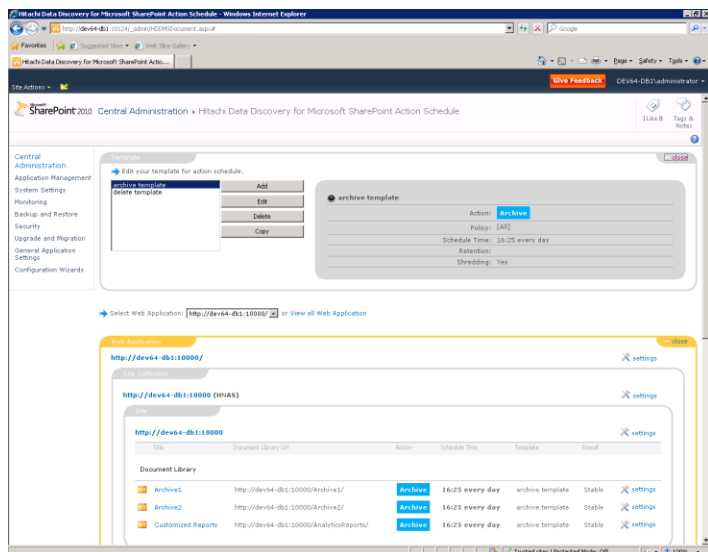
## HDD-MS Policies



- Policies can be customized and applied to a wide range of document libraries, sites, site collections and web application.
- Policy can be reused and shared with other document libraries, sites, site collections and web application.
- Provides logs for modification in the policies

# Hitachi Data Discovery for SharePoint is Cloud Enabled

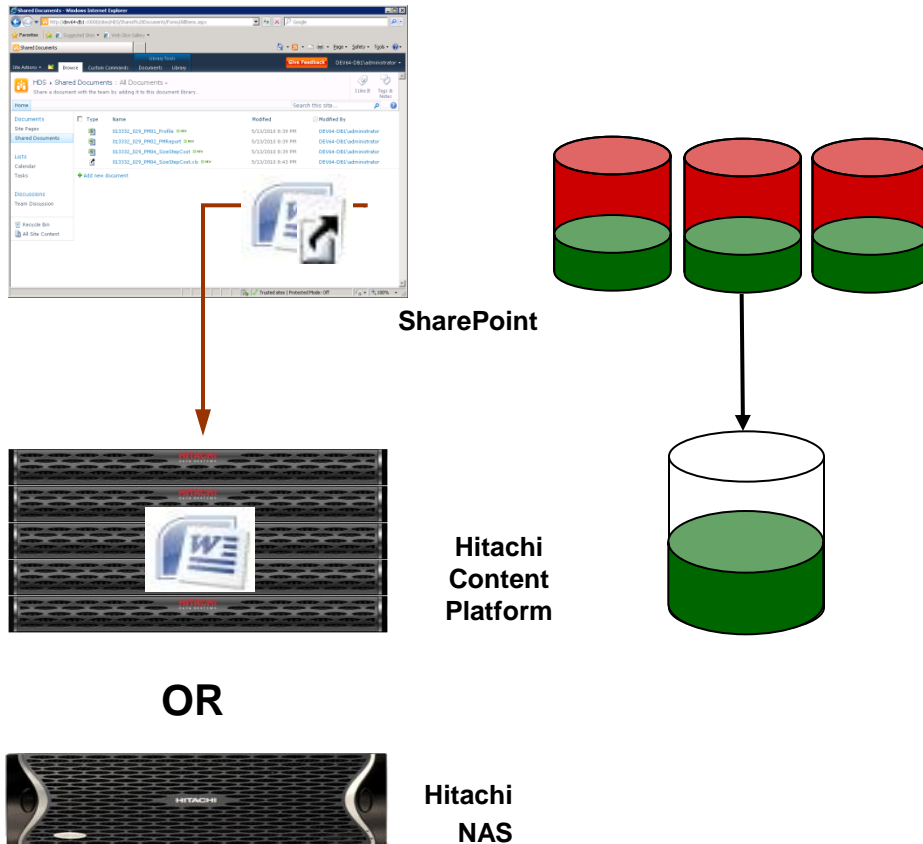
- Multitenancy and namespace for Hitachi Content Platform
- Allows for flexible SharePoint administration – specify namespaces for archiving



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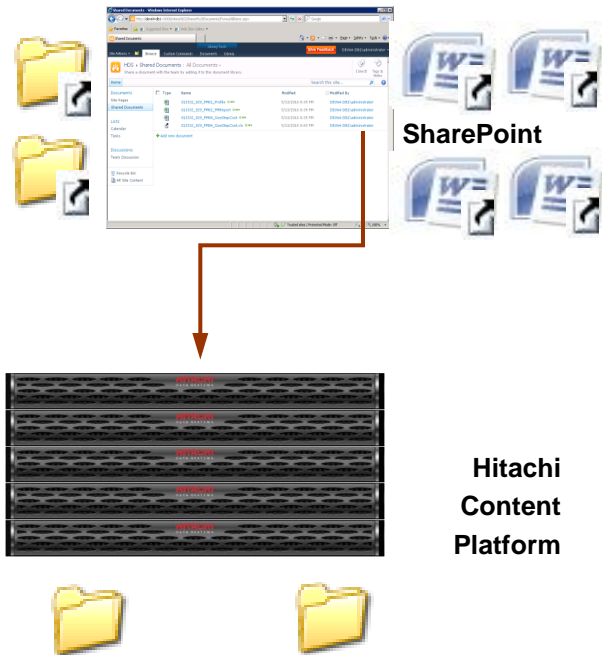


- Use Cases
- Business Impact
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## Offload data from SharePoint to Hitachi Storage

- Maintain transparent access to information through a “stub”
- Consolidate large SharePoint deployments
- Offload data from SharePoint
- Improve scalability of SharePoint
- Improve SharePoint performance
- Improve backup and restore times



## Automatically protect business critical information based on corporate policy

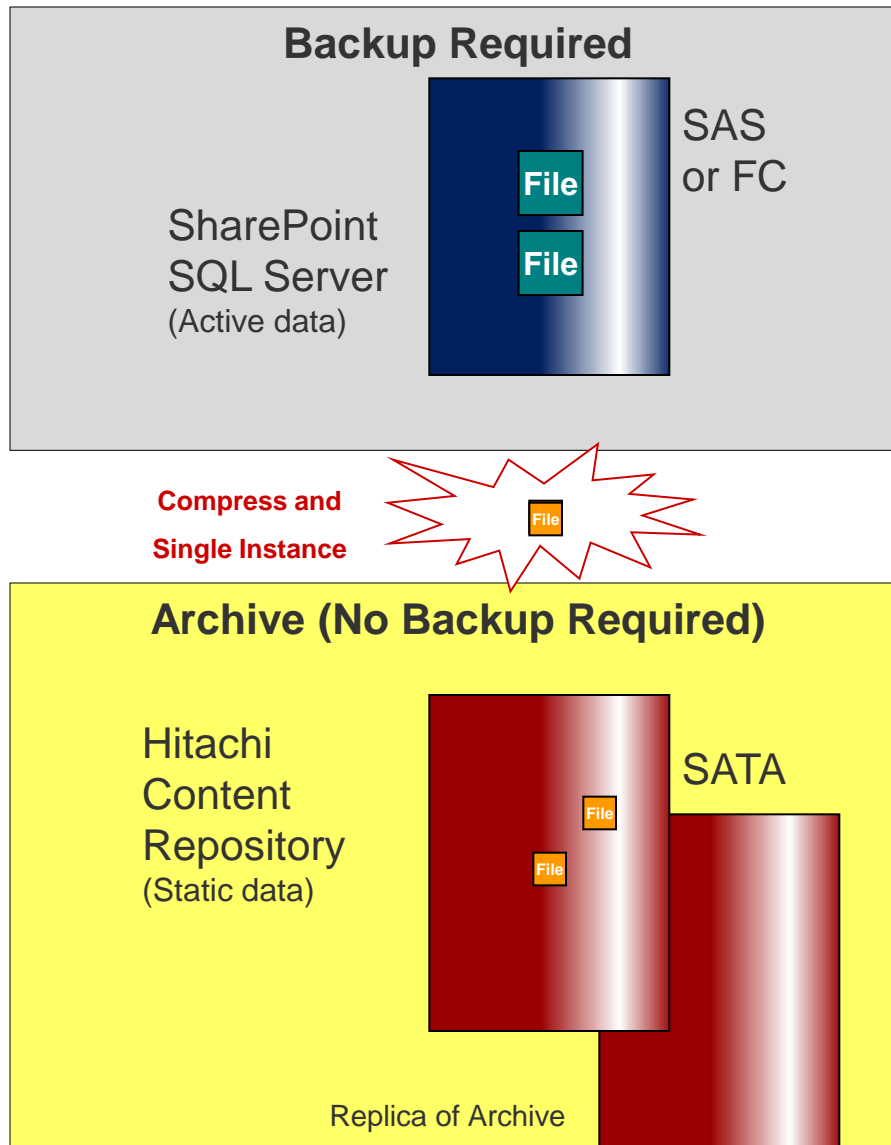
- Helps ensure compliance by automating ingestion, retention, shredding\* and litigation hold practices
- SharePoint data can be ingested in bulk for faster archiving and greater end user convenience
- Data is retrieved via the familiar SharePoint interface
- Maintain chain of custody on Hitachi Content Platform

### Policy A

- Archive after 90 days
- Retain for 25 years

### Policy B

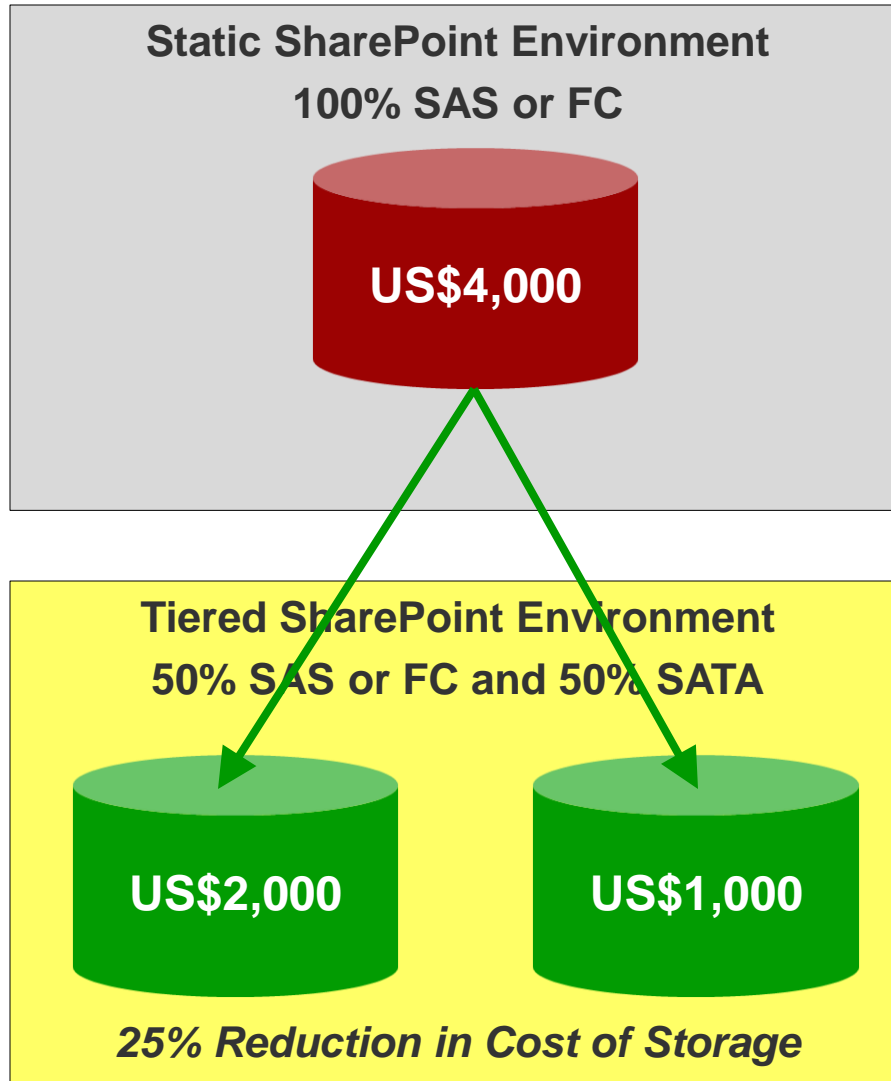
- Archive after 30 days
- Retain for 50 years



**By archiving a percentage of the active working set (data on SharePoint SQL server), HDD-MS can reduce the amount of SQL server backup required**


- Data can be moved to an archive (releasing expensive SQL server capacity and saving the object in a more space-efficient format)
- Backup efficiencies – Replication of the archive provides data protection and reduces the need to back up the data
- Archive has been replicated – So there is no need to back up the archive

# Use Case 4: Reclaim Expensive Storage and Reduce SharePoint Total Cost of Storage



**By tiering SharePoint SQL server data from expensive SAS or FC storage to less expensive SATA storage, administrators can significantly lower the total cost of ownership within their SharePoint environment.**

- SAS or FC only tier (100%)
  - 1TB SAS/FC @ \$4,000/TB = \$4,000
  - Total Cost of Storage = US\$4,000
- SAS or FC (50%) and SATA tiers (50%)
  - 500GB SAS/FC @\$4,000/TB = \$2,000
  - 500GB SATA @\$2,000/TB = \$1,000
  - Total cost of storage = US\$3,000
- *500GB SAS and FC reclaimed storage*
- *25% reduction in total cost of storage*

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## Reduce Cost

- Reduce the impact of SharePoint proliferation
- Improve storage and IT efficiency
- Reduce the cost of compliance practices
- Archive to a lower cost tier of storage

## Improve Efficiency

- Improve SharePoint scalability
- Reduce required SharePoint backups
- Reduce the load on primary SharePoint environment
- Ingest data more efficiently

## Mitigate Risk

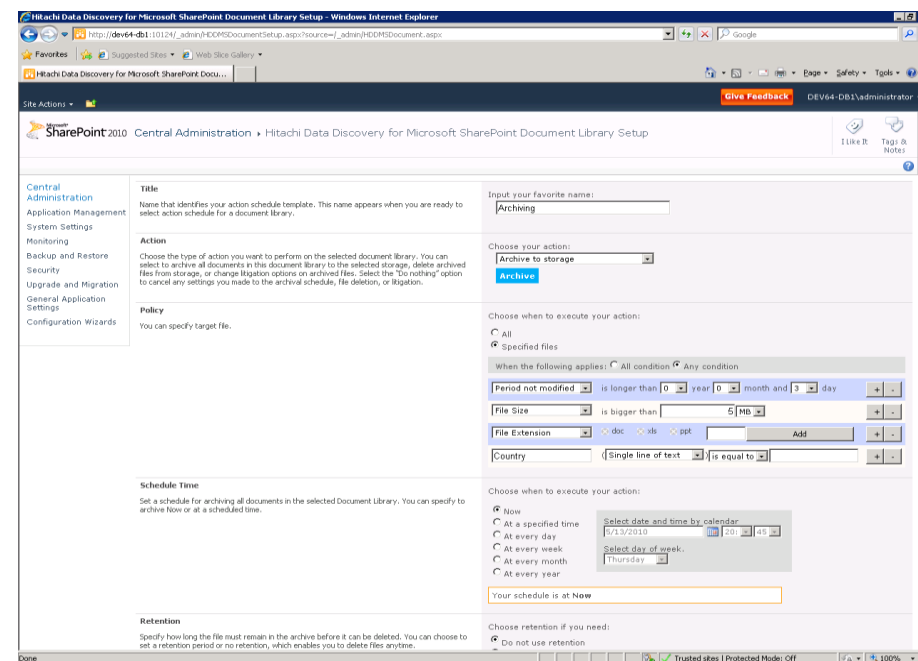
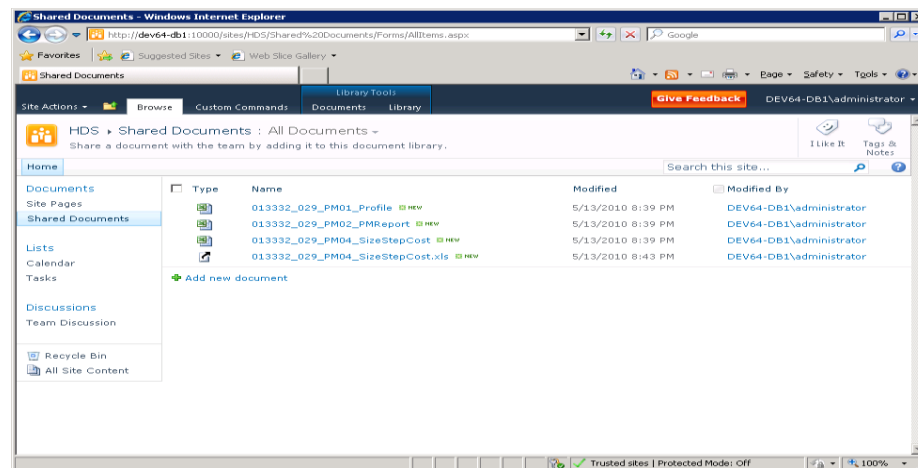
- Automate repeatable policies to manage content
- Store authoritative copies in immutable media
- Manage chain of custody, certified deletion, authoritative copies
- Find and archive content quickly in response to audit

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- Managed from SharePoint
- Allows users to set and manage policies
  - Tiering
  - Archiving
  - Retention
  - Shredding\*
- Provides reporting
  - Document status
  - Single view across document libraries

\*Shredding is only for Hitachi Content Platform






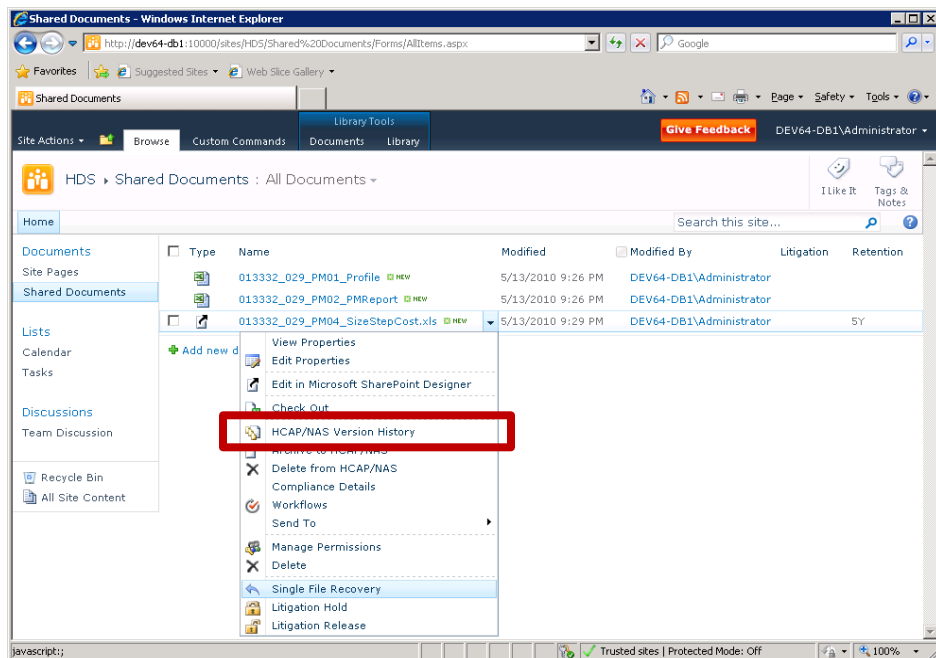
- Icon changes to signify it is stored on Hitachi Storage
- User can click and retrieve item
- User can save additional versions

Enron > Human Resources > Employment Contracts

## Human Resources

New ▾ Upload ▾ Actions ▾ Settings ▾ View: **All Documents** ▾

Type	Name	Modified	Title	Litigation	Retention
	EMPLOYMENT AGREEMENT !NEW	7/15/2010 1:30 AM			
	Richard Smith Employment Contract.docx !NEW	7/15/2010 12:00 AM			5Y+0M
	Steven Jones Employment Contract.docx !NEW	7/15/2010 12:00 AM			5Y+0M



- Provides versioning for files and ingests them within Hitachi Content Platform and Hitachi NAS
- Retrieve individual versions
- Does NOT orphan versions

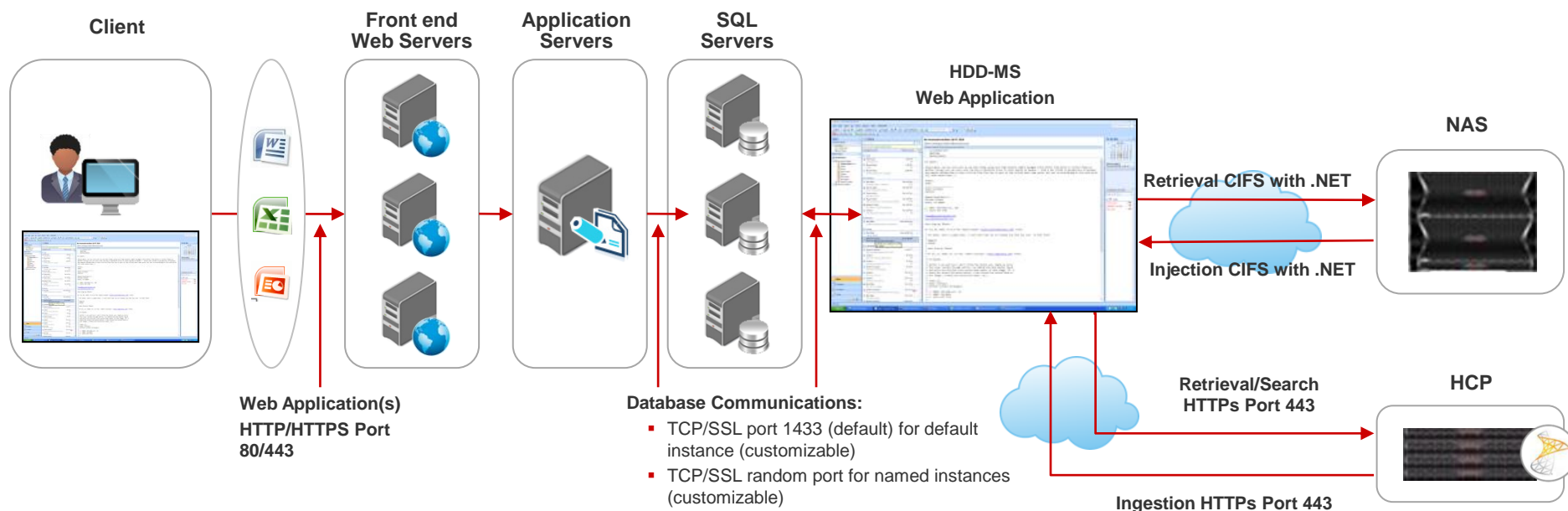
## Versions saved for RN-00HS324-07\_0817\_Draft.doc (HCAP)

You can manage versions of archived documents in HCAP. When you recover and modify an archived document, you can archive this revised document as a new version. Select the Modified date of a document version to download this version to your local PC.

All versions of this document are listed below with the new value of any changed properties.

No.	Modified	Modified By	Size	Actual File Name
3.0	11/23/2009 2:20 PM	System Account	845 KB	RN-00HS324-07_0817_Draft_v3.doc
2.0	11/23/2009 2:17 PM	System Account	845 KB	RN-00HS324-07_0817_Draft_v2.doc
1.0	11/23/2009 2:11 PM	System Account	845 KB	RN-00HS324-07_0817_Draft.doc

# Enabling Storage to Meet Content Requirements



## Hitachi Content Platform (HCP) Support

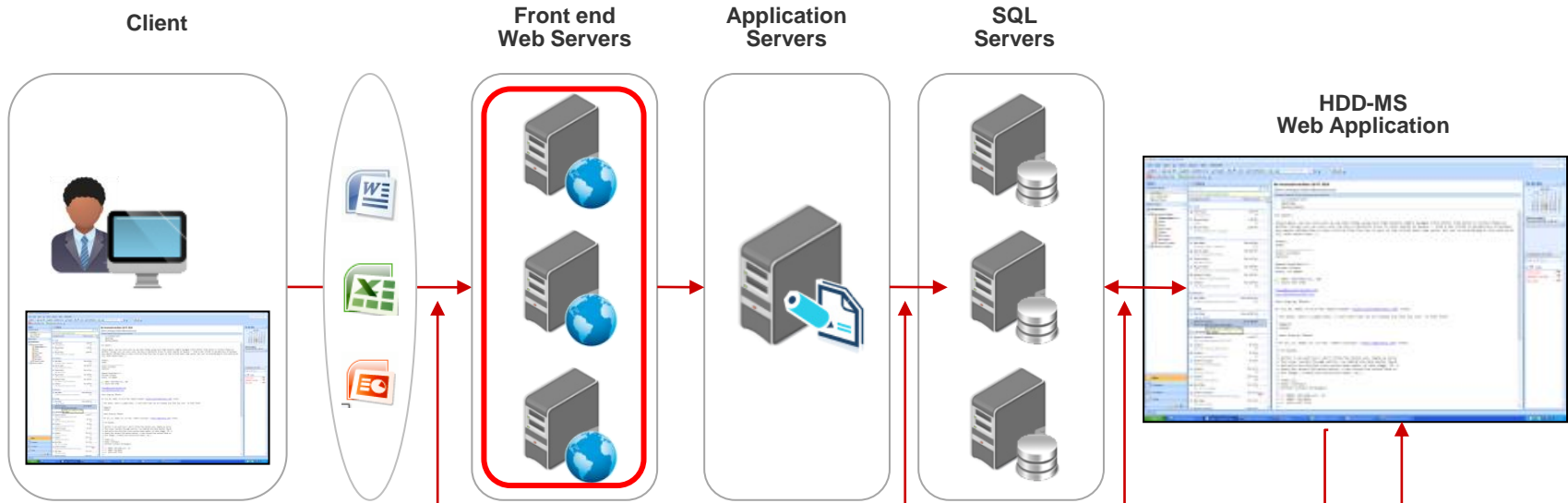
- Ingest data with data integrity check
- SharePoint metadata with HCP
- Custom metadata support
- Litigation hold or release
- Versioning and single file recovery
- Full content search using HCP search HCP default name space only

## NAS Support (HNAS, NetApp)

- CIFS support only
- Ingest data with data integrity check
- WORM retention (HNAS only)
- Versioning and single file recovery
- HDD-MS custom metadata support for NAS
- NAS delete

- **NAS support (Hitachi NAS Platform, NetApp) with or without WORM**
- **Hitachi Content Platform**
  - Choose ingestion into either NAS or HCP
  - Ease of use on deployment to multiple sites

# Simple Implementation



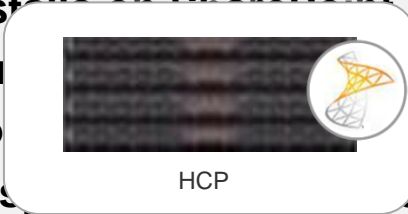
**Web Application(s)**  
HTTP/HTTPS Port 80/443

**Database Communications:**

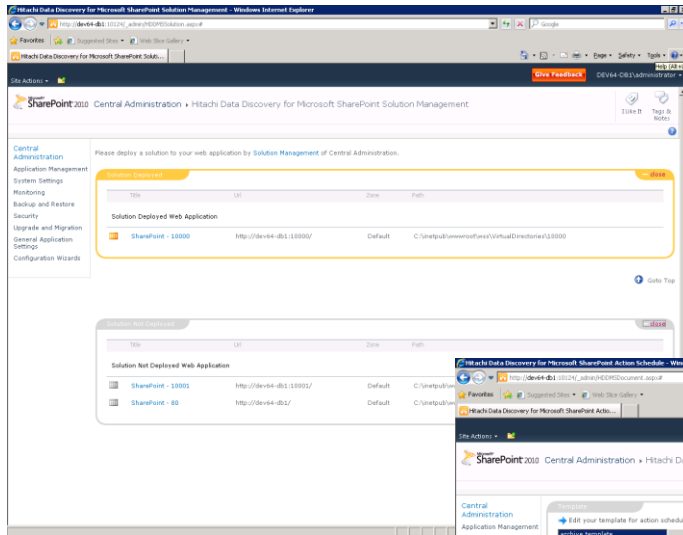
- TCP/SSL port 1433 (default) for default instance (customizable)
- TCP/SSL random port for named instances (customizable)



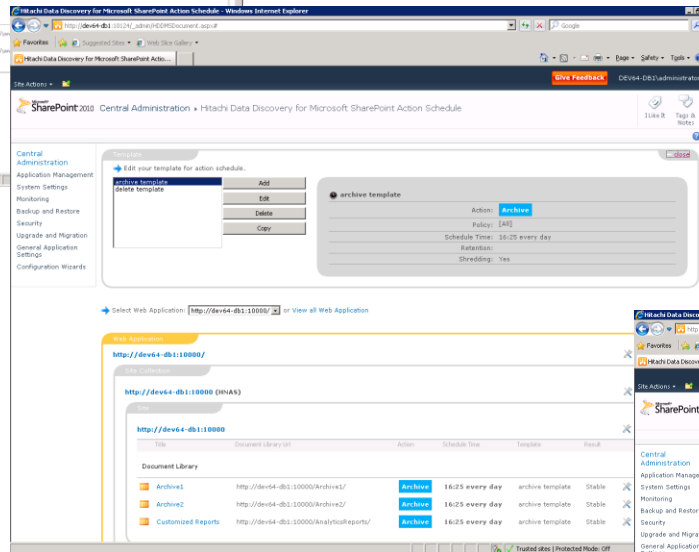
- ~~Installation Client Administration Server~~
- ~~Fast~~ **and web front ends**
- ~~No~~ **servers or hardware**
- ~~Easy~~ **Hitachi storage**



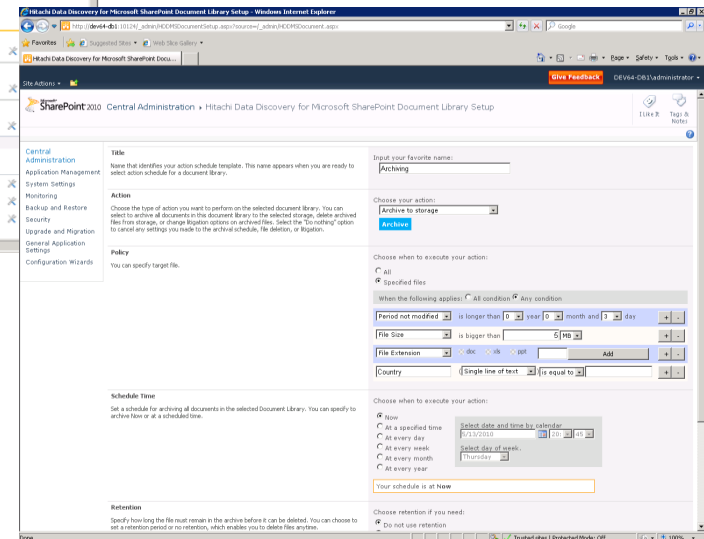
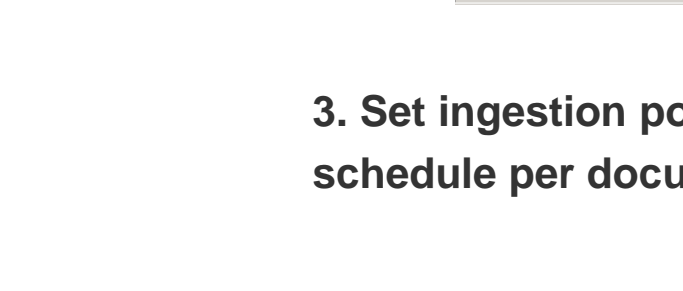
Ingestion HTTPs Port 443



1. Scan existing web applications and deploy solution

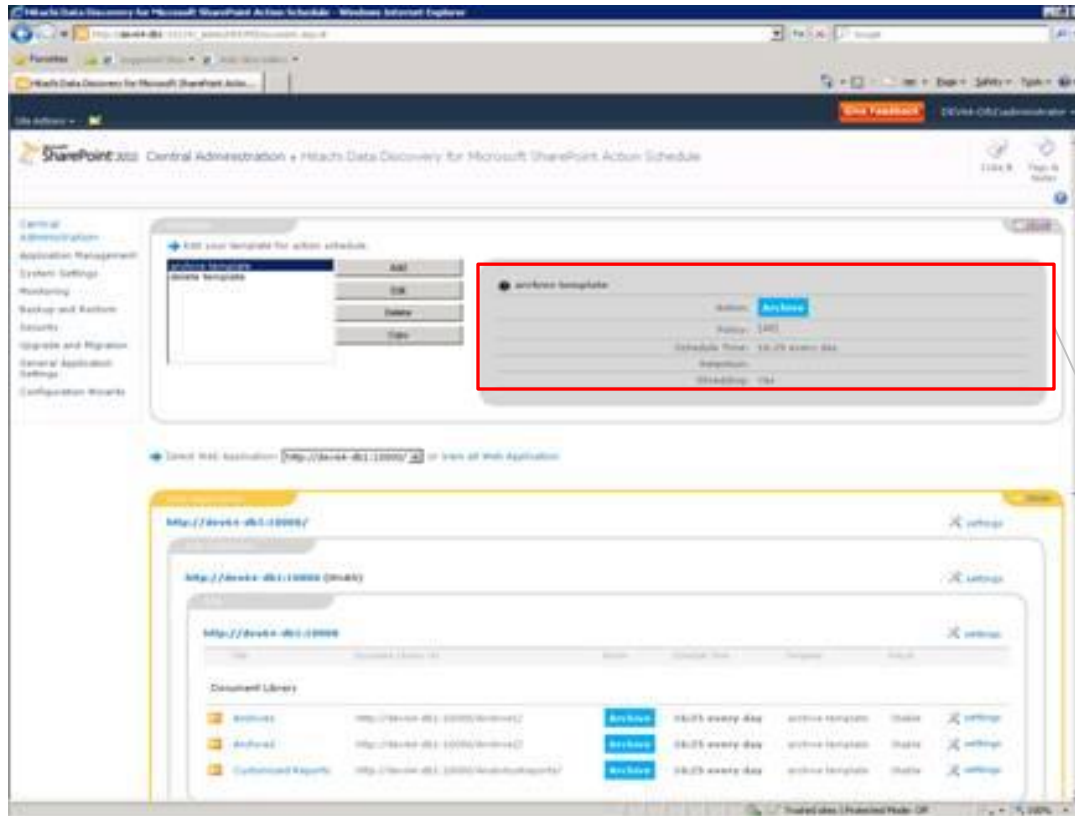


2. Set up target storage (NAS or HCP) per site collection



3. Set ingestion policies and schedule per document library

- Actions can be scheduled via SharePoint interface



- Archive to selected storage
- Delete from storage
- Change litigation options on selected files

## Reduce Cost

- Reduce the impact of SharePoint® proliferation
- Improve storage and IT efficiency
- Reduce the cost of compliance practices
- Archive to a lower cost tier of storage

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- Improve SharePoint® scalability
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- Find and archive content quickly in response to audit



**Questions or  
Comments?**

## February

- Do More for Less with the AMS 2000 Family, February 23, 2011 at 9am PT, 12pm ET

## March

- *Business Case for VAll*, March 9, 2011 at 9am PT, 12pm ET
- *How to Deliver Efficient IT to Remote and Cloud Users*, March 16, 2011 at 9am PT, 12pm ET
- *The Six Points of VMware Integration*, March 23, 2011 at 9am PT, 12pm ET
- *Snapshot-based Backup and Data Protection*, March 30, 2011 at 9am PT, 12pm ET

Please check [www.hds.com/webtech](http://www.hds.com/webtech) for:

- Link to the recording, the presentation and Q&A (available next week)
- Schedule and registration for upcoming WebTech sessions

Thank you!