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BNA INSIGHT

This two-part article is a comprehensive primer for legal and RIM professionals on aspects of Exchange 2010 relating to records management and eDiscovery. Part One provides background on Exchange, covers versions and deployment options, and describes the core and extended Exchange footprints.

Part Two, to be published in a forthcoming issue of DDEE, explores Exchange 2010's records management and eDiscovery features and previews what the next version of Exchange—Exchange 2013—has in store for legal and RIM professionals.

This article provides legal and RIM professionals with the foundation they need in order to collaborate with IT in figuring out how to match RIM and eDiscovery best practices with Exchange 2010's features and capabilities—and identify where those features and capabilities might fall short.

Microsoft Exchange Server 2010: What Legal And RIM Professionals Should Know —Part I



BY JOHN P. COLLINS

INTRODUCTION

Microsoft Exchange, with a worldwide market share of 57 percent¹, is the leading enterprise email system.

Given Exchange's market share, email's continuing prominence in eDiscovery, and the challenge of applying records management principles to email, it's clear

that the more knowledgeable legal and RIM professionals become about Exchange, the better prepared they will be to play a valuable role in deploying and managing Exchange 2010.

But why should legal and RIM professionals play any role at all in the deployment of Exchange 2010? While there are a number of reasons, two in particular stand out:

(1) Legal and RIM professionals are the subject matter experts when it comes to records management and eDiscovery and therefore should be providing input to decisions about what Exchange 2010 features to deploy and how to manage the ESI associated with those features.

Exchange 2010 includes new features, new functions, and expanded integration with "sister" Microsoft applications Lync and SharePoint.

In turn, these new features, functions, and integration capabilities introduce new records management and eDiscovery challenges, such as:

- Should instant message (IM) conversations be recorded and retained in user's mailboxes?

■ Should users be allowed to keep copies of SharePoint documents in Outlook?

■ Are the business benefits of unified messaging worth the eDiscovery risks?

These are just a few of the questions which should be asked when moving to Exchange 2010. Legal and RIM professionals, as eDiscovery and RIM subject matter experts, should be fully vested members of the Exchange 2010 project planning and deployment teams to ensure eDiscovery and RIM challenges introduced by Exchange 2010 are appropriately addressed—and to ensure eDiscovery and RIM specific features are employed consistent with legal and RIM requirements and best practices.

(2) Exchange 2010 includes records management and eDiscovery features. Whether these features should be deployed—and if so, how—should be determined by legal and RIM professionals (with input from IT and the business.)

Exchange 2010 includes a number of records management and eDiscovery features “out-of-the-box.” While these features won’t meet every organization’s needs, their inclusion in Exchange 2010 and the fact they don’t require additional software or hardware investments puts records management and eDiscovery features literally at the fingertips of thousands of organizations.

Legal and RIM professionals should insist on participating in their organizations (or client’s) deployment and operation of Exchange 2010 because IT professionals on their own and without competent guidance typically don’t have the expertise to assess the suitability of Exchange 2010’s records management and eDiscovery features, or the ability to properly deploy and manage them.

¹ Levenstein, Justin, and Radicati, Sara. *Messaging Platforms Market, 2012-2016*. Palo Alto: The Radicati Group, Inc., 2012. Available at <http://www.radicati.com/wp/wp-content/uploads/2012/09/Messaging-Platforms-Market-2012-2016-Executive-Summary.pdf>

Legal and RIM professionals conversant with Exchange 2010’s records management and eDiscovery capabilities can provide guidance to IT, and through such collaboration ensure the evaluation of these features, and any subsequent deployment and use of the features, is appropriate and optimal.

Thoughtful collaboration between subject matter experts from pertinent disciplines (IT, legal, and RIM) is the best way to ensure Exchange 2010’s extended footprint, records management, and eDiscovery features are fully understood, properly deployed, and where appropriate, fully leveraged.

SOME HISTORY

Microsoft’s first email product, Microsoft Mail, was introduced in 1988.² The first version of Exchange, Exchange 4.0, was introduced in 1996, followed by Exchange 5.0 in 1997.

Exchange 5.0 is noteworthy as the first version of Exchange to provide a modicum of records management and eDiscovery functionality with the introduction of rudimentary journaling. At the time of introduction, journaling was considered a compliance and archiving function (the term eDiscovery was not in widespread use in 1997), and it would be nine more years before a version of Exchange came on the market which included features created specifically to address records management or eDiscovery.

However, long before Microsoft introduced features specifically designed to address records management or eDiscovery, numerous third party products and services filled the gap. Given the limitations of Exchange 2010’s records management and eDiscovery features, there will continue to be a market for third party products and services.

² Jagott, Siegfried., Stidley, Joel., with the Microsoft Exchange Server Team, (2010). *Microsoft Exchange Server 2010 best practices*. Redmond, WA: Microsoft Press.

The table below summarizes twenty-four years (and counting) of email systems from Microsoft.

System and Version	Release Date	Features of Interest
Microsoft Mail	1988	None
Exchange 4.0	1996	<ul style="list-style-type: none"> ■ Public Folders introduced
Exchange 5.0 and 5.5	1997	<ul style="list-style-type: none"> ■ Web (browser) access introduced ■ POP3 introduced as client option ■ In mid-1998 Microsoft Outlook client software introduced ■ Journaling introduced
Exchange Server 2000	2000	<ul style="list-style-type: none"> ■ Dumpster introduced
Exchange Server 2003	2003	<ul style="list-style-type: none"> ■ Offline folders introduced ■ Cached Exchange Mode introduced
Exchange Server 2007	2006	<ul style="list-style-type: none"> ■ Exchange ActiveSync (EAS) introduced ■ First version of Exchange with records management features: <ul style="list-style-type: none"> o Managed Folders introduced o Message Classifications introduced ■ Premium journaling introduced

System and Version	Release Date	Features of Interest
		<ul style="list-style-type: none"> ■ Unified Messaging introduced ■ Transport rules ■ Rudimentary multi-mailbox searching³ introduced
Exchange 2010	2009	<ul style="list-style-type: none"> ■ Expansion of records management features ■ Introduction of eDiscovery features <ul style="list-style-type: none"> o Legal hold o Multi-Mailbox Search (also known as discovery search) ■ Personal (also known as archive) mailboxes introduced ■ Auditing of users, administrators, and mailboxes ■ Mailbox moderation
Exchanger Server 2013	2013	<ul style="list-style-type: none"> ■ “In-Place” legal hold (enhanced legal hold) ■ “In-Place” eDiscovery (enhanced eDiscovery search) ■ Data loss prevention (DLP) introduced ■ Outlook Web App (OWA) offline access

³ This rudimentary search feature is probably not suitable for most eDiscovery scenarios. There is little documentation about the feature, and many Exchange administrators are not even aware it exists. See blog post at <http://blogs.technet.com/b/exchange/archive/2006/12/18/3397563.aspx>

EXCHANGE 2010 LICENSING AND DEPLOYMENT OPTIONS

The following questions regarding type of deployment and licensing must be answered early on in discussions about deploying Exchange 2010:

- First, should the organization go with the on-premise, subscription, hosted (outsourced) or hybrid version?
- Second, if on-premise is chosen, is Exchange 2010 Standard or Enterprise required? The only difference between the two editions is the number of databases supported (six in standard and 100 in enterprise); the same set of features and capabilities are included in both.
- Third, will Enterprise Client Access Licenses (CALs)⁴ be necessary? Each end-user accessing the records management or eDiscovery features of Exchange 2010 must have both standard and enterprise client access licenses or “CAL.”⁵

⁴ Detailed information about Microsoft licensing may be found at <http://www.microsoft.com/licensing/default.aspx> (last visited 10/2/2012)

⁵ This is of interest from a legal and RIM perspective because employing Exchange 2010’s records management and eDiscovery features requires an organization to pay the incremental costs of an enterprise CAL in addition to the standard CAL. Legal and RIM professionals should be prepared to engage in a cost-benefit discussion with IT regarding Exchange 2010’s records management and eDiscovery features. The ad-

ditional costs of enterprise CALs and the question as to whether Exchange 2010’s built-in records management and eDiscovery features are adequate should foster meaningful debate over the value/cost of these features versus third party solutions.

For legal and RIM professionals, the answer to the question whether to deploy an on-premise or subscription based version of Exchange is especially significant. On-premise allows for complete control over all aspects of the environment: what records management and eDiscovery features to use, how to configure the underlying infrastructure (servers, backup, disaster recovery, etc.), and data retention.

Subscription services don’t typically provide the subscriber with any degree of control over the underlying infrastructure; instead, a service level agreement stipulating availability is included in the terms and conditions.

The table below describes the five most common deployment scenarios for Exchange 2010 and some of the records management and eDiscovery considerations for each. There may be deviations in how each of these scenarios is actually implemented, so it is important to understand specifically your organization or client’s particular approach. The initial question about whether to pursue on-premises versus cloud-based deployment will likely be answered only after discussion around the trade-offs between complete versus partial control of the IT infrastructure.

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Deployment Scenario	Records Management and eDiscovery Considerations
<p>On-premises</p> <ul style="list-style-type: none"> ■ Entails installing Exchange 2010 software on internally owned and operated servers and IT infrastructure (“behind the firewall”) ■ Supporting IT environment, such as backup and disaster recovery, is internal. ■ The environment is managed either by direct employees of the organization, an IT outsourcing partner, or a combination of both. ■ Oldest and most widely used deployment option.⁶ 	<ul style="list-style-type: none"> ■ Gives an organization the most control over the environment: <ul style="list-style-type: none"> o Complete control over all Exchange configuration settings o Backup: how long backups are retained, where they are stored, and the technology to be used (tape, disk, or tape to disk) ■ WHO can answer detailed questions about the environment? Typically an internal employee or contractor for whom managing Exchange is a significant day-to-day responsibility. Consequently, obtaining information about the environment tends to be more straightforward as compared with other deployment options. ■ HOW email is managed can be determined most clearly in an on-premises deployment because all configuration setting decisions are made by the deploying organization. ■ WHERE the infrastructure is located is determined by the organization, and infrastructure location impacts WHERE email is located.
<p>Exchange Online</p> <ul style="list-style-type: none"> ■ Exchange Online is a solution from Microsoft in which all of the back-end system elements such as servers, backup system, and data storage reside in a Microsoft data center and are managed by Microsoft employees ■ Exchange Online is one of the products available in Microsoft’s Office 365⁷ suite. There are suite five products in the suite: Office Professional Plus, SharePoint Online, Lync Online, and Office Web Apps, and Exchange Online. 	<ul style="list-style-type: none"> ■ Gives an organization significantly less control over the environment as compared with an on-premise deployment. <ul style="list-style-type: none"> o Degree of control varies among the various Exchange Online plans.⁸ ■ Management of the IT infrastructure is primarily handled by Microsoft, with the degree of control available to the subscribing organization dependent on the plan purchased. Ultimately, in comparison with an on-premises deployment, Exchange Online takes away a degree of control over the IT infrastructure from the subscribing organization. From a records management and eDiscovery perspective, policies such as backup tape rotation and retention are determined by Microsoft. Legal and RIM professionals should review carefully the terms and conditions and service level agreements for Exchange Online to understand the implications of those terms and conditions in the context of eDiscovery. What if a judge orders discovery from backup tapes? How will your organization respond? ■ Exit strategies: how and when do you get your data back? Will Microsoft certify complete removal of your data from their environment after you stop using the service? While the likelihood of Microsoft going bankrupt or defunct is remote, such may not be the case with other vendors. It is best practice to negotiate your exit strategy at the time of initial contracting. ■ WHERE email is located varies in an Exchange Online

⁶ According to The Radicati Group, as of 2011, 76% of the Microsoft Exchange Server mailboxes worldwide reside in on-premise installations (see <http://www.radicati.com/wp/wp-content/uploads/2011/03/Microsoft-SharePoint-Market-Analysis-2011-2015-Brochure.pdf> last visited 10/2/2012)

⁸ For a comparison of the various plans see <http://www.microsoft.com/en-us/office365/all-plans.aspx> (last visited 10/17/12)

⁷ Extensive information about Microsoft Office 365 and Exchange Online may be found at <http://www.microsoft.com/en-us/office365/online-software.aspx> (last visited 10/2/2012)

Deployment Scenario	Records Management and eDiscovery Considerations
	<p>environment as Microsoft maintains a number of data centers worldwide.⁹Legal and RIM professionals need to be cognizant of data privacy and protection laws which vary by country.¹⁰</p>
<p>Hybrid A hybrid deployment typically means one of two things: (1) a deployment consisting of a combination of on-premise and cloud based Exchange; (2) a transitional deployment in which two different versions of Exchange (for example, 2007 and 2010) run in the same environment for a period of time—a common approach used during the process of upgrading to a new version of Exchange.</p> <ul style="list-style-type: none"> ■ In a hybrid deployment involving the combination of on-premises and cloud based Exchange, some system elements reside “on-premises” and some reside “in the cloud”¹¹ but the system overall functions as a seamless whole with end users unaware of the two separate environments. ■ Hybrid deployments can be temporary or permanent: <ul style="list-style-type: none"> ■ Temporary: while the objective is to move all users to the cloud, for an interim “migration period” both the on-premise and cloud solution are used. ■ Permanent: the organization chooses to permanently maintain some elements of Exchange in the cloud and on-premise. For example: corporate office employee mailboxes are located on-premises and remote employees’ mailboxes reside in the cloud. 	<ul style="list-style-type: none"> ■ A permanent hybrid deployment means there will be some employees whose email, or a sub-set of their e-mail, will reside within the cloud. For example, a user can have a “main” mailbox located in the on-premises Exchange infrastructure while their Exchange 2010 personal archive is hosted in the cloud by Microsoft. ■ Hybrid deployments can be challenging since issues associated with on-premise and cloud based Exchange deployments are present. ■ Exit strategies related to getting your data back, and making sure none of your data remains in the provider’s environment if you cease using their service should be addressed. Negotiate your exit strategy up front.
<p>3rdParty Subscription</p> <ul style="list-style-type: none"> ■ There are a number of service providers¹² selling Exchange as a subscription service, competing with Microsoft’s Exchange Online. Subscribers pay a set fee per month for each mailbox, with most providers offering several different plans. Typically, the more features and control, 	<ul style="list-style-type: none"> ■ eDiscovery and records management features may not be available in all plans. For example, many service providers charge a premium to use Exchange 2010’s legal hold feature. ■ Features (such as Exchange ActiveSync) may not be included in less expensive plans and IT should identify technical gaps (is the providers disaster recovery fail-over commensurate with other service level agreements?) ■ Backup and disaster recovery policies and procedures

⁹ Information regarding Microsoft Office 365 data center locations may be obtained at <http://www.microsoft.com/online/legal/v2/?docid=25> (last visited 10/29/2012)

¹⁰ “Microsoft Office 365 maintains primary and backup data centers distributed around the world. When a company signs up for a Microsoft Office 365 service, its hosted environment is automatically provisioned in the appropriate data center based on the company’s address. All users for the company are hosted from the same region.” From Microsoft Exchange Online for Enterprises Service Description available at <http://www.microsoft.com/en-us/download/details.aspx?id=13602> (last visited 10/5/2012)

¹¹ “In the cloud” is a colloquialism which refers to a computing system or service accessed via the internet. Microsoft Office 365 and Salesforce.com are examples of cloud-based systems.

¹² For example: <http://www.sherweb.com> and <http://www.networksolutions.com>

Deployment Scenario	Records Management and eDiscovery Considerations
<p>the more expensive the plan.</p> <ul style="list-style-type: none"> ■ As with Exchange Online, subscribers typically retain some control over the features which can be deployed; the more expensive plans usually allow for more control by the subscribing organization. 	<p>are typically controlled by the vendor; subscription terms and conditions of may provide limited backup and recovery options.</p> <ul style="list-style-type: none"> ■ Exit strategies related to getting your data back, and making sure none of your data remains in the provider’s environment after you leave them may be problematic (what if the vendor goes into bankruptcy?) It is best practice to negotiate your exit strategy at the time of initial contracting.
<p>Third-party Dedicated Hosting or Outsourcing</p> <ul style="list-style-type: none"> ■ In this type of deployment, an organization contracts with a third-party to host their Exchange environment. Because the infrastructure is dedicated to the contracting organization, the level of control is almost the same as that retained in an on-premise deployment. This control comes at a cost, as this type of hosting is more expensive than subscription based services (which scale the infrastructure by putting multiple companies into a single IT environment with the trade-off to the subscriber of reduced control.) ■ The infrastructure may be managed by the third-party hosting vendor, the contracting organization, or a combination of both. ■ Third-party dedicated hosting vendors include Rackspace, Accenture, and ACS. 	<ul style="list-style-type: none"> ■ Generally, with third-party dedicated hosting, the contracting organization retains the ability to control most aspects of the environment, including backups and disaster recovery. This is in contrast with most subscription services where backups and disaster recovery are determined and managed by the vendor, and provided on a “take it or leave it” basis. ■ As these types of agreements are often multi-year, multi-million dollar contracts encompassing a wide array of outsourced IT operations. Consequently, terms and conditions relating to exit strategies and data access are typically addressed in a negotiated agreement. However, legal and RIM professionals should still claim a seat at the table to articulate records management and e-discovery requirements.

THE EXCHANGE FOOTPRINT

The Exchange footprint—the sum total of features and functions of which the system is capable—has displayed a degree of elasticity over time¹³, sometimes expanding and other times contracting. With Exchange 2007 and now Exchange 2010 (and in the future, Exchange 2013) the Exchange footprint has reached a milestone: a striking expansion of features, functions, and capabilities far beyond email and calendaring.

For the legal and RIM professional whose organization or client is moving to Exchange 2010, it’s useful to think of the system as having two footprints: a “core” footprint encompassing the standard email, calendaring, and contact management functions always present in Exchange; and, an “expanded” footprint that potentially includes instant messaging, voice mail, and a host of records management and e-discovery features. These two footprints are explored next.

¹³ Jagott, Siegfried., Stidley, Joel., with the Microsoft Exchange Server Team, (2010). *Microsoft Exchange Server 2010 Best Practices*. Redmond, WA: Microsoft Press. See Chapter 1 for a discussion about the history of Exchange.

“Core” Footprint

Exchange has provided a set of core functions for the past 15 years.¹⁴ While functions have been added to and removed¹⁵ from Exchange during this time, the follow-

¹⁴ Unless otherwise noted, when Exchange is discussed in this article, the reader should understand the reference (where appropriate) is to Exchange and Outlook working together to deliver the features and functions of the system. However, Outlook and Exchange are separate software programs, and can operate independently. For example, an organization could use a non-Microsoft email server in conjunction with Outlook; alternatively, Exchange could be used with Lotus Notes as the client. An underlying presumption of this article is that the reader’s organization or client has deployed Exchange and Outlook together. The reader should be aware that in environments where Exchange and Outlook are not used together, the features and functions described in this article may operate differently or not at all.

¹⁵ For example, Exchange 2000 saw expansion of the footprint with the addition of instant messaging and online meeting functions; Exchange 2003 subsequently saw the removal of these two functions as Microsoft elected to provide instant messaging and online meeting functions in a separate platform (When Microsoft Office Live Communications Server.)

ing are the core functions that have been present in the system since 1997¹⁶:

- Email
- Appointments/scheduling
- Contacts
- Tasks
- Notes
- Journal (time tracking—not archive journaling)
- Public Folders

While expanding Exchange’s core footprint has always possible, it required custom programming or purchase of additional software and/or hardware.¹⁷ While some organizations have gone down such paths to expand the Exchange footprint, market developments over the past couple of years have lowered the technical and financial threshold for taking advantage of the features and benefits of the expanded Exchange footprint.

For example: *inclusion* at no additional charge of unified messaging and records management features in Exchange 2007; inclusion at no additional charge of basic eDiscovery features in Exchange 2010; and, emergence of attractively priced “bundled” subscription services including not only Exchange but also Microsoft Office, Lync, and SharePoint (Microsoft Office 365.) With modest additional cost and effort, (or in the case of subscription based services **less** cost and effort), or-

¹⁶ Prior to 1997, Exchange had its own email client; calendar and scheduling functions were available through a separate program called Schedule Plus. In early 1997 Microsoft Outlook was introduced as the primary client for Exchange. However, Outlook is a separate program from Exchange. Outside the corporate market, Outlook is often deployed as a POP3 or IMAP email client for web-based or non-Microsoft email systems.

¹⁷ For example, implementing unified messaging prior to Exchange 2007 required a third-party product such as Cisco Unity Connection.

ganizations can now deploy unified messaging, enterprise instant messaging, virtual collaboration rooms, as well as, records management features to manage retention of email and eDiscovery functions to identify, preserve, and collect email. These features and functions are all elements of the extended Exchange footprint realized in Exchange 2010.

“Extended” Footprint

The “extended” Exchange 2010 footprint took a quantum leap forward with the introduction of two new and seminal functions in Exchange 2007: *unified messaging* and *messaging records management*.

However, these built-in Exchange functions are just part of the story; the other part is integration between Exchange/Outlook¹⁸, and two other Microsoft systems: Lync and SharePoint.

While a degree of integration among these systems has been possible since the early 2000’s, the emergence of attractively priced bundled¹⁹ subscription services increases the chances organizations will use the features integration enables because the features are included as part of the overall package; there is less of a cost barrier, and because the software and infrastructure are hosted, technical hurdles are reduced or eliminated.

The following tables itemize key elements of the extended Exchange footprint.

1. Exchange 2010: below are the key features and functions included in Exchange 2010 and which expand upon the core footprint.

¹⁸ Outlook’s integration with SharePoint does not involve Exchange Server, so the integration is between Outlook and SharePoint, and not Exchange and SharePoint.

¹⁹ Bundled offerings typically include multiple items or services for a single fixed fee. For example, there is a Microsoft Office 365 bundle including Exchange, Lync, Office Professional Plus, and SharePoint for a fixed fee of \$20 per user per month. See http://www.microsoft.com/en-us/office365/compare-plans.aspx?WT.z_O365_ca=Buy_enterprise_en-us for details (last visited 11/1/2012)

Feature/Function	Description
<ul style="list-style-type: none"> ■ Unified Messaging 	<ul style="list-style-type: none"> ■ Voice mail messages are delivered into user’s mailboxes as MP3 files ■ Voice mail “preview:” Voice mail messages are “transcribed” from voice to text and delivered to the user’s mailbox as an email message (with mailbox the MP3 attached)
<ul style="list-style-type: none"> ■ Messaging Records Management 	<ul style="list-style-type: none"> ■ Records retention tags and policies ■ Retention hold ■ Archive (personal) mailbox ■ Message classification ■ Mailbox moderation <p><i>NOTE: Messaging Records Management is covered in Part II of this article.</i></p>
<ul style="list-style-type: none"> ■ eDiscovery 	<ul style="list-style-type: none"> ■ Litigation hold ■ Multi-mailbox (discovery) search ■ Auditing of mailbox access and administrator

Feature/Function	Description
	<p>actions</p> <p><i>NOTE: eDiscovery is covered in Part II of this article.</i></p>

2. Lync Server 2010 is an enterprise instant messaging, online conferencing, and telephony solution. Lync's

seamless integration with Exchange 2010 is a significant extension of the Exchange footprint.

Feature/Function	Description
<ul style="list-style-type: none"> ■ Outlook is a Lync “client” 	<p>Users can send or reply to instant messages (IM) from within Outlook; reply to an email with an IM or Lync phone call, etc. Outlook serves as an additional Lync client (Lync has its own client software.) Note: not all Lync functions are available from within Outlook</p>
<ul style="list-style-type: none"> ■ Outlook Web App (OWA) 	<ul style="list-style-type: none"> ■ Users can respond to IM and send IM from within OWA ■ Users can see presence of others from within OWA
<ul style="list-style-type: none"> ■ Conversation history folder 	<p>The conversation history folder maintains a word for word transcript of all IM conversations and a log of phone calls made and received. This feature is of particular interest from a legal and RIM perspective because if it is enabled, a transcript of each IM conversation is retained in mailbox creating an additional body of data which has to be managed and is available for discovery.</p>
<ul style="list-style-type: none"> ■ Presence visible from within Outlook and OWA 	<p>Presence is a feature whereby a small icon indicates via a color scheme the current “status” an individual (green=available, red=busy, etc.) The concept is to let co-workers know at a glance whether a colleague is available or not. The presence icon is visible from within Outlook and OWA. A user reading an email message can see via the icon's color -mail's the sender.</p>
<ul style="list-style-type: none"> ■ Unified Communications²⁰: access to voice, e-mail, and IM from within Outlook and OWA 	<p>It's possible to replace an organization's legacy PBX (phone system) with Lync, and if the organization uses Exchange 2007 or 2010, it can also replace its legacy voice mail system. In such a scenario, organizations can provide users with unified communications: a single interface for engaging in virtually all modes of electronic communication. If Lync and Exchange 2007 or</p>

²⁰ “Unified communications (UC) is the integration of real-time communication services such as instant messaging (chat), presence information, telephony (including IP telephony), video conferencing, data sharing (including web connected electronic whiteboards aka IWB's or Interactive White Boards), call control and speech recognition with non-real-time communication services such as unified messaging (integrated voicemail, email, SMS and fax). UC is not necessarily a single product, but a set of products that provides a consistent unified user interface and user experience across multiple devices and media types. There have been attempts at creating a single product solution however the most popular solution is dependent on multiple products.” From Wikipedia at http://en.wikipedia.org/wiki/Unified_communications

Feature/Function	Description
	2010 are integrated, Exchange provides voice mail functions via its unified messaging function, while Lync Server 2010 provides the telephony functions via Voice over IP (VoIP). ²¹

²¹ For a detailed discussion about the integration between Exchange Server 2010 and Lync Server 2010 see Chapter 20, Exchange 2010 and SharePoint 2010 Integration, Lewis, A., Abbate, A., Pacyk, T. (2011) Microsoft® Lync Server 2010 Unleashed. Pearson Education, Inc.

3. SharePoint is a multi-function web platform enabling disparate individuals and teams to collaborate, build web pages, automate business process workflows, and so on. Unlike Lync Server 2010, which integrates

with Exchange 2010 directly, SharePoint integrates directly with the Outlook software client (it does not integrate with Outlook Web App).

Feature/Function	Description
<ul style="list-style-type: none"> ■ Outlook functions as a SharePoint "client" 	<ul style="list-style-type: none"> ■ Outlook operates as a "client" (access point) to SharePoint content ■ Users can download files from SharePoint into Outlook for offline access ■ Users can synchronize contacts, tasks, and calendar items between Outlook and SharePoint

While the core Exchange footprint triggers records management and eDiscovery issues (how long should email be retained, how to place certain employees email on legal hold, and so on), deploying Exchange 2010 with its extended footprint engenders new questions. The new questions will vary based on the organization's legal and regulatory landscape and which functions from the expanded footprint are deployed.

Following are a few points legal and RIM professionals should consider with regards to Exchange 2010:

- Data center location: if you're considering Exchange Online (or some other subscription based service) or a hosting arrangement, data center location may be an important issue, especially if your organization or client has users located outside the United States.
- In considering subscription and hosted options for Exchange, explore whether the degree of control over the infrastructure is suitable given the legal, regulatory, and records landscape.
- Discuss with all stakeholders the pros and cons of features with a records management or eDiscovery aspect, including:
 - Do you want a log of every incoming and outgoing phone call to be retained?
 - Do you want to capture and retain Instant Message conversations?
 - Do you want voice mail messages to be transcribed into text?
 - Do you want voice mail messages to have the same or different retention than email?
 - Does the legal hold function in Exchange 2010 meet the particular needs of the organization?
 - Does the records management functionality in Exchange 2010 meet the organization's needs?

- Have you done your homework and become familiar with the history of email at your organization or clients? The only way to understand the email environment is to reverse engineer from the present back to the beginning. Otherwise, you're not dealing in facts about the environment—you will be guessing.

GLOSSARY

Cached Exchange Mode A version of offline folders (see definition) in which synchronization between a user's server based mailbox and the local replica (offline or OST file) occurs in a fashion whereby the user's local mailbox replica (.OST file) is the "working" mailbox. This status is transparent to the end user.

Dumpster Introduced in Exchange 2000, the dumpster's purpose was to allow (for a configurable length of time) the recovery of "hard" or "double" deleted items (messages, contacts, appointments, etc.) Administrators or end-users could retrieve hard/double deleted items out of the Exchange Server's dumpster. Without the dumpster function, hard/double deleted items could only be retrieved from backups.

Exchange ActiveSync (EAS) For providers willing to license the software from Microsoft, EAS enables mobile devices (cell phones, smartphones, tablets, etc.) to synchronize email, contacts, appointments, and other data between an Exchange Server and the user's device (or, devices.) EAS actually has two components: a server component (which is included at no charge in Exchange 2003, 2007, and 2010); and, a client component (which device and operating system manufacturers are required to license.) Major players Apple and Google have licensed EAS and deployed it in their mobile device operating systems (Apple's iOS and Google's Android.) While originally designed for simple data synchronization, EAS now includes mobile device management (MDM) features such as "remote wipe

data”, “turn off camera,” and “log-in password required.” With the growing interest in “bring your own device” (BYOD) initiatives, EAS is one of the technologies being used to manage mobile devices connecting to an organization’s network.

Journaling Journaling delivers a copy of every email message sent and received by an organization; a copy of each message is retained in a “journal mailbox.” Journaling is controlled by the Exchange System Administrator, so end-users have no control over journaled email—they cannot delete, move, copy, alter, or in any way interfere with journaled email. Journaling is frequently used to facilitate transmission of email into third party email archiving tools such as Enterprise Vault and ProofPoint.

Mailbox Moderation Feature that allows for a simple review workflow process to be configured. Prior to being delivered, messages meeting certain criteria are routed to a specific “moderation mailbox,” for review by the appropriate authority. If a message is approved, it is sent and delivered in normal fashion; if the message is rejected, it is returned to the original sender with a notice of non-delivery.

Managed Folders Introduced in Exchange 2007, managed folders are Exchange mailbox folders (such as the Inbox, Deleted Items, etc.) which have a retention policy applied directing what will happen (delete after 180 days) to the items (emails, appointments, etc.) contained in the folder. Multiple retention policies may be configured and tailored to an organization’s needs. For example, a financial services company might retain client communications for seven years, but a manufacturer for only three years. A manufacturer might elect to purge Sent Items that reach the age of 30-days-old, while a bank may set purging to run only after 180 days.

Microsoft SharePoint Versatile web platform that provides a number of capabilities, including: collaboration (Team) sites that enable various individuals to share documents, calendars, lists, etc.; intranet and extranet deployment; public web site presence; document and web-content management; and, business process automation. SharePoint provides substantial functionality “out-of-the box,” but also can be customized to meet specific application and project needs.

Messaging Records Management (MDM) Terminology used to describe the built-in (native) records management features and functions of Exchange 2007 and 2010. Part II of this article treats MDM in detail.

Message Classification A feature enabling individual email messages to be classified by users or automated rules. For example, messages may be labeled as “attorney/client privileged,” “company confidential,” “company internal,” and so on. Once messages are labeled, they may be acted upon or “moderated” (see mailbox moderation definition.) For example, all messages marked “company internal” are sent to a special compliance mailbox for review prior to transmission. This can be done “out-of-the-box” in Exchange 2007 and 2010.

Microsoft Lync Server 2010 An enterprise-class software system providing instant messaging (IM), telephony (phone), and online meeting functions, accessed by users via a wide variety of access points. Lync Server 2010 integrates with Exchange, SharePoint, and Microsoft Office to provide presence and other features.

Multi-Mailbox Search Introduced in Exchange 2010, this feature enables a user (with appropriate system au-

thorization) to conduct a search across one or more mailboxes. Searches can employ various criteria, including: keywords; date range; and content type (email, meetings, tasks, and notes.) Search results can then be copied to a discovery mailbox for review and processing. This feature will be discussed in more detail in Part II of this article.

Offline folder (.OST file) A “locally” stored (desktop or laptop computer’s hard drive) replica of a user’s Exchange Server mailbox. When a user is disconnected from the Exchange Server (such as on an airplane) but still has access to the contents of their mailbox, they are working out of the offline folder. When users are connected to the network or the internet, synchronization occurs continuously between the Exchange Server mailbox and the offline folder.

Personal archive (aka archive mailbox) Introduced in Exchange 2010, it provides users with a location in which to store older messages, or messages to which the user does not necessarily need immediate access. The personal archive is a replacement for .PST files. A key difference between the personal archive and .PST files is that personal archives are stored on the Exchange Server whereas .PST files are stored outside the Exchange Server. This feature will be discussed in more detail in Part II of this article.

POP3 (Post Office Protocol version 3) Protocol stating how email client’s such as Outlook or Lotus Notes should interoperate with an email system. For example, the POP3 protocol states that an email client should be capable of retrieving messages from a messaging server and include an option to leave a copy of each message on the server.

Premium Journaling Introduced in Exchange 2007, premium journaling allows specific individuals or members of an Exchange distribution group to have their email journaled (see definition for journaling.) Prior to Exchange 2007, journaling could only be applied to *all* users in a mailbox store. In situations where only one or several users need to have their email journaled all users on the same database would have their email journaled.

Presence Microsoft Lync feature in which a small “presence” icon indicates the current “availability” status of an individual. The objective is to let individuals know at a glance whether a colleague is able to communicate with them at a particular moment in time. The presence icon assumes a particular color (green=available, red=busy, etc.) based on the individual’s status; status, in turn, is based on several variables the Lync Server monitors. Presence is an optional integration feature in an environment where both Exchange and Lync are deployed.

Public folders Introduced in the first version of Exchange (to compete with Lotus Notes), public folders are mailboxes which can be made available to all or just some users in an organization. Public folders were designed to facilitate collaboration among members of an organization. Features of public folders include: ability to email directly into the public folder; storage of documents, spreadsheets, email messages, and other items; and, utilization of custom forms for specific business processes. Public folders can be taken “offline” by a user and then synchronized with the Exchange Server. Public folders can have quotas, are subject to deleted item retention in the dumpster, and allow for the application of granular user access controls.

Transport Rules Introduced in Exchange 2007 and improved upon in Exchange 2010, transport rules enable actions to be taken on email messages based on an extensive range of criteria. For example: add a disclaimer to every incoming email with the word “dog” in it; do not let email messages from certain users be sent outside of the company; and so on. Prior to Exchange 2007, employing transport rule type functionality required custom programming or a third party tool.

Unified Communications (UC) The concept of bringing together in one system multiple communication technologies. In a Microsoft systems landscape this means combining instant messaging (IM), email, voice mail, fax, and phone in a single (unified) interface. From a unified interface users can engage in multiple forms of communication, which includes the ability to respond to or initiate communication using one modality—such as voice—and then change to another—such as IM.

Unified Messaging Exchange 2007 and 2010 include, “out-of-the-box,” the unified messaging function. Unified messaging is the concept of delivering voice mail

messages into the user’s Exchange mailbox; the user can access the voice mail messages the same way as they would access email messages. The voice mail messages are delivered as attachments in the MP3 format.

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