

UK Lotus User Group 2009

CSI Domino - **C**ommon **S**ense Infrastructures for Lotus Domino Servers

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Worldmark
Global Solutions...Locally



The aim of this session is to:

To help **you** gain a better understanding of the infrastructure surrounding and servicing your Domino Server, by improving **your** overall awareness of the hardware, software, network & environmental components that make up your server infrastructure.

By increasing this awareness, the following groups of people will benefit:-

Your End User Community

Your Boss

Your Developers

You -- the Notes & Domino Administrator

- **Introduction**
- **Forget Domino Server ... for the moment**
- **Fully Functional Firewalls**
- **Malware Management**
- **Backups, Backups, Backups**
- **Notes & Domino Administration Best Practice Tips**
- **How to make your Admin life easier**
- **CSI Domino**
- **Q&A**



Forget Domino Server ... for the moment

Get to know your infrastructure first!

- Physical Environment
- Domino Server Hardware Platform
- Domino Server Host Operating System
- Network Infrastructure

Once you know your infrastructure, know your Domino Server(s)

- Primary Role
- Configuration

Physical Environment

- Is your environment secure?
- Do you have UPS/Surge protection?
- Is the environment dust & moisture free?
- Is your server hardware cool?



Domino Server Hardware Platform

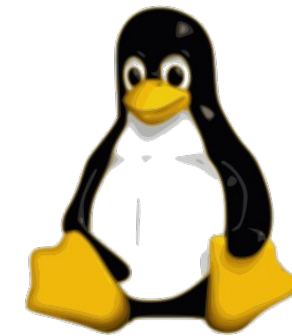
- Does your hardware meet the minimum hardware requirements?
- Can you justify exceeding the minimum hardware requirements?
- No need for “Rip”, but how about “Replace”?
- Is Virtualisation something to consider?

Full list of hardware & software requirements available online at:-

<http://www-01.ibm.com/support/docview.wss?rs=463&uid=swg27013072>

Domino Server Host Operating System

No matter what host operating system you choose:



Ensure that you install the version which **supports** the release of Domino Server you are running, or are planning to install/upgrade to

And make sure you apply the necessary OS patches too ..!

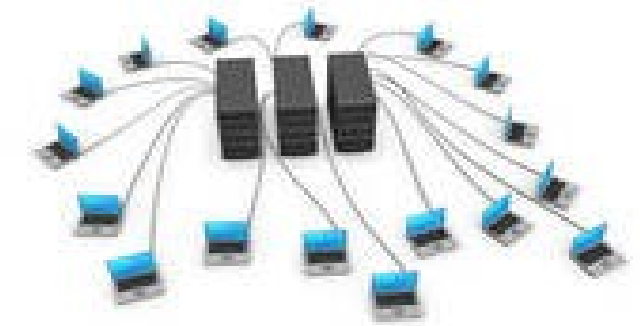
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Network Infrastructure

How does your Domino Server connect to your LAN?

- Physical connectivity
- Logical connectivity
- Domino Cluster Replication Traffic



How do you secure network access to your Domino Server?

- Perimeter Protection
- DMZ



Securing Network Access to your Domino Server

Protecting external access to your Domino Server with a Firewall

- Perimeter Protection
- DMZ
- Do you have the correct rule sets/policies enabled?
- Do you have the correct end points defined?
- Is your Domino Server configured correctly to receive traffic on the default or defined service ports?
- Is the software firewall within your server's operating system enabled? Should it be?
- Do you manage traffic flow, or prioritise traffic within your LAN?



Virus + Trojan + Spam + Phishing + Other Nasty Stuff = MALWARE!!

- Where does Malware get stopped within the signal chain?
- Are there any gaps in your protection schemes?
- What policies do you use for trapping Malware infected messages?
- Who decides what does and what doesn't get released from quarantine?
- How often are these policies reviewed?

If you are running Anti Malware Protection products **directly** on your Domino servers or SMTP gateways, ensure that they are configured to allow traffic to be served on the required TCP/IP ports, and that they do not conflict with core services supplied from the server.

Backups – The Facts:

“The more important the data is that is stored on the server, the greater is the need for backing up this data”

“Automated backup and scheduling should be considered, as manual backups can be affected by human error”

“Backups will fail for a wide variety of reasons. A verification or monitoring strategy is an important part of a successful backup plan”

“A backup is **only** as useful as its associated restore strategy”



Ensuring “Hassle” free backups, and easy data recovery

- Ensure that all critical data is stored on a server. Better yet, make sure your critical data is stored across multiple servers. The more copies, or replicas, you have, the better the chance of recovery
- Server to Server Domino Replication is **NOT** a substitute for backups!
- Ensure that your data is backed up to tape, disk, or some form of media that you can refer to at a future date
- Automate & schedule your backups. Only run manual backups if you really have to
- Check your logs to ensure that your backups are running the way **YOU** want them to. If not, adjust the backup job settings
- I know it's a pain, but run a verify against your backups, if your software allows you to

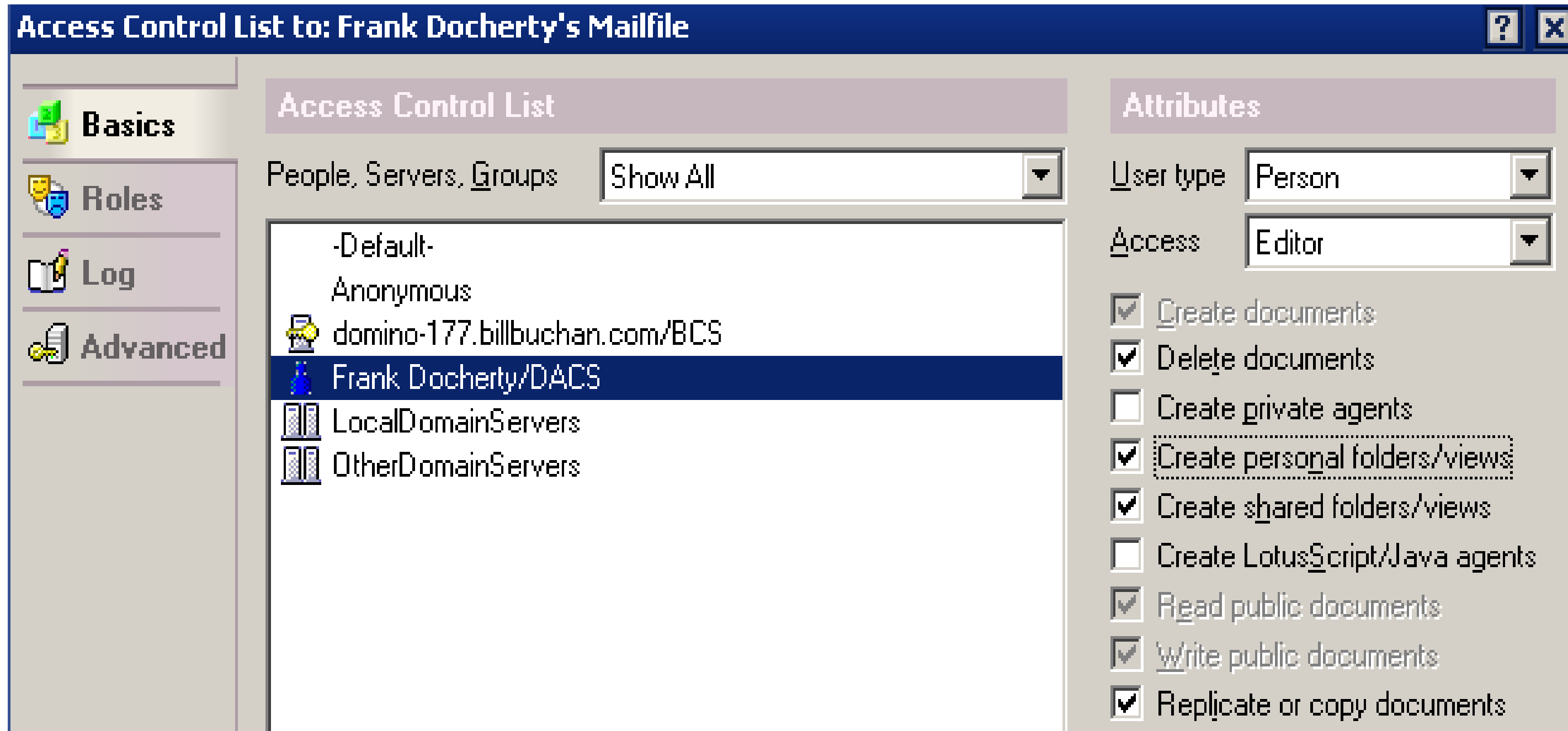
Ensuring “Hassle” free backups, and easy data recovery (Continued)

- Stick to the cleaning & maintenance cycles, as prescribed by your Backup hardware vendor. Your backup hardware will last longer
- Test your backups, at least once a month
- **Seriously** – test your backups on a regular basis, by performing a restore of a critical mail or application file
- When testing your backups, ensure that you test restoring to a Domino Server **and** to a local hard disk. Then verify your restores, by testing them within the Lotus Notes client
- Document the fact that your backups **AND** test restores are working as they should be, i.e., the way you have configured them to work
- Store your backups away from your Domino Servers, preferably in a secured, off-site location

My top 5 Notes & Domino Admin Best Practice tips:



Reduce mail file owner access from Manager to Editor



Access Control List to: Frank Docherty's Mailfile

Access Control List

People, Servers, Groups

- Default-
- Anonymous
- domino-177.billbuchan.com/BCS
- Frank Docherty/DACS**
- LocalDomainServers
- OtherDomainServers

Attributes

User type

Access

- Create documents
- Delete documents
- Create private agents
- Create personal folders/views
- Create shared folders/views
- Create LotusScript/Java agents
- Read public documents
- Write public documents
- Replicate or copy documents

This is a very easy way to prevent those “**oh sh*t**” moments that users sometime cause us!

Remote Server Console **WITHOUT** loading the Domino Admin client

From within your Lotus Notes client, click on File, Preferences, Toolbar Preferences

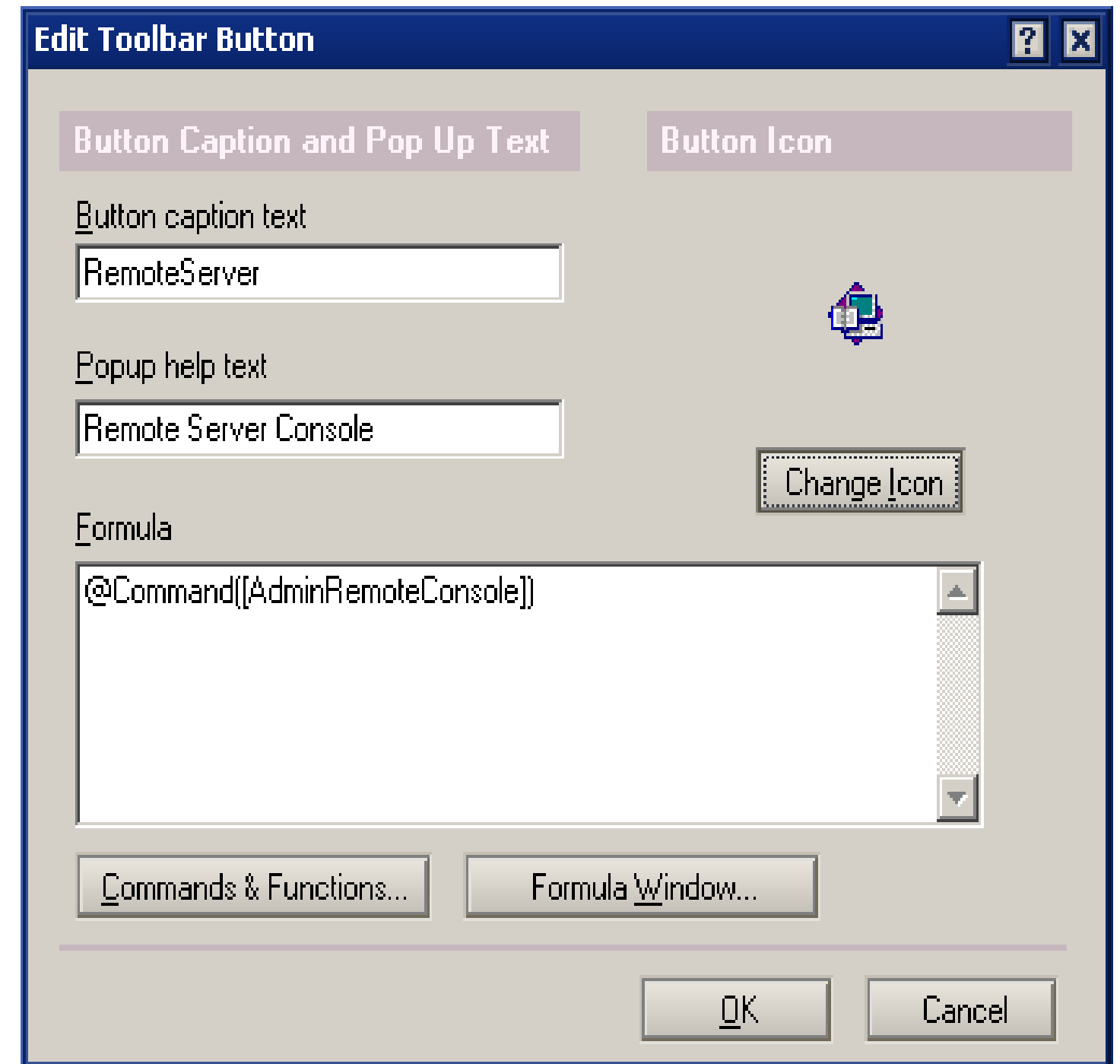
Then click Customise, New Button

Label the button whatever you want, and change the icon to something appropriate

Place @Command([AdminRemoteConsole]) in the Formula Window

Click OK Twice

Job done!

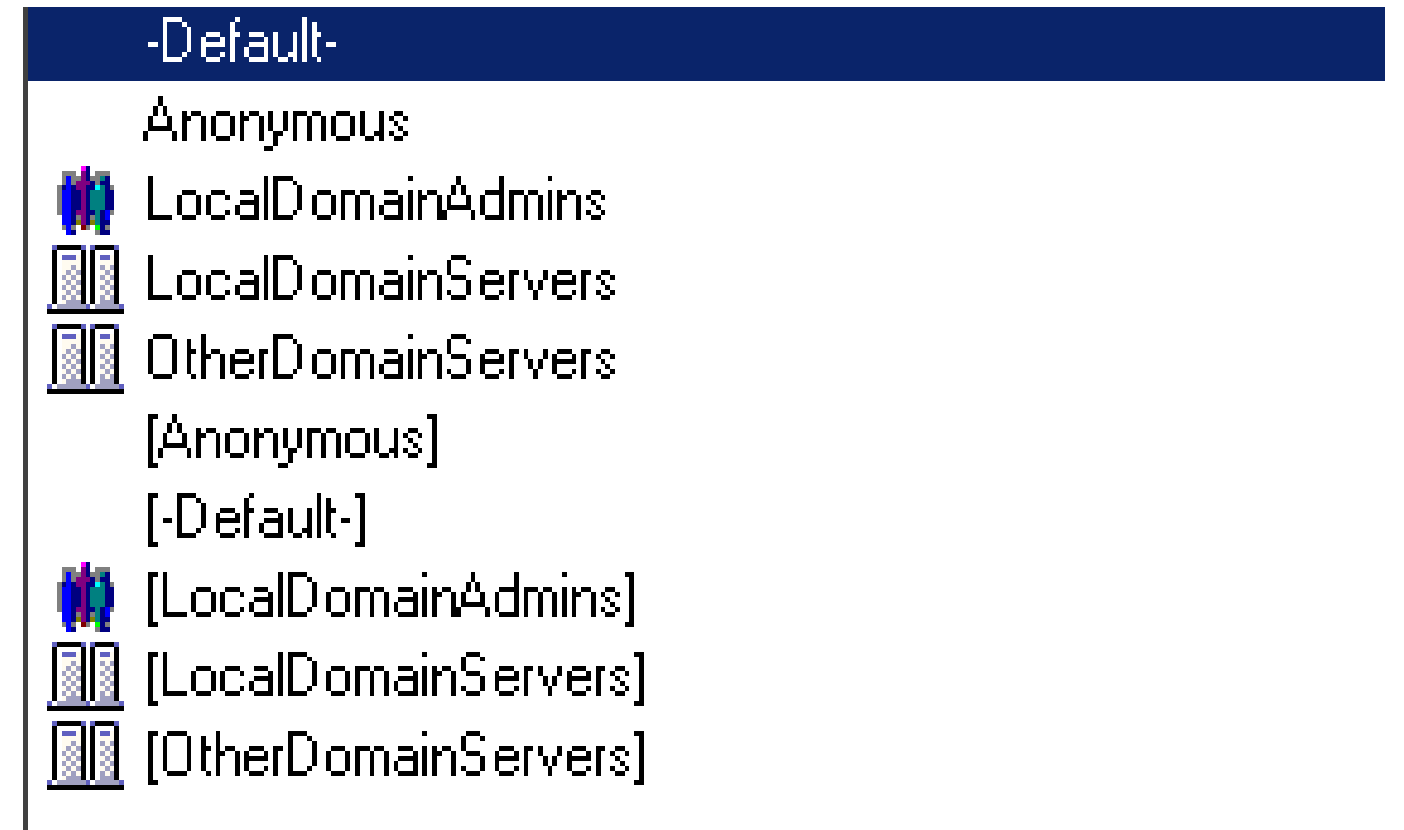


Adding default ACL entries to Applications created from templates

To automatically add a default ACL entry to an Application, simply enclose user or group names inside square brackets [] within the ACL of the Application template.

Once you create the Application from the template, the default ACLs will be populated from the user name & groups specified within the square brackets.

Very handy when you want to roll out a new mail file template, and update, or standardise, default ACLs at the same time.



Preserving Domino Directory Customisations

If you have a customised Domino Directory within your infrastructure, it's probably best that you don't lose those customisations whenever you upgrade or re-install Lotus Domino Server.

To prevent this from happening, simply add the following line to the NOTES.INI on all of your Domino Servers:

Server_Upgrade_No_Directory_ReDesign=1

After adding this, any Directory customisations you have will always remain in place, when you upgrade or re-install.

Reduce Mail File Sizes by approx 10Mb, without enabling DAOS

To reduce the overall size of mail files by approximately 10Mb:

Enable the “Database file is a Master Template” and “Single copy template” options within the Database properties (Design Tab) of the mail file template

Load the design task, to update the mail file(s) referenced from this template

Run a compact of the mail file(s)

Temporarily enjoy the disk space savings you make!



If you are serious about making your life as a Notes & Domino Administrator much easier, then:-

- ✓ Take stock of your infrastructure and document it thoroughly
- ✓ Identify any weak spots, bottlenecks and other problem areas
- ✓ Eliminate these issues as soon as you possibly can
- ✓ Review and update your infrastructure documentation on a regular basis
- ✓ Look at the bigger picture, and understand what goes on within your Server & Network infrastructure
- ✓ Maintain an effective backup routine
- ✓ Verify & test that your backups **are** effective
- ✓ Ensure your Firewalls & Anti Malware solutions work as they should
- ✓ **CSI = Common Sense Infrastructure**

By applying these simple **C**ommon **S**ense measures to the **I**nfrastructure that your **D**omino Server(s) run within, your efforts will benefit the following groups of people:-

Your End User Community

Your Boss

Your Developers

You -- the Notes & Domino Administrator



Thank you for attending CSI Domino

Please remember to complete your session evaluation form.

Any questions?

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