Adminblast 2012

Paul Mooney | Senior Architect, Bluewave

Paul Mooney

Geek
- Lotus software since R2
- Symantec Authorised Consultant
- Google Certified Deployment Specialist

Speaker, Author, Blogger, jogger, biker
- www.pmooney.net

Bluewave Technology
- 26 staff
- Operate globally

Business Development day…

We ate well

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About This Presentation

Provides you with a brain dump of useful tips

Presentation is self-contained

- There is plenty to cover
- All the information you need to implement these tips is in this presentation

There are over 60 tips

- Although some "tip pages" have more than one tip!

If you have any trouble with a tip, email me at:
pmooney@pmooney.net

Paul keeps his two favourites in each year

-Sue me

Gathered from life in the real world

Gathered from forums

Gathered from blogs

Go to www.pmooney.net/resources

Many presentations there

Different versions of this one

Download away!

The latest and the "must know" slides are repeated this year.

   -I have favourites

   -You will ignore my recommendations anyway

Lotus Domino - Das Fliewatüüt der Administration

Let's get Legal!

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- Your mileage may vary

- My mileage may vary

- Fill out the evaluations

- Buy me a beer

- Today is "punch a developer in the face day"

- No.. really it is

Tip #1 Mass change of mail-file ACLs

Updated from a few years ago

Free tool on www.pmooney.net/resources

Iterates through all mail files you specify

Changes owner level of access

- Typically reduce from Manager to Editor

Now on version 0.4

- Updated by Sebastian Becker

YMMV

If you update it, send me the new version!

Tip #2 Pick a consistent auth model for Sametime

There are 2 choices
- LDAP
- Domino directory Authentication

Pick one, and stick with it
- Makes life a lot easier

Dedicated LDAP server is always recommended
- Can be used for much more
- Quickr/Sametime integration works better

http://www-01.ibm.com/support/docview.wss?uid=swg21099910

Servers with internet sites enabled

Store SSO in Internet sites view

Servers with internet sites disabled

Store SSO in Web Server Configuration View
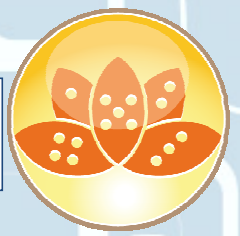
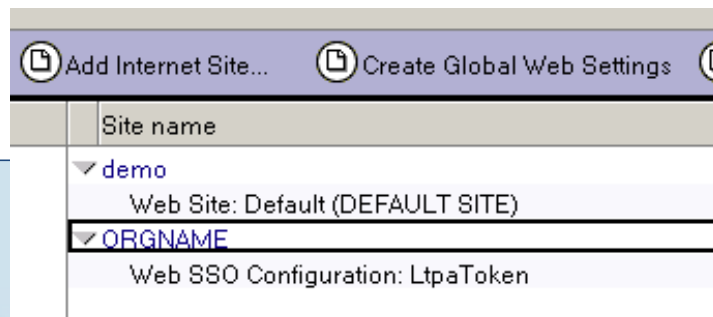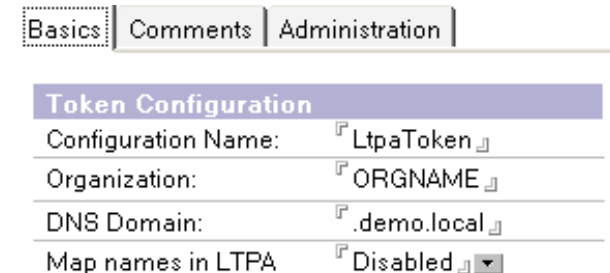What if you want SSO between servers that use both?

Create the SSO configuration document

Copy/paste it

Edit one of them and enter the Organisation name

Save / Close

It now appears in the internet sites view

You can easily end up with many different DNS suffixes

- mailserver.ibm.com

- mailserver.lotus.com

- mailserver.bluewavegroup.eu

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Can you have Single Sign on between these servers?

Technically ... no.

- The SSO key is created based on the DNS name

Reality ... yes

- Hack it

Create an SSO configuration document

Create the key

Now copy/paste the SSO document

Change the DNS name in the new SSO document to other DNS name

Now SSO will work between the sites

Domino HTTP stack needs a place to store temporary files

Default is OS system temp directory

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Can be moved (like the view rebuild index directory)

NOTES_TEMPDIR=path

Tip #6 Read the Router routing tables

Troubleshooting weird routing issues?

Type in TELL ROUTER DUMP ROUTINGTABLES
  on the Domino console

Very useful to get idea of next hop data, aliases etc

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What is all this stuff?

If you upgrade to 8.5.3, thread ID
   Debugging is ON by default

DEBUG line is NOT visible in

the notes.ini

Turn it off, by adding following to notes.ini

Debug_Threadid=0

Tip #8 Clean your event monitor

Frequently see events4.nsf errors on console on startup
- Database events4.nsf in View ($Messages) is missing n documents as defined in events4.ntf

Typically happens in mixed version environments

The list of documents does not map to the events4.txt file in the program directory

Command to clean
- Tell event clean ($Viewname)

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The XPS engine is enabled by default in Domino

You may not want it

It can be disabled

INOTESDISABLEXPAGECMD=1
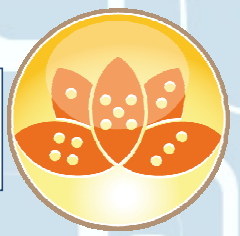
Restart htttp... and it's gone

Fantastic for screwing with developers.

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Client side failover much improved over recent releases

Users still get the prompt though

- Should the client switch to a replica on another server

Let's make this go away

Notes.ini of the notes client

- HidePromptFailoverInc=1

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Domino is as secure as you want it to be

Some default settings should be changed

Top of Paul's list

- HTTP Port server access settings

Ensure this option is enabled

- If not, all server access security is bypassed over http

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| Basics | Security | Ports... | Server Tasks... | Internet Protocols... | MTAs... | Misc |

| Notes Network Ports | Internet Ports... | Proxies |

| Web | Directory | Mail | DIIOP | Remote Debug Manager | Server Controller |

Web (HTTP/HTTPS)

TCP/IP port number:	⌜80⌟
TCP/IP port status:	⌜Enabled⌟ ▼
Enforce server access settings:	⌜Yes⌟ ▼
SSL port number:	⌜443⌟
SSL port status:	⌜Disabled⌟ ▼

Troubleshooting tip

Depending on options chosen, some fields hide in Domino
- Doesn't mean they still cant screw with things

Example - SMTP mail and TLS

Load Internet configurations from Server\Internet Sites documents: 『Enabled』 ▼

If you enable Internet Sites on a server document
- You can no longer set keyfile data in the Internet Ports section

Basics | Security | Ports... | Server Tasks... | Internet Proto

Notes Network Ports | Internet Ports... | Proxies

If you are configuring TLS on that server
- You need to set the keyfile name in the "hidden" field

SSL settings

SSL key file name: 『keyfile.kyr』

SSL protocol version (for use with all protocols except HTTP): 『Negotiated』 ▼

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Rarely used feature of DDM and Traveler

Are you using directory policies with Traveler

Don't forget

- DDM can report on security breaches

Enable the policy correctly

- Set to report

Prevent Copy!

- Old and sometimes still used

Traveler is set to obey this rule
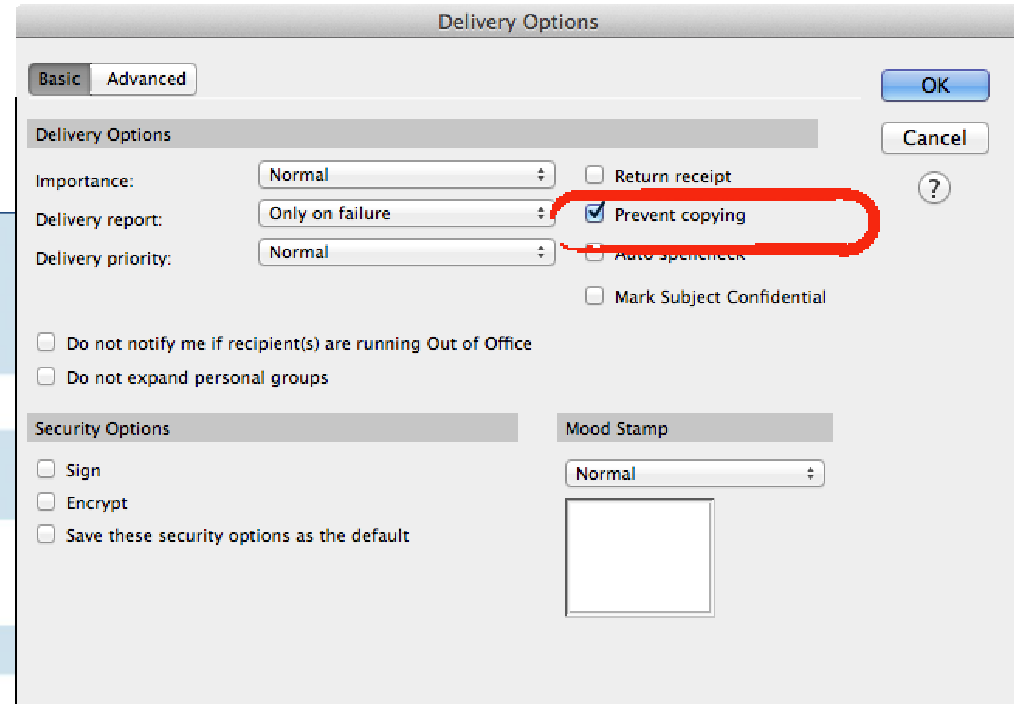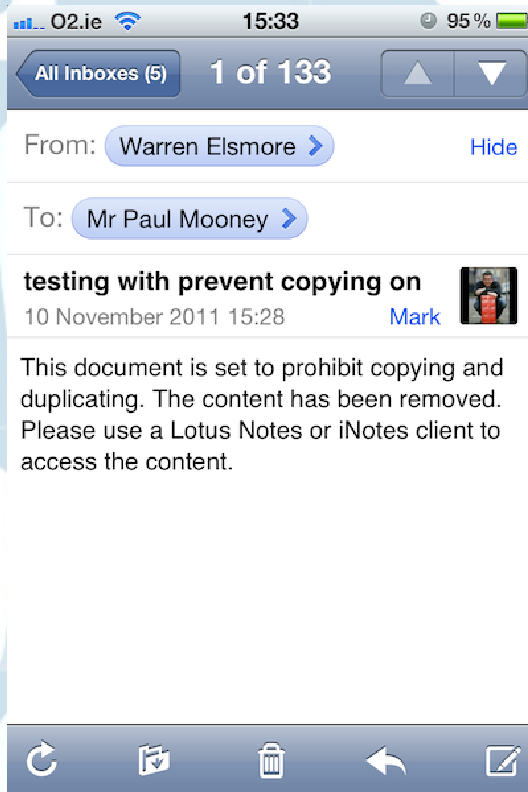
Tip #14 Prevent copy and mobile devices

You can tell Traveler to pay no heed!

Open ntsconfig.xml on traveler server

Look for this line

- <PROPERTY NAME="RemoveContentWhenPreventCopying" VALUE="1"/>

Change the value to "0" and restart

Now prevent copy does not prevent the message getting to the device

Useful when trying to troubleshoot

Cancels scheduling of agents

- No more scheduled agents will run
- Type in tell amgr pause

Triggered agents still work

To start scheduled agents again

- Tell amgr resume

Even better!

Cancels the scheduled agent that is currently running

Tell amgr cancel "dbname.nsf" 'agent name'

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Tip #16 Compact filtering

Exclude specific databases from scheduled compacting

Add line to domino notes.ini

- COMPACT_FILTER=DBNAME.NSF,DBNAME2.NSF

These databases are skipped

- Console displays message

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Tip #17 When will DDM probe?

Type in Show Schedule -DDM on your server console

Outputs scheduled ddm probes and times

```
> sh sch -ddm
Scheduled                          Type                   Next schedule

Default Messaging/Router Proc Event Monitor     12/19/2011 10:22:27 PM
Default Administration/Automa Event Monitor     12/20/2011 03:30:00 AM
Default Administration/Automa Event Monitor     12/20/2011 02:00:00 AM
Default Replication/Replicati Event Monitor     12/19/2011 10:35:09 PM
Default Security/Database ACL  Event Monitor     12/20/2011 04:00:00 AM
Default Database/Error Monito Event Monitor     12/20/2011 06:00:00 AM
Default Security/Review Probe Event Monitor     12/25/2011 04:00:00 AM
Default Security/Database Rev  Event Monitor     12/20/2011 04:00:00 AM
Default Administration/Automa Event Monitor     12/20/2011 04:30:00 AM
Default Directory/Directory I Event Monitor     12/19/2011 10:22:27 PM
Default Administration/Automa Event Monitor     12/20/2011 06:00:00 AM
Default Directory/Directory A Event Monitor     12/19/2011 10:22:27 PM
Default Database/Scheduled Da Event Monitor     12/20/2011 04:30:00 AM
Default Administration/Automa Event Monitor     12/20/2011 01:00:00 AM
Default Administration/Automa Event Monitor     12/20/2011 02:30:00 AM
Default Administration/Automa Event Monitor     12/20/2011 03:00:00 AM
Default Administration/Automa Event Monitor     12/20/2011 01:30:00 AM
Default Administration/Automa Event Monitor     12/20/2011 05:00:00 AM
Default Administration/Automa Event Monitor     12/20/2011 12:30:00 AM
Default Administration/Automa Event Monitor     12/20/2011 04:00:00 AM

Default Messaging/NRPC Routin ISpy              12/19/2011 10:22:37 PM
```

Tip #18 Local mail file replicas

Easier to manage with managed replicas

Works well

Sometimes things go wrong

- Sometimes you dont want users to have local replicas

CacheMail=8 in the notes.ini file

- Deletes the local mail file replica on the user

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Tip #19 Use Traveler? Use iOS5?

Upgrade or bad things will happen to you

IBM/Lotus supports iOS5

However…

- Some newer features can cause significant CPU issues

Upgrade to 8.5.3.1 to resolve issues with

- iOS5 Folder management
- Task management

http://www-01.ibm.com/support/docview.wss?uid=swg21512456

Commence banging head on desk, wall, floor, carpet, developer

Users could create mails locally

- And fun ensues....

Now you can control it

- 6.5.6, 7.0.2 and >8

Check_Quota_on_Mail_Create=1

- Enables quota checking when creating. Not saving

REPL_OBEYS_QUOTAS=1

- Forces quota obeying on local replica

Quotas rechecked with the "Check new mail" feature

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You can (kindof) limit the size of a message a user can send
- Configuration document

What about mass mailing?

How can I stop Bill mailing a 1MB file to 10000000000 people

RouterMaxEffectiveSize=xxx
- xxx=kb value

Size of message * number of recipients must not exceed xxx value specified
- If it does, NDR sent

Tip #22 Creating multiple new replicas

You already know that you can create replicas of multiple database at once
- Selecting from FILES tab and clicking NEW/REPLICA

BUT, you can change directory for selected databases
- Select them in the destination space and alter FILE PATH
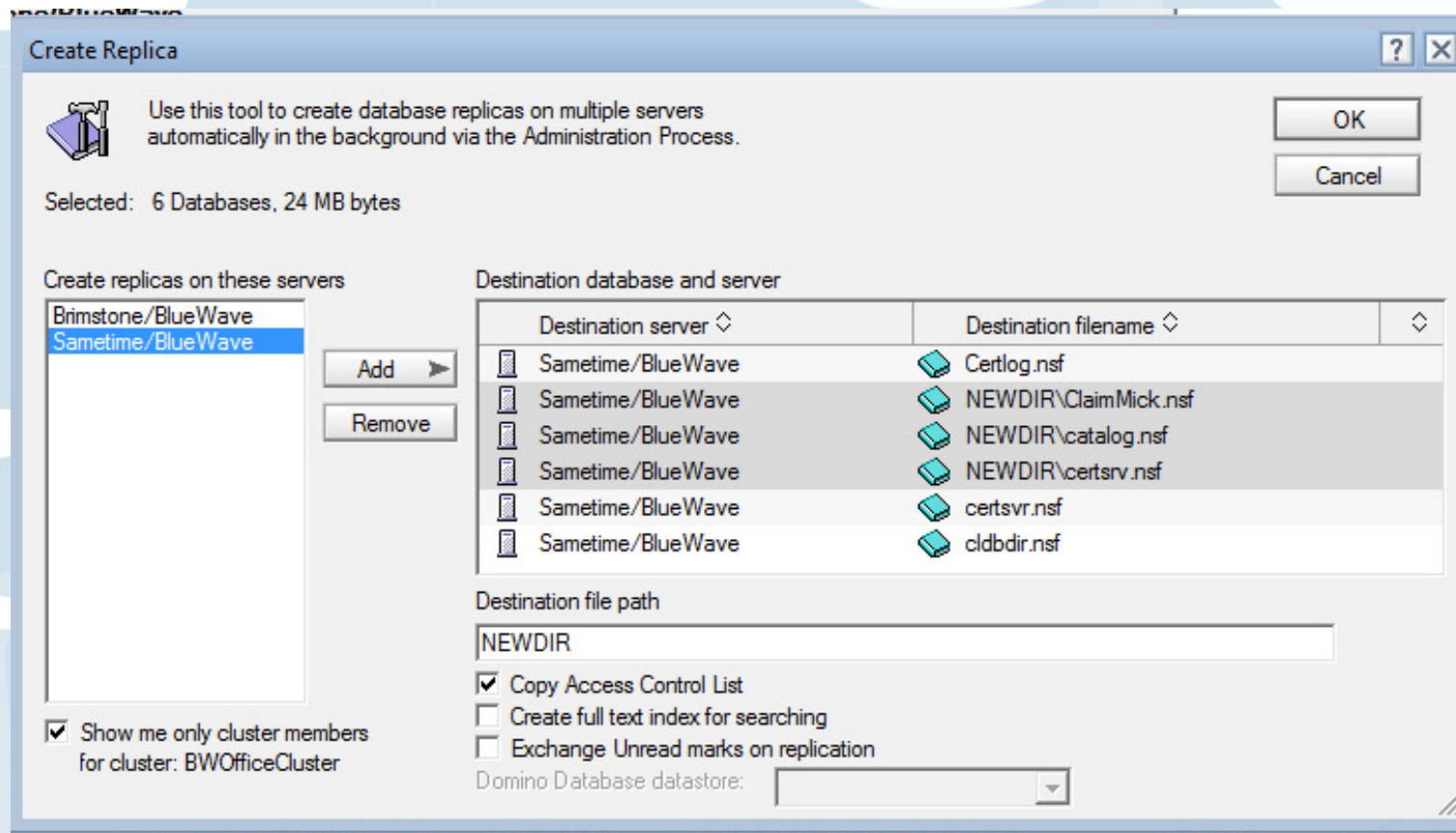
Lots of different (conflicting) opinions

IBM have added Tables into their wiki

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Short version... Use TXN Logging for all databases except dbdirman.nsf

Take a look at the wiki link

- http://www-10.lotus.com/ldd/dominowiki.nsf/dx/daos-best-practices

Tip #24 Limit Mail rules

Users love mail rules

- It makes them feel smart

They create lots of them

- It slows down your servers

You can reduce the maximum number of rules

MailMaxFilters=<1 to 100>

Tip #25 Resource reservation agents

Resource reservation databases can be very old

- Can be VERY big

- Lots of old reservations

Increase performance by enabling the purge agent
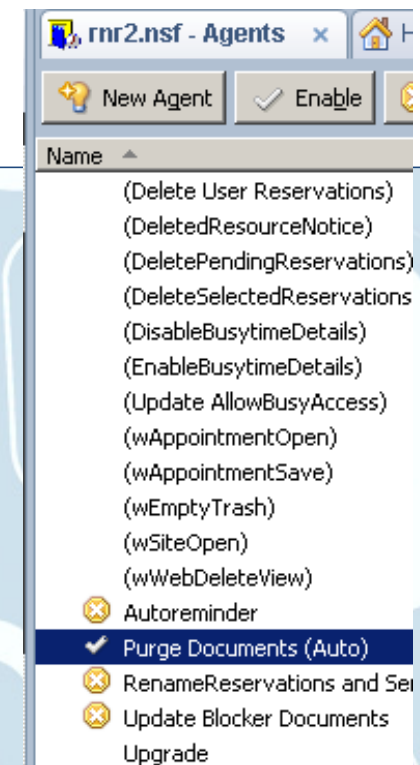
Tip #26 Export files tab as a list

Andy Pedisich's blog post reminded me

- http://www.andypedisich.com/blogs/andysblog.nsf/dx/a-tip-that-i-am-surprised-is-a-tip.htm

Want to export all file details from the view in the admin client?

Select the files using CTRL A

Select COPY

Paste into spreadsheet

Details all output in structured list

Demo.. if we have time

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Tip #27 8.5.3 Agent manager and compact

Ever have a scheduled agent fail as it was being compacted?

Will not run agent again until
- AMGR restarted
- Nightly cache reached

New line
- DEBUG_AMGR_ENABLE_RETRY_ON_COMPACT=1

Agent will now run on next scheduled attempt

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Default log keeping on LOG.NSF is sometimes too short
- I tend to recommend at least 14 days of logging

Modify the NOTES.INI on the server
- LOG=LOG.NSF, 1, 0, 14, 40000
  - "14" is the number of days LOG.NSF records data

BUT... the longer the log, the longer the restart
- After a crash

What if you want/need the log data on the server

Tip #29: Archive your log

Set up archiving on your log.nsf database
- Database Properties / Archiving

Run compact -a program document against log.nsf nightly

Now you have access to older logs without performance impact
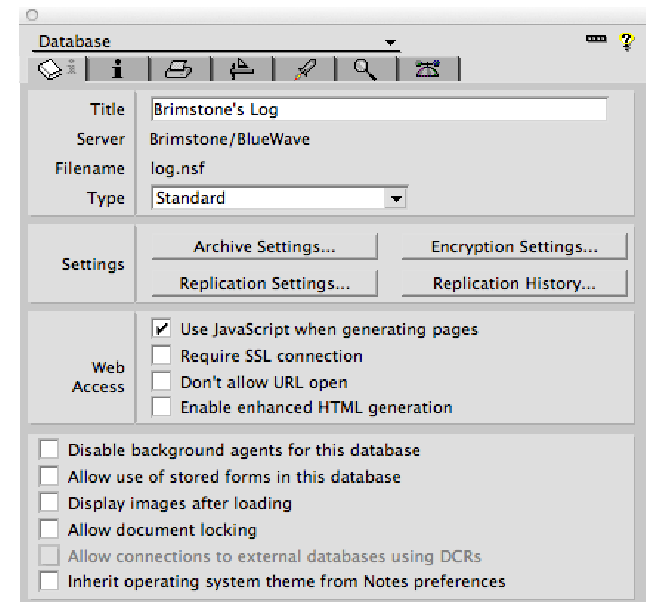
Tip #30: Unread Marks in Replica Databases

Sometimes ... just sometimes ... go out of sync ...

- If you need to sync the unread marks
- Hidden tool

Unstack the replicas on the workspace

Hold CTRL and select the two databases

Hold CTRL + SHIFT and select View → Unread Marks → Exchange Unread Marks

Tip #31: Remotely connect to your servers

Most of you cannot get to your servers with ease
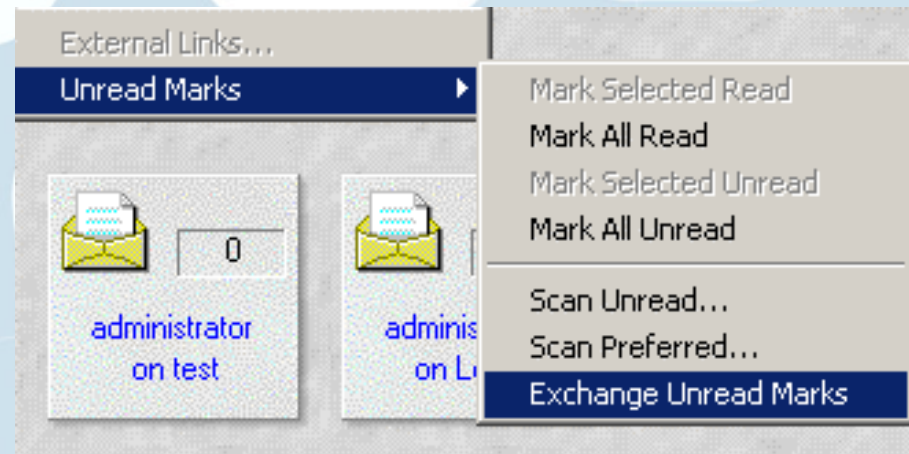
Some of you don't know where they are

We all use remote viewing software

- RDP, VNC, Netsupport etc etc etc

Add the following to your notes.ini

- RemoteProgram=path\filename %hostname%

- Mine is RemoteProgram=C:\vnc\vncviewer.exe %hostname%
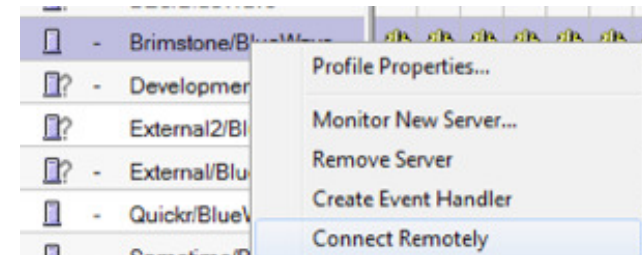
Will now try to open session

Note - have found issues if under directory structure with spaces (e.g
  program files)

Tip #32: Group auto-population

Groups can be created to auto-populate

- Based on home server

Create the group

Set the populate method

Select the servers

You can also choose additional members

- e.g. admins or default members

You can also choose excluded members

Tip #33: Extending group population

You may want to auto-populate groups based on other criteria

- Manager
- Location

Home server selection criteria can be modified

- Based on $AutoPopulate1 subform

You can create more $AutoPopulateN subforms

- For example choosing based on other field

Now you can choose different types of auto-populate options

Tip #34: SH Config

Sh Config can be very useful

Also now displays wild card results

Want to see all the debugs on your server?

- SH CONFIG *DEBUG*

Want to see all servertask entries

- SH CONFIG ServerTasks*

Tip #35: Faster Admin client startup time

A *lot* of time is spent parsing through the file listings

Web servers

- Many HTML files

This annoyed the Iris team

- Namely John Paganetti

Admin_Client_Skip_Domino=1

- Domino directory is skipped from parsing on startup

Waaaayyy faster startup

Clustering works

Failover works

Can be an issue in active/passive clustering environment

- Users waiting for $Inbox / $All view to update when using an "unused" mail file

Run an updall program

Load updall mail\ -c -t ($All)

Load updall mail\ -c -t ($Inbox)

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Tip #37: Is your cluster task too busy?

Sh stat replica.cluster*

Cluster work queue depth

- How many databases the cluster replica task is behind
  - Average
  - Max
  - Current

Cluster seconds on queue

- How long databases are pending before clustering
  - Average
  - Max
  - Current

Tip #38: Is your Update task too busy?

Default recommendation is to run n Update tasks
- n= No of processors - 1

Before you do that, is the update task busy??

Sh Stat Update.Pending*
- Update.PendingList - Number of unprocessed requests in the pending queue
- Update.DeferredList - Number of unprocessed requests in the deferred queue
- Update.FullTextList - Number of unprocessed requests in the FT queue
- Also .Max for each one – Maximum number of requests in the given queue

If they are not busy, they are consuming resources

Tip #39: A dog is not your best friend

The Domino Configuration Tuner is your best friend

DCT is a simple, effective tool for scanning your environment

Updates with new features as they are released

Should be part of your audit

http://www-10.lotus.com/ldd/dominowiki.nsf/dx/domino-configuration-tuner

Tip #40: More compact options!

8.5 and up only

Add the following to your server notes.ini

- DEBUG_ENABLE_COMPACT_8_5=1

You now have more compact options

- Load Compact -W nn
  - Compact databases NOT compacted in the last number (nn) of days
- Load Compact -w
  - Compact system databases only
- Load Compact -X nn
  - Limit the time for compacting databases to number (x) of minutes
- Load Compact -# nn
  - Start multiple (nn) compact tasks simultaneously

Server backup runs utilise Domino shared memory

If server is already peaking memory usage

- This can get nasty

- Backups at night... what else is running?

Add this to your notes.ini

- NSF_BACKUP_MEMORY_CONSTRAINED=1

Limits memory that can be used by the backup software to 20MB

You can increase this

- NSF_BACKUP_MEMORY_LIMIT=bytes

IBM recommend never going beyond 300MB

I have already seen this prevent backup related crashes

Paul will not speak during this slide…

Paul has a wish….

It involves server id files

He makes this wish every year

It involves passwords

Put passwords on your server ids please

Paul is considering threats

- For every server id without a password, he will punch a baby in the face
- For every server id without a password, he will execute a puppy
- For every server id without a password, he will make the admin team run vista
- For every server id without a password, he will make you attend a session saying "strategic" in the title

Paul will continue the presentation when everyone in the room agrees to set passwords on their server id files…

Tip #43: Standardise your db properties

Types of data compression

DAOS on/off

Types of design compression

Types of attachment compression

Set a nightly program document running compact

- Compact -n -v -ZU -Daos on

it just sets all the properties

- Data compression

- Design compression

- LZ1 compression

- DAOS

Tip #44: Improve mail server performance

Busy internal servers

Leave mail sessions open between mail servers

Prevents open/close/open/close

Add this to notes.ini

- MAILLEAVESESSIONOPEN=n

n=

- 1 = Leave all mail sessions open
- 2 = Leave all LAN based sessions open
- 3 = Leave no sessions open (disable)

Default logging on Mail servers
- include MIME conversion

You see "converted doc to mime format"
- A lot

Get rid of it

Add to notes.ini
- CONVERTER_LOG_LEVEL=10

Lowers the logging

Helps performance

Helps troubleshooting

Promotes world peace

By default update task excludes the following attachments

- .NSF
- .NTF
- .SYS
- .PAG
- .IMG
- .WAV
- .GIF
- .JPG
- .DLL
- .TAR
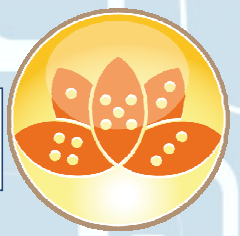- .EXE
- .ZIP
- .AU
- .MPG
- .MOV
- .MP3

Add to the list!

- FT_Index_Ignore_Attachment_Types=.xxx.yyy.zzz etc

DR plans go out of date very quickly

- Data expansion
- User expansion
- Change control

We have seen DR procedures fail

- Procedure becomes expensive paperweight

Make DR process review/documentation review part of any Change Control

Tip #48: Disable BCC Group expansion

Mails with large BCC groups entered can hurt performance

- Domino has to expand the group and alter the message
- So recipient sees their name in the BCC field

Add this to notes.ini

- DISABLE_BCC_GROUP_EXPANSION=1

Group is no longer expanded

Performance improved

- Recipient will not see their name in the field though

Tip #49: Override session authentication feature

Server session authentication is a good thing

- More secure
- More configurable

But, sometimes you cannot use it

- Using APIs that require pop-up auth
- Using dumber browsers
  - e.g. mobile browsers

Setup SSO in your server

But create Override Session Authentication rules

Web Site Rule

Basics | Comments | Administration

Basics

Description:	back to basic auth for application
Type of rule:	Override Session Authentication
Incoming URL pattern:	/servlet/application

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Add to the Traveler access group

Ensure they know the internet password

Ensure they have <u>sync'd their contacts</u>

Ensure the traveler server has manager access to the mail file

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Tip #51: Android can be picky

If you are deploying lotus traveler
- Use SSL
- No. Really. Do use SSL

Self signed certificates are fine
- Free
- Easily built in Domino
- Not for public use

Android does not like to download the Lotus Mobile Installer package from a self signed SSL site

Copy the package file to another non-SSL site
- Or use an alternative site document to download the file

Problem goes away

Simple searching hurts a domino server
- Searches a database that does not have an FTI
- CPU intensive

You can prevent simple searching now

Database properties

Database   ▼   ━ ? X

◇ | i | ⬛ | ⬛ | ✎ | ⚲ | ☎

Unread Mark Options
☐ Don't maintain unread marks
Replicate unread marks:
● Never   ○ Clustered servers only   ○ All servers

Advanced Options
☐ Optimize document table map
☐ Don't overwrite free space
☐ Maintain LastAccessed property
☐ Disable transaction logging
☐ Don't support specialized response hierarchy
✔ Use LZ1 compression for attachments
☐ Don't allow headline monitoring
✔ Allow more fields in database
✔ Support Response Thread History
☐ Don't allow simple search
✔ Allow compression of database design
✔ Allow soft deletions
    Permanently delete documents after 48   hours
Limit entries in $UpdatedBy fields 1
Limit entries in $Revisions fields 0

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Tip #53: Replication issues

Found by Victor Toal

Are you have specific replication errors

- Debugging listing a repeating hex code in the error?

You can get your replicator to ignore them

- DEBUG_REPL_TOLERATE_ERRORS=CODE

Now replica task will ignore those errors and continue to replicate

Tip #54: Read the release notes
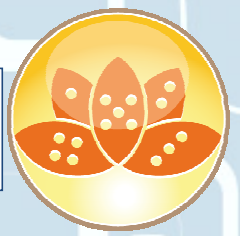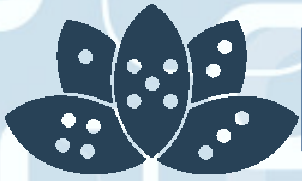
All to many times

Poor performing application servers

All databases have unread marks maintained/replicating

Is it needed?

- Does the application benefit from it?
- Do the users benefit from it?

Turn it off!

Tip #55: Save as eml file

Useful for troubleshooting

save as eml in the notes client

You get the message stored seperately

Why is this useful?

- The eml file has all the header data intact without additions
- Easier to debug, as opposed to getting a message forwarded to you

Tip #56: Group names and forwarding loops

Potential routing loop issue

- Group with internet email address
- User with same first or last name as group
  - Message gets killed in a forwarding loop error

Make it go away

- RouterExpansionAllowNonUniqueGroupMatch=1
- in server notes.ini

Tip #57: Route commands

Only recently surprised that a site was not aware of this command

Route SERVERNAME
- Immediately routes any pending messages for that server

Route *
- Immediately routes any pending messages outbound

Did you know that the Domino server records changes to the server document automatically?

Every time you make a change, a new date/time stamped file is stored in the IBM TECHNICAL SUPPORT directory on the server

DXL Files.. open them in a browser or import into another product

Nice troubleshooting tip!

serverdoc_test_2007_10_15@14_17_53.dxl
serverdoc_test_2007_10_15@14_18_34.dxl
serverdoc_test_2008_08_11@11_09_49.dxl
serverdoc_test_2008_11_30@08_01_26.dxl

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All to many times

Poor performing application servers

All databases have unread marks maintained/replicating

Is it needed?

- Does the application benefit from it?
- Do the users benefit from it?

Turn it off!
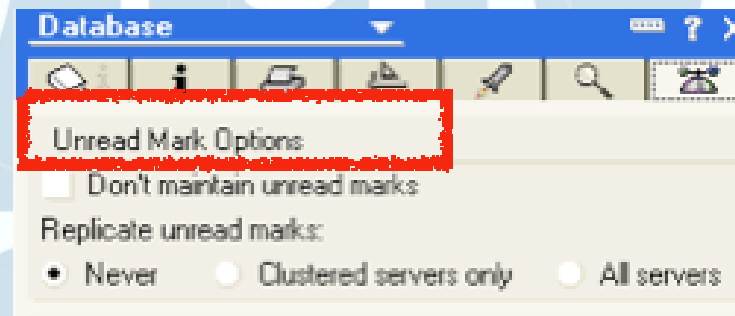
Tip #60: Separate domain / same certificates

For scaling and security

What if you need servers in a separate domain

- e.g. Traveler server
- e.g. Very large environment with regional management.
  - May be easier to have separate domains
  - Issues when users travel between them

What if you do not want to deal with cross certification

When creating a new server

- Use existing certifier id files
- Use existing server id files
  - Have them registered using the O or OU that you already have in place

Now you just have to deal with domain security

- Certificates will match

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Thank you…

Paul Mooney

pmooney@pmooney.net

www.twitter.com/pmooney.net

Thank you...

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bleedyellow.com   (geekchat)

paul_mooney@hotmail.com   (geekmsn)

pmooney.net (skype)   (geekcall)

www.bluewave.ie   (worksite)

www.bluewavegroup.eu   (workmail)

paul.mooney@besystems.eu   (moreworkmail)

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