Comparison of eDiscovery capabilities in Microsoft Exchange Server 2013 Enterprise and Smart Information Server (SIS)

SIS feature highlights

- Advanced querying capabilities, including integrated and dynamic identity-awareness for a true custodian search

- Organization-wide search, unified across Exchange mailboxes, public folders, file servers, SharePoint and Office 365

- Insight before collection

- Simplified smart extract to user-based .PSTs

- External preservation to avoid added storage demands in Exchange

- Federated keyword search across Exchange versions

- Maintained defensibility with chain-of-custody and user audit history

- Support for Exchange mixed-mode and any licensing edition of Exchange 2007, 2010, 2013 or Exchange Online

Simplified, defensible search and collection

In Microsoft Exchange Server 2010 and Exchange Server 2013 there exists eDiscovery features that enable a privileged user to search, preserve and collect the contents of user mailboxes.

In the 2013 version, Microsoft made several significant investments to improve searching, add in-place holds and enhance .PST export capabilities.

This document will outline what is available in Exchange 2013 Enterprise Edition and explore the advantages available through Acaveo Smart Information Server (SIS).

Use case overview

The business driver for this functionality can be an open records request, subpoena response, audits or other types of investigation. Often times a clear search scope is defined and the requirement is simply to provide the search results in a .PST file format. There is often a wide spectrum of search requirements, but custodian, date range and keywords are the most frequent. Chain-of-custody, meaning an audit trail around who has interacted with the data during the investigation, can be critical. Often times it is advantageous to have metrics or insights on the search results prior to taking any action on the data. In some scenarios, the initial action may only be to preserve the data and, possibly, at a later time export it or a subset of it. In EDRM parlance, these are the identification, preservation and collection stages of eDiscovery – it does not entail processing and review.

OVERVIEW

Executive Summary

Exchange 2013's In-Place eDiscovery offers search, in-place hold and .PST export capabilities. While the native capabilities of Exchange Server may be sufficient for basic search and export requirements of mailboxes, many organizations require enhanced capabilities. The following reasons are why organizations use Smart Information Server (SIS) for their in-house eDiscovery needs, either as complementary to Exchange's native feature set or as an alternative:

- Advanced searching capabilities
- Integrated public folder support
- Integrated identity-awareness for a true custodian search that includes mailbox delegates, folder sharing, public folder permissions as well as other content like file servers and SharePoint
- Dynamic group, OU or AD attribute based searches and preservation
- Analyze and preview search results in-place with rich visualizations and guided navigation
- External preservation to avoid extra storage demands in Exchange
- Ability to incrementally update a .PST export
- Ability to visualize and report on the data that is on hold, either by Exchange or SIS
- Integrated file server and SharePoint support
- Federated supported across Exchange versions
- Support for any license edition of Exchange 2007, 2010, 2013 or Exchange Online

Smart Information Server (SIS) Overview

SIS is information governance software for in-place management of unstructured data in a unified manner across Exchange, SharePoint, file servers and other repositories without requiring expensive new infrastructure, re-indexing of data or vendor lock-in.   SIS makes it easy to profile and control large, diverse volumes of unstructured data by empowering IT, eDiscovery and RIM professionals to efficiently visualize and interrogate unstructured data repositories and defensibly take action to cleanup data, apply governance rules and streamline litigation responses. SIS augments native capabilities in Exchange, SharePoint and Windows Server to provide enhanced search, management, reporting and security capabilities as a thin, seamless layer to the existing information infrastructure.

Exchange Server Native Capabilities

In Exchange 2013 and Exchange Online, exclusive to the Exchange Enterprise CAL, a privileged user may be given access to the In-Place eDiscovery features of Exchange Server through membership in the

Discovery Management role group. This enables the user to see the eDiscovery features in the Exchange console.

In general, the user will perform searches against active mailboxes. The following may be performed on search results:

- Estimate – displays the estimated number of items and total size of the result set.
- Preview – displays the messages from each mailbox searched.
- Copy – makes a copy of the search results in a segregated discovery mailbox.
- Export – exports search results to a .PST file.

SIS eDiscovery Capabilities

At a high level, SIS and Exchange eDiscovery capabilities follow a similar process.

In general, with SIS a privileged user will perform seamlessly federated searches against multiple native Exchange indices and a context-rich, identity-integrated metadata catalog that spans mailboxes, public folders and optionally file servers and SharePoint. The following may be performed on search results:

- Interactive visualization – displays charts summarizing the result set along with the ability to interact with a visual, context-rich result set.
- Copy – makes an external copy of the search results in a segregated location outside of Exchange, either in Windows Azure Storage or a specified file share location. Content is stored externally in the identical format as Exchange stores it internally so as to maintain 100% data integrity.
- Production (export) – search results coming from Exchange can be pushed to user-based .PST files or injected into a target mailbox on the Exchange Server.

IDENTIFICATION

Exchange Server eDiscovery Search Features

The following search features are available in Exchange In-Place eDiscovery:

- Notable information about search scoping:
  - Search scoping is either all mailboxes or select mailboxes. If you also want to use the search to place items on hold, you must search by specifying the mailbox(es).
  - A mailbox includes both the primary and archive mailboxes. Mailbox delegates and folder sharing are not factored.
  - Public folders are not supported.
  - Mailboxes to search can be identified via a distribution group. This will include mailbox users who are members of that group. Group

membership is calculated only upon search creation so future changes to group membership will not be reflected in the search.

- Notable information about search query capabilities:
    - Keywords and phrases to search message content, with the ability to use logical operators.
    - Exchange's In-Place eDiscovery also uses Keyword Query Language (KQL), a querying syntax similar to the Advanced Query Syntax (AQS) used by Instant Search in Microsoft Outlook and Outlook Web App.
    - Optionally, a date range can be specified which is based on sent dates.
    - Optionally, senders and recipients can be searched by specifying email addresses, display names or domains in the From, To or CC fields.
    - Optionally, searches can also restrict to particular message classes.

Considerations

- Exchange Search does not support nesting criteria other than keywords.
- Exchange Search does not support exclusion criteria other than keywords.
- Exchange Search cannot perform a single integrated mailbox search across multiple Exchange versions.
- Exchange Search does not support non-mailbox content such as public folders, file servers and SharePoint.
- Exchange Search does not factor mailbox delegates or folder sharing.
- Exchange Search's distribution group based searches are static, meaning that changes to the group membership are not reflected in a future execution of the search.
- Exchange Search has a basic preview capability for looking at search results.

Smart Information Server (SIS) Advantages

The following search features are available with SIS:

- Notable information about search scoping:
    - Searches can optionally be scoped by location to be all mailboxes and public folders, all

mailboxes, all public folders, select mailboxes, select public folders, primary mailboxes, archive mailboxes, recoverable items folders, and select folders within a mailbox. File and SharePoint content can also be included in SIS search scopes for truly unified search.

o Searches can optionally be scoped by SIS's integrated and dynamic identity-awareness which provides a true custodian search based on principal(s), group(s), OU(s) or AD attribute(s). Mailbox delegates, folder sharing permissions and public folder permissions are factored into an identity-based query against Exchange to show the complete contents that a user or set of users can access. Identity-based queries are dynamic such that changes to group memberships or permissions within Exchange are automatically reflected when the search is run again.

o There are no restrictions in SIS on the types of searches that can be actionable for preservation or export.

o Items can be excluded from search results based on keyword, location or any other attribute. This provides powerful culling capabilities not present with the native Exchange search.

- Notable information about search query capabilities:

o SIS federates the native full-text indices of Exchange to provide equivalent support for keywords and phrases to search message content, with the ability to use logical operators. This includes support for Keyword Query Language (KQL).

o Nested criteria are supported, including exclusions, leveraging any available search parameters.

o SIS is able to leverage any message property for searches. SIS is easily calibrated to incorporate any message properties of interest. As an example, this includes the ability use, either as inclusion or exclusion criteria, the following: date ranges based on any available dates, senders and recipients, message classes, categories, sensitivity, importance, follow-up flags, retention policy tags, has attachments,

read/unread, et cetera. Any standard or custom message property may be used in search criteria. An example scenario: exclude items that are confidential.

- o Without any additional overhead, search result metrics are provided along with a visual and interactive inventory of the results.

- o Searches can be executed on-demand or as an automatic scheduled event. SIS maintains history of the search to show metrics of the results over time.

Summary

Organizations that require advanced search scoping and querying capabilities should look to Smart Information Server (SIS). For keyword search, SIS leverages the native full text index of Exchange so that redundant index operation and storage is not required. SIS also provides the added benefits of a defensible audit trail, streamlined ability to export results to user-based .PST files from within a central console, integrated and dynamic identity-awareness, public folder support, natively unified support across multiple Exchange versions, file servers, SharePoint and Office 365, and support for any license edition of Exchange 2007, 2010, 2013 or Exchange Online.

PRESERVATION

Exchange Server Preservation Features

The following preservation features are available in Exchange In-Place eDiscovery:

- In Exchange 2010 legal hold capabilities were applied on the entire mailbox only (this is called 'litigation hold'). All items in the mailbox were on hold until the litigation hold was removed.   As of Exchange 2013, and in Exchange Online, in addition to litigation hold capabilities at the mailbox level, holds can also be applied based on a discovery search (this is called 'In-Place Hold').

- In-Place Hold allows you to apply a hold policy. A hold can be indefinite (until the hold is removed), time-based (the hold has a set duration), or query-based (the hold is dynamic to any existing or future content that meets the search criteria).

- Storage for preserved content is either the primary mailbox (in conjunction with mailboxes Recoverable Items folders) or a discovery mailbox. Both options are internal to Exchange Server.

- If you wish to apply in-place hold based on a search, you can't use the option to search all mailboxes. You must scope the search by select mailboxes or distribution groups. Distribution group membership is calculated when the search is created and the search mailboxes will not be subsequently updated to reflect changes in the underlying distribution list.

- In-Place Hold does not allow deletion from the production Exchange environment, thus potentially causing storage capacity issues in Exchange.

- In some situations, the volume of data requiring preservation may be too large and taxing for the production Exchange environment, especially if it needs to be preserved.

- No ability to preserve public folder content. File and SharePoint content, if required, must also be handled externally.

SIS Preservation Features

The following preservation features are available with SIS:

- Any search is available to be directly actionable for preservation.

- Public folder, file and SharePoint content can all be preserved from a single unified query that is centrally managed.

- Preservation can be applied from a search on an on-demand or scheduled basis. On a scheduled basis, the search scope and criteria are dynamic such that any new content or changes to permissions or group memberships that would impact the search scope are automatically reflected in the result set that is preserved.

- Preservation is achieved externally, using the same native format for the content so to avoid any data integrity issues, thus alleviating added storage demands on Exchange. External preservation can be Windows Azure Storage or a specified file share location.

- Preserved content is stored externally with single-instance storage and compression for efficiency.

- SIS can be used to complement Exchange's native In-Place Hold capabilities. For instance, In-Place Hold is applied with a set duration to ensure nothing is deleted from the mailbox. SIS applies the same search scoping

and criteria to extract the hold scope for external preservation, thereby alleviating the issue of mailbox storage requirements in Exchange.

Summary

Organizations that require preservation based off of advanced searches and/or external preservation capabilities should look to SIS. SIS also provides unified preservation capabilities for public folders and any license edition of Exchange 2007, 2010, 2013 or Exchange Online.

EXPORT (COLLECTION)

Exchange Server Export Features

The following export features are available in Exchange 2013 In-Place eDiscovery:

- A discovery search can be exported to .PST. This can occur after the search is either estimated or executed and can happen regardless of whether a hold is applied to the results. It does not require results to first be moved to a discovery mailbox.

- In exporting to a .PST, results can be de-duped or not. If de-duped, all results from all mailboxes will be merged into the root of a single .PST file. If not de-duped, a .PST file per user mailbox will be created.

- Output .PST files have a time stamp in the file name and are a one-time output. If the search is exported again, the full result set is exported to a new .PST file.

Considerations

- Because public folders are not available in the search scope they cannot be exported to .PST from a discovery search.

- Because search capabilities are basic there will likely be more content than is necessary in the .PST export.

- .PST exports are not incrementally updated when the search is run subsequently.

SIS Export Features

The following export features are available with SIS:

- Any search result can be preserved and from there exported either to user-based .PST files or a select mailbox in Exchange.

- Additional filters can be applied to restrict what is exported from a preservation vault. This allows

intelligent culling of over-preserved content prior to producing this content for review.

- Export can pull from one or multiple preservation vaults.

- Exports can include public folders, which are output to a .PST file also. Files and SharePoint content can also be exported from a single unified query that is centrally managed.

- Subsequently running an export will result in an incremental update of the previously output .PST files.

Summary

SIS export capabilities require content to first be preserved externally before being exported. Organizations that require a direct export to .PST from a basic search will be satisfied with Exchange's native tools in this regard. Organizations should look to SIS if they have requirements for a more precise export from advanced searches, support for public folders, the ability to incrementally update an export, or support for mixed-mode Exchange configurations. SIS also provides export capabilities for any license edition of Exchange 2007, 2010, 2013 or Exchange Online.

CONCLUSION

Microsoft has done a nice job with In-Place eDiscovery capabilities in Exchange 2013. If all that is required is a basic search of mailboxes with .PST export capabilities then Exchange's native functionality may be sufficient for your needs. For some organizations, limited search features, lack of public folder support, need to include file and SharePoint results, lack of identity integration, lack of dynamic group-based search and production storage demands can be problematic for standardizing on Exchange 2013 In-Place eDiscovery. Smart Information Server (SIS) addresses these limitations while delivery equivalent, and in some cases more advanced features, in an elegant, non-intrusive way that doesn't add overhead or complexity to your Exchange environment.

The following reasons are why organizations use Smart Information Server (SIS) for their in-house eDiscovery needs, either as complementary to Exchange's native feature set or as an alternative:

- Advanced searching capabilities
- Integrated public folder support
- Integrated identity-awareness for a true custodian search that factors mailbox delegates, folder sharing, public folder permissions as well as other content like file servers and SharePoint
- Dynamic group, OU or AD attribute based searches and preservation
- Analyze and preview search results in-place with rich visualizations and guided navigation

- External preservation to avoid extra storage demands in Exchange
- Ability to incrementally update a .PST export
- Ability to visualize and report on the data that is on hold, either by Exchange or SIS
- Integrated file server and SharePoint support
- Federated supported across Exchange versions
- Support for any license edition of Exchange 2007, 2010, 2013 or Exchange Online

OTHER SIS ADVANTAGES

In-Place Information Management

Smart Information Server combines analytics and information management controls in a thin layer to seamlessly unify your existing Exchange, file server and SharePoint infrastructure so that it is possible to perform in-place management of all your unstructured data from a single console.

In-Place Analytics, Alerting and Reporting

Smart Information Server familiarizes you with your unstructured data situation through the existing metadata, locations, entitlements and identities. In this way, you can efficiently maintain an ongoing situational awareness while identifying cost reduction opportunities and potential compliance or security concerns. Easily visualize what is stored, query to identify possible issues, get detailed reports, and take defensible and direct action to remediate the data.

File Server Administration

Smart Information Server automatically discovers file servers on the network along with each file share. Efficiently, all file server contents can be catalogued, along with any extended file attributes, and an understanding of permissions and identity-awareness. Search across file servers on any file attribute together with identity access and location criteria to understand both what's stored and who has access to what. Add keyword search support by configuring SharePoint to index file shares. Manage the information lifecycle of file server data by applying query-based rules to move data from file shares into SharePoint, Windows Azure Storage or Box. Defensibly delete what you no longer need to retain. Automatically apply in-place compression on files that are large and not used. Apply security rules to alert to unwanted data access or data being stored in the wrong locations.

SharePoint Governance

Smart Information Server enables you to easily visualize and search against all content stored in SharePoint, including federated keyword search and integrated identity-awareness. Using Acaveo DataClassifier, a standalone component included with SIS, identify content with Personally Identifiable Information (PII) such as health card or credit card numbers in any content source indexed by SharePoint. Apply defensible deletion, migrate and compliance rules to SharePoint content. Easily apply eDiscovery preservation and collection to any SharePoint content.

Stress-Free, No Lock-in Approach

Using a purely agentless approach, Smart Information Server gives you the actionable understanding and controls that you need on unstructured data without the headache and cost associated with classical information management software approaches. No software or configuration changes are required on production servers and your data is managed in-place with no vendor lock-in.

Federated Enterprise Search

Without redundantly full-text indexing unstructured data, Smart Information Server federates search results across natively indexed sources and intersects these results with other filtering criteria that you may have defined to provide you with precise and actionable datasets of your active information.

Powerful eDiscovery Features

Smart Information Server empowers your in-house e-discovery team to streamline identification, preservation and collection in a way that is precise, defensible, and unified across Exchange mailboxes, public folders, file servers, SharePoint and other unstructured data repositories.

Records Management

Smart Information Server empowers your records and information management capabilities with its context-rich data inventory and integrated Actionable Query Engine (AQE). Policies can be expressed to raise compliance alerts, generate reports, preserve content, automatically organize and move content, or apply defensible deletion.

ABOUT ACAVEO

Acaveo is an emerging leader in information governance software for in-place management of unstructured data. Acaveo's solutions make it easy to profile and control large, diverse volumes of unstructured data in a unified manner across Exchange, SharePoint, file servers and other repositories without requiring expensive new infrastructure, re-indexing of data or vendor lock-in. Acaveo's flagship product, Smart Information Server, empowers IT, eDiscovery and RIM professionals to efficiently visualize and interrogate unstructured data repositories and defensibly take action to cleanup data, apply governance rules and streamline litigation responses.