



## Getting A Grip On Lotus Domino Email Storage

- Email is rapidly evolving – bringing increasing pressures to bear on the storage infrastructure
- File attachments are forever increasing in size and quantity
- New applications generate new demands – e.g. large mp3 audio and picture files
- Current techniques for addressing this issue are either costly, difficult to implement or don't satisfy the business
- A key to finding a solution is to become more informed about email storage use down to file level
- To be useful, the right monitoring and analysis tool must scale to provide interactive results even with millions of files to analyse.

### Managing email storage – a never ending saga

IBM Lotus Notes and Domino is a rich platform for application and messaging delivery – but it is email that usually sits at the heart of any Domino infrastructure. Indeed, many Lotus users don't get further than the admittedly numerous free templates that come in the box, concentrating primarily on its rich email capabilities.

With the latest Domino 7 its possible to support thousands of email users which relatively modest boxes – whether these be Windows, UNIX or linux. With the right amount of memory, and occasional helpings of TLC (tender loving care) from the Notes team, it can be relied on to provide a high availability email system for any size organisation.

At least that was the picture for many years – increasingly this picture is changing. These changes reflect the way that email is evolving, bringing increasing pressures to bear on the messaging infrastructure.

Until relatively recently email was a proprietary affair if you wanted to do much more than send plain text.

Most organisations had relatively expensive and hence bandwidth-limited Internet connections and sending all but the smallest attachments was frowned on.

This was OK because by modern day standards most desktop applications produced very small document files – try comparing the same text saved in Microsoft Word 6 and 2003 formats. Or if you want a real scare, take a look at what's coming next with the new Microsoft Word 2007 document format, and its multiple zipped-up files.

So email users happily communicated internally – and if they happened to know someone in another organisation who had an Internet email address, they might occasionally send email that way.

Most users didn't send and receive all that much email and had small mailboxes – no one had coined the phrase 'email archiving'.

The point of this short historical recap is to illustrate just how quickly the demands on email are changing:

- ❖ File attachments are growing rapidly in size, as desktop applications evolve ever more sophisticated document structures
- ❖ Users now expect to be able to share large files via email with anyone - internally or via the Internet
- ❖ New applications are driving new file types and new issues – for example mp3 and picture files
- ❖ Email is where people work – so all this data must be available on line and on demand.

The end result? Managing email storage is not getting any easier. In fact, unless new tools and techniques are deployed, it will continue to absorb more and more admin time and infrastructure resources.

In the next section we discuss some of these tools and techniques.

## Techniques for Managing Email Storage

A number of time-honored techniques have grown up to try and cope with email storage issues. These can be summarised as:

*Admit defeat and just buy more disk*

Apparently disks are cheap (so their manufacturers tell us) and no one counts the cost of backup or disaster recovery.

Don't worry about compliance issues.

Of course this approach does mean you have to treat all email as equal and keep everything online – but that's what SANs were created for – right?

*Sweep it under the carpet*

Why not get an archive system and cleverly automate migration of little used user-created files to cheap/slow storage?

This will certainly reduce your costs, but you'll probably still worry that a large part of that archived data actually shouldn't be there – why are you storing lots of duplicated documents that exist on your file servers anyway?

Who said the users could use the email system for mp3 download sharing?

Is it really business critical to embed the latest corporate video as an mpeg clip in that huge Powerpoint attachment?

*Pass the issue back to the users*

A problem shared is a problem... shared. Why not introduce mailbox quotas?

No one ever got promoted for this approach, but it certainly gets IT talked about (but not in a good way).

If the business thinks it wants 1GB mail files, on what basis can you argue differently? How many "exceptions" do you need before having a quota becomes a minority feature?

*Try to educate the users*

Everyone tries this one at some point. Simply create an 'acceptable use' policy, then try to police it (good luck!).

The problem here is not drafting a acceptable policy, but the time it can take to monitor and address non-compliance.

## The Informed Approach to Managing Email Storage

Whilst most organisations will try to adopt one or more of the previous techniques, none are entirely satisfactory – either because of cost, implementation difficulties or lack of fit with the business.

However there is a common issue that underlies many of these failures: lack of detailed understanding about what the users are actually doing with their email storage.

Admins can manually examine mail files to get some feel for this – but a detailed and/or wide-ranging analysis is just impractical manually.

With such an analysis available at your finger tips

there comes the possibility of informed management – rather than uninformed reaction to events.

Find out what types of files users are storing and sharing in their email's and you can start to readily police your acceptable use policy.

Find out where duplication exists across your file servers and email system and you can start to optimise how each is used.

Take a longer term view and analyse how attachments are growing – is it particular applications? Or perhaps a particular department or user? – and you can start to plan investments where their needed, rather than taking a blanket approach to growth.

### Choosing the right Email Storage Management tool

On average today users create and receive around 50-200 emails per day, with most including at least one file attachment – usually more.

This means that even in a medium sized organization any email storage management tool capable of supporting the approach described above must scale to analyze millions of file attachments.

Suitable tools are now becoming available, built around high performing database systems such as Microsoft SQL Server or the open source MySQL.

When choosing an email storage management tool consider not just batch reporting requirements, but

how it will support you interactively in your day-to-day work.

For example do you need to wait hours or even until the next day to see the results you need?

Can you carry out file-level search and analyses without loading up your production systems?

How easily can you slice and dice the results to share them with users or co-workers?

If your tool can answer these questions quickly and easily, you're well on the way to getting a grip on email storage management.

#### **SPACEWatch Pro Domino Edition 5**

Sharpeware have produced the ideal tool to underpin your email storage management.

SPACEWatch Pro Domino Edition 5 gives you the visibility you need across your enterprise.

Easily deployed, without the need for production server agents etc., it gives you down to file and user level detail – but presents the high level picture too.

Available in as an easy-to-use interactive Windows application, why not get your free trial now?

For details see:

[www.spacewatch-domino.com](http://www.spacewatch-domino.com)

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Sharpeware Ltd  
10 Gallow Hill  
Peebles  
EH45 9BG  
United Kingdom

USA +1 (213) 985-1858  
Europe +44 (131) 208-2858

Produced in Scotland

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