HP TRIM and Microsoft SharePoint

Optimizing Secure Information Flow and Compliance

Government agency proof of concept results

Autonomy White Paper
## Index

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td>1</td>
</tr>
<tr>
<td>Integrating HP TRIM Software</td>
<td>1</td>
</tr>
<tr>
<td>Records Management Challenges</td>
<td>2</td>
</tr>
<tr>
<td>Use of the Microsoft SharePoint Web Portal</td>
<td>2</td>
</tr>
<tr>
<td>Proof of Concept</td>
<td>2</td>
</tr>
<tr>
<td>Transparency and Ease of Integration</td>
<td>3</td>
</tr>
<tr>
<td>Security</td>
<td>4</td>
</tr>
<tr>
<td>Conclusion</td>
<td>5</td>
</tr>
<tr>
<td>About Autonomy</td>
<td>5</td>
</tr>
<tr>
<td>About HP</td>
<td>5</td>
</tr>
</tbody>
</table>
Executive Summary

Government enterprises and especially defense agencies need to facilitate information sharing among many other agencies and external service providers in order to execute their responsibilities of service delivery.

To achieve this, agencies must provide central access to its records and the records of its constituent organizations to both internal and external users. At the same time, they must protect the security of those records, both to protect operational integrity as well as to comply with Department of Defense records management standards.

To accomplish these two critical, although at times possibly conflicting objectives, one government Defense Agency evaluated an integrated HP TRIM and Microsoft® SharePoint® records management solution. Following this evaluation, it was determined that this solution met all of that Agency’s requirements for its records management environment:

• Quick and easy installation of the HP TRIM server and integration application.
• Depth of the integration HP TRIM and Microsoft SharePoint. Records management functions managed by a common user interface.
• HP TRIM provides the rigorous record management compliance required by the Defense Agency, in conjunction with Microsoft SharePoint.

This white paper describes the agency’s records management challenges and details how the functionality of the integrated HP TRIM enterprise records management software and Microsoft SharePoint can enable the command to meet those requirements. This white paper also describes a proof of concept that the Agency performed to validate the transparency, ease of integration, and security management features of the solution and the results of that trial.

Integrating HP TRIM Software

An integrated HP TRIM and Microsoft SharePoint foundation meets the first two of key requirements as follows:

• Provide “content from anywhere:” the ability to reach digital content from anywhere using any digital device.
• Meet Defense Agency specifications for security and records control and is certified for all chapters of U.S. Department of Defense (DoD) 5015.2 Version 3 (visit: http://jitc.fhu.disa.mil/recmgt/register.html)
  – Mandatory Requirements—Chapter 2 and Chapter 5
  – Management of Classified Records—Chapter 3
  – Managing Records for the Privacy Act and the Freedom of Information Act—Chapter 4
  – Non Mandatory Features—Chapter 6.

An integrated HP TRIM and Microsoft SharePoint solution offers significant benefits of importance to the agency. HP TRIM provides seamless integration for managing all content in Microsoft SharePoint. It also supports records management for many other data formats including email, flat files, documents from office productivity tools, and content from database applications such as Oracle, SQL, and SAP.

HP TRIM software is a leading enterprise records management solution and has been in use for over 25 years. HP TRIM supports rapid installation, configuration, and deployment, which in turn means a fast return on investment.

The Agency's mission also requires that its records management environment meet a number of specific requirements. These include:

• Converged Collaboration (Content from Anywhere): The Agency needs to minimize the number of places where content is stored and at the same time reduce the cost to manage, maintain, share, and search information. The solution must support the ability to centrally manage information from anywhere. An example of this would be a user in the field.
• Compliance: The government organizations making up for example a Defense Agency are all under obligation to maintain records management compliance by DoD 5015.2. The solution must meet revision three of the specification as well as all prior revisions and meet the rigorous security requirements for classified records, freedom of information (FOI), and privacy records.
• Transparency and Ease of Integration: The Agency needs a seamless solution that saves both time and cost in implementation and maintenance. The command therefore requires its records management solution to support seamless, out of the box integration with its SharePoint application. In addition, the Agency specified that the solution maintain appropriate integrity of both data and metadata.
• Security: Many of the organizations that require access to the Government SharePoint portals maintain proprietary information that may not be shared with other organizations. For security purposes, it is vital that parties accessing agency records are restricted to authorized content only.
Records Management Challenges

Managing these records is a primary challenge for the Agency for a number of reasons. First, the information is generated by many disparate sources, which makes them difficult to centralize and standardize. The Agency has had difficulty establishing a retention policy for this reason as well. This has, in turn, made it difficult to reduce the amount of information retained.

In addition, directorates, component commands, and groups that represent the Agency do not use or process the data in a uniform manner.

The data is stored in various places, which creates redundancy challenges. When data is analyzed, subsets are copied to common repositories; this exacerbates the redundancy problems further.

The multiple copies of information are frequently out of regulatory compliance guidelines for records management, which leaves the Agency vulnerable in an audit. This often undermines trust in the information since employees don’t know which version to believe.

The lack of standardized processes and best practices has made the Agency’s records management unnecessarily expensive and time-consuming. It has also made it difficult for the Agency to ensure it meets the requirements of regulations such as the FOI and Privacy Acts.

Use of the Microsoft SharePoint Web Portal

Microsoft SharePoint provides a simple, familiar, and consistent user experience for sharing business information. From a management point of view, the software also provides a single, integrated platform to manage intranet, extranet, and Internet applications across the enterprise to effectively manage and reuse content, making it attractive to government organizations.

Within the Agency, Microsoft SharePoint enables the command to both centralize its information and provide access on behalf its constituent organizations. The Agency also needs to meet the data integrity and security requirements of DoD 5015.2 standard, which have been strengthened since the standard were originally published in 1998. Of particular concern to the Agency are provisions within the current revision of the DoD 5015.2 that require the Agency to:

- Restrict records access to users with appropriate privileges, and
- Maintain an audit log to monitor user activity within the records management environment.

Effectively sharing data among its constituent government organizations is critical. The challenge is to support this critical data exchange while also maintaining effective security and control. HP TRIM adds value to the SharePoint environment by meeting the rigorous records management requirements of the U.S. Department of Defense’s (DoD) Design Criteria Standard for Electronic Records Management Software Applications, also known as the DoD 5015.2 v3.

Proof of Concept

To validate the transparency, ease of integration, and security features of the integrated HP TRIM and Microsoft SharePoint, the Agency performed a proof of concept test of the combined solution. During the proof of concept, the Agency observed the combined solution of Microsoft SharePoint and HP TRIM in a test environment.

The following sub-sections describe the outcome of the pilot as it relates to the Agency’s final two requirements for the solution.
Transparency and Ease of Integration

To better understand the trait of transparency, Microsoft SharePoint and HP TRIM were installed on separate servers. Next the installations were integrated. It is important to note that the installation in this proof of concept is typical of most use cases. Unlike many traditional integrations, the connection of the two applications requires very little configuration. The integration only requires agreement to the license terms.

The following screenshot (Figure 1) shows how the Windows Microsoft SharePoint Services Solution Framework File (WSP) is deployed from a browser window.

As this screen shows, very little configuration is required for HP TRIM to work with Microsoft SharePoint given HP TRIM’s integrated SharePoint support.

The following screenshot (Figure 2) shows how simple it is to perform the HP TRIM integration with Microsoft SharePoint. From this configuration page in Microsoft SharePoint, the user simply associates the HP TRIM instance with the Microsoft SharePoint application.

The integration is configured from a single screen and does not require expert level understanding of either application.

Note that another attribute of the transparency of HP TRIM with Microsoft SharePoint is that direct records management functions are added to Microsoft SharePoint.

Another key benefit of an integrated HP TRIM and Microsoft SharePoint solution is ease of use.

The screenshot in the bottom right (Figure 3) shows how critical functions such as finalizing an object, archiving an object, or relocating an object are performed using a simple right click of the mouse. This functionality enables records managers to easily move, protect, or begin the process of disposal of the content in Microsoft SharePoint.

Although the administrators can set HP TRIM to manage all content generated by this Microsoft SharePoint site, the solution also provides extensive flexibility to manage a portal, a site, or to content down to the granularity of a list. These functions can be automated or performed manually. The solution also leverages the intuitive nature of the Microsoft SharePoint administration interface.
Security

To validate that an integrated HP TRIM and Microsoft SharePoint solution would satisfy the Agency’s requirements for data security and protection, the proof of concept included two real-world security scenarios.

Depending on content, the Agency has an obligation under DoD 5015.2 to prove certain information is protected. The command must depend on Microsoft SharePoint and HP TRIM to both use the appropriate user permissions to allow for proper authentication.

The first scenario was designed to manage internal the Agency users via Active Directory logons. From Active Directory, users and groups requiring authentication by HP TRIM and Microsoft SharePoint were created. Next, security groups were defined within the Active Directory console, and users were added to the appropriate groups as depicted in the screenshot to the right (Figure 4).

Note that using the operating system authentication is not only typical for administrators, it is also a proven method for securing an entire range of content.

In the second scenario, HP TRIM acted as the gatekeeper, providing enhanced security for users accessing the Microsoft SharePoint portal via a browser. Note that HP TRIM can be configured to provide unlimited access to records; it can restrict access to individuals who have certain permissions for a container record; or can restrict access by location. Users or groups are assigned to the appropriate access levels via a list.

Using this HP TRIM feature, administrators can grant access to records, while concurrently restricting access to non-authorized users; these users are restricted from even viewing certain document records.

The screenshot above (Figure 5) shows how these access levels are set. The Microsoft SharePoint documents can be viewed only by an authorized user.

During the proof of concept, both of these security management functions were proven to be effective in maintaining security internally to the Agency without inhibiting the sharing of content with external partners. All attempts by external users to access data were refused when proper credentials were not provided through HP TRIM. More importantly, during the proof of concept the external users could only access those public libraries in Microsoft SharePoint where permissions had been granted.

Meeting these security requirements validated that the HP TRIM and Microsoft SharePoint when integrated together meets DoD 5015.2 v3 certification standards. In addition, the proof of concept demonstrated that the solution supports the replication of content to a neutral repository and thus meets the requirements of centralization as well as regulatory compliance.
Conclusion

Government Agencies must not only provide converged content, but also adhere to Government to Government (G2G) mandates by sharing data and conducting electronic exchanges between diverse and complex government organizations.

While implementing a Microsoft SharePoint portal enables the Agency to leverage an established application that is used effectively by other government organizations, the Agency also required additional functionality to ensure data security and integrity and meet DoD 5015.2 v3 certification for baseline, classified records and FOI and privacy records.

The Agency’s proof of concept validated the effectiveness of a records management system that uses Microsoft SharePoint as a Web portal while leveraging HP TRIM as the enterprise records management engine in the background. The proof of concept showed that the integrated solution allows administrators to retain the familiar Microsoft SharePoint interface while synchronizing access permissions for users between the two applications. The successful proof of concept also demonstrated that the integrated solution meets the Agency’s security and data integrity requirements.

About Autonomy

Autonomy, an HP Company, is a global leader in software that processes human information, or unstructured data, including social media, email, video, audio, text and web pages, etc. Autonomy’s powerful management and analytic tools for structured information together with its ability to extract meaning in real time from all forms of information, regardless of format, is a powerful tool for companies seeking to get the most out of their data. Autonomy’s product portfolio helps power companies through enterprise search analytics, business process management and OEM operations. Autonomy also offers information governance solutions in areas such as eDiscovery, content management and compliance, as well as marketing solutions that help companies grow revenue, such as web content management, online marketing optimization and rich media management.

Please visit www.autonomy.com to find out more.

About HP

HP creates new possibilities for technology to have a meaningful impact on people, businesses, governments and society. The world’s largest technology company, HP brings together a portfolio that spans printing, personal computing, software, services and IT infrastructure to solve customer problems.
