

I know we need an
EMAIL ARCHIVE
but which one?

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ABSTRACT

By 2007 the various issues, which have driven the adoption of email archiving solutions, are well known. Many high-profile cases reported in the press have generated a good understanding as to why email archiving is required. However, many organizations have yet to implement a solution.

This discussion paper positions the Overtone *AbilitySuite*[®] Email Content Management & Archiving (ECM&A) solution to aid organizations select the best software to meet their respective needs.

structure

This document presents this information in sections relevant to key roles within an organization. In the context of email archiving, the key roles this document addresses are:

THE EXECUTIVE

Those people responsible for the implications of compliance and litigation.

While recent high visibility events have driven a focus on emails it remains that discovery and compliance requests as well as demands of litigation need to draw on many systems,

not all electronic, of which email is simply one. Discovery Support Systems, which your legal advisors will own or subscribe to, are the best place for analysis of these documents and the establishment of a legally defensible process around the management of this material during any discovery process. An email archiving solution should focus on the job of archiving email messages not trying to be a Discovery Support System.

THE INFORMATION TECHNOLOGY MANAGER

Those people responsible for implementing and supporting a solution.

Requirements, which can be met by an email archiving solution are being expressed by many areas of the business. IT is responsible for deploying and possibly selecting a system to address these. Many solutions will result in the introduction of new systems to learn and support and yet another log-on for users. An email content management and archiving solution built on the Lotus Notes / Domino platform, utilizing the unique and advanced capabilities of that platform, which is capable of integration to other systems like a DMS, CRM or PMO, may provide a best of breed solution.

THE KNOWLEDGE MANAGER

Those people responsible for the strategies to leverage corporate knowledge effectively.

While many organizations have been compelled to adopt an email archiving solution because of compliance requirements, the cost of discovery requests or simply in order to manage the volume of email, focus is now turning to the next stage in the evolution of email management systems. That is, how does an organization securely share and thus benefit from the knowledge contained in emails?

In reviewing this document the reader may assume that *AbilitySuite*[®] for Email Content Management & Archiving addresses the more general and well known requirements that have been established over the last five years for an email archiving system while at the same time providing an 'open' architecture that allows integration with other business systems as well as certified third party storage solutions.

In brief these are:

- Journaling of all email messages for compliance.
- Retention Management
- Rules based archiving for mailbox management.
- Stubbing and archiving of mail from the user mail files to the archive.
- Deletion of mail from user mail files
- Single-instancing of duplicate mail messages in the archive.
- Compression.
- Standard Meta data searching.
- Full text searching.

The purpose of this document is to highlight the philosophical, architectural and unique features, which make *AbilitySuite*[®] for Email Content Management & Archiving a compelling option for consideration over and above these standard requirements.



AbilitySuite®

EMAIL CONTENT MANAGEMENT & ARCHIVING

POSITIONING

AbilitySuite® ECM&A is a targeted and specialist system designed to increase the value organizations receive from their email solution, to minimize risk and to reduce the cost and complexity of maintaining these capabilities.

The first and most poignant positioning statement about *AbilitySuite*® is that it is designed for organizations that use **IBM Lotus Notes / Domino**. If you have a Microsoft Exchange or other email system you will not be able to take advantage of the advanced features the *AbilitySuite*® ECM&A software offers.

From a philosophical stand point *AbilitySuite*® promotes a 'best-of-breed' approach to the provision of capabilities within the organization. *AbilitySuite*® ECM&A, for example, does not seek to be a storage management system or a discovery management tool. There are best-of-breed solutions for these requirements. *AbilitySuite*® ECM&A is a specialist email content management and archiving system that focuses on the important and missing capabilities in modern enterprise architectures. *AbilitySuite*® ECM&A allows for the utilization of other best-of-breed tools rather than creating new silos of technology that are unnecessary and not optimal. For example, *AbilitySuite*® ECM&A comes with out-of-the-box integration to hierarchical storage management systems such as IBM's Tivoli Storage Manager and certified storage devices such as IBM System Storage Archive Manager and DR550.

AbilitySuite® ECM&A thus becomes part of a holistic Information Lifecycle Management architecture, while at the same time providing unique, as well as the necessary archiving capabilities for email.

IBM's Lotus Domino Notes environment is a platform that provides many capabilities that a standard email environment does not.

AbilitySuite® uses fully integrated features to extend the capability of the Lotus Domino Notes email platform to provide email archiving and knowledge management functionality. *AbilitySuite*® thus is not a “bolt-on” system and because it focuses only on the Lotus Notes environment is not limited by any lowest common denominator. In fact, it is a 100% fit with this environment.

To the user this means seamless integration of these new capabilities within a known and familiar user paradigm and user interface (UI).

To the IT department it means that this business critical requirement can be delivered without the introduction of a new technology stack and associated user management paradigm.

AbilitySuite® thus returns greater value from a Lotus Notes based email system through the addition of archiving, as well as other associated capabilities at a significantly lower cost of ownership than if a new, separate system is introduced.

For the small to medium or distributed organization an *AbilitySuite*® solution may be implemented completely within the Domino Notes technology context, obviating the need to introduce a new technology stack or separate database system(s) with all the costs and complexities implicit in doing so.

For large organizations with an established strategy for Information Lifecycle Management, document management, storage management and a corporate taxonomy, *AbilitySuite*® can leverage these existing assets to provide a superior email archiving solution as well as the benefits of a fully integrated Knowledge Management solution.



for the executive

From the perspective of those people responsible for the implications of discovery requests, compliance and litigation.

One of the key drivers for the implementation of an email archiving system is the need to support compliance or discovery requests as well as to defend your own position in any litigation.

Because of the high visibility of recent cases, which have involved emails many providers of electronic archival systems have attempted to create a panacea for all of these requirements. In many cases, these systems promote the use of the email archive as a tool for the support of the discovery or regulatory response process.

However, the fact of the matter is that this is not what your email archive system should be used for and although we recognize that this is a bold statement we believe the following points are obvious, once considered.

- For a typical discovery or compliance response process there will be information that is relevant, and needs to be collected, from a number of systems (not all electronic). Email is simply one of these.
- Once the broad ranges of emails of interest have been collected they must be aggregated together with this other information in order that all of it may be organized reviewed and processed. This is most efficiently carried out in specialist discovery support software that your lawyers will either own or subscribe to from a specialist discovery support service provider.
- When all the information has been accumulated it is important that a legally defensible process for their management be established. This means a complete and uncompromised chain of custody must be instantiated, complete with audit trails and a history of each document during the discovery process.
- The set of documents, which are identified will need to be made available to several parties and, as stated above, a chain of custody established. This is not a task for either your IT department or your email archive!
- All of the requirements above are best carried out in the discovery support software system of your legal advisers and under the aegis of their processes. In order to support this process your email archiving solution should:
 - ◊ Have captured all the emails that are necessary and have stored these on the correct media.
 - ◊ Leave non-email archiving capabilities such as suppression, pattern matching, de-duplication and filtering to the respective specialist tools.
 - ◊ Be able to carry out relevant queries (from, to, date, subject, etc.) to return data sets that may contain emails of interest that can then be loaded into the discovery system for processing. To achieve this, the archive should be able to deliver the emails in a widely accepted format for import into that tool.

In relation to the capture and storage of emails for the support of compliance and discovery it is likely that you may need to capture all emails in order to be prepared for the unexpected.

This, however, may not always be the case and this broad brush approach has been adopted in order that organizations err on the side of conservatism to ensure that they are compliant and ready to defend themselves intelligently as and when required. It may be possible that this is not actually the requirement and that only certain key roles need complete monitoring in this way. In some cases, it may be possible to negotiate with your regulatory body a model that does not necessarily impose impractical requirements on you and your IT department. For example, it may not be necessary to write all users' emails to non-tamperable media. It may be acceptable that while all emails are archived, only those of key users and executives are written to these special devices. This significantly reduces cost and load on your IT systems.

In light of this discussion the following capabilities of *AbilitySuite*® are relevant:

- *AbilitySuite*® can capture all email messages through journaling but can treat emails to or from different individuals or groups differently. For example, emails to or from executives can be stored on non-tamperable certified storage devices while all others are maintained in memory and later moved to tape.
- *AbilitySuite*® stores emails in either native Lotus Notes format or XML. Over 120 million users worldwide use Lotus Notes and so almost all legal discovery systems will support import of emails in these formats. *AbilitySuite*® comes with a “easy-to-use” facility to export any search result set to a Notes .nsf file for provision to your lawyers for discovery purposes. This action should be all that is requested of your IT department.
- *AbilitySuite*® can be configured to compel users to add additional meta data categorization to an email message either when they compose it, send it or receive it. This categorization is customized (through simple configuration) to the organization for meta data such as “Mail Type” e.g. financial advice, project report, human resources etc. and any other meta data, which is meaningful to the organization such as claim number, customer reference, project number, product code, matter etc. This categorization can then also be used to determine different lifecycles of the email.

The corollary of these capabilities is that it is possible to set up different lifecycles for the different requirements of emails with different attributes, for example an organization may choose to have rules such as:

CEO's Emails:

Retention = 5 years

Storage = Immediate to non-tamperable media, DR550 Certified Storage Device

Financial Advice:

Retention = 5 Years

Storage = First year in *AbilitySuite*® read only primary storage archive then tape library.

All Other Emails:

Retention = 3 Years

Storage = First Year in *AbilitySuite*® read only primary storage archive then tape library for remainder.



for the *IT manager*

From the perspective of those people responsible for implementing and supporting a solution.

IT Managers are faced with the conflicting requirements modern email systems present. On the one hand, from a knowledge and compliance perspective all emails should be retained, however, on the other hand users are encouraged to stay within email file size quotas because email systems exist on high availability storage in order to provide premium performance. The only real options are deletion of emails from the mail files or stubbing and archiving.

In addition, some emails are of a very high value for the organization. That is, they should potentially be shared as “knowledge” and made available to authorized people in an organization. This latter requirement is something, which has traditionally not been addressed in email archiving solutions very well at all and has until now been considered to be in the realm of a CRM, project management or document management solution. Modern email archiving solutions should provide a way to select, as a service, high value emails and make them available to such systems.

Clearly, the answer to these issues lies in an email archiving solution but the question is what that should look like, and how does this fit into the wider information management strategies of the organization.

The following issues, which the IT manager will be familiar with, have driven the architectural direction of the *AbilitySuite*® Email Content Management & Archiving solution:

- Email files are the wrong place for large amounts of data resulting in poor performance of email messaging servers and potentially very long backup windows.
- If transaction logging in Lotus Notes is used to reduce backup windows the performance implication on the Domino messaging servers is unacceptable.
- Compliance often requires that all email messages be kept, particularly for certain users, such as company executives.
- Compliance may also require that emails of some users are stored on certified non-tamperable storage devices such as IBM’s DR550. This may not necessarily need to be implemented for all users. Having said this, and particularly given that journaling is an “all or nothing” paradigm, moving every single email to certified storage is impractical and often unnecessary.
- The requirements businesses have for a document management and/or CRM system are linked to email archiving. Document management and CRM systems often do not satisfy all the requirements for email archiving, however, they frequently unduly influence the selection of email archiving solutions.
- Because of the bulk of email it is necessary to be able to implement some form of hierarchical storage management for archives.
- Many email archiving systems introduce new technology to learn and maintain by both users and IT making the cost of ownership high. Further, because they often are a “black box” their storage standards are propriety and they do not seamlessly integrate with either the email system or any other system.
- By default there is an expectation by the business that discovery processes fall into the

realm of the IT department. This initially occurred because the information required was often very inaccessible (e.g. on back-up tapes etc.) and only IT had the skill to forensically find this information. The costs of retrieval in this way are extremely high!

- Email archiving solutions should alleviate this burden and allow IT to focus on their core tasks and strengths.
- In light of this discussion the following capabilities of AbilitySuite® are relevant:
- AbilitySuite® can be deployed in conjunction with the standard Lotus Notes client (“Zero Touch”) or using the AbilitySuite® ECM&A enhanced Lotus Notes client.
- With the “Zero Touch” client deployment it is possible to implement journaling for compliance capture of all emails routed through Lotus Domino messaging servers.
- In addition, using the Zero Touch client deployment you can implement automatic rules-based or manual stubbing and/or deletion of emails from user mail files to manage storage.
- With the ECM&A enhanced Lotus Notes client you gain access to more advanced features for knowledge management (custom meta data tagging etc.) and more advanced rules based archiving for storage management.
- The ECM&A enhanced client is deployed centrally through standard Lotus replication.
- All users may be given access to the *AbilitySuite*® MailStore™ archive(s) via their standard Lotus Notes client since every message has specific access control and security settings applied to it and users will only be presented with results that they are permitted to see.
- Special roles may be assigned access to all emails.
- *AbilitySuite*® allows you to set-up rules so that emails of different people or groups are stored separately and treated differently. That is, you may want to save emails of executives to certified storage such as DR 550 while general users emails go through a different Information Lifecycle.
- *AbilitySuite*® provides rules based integration points so that emails may be migrated to secondary storage, or registered and/or migrated to a document management system after set trigger events.
- *AbilitySuite*® can act as a data service to become part of a Services Oriented Architecture (SOA) so that parameterized search strings can be sent to the system to launch an email search from other systems.
- Back-up windows can be reduced using *AbilitySuite*® because emails are migrated to archives, which are closed and marked ‘read only’. Once an archive is closed it can be backed-up once and then excluded from further backups. Emails in user mail files can be stubbed against these archives and significantly reduce mailbox size.
- *AbilitySuite*® importantly is not a “black box” with its own proprietary storage and access paradigm, a new security model and a new set of complexities and limitations. *AbilitySuite*® is all about improving the value of your existing Lotus infrastructure and licenses as much as possible and to your best advantage.
- *AbilitySuite*® can be completely deployed and maintained within the Lotus Domino Notes paradigm. Thus, your current administrators will be able to maintain the system. The only variation from this is if you want to deploy the optional out-of-the-box integration with hierarchical storage management (HSM) or certified storage devices. In this case you will use the integration point to access your own HSM system or the out-of-the-box integration with Tivoli Storage Manager and or SSAM.



for the knowledge manager

From the perspective of those people responsible for strategies aimed at leveraging in-house corporate knowledge effectively.

Increasingly, with the wide use of email as the default communication standard within and between organizations, knowledge, which is contained within the email system, is of very high value.

This is true, not only for situations of exception, but also more and more during normal business processes. Personal use of email is already a powerful resource to many individuals, exemplified by the number of times we each reference our emails to support our position or assess what action to take.

Increasingly, however, we also provide, through “forward”, “CC” and “BCC”, information from our emails to other colleagues. This sort of use is, however, is only the tip of the iceberg when it comes to sharing the information in an email system.

To a large extent current behavior for sharing such as forwarding is dictated by the limited tools we have available in off-the-shelf email systems.

As soon as we no longer view email as a personal communication medium but as a corporate asset to be shared, much better techniques and thus business outcomes, and levels of service are achieved.

For example, to give a new customer relationship manager the ability to be able to see all communication with a client in regard to an insurance claim or policy regardless of whether they were part of that original communication or indeed even with the company at the time, is a very powerful proposition.

The challenge for this example, however, is that firstly “claim number” or “policy number” is not part of the standard meta data associated with an email. Secondly, the basic security premise on which email is founded is that email messages are ‘personal’ and thus the property of the individual rather than the organization. Clearly, this approach does not support the secure and effective sharing of information in emails.

This requirement to share information with colleagues is a common one, which has not been, and is still not, well supported by off-the-shelf emails systems.

Knowledge managers thus face somewhat conflicting requirements that email messages, including their attachments, should be more accessible and managed effectively while at the same time remaining sensitive and only accessible by authorized users.

A common theme in addressing this requirement, and others, is the implementation of electronic document management systems (DMS), CRM systems and/or the use of third party search engines.

In consideration of the former there is no doubt that if an organization has a document management system or a CRM system then high value emails should be accessible from these systems.

Additionally, however, one could argue also that those emails should equally be available contextually from other systems, such as in the example above, the claims system or call center software. This latter

consideration begs the question as to whether emails should reside in the DMS or, using tenants of Services Oriented Architecture (SOA), simply be accessible 'as a service'.

Clearly, these considerations introduce a number of issues as to where an email document should reside and how this is made available securely to the many systems and ultimately authorized users who may need access to them.

While knowledge managers have been aware of these issues for some time it has often been the requirements around discovery and compliance requests and litigation in general which have, to a large degree, driven the adoption of systems and released funds for their implementation.

Thus the knowledge user and knowledge manager are not the only people who have a strong vested interest in email. Those responsible for the implications of compliance, discovery and litigation have a strong interest but also sometimes needs which conflict with the fundamental tenants of knowledge management.

Although no one can argue with the conservative safety of keeping every email, the incredibly large number of emails and the varied value the information contained in these present organizations with a significant challenge. From a knowledge management perspective that challenge is to "separate the wheat from the chaff".

As stated earlier in this document, one of the key requirements of compliance driven systems is the automatic capture of all emails. It is preferable that this take place in the background and that user's cannot interact with the process of capture. This process is typically referred to as journaling and is covered by the 'Flight Recorder' features of *AbilitySuite*[®].

The problem with journaling from a knowledge management perspective is simply that we do not know enough about the email when it is journaled to make it useful as knowledge, i.e.

- We cannot extend readership to it in any meaningful way because we do not know its relevancy and confidentiality. Thus, the email remains 'closed' (i.e. private to the sender and/or recipients) and only people in special roles such as those legitimately involved in a discovery process may have access to the email.
- The email will be extremely hard to find from any other perspective than simply who it was sent by, to whom, when and what the subject was because it only has this 'standard' meta data associated with it. This does not help the knowledge worker who is trying to locate/retrieve/access any communications relating to some line of enquiry, e.g. (to continue our example) an insurance claim or other relevant context.

Enterprise search engines are seen by many organizations as a way around these issues. The concept being that all emails are simply archived and a search engine is used to crawl the archives thus providing access to the knowledge contained within, potentially along with aggregated information from other systems.

Critics of this approach argue that the key draw back of these solutions is that search engines are by definition designed to return as many hits as possible. The degree of precision you can achieve with these tools, while tolerable for searching the public Internet is simply not acceptable for businesses applications. The objective here should be to return as small a result set as possible or relevant.

Additionally, the issue of controlled, extended readership is still not resolved so it is difficult to make the emails in the archive available to all users since the archive will contain all emails – including some that are not for public consumption.



Knowledge workers want to see all emails sent or received filed under, for example, a claim number not thousands of emails, which contain the word “claim”. There is also little benefit in offering them access to only their own emails, as they could have searched these easily anyway.

There is a place for such tools but many would argue that full text searching, pattern matching or content analysis is useful when looking for particular content within a set of identified valid documents, for instance in a litigation discovery exercise, not however, in a “day-to-day business tool”.

As a “day-to-day business tool” what knowledge workers want is fast, targeted access to the high-value emails and they want, based on lines of enquiry, which are unique to their organization or indeed their role in that organization.

Clearly, to achieve this, what is needed is a way to separate the “wheat from the chaff” (while still keeping the chaff – just in case it is needed...). The high-value emails are made readily available through concepts like **custom meta data tagging, threading** and **extended readership**. Importantly, readership needs to be able to be set so that users can have access to the emails but will only see those, which they are authorized to see and this authentication should not introduce yet another log-on but be linked to the security features of their existing email system.

Finally, integration with other systems like the DMS, CRM, Claim System, Project Management system etc. should be possible so that emails can be accessed with reference to the meta data created by these systems and also contextually from within these systems. Either export to that system or services based architecture are acceptable.

In summary, a complete and secure email content management and archiving system should automatically capture all emails and apply standard meta data to these. It should also allow for the profiling and classification of messages into a secure, sharable knowledge base, which can be accessed contextually through common lines of enquiry based on user authentication and message profile.

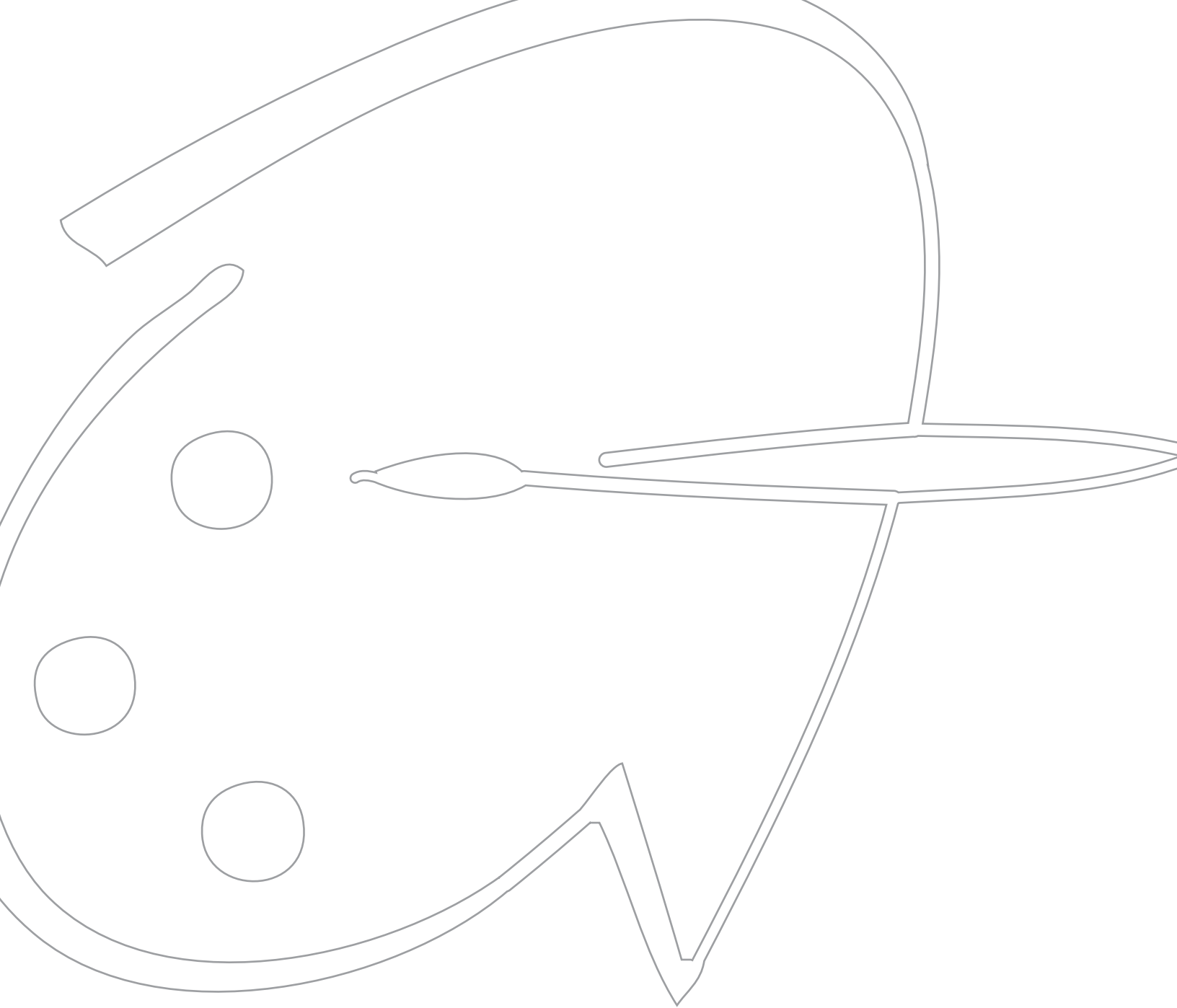
If an email archiving solution is to help make email content available as knowledge in the organization it must:

- Provide the means for an author or a recipient of an email to “tag” the email as important and thus to have that email treated differently from the “chaff”.
- Make all email easy to find using standard meta data.
- Make important email even easier to find by the ability for users to “tag” the email with custom meta data ideally based on an agreed corporate taxonomy so that it is associated with common lines of enquiry used in the organization, e.g. loan number, project code, etc.
- Use existing corporate taxonomies for meta data tagging so that consistent classification of emails across the organization as well as other documents are used.
- Allow security to be applied to individual emails so that valuable content can be securely shared and users only see what they are authorized to see when emails are retrieved.
- Make the application of all the above as simple and effective as possible. This cannot be overstated. Knowledge management is highly dependent on knowledge capture.
- Allow important emails to be easily exported into or registered in systems like CRM or document management systems. Alternatively, those applications should be able to call the archive system as a service and supply custom search parameters (once again, sourced from the corporate taxonomy) so that contextual accurate searches on email can be carried out.
- In the light of this discussion the following capabilities of *AbilitySuite*® are relevant.
- *AbilitySuite*® is essentially part of and an extension to your Lotus Domino Notes email system. The software is written within the Domino environment and thus is highly integrated

rather than an add-on. What this means is that due to our focus on Domino technology the *AbilitySuite*® provides superior capabilities and ease of use from a user perspective in addressing the requirements around knowledge management for emails.

- *AbilitySuite*® is not aligned with any one document management system. It is a best-of-breed email content management and archiving system, which has integration points so that important email can be authenticated.
- *AbilitySuite*® uses the Domino security paradigm. Once a user logs on to Lotus Notes they are also by definition logged on to *AbilitySuite*® and their security and access rights are set. This means users have access to the archive directly from within their Lotus Notes mail client. Users do not need to log on to a separate system to find emails in the archive and importantly, every user can have access to the system but will only see the emails they are permitted to see based on access/readership set at an individual message level or Lotus Notes groups.
- It is important to note, however, that through the profiling of emails readership may be extended to users and groups by way of specific readership extension or as a default created by the classification applied to the email as it is profiled.
- *AbilitySuite*® provides security at the granularity of message level using Lotus Notes groups and roles. Thus through message profiling Notes based groups and roles can have access to mail in the archive even if it was not sent to them. The knowledge management implications of this are significant. For example, a claims officer in an insurance company can access the archive and search on a claim number and see all email communications tagged under that claim, regardless of whether they were involved in the original discussion, as long as they are in a group, which has access to this information.
- *AbilitySuite*® provides the capability to require users or to give the option that messages be profiled when composed, sent or received.
- Users profile messages by first choosing a mail type. A mail type then prescribes default readership and sets mandatory and optional meta data requirements. For example a “Claim related email” may set default readership of the email to the claims supervisor group (as well as the sender and all valid recipients of the email) and may make the selection of a claim number mandatory.
- Users may pre-populate mail types with meta data and save these settings. This is particularly useful for activities that require many emails to be categorized in the same way over an extended period of time. The next time they are prompted to profile an email these pre-populated profiles as well as the blank mail type templates will be available for selection in order to make profiling quicker and easier for commonly used classifications.
- Subsequently, these pre-populated profiles may also be associated with a folder for simple drag-and-drop classification of emails.
- Emails may be treated differently according to their mail types.
- *AbilitySuite*® allows an organization to set up or connect to a corporate taxonomy to source relevant meta data values for tagging of emails, e.g. project number, client reference, product code etc, that can later be used to search and retrieve emails easily within the archive for knowledge sharing.





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