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A closer look at the Lotus Notes/Domino 6.5 Administration Client

Andrew Pollack

President, Northern Collaborative Technologies

Agenda

- Who am I, Why are we here, and other big questions
- Set it up right for it all to work
  - the administration process
  - the certificate authority
  - administration access control
  - the Server Controller
- Performing Everyday Tasks Faster & Better
  - user management
  - database management
  - server management

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Language note -

- **I realize that for some of you, English is not your primary language, and for others, my accent is not the same as yours.**
- **If you are having trouble understanding me during this talk, please raise your hand and I will try to slow down and speak more clearly.**

- **Thank you.**

About this Presentation

- **A "Best Practices" session is different**
  - This is not a list of product features
  - This is a practical 'field guide' to using the tools
- **Designed for re-use**
  - These are not empty bullet points
  - The details you need are in this text

Big Questions: Who am I? Why are we here?

- Andrew Pollack
  - President, Northern Collaborative Technologies
  - 2003 IBM Lotus Beacon Award Winner
  - Administrator & Developer since version 2.0
  - Member of the Penumbra Group
  - Firefighter - Engine 1 – Cumberland, Maine!
    - In firefighting, just like Server Administration – its all in the planning
- Why We're Here
  - To learn and grow as human beings
  - The new administrative tools rock
  - The didn't always rock so much
  - Its finally time to adopt all this new stuff

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Part 1. Set It Up Right

The Administration Process

The Certificate Authority

Administration Access Control

The Server Controller

The Administration Process

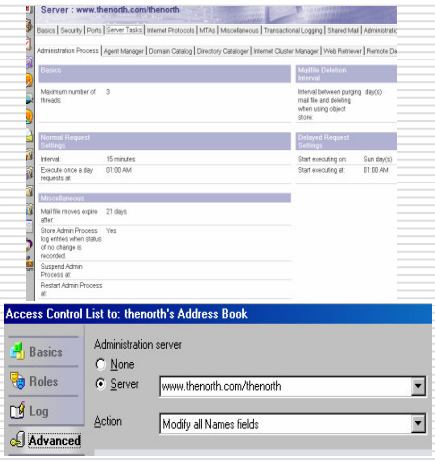
- **Why you need it**
  - It carries out the instructions you give the Administration Client
  - It does the work that takes a long time if you do it yourself
    - Create replicas, move mail files
  - It does a more complete job – most of the time – than you can
    - Renaming or removing users
  - Its also a required part of the Certificate Authority

Administration Process Configuration Checklist

- **The Administration Database**
  - Named ADMIN4.NSF
  - Updated with the Current Version Template
  - Replica on Each Server
  - Verify Replication
- **The Administration Task**
  - In the Notes.INI
    - Tasks = …, adminp, …

Administration Process Configuration Checklist

- **Review Sever Document in the Domino Directory**
  - Server Tasks Tab, Administration Process Tab
- **Determine The Administration Server**
  - The Administration Server is the server listed as the administration server of the Domino Directory
  - Set this in the advanced tab of the Access Control List dialog box for the Domino Directory



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The Certificate Authority

- **Why you need it**
  - Required if you plan to use the Web Administrator client to register Notes users
  - Administrators can manage both Notes and Internet certifiers through the CA process
  - Does not require administrator access to the certifier ID and ID password in order to register users and servers.
    - Allows administrators to delegate these tasks without potentially compromising the certifier.
  - Issues Internet certificates that are compliant with security industry standards

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Setting Up the Certificate Authority

- **First, make sure you've got the Administrative Process set up and running correctly**
- **Migrate at least one certifier to use with the Certificate Authority**
  - From the Domino Administrator, click Configuration
  - On the Tools pane, choose Certification - Migrate Certifier
    - Make sure to specify both the people who can use the certifier, and the server!
- **Start the Certificate Authority Task**
  - load ca
  - Notes.INI -- Tasks = …, CA, …
- **The Certificate Authority adds newly-created certifiers when it refreshes, which takes place every 12 hours**

You Don't Really Have To Wait

- **At the server console, simply type:**
  - tell ADMINP process all
  - tell ca refresh
- **To see if the new certifier has been added:**
  - tell ca stat

Domino Server statistics & Events

"There are Lies, Damn Lies, and Statistics"

Winston Churchill

ADMIN&DEVELOPER 2004

Setting up Domino's Statistics & Events

ADMIN&DEVELOPER 2004

- **The Event Task & Database**
  - EVENTS4.NSF – Yes, even in version 6
  - Notes.INI – Tasks = …, event, ….
- **The Statistics Task & Database**
  - STATREP.NSF
  - Notes.INI – Tasks = …, stats, …
- **The ISPY Task**
  - Tests and gathers statistics on mail routes
  - Load runjava ispy
  - Tell runjava quit
  - Notes.INI – Tasks = …, runjava ispy, …

Not All Administrators are Created Equal

At least not any more, if you set up your environment right

Controlling Administrator Access via the Server Document

- **Full Access Administrators**
  - Manager access to all databases
  - Runs with All roles in all databases
  - Access to all documents
    - Bypasses Reader Fields

Great tool – but be careful, these guys own your server!

Once Enabled via the menu in the admin client, Full Administrator Access is enabled in the Client, Designer, and Administrator!

- **Practices for Managing Full Access Administrators**
  - Disable via NOTES.INI
    - SECURE_DISABLE_FULLADMIN = 1
  - Create separate Admin Full Access ID's and use only the web admin tool
  - Create an Event Handler in EVENTS4.NSF to notify key people when activated

Control Admin Access in the Server Document

- **Administrators**
  - Everything but override ACL's and Reader Names as a Full Access Administrator
    - Manager access to the Web Administrator database
    - Create, update, and delete folder and database links
    - Create, update, and delete directory link ACLs
    - Compact and delete databases
    - Create, update, and delete full text indexes
    - Create databases, replicas, and Master Templates
    - Get and set certain database options
      - in/out of service, database quotas
    - Use message tracking and track subjects
    - Issue any remote console command
      - Including shell commands to the operating system

Can delete any database on the server without being in the ACL!

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Control Admin Access in the Server Document

- **Database Administrators**
  - Create, update, and delete Folder and Database links
  - Create, update, and delete directory link ACLs
  - Compact and delete databases
  - Create, update, and delete full text indexes
  - Create databases, replicas, and Master Templates
  - Get and set quotas, database in/out of service flags
- **Database Administrators DON'T get:**
  - Automatic manager access to databases
  - Any rights to use the Web Administration Database
    - They cannot perform their tasks via browser

Can delete any database on the server without being in the ACL!

"Administrator"
vs.
"Database Administrator"

It sounds like a fine distinction at first – but it is critical.

This allows control over the files & data but not the configuration and most of the performance settings on the server.

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Control Admin Access in the Server Document

- **Full Remote Console Administrators**
  - Can use the remote console without restriction
- **View-Only Administrators – Show, but not Tell**
  - Can execute remote console commands that display information
    - Show Tasks, Show Server
  - Cannot execute remote console commands that take action
    - Load, Tell, Replicate, Route, …

Control Admin Access in the Server Document

- **System Administrators**
  - Can issue Remote Server Console Commands to the operating system
  - Use the "$" symbol before the command
  - Use the "#" symbol before commands to the server controller
- **Restricted System Administrators**
  - Same as above, but limited by the field below
- **Restricted system commands**
  - Lists the specific Server Controller and Operating System Commands available to Restricted System Administrators

WARNING:

The "$" and "#" prefixes only work if you have started the server with the server controller.

BIGGER WARNING:

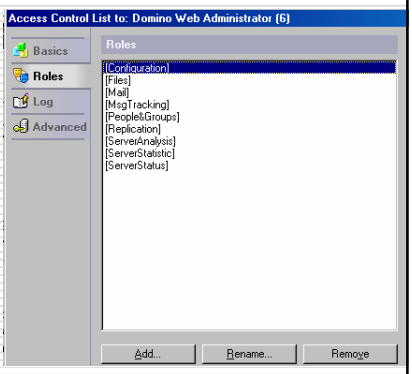
In many environments, you can get around this with the "Load" command, to load a system shell with a command parameter. For Example:

Load cmd /c shutdown /l /y /c

Will shut down most Win32 Servers (add /r to reboot!)

Control Admin Access in the Server Document

- **You can manually manage the WEBADMIN.NSF database directly with it's ACL & Roles**
- **This is a "Best Practices" Session, so I can say:**
  - DO NOT DO THIS
  - IT IS NOT A BEST PRACTICE



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The Server controller

The best kept secret in the world of Administration – Really!

What is the Server Controller?

- **A Java Application that loads 'in front' of the Domino Server**
- **Enables the Java Console (JCONSOLE)**
  - WAY better console access
- **Enables the Java Console in the Web Administration Client**
  - Super Cool
- **Allows Remote Crash Recovery**

Starting the Server with the Server Controller

- **Just add "-jc" to the command line to start the server**
  - Example: nserver –jc
  - Works in Unix / Linux environments as well
- **For Windows Servers**
  - Use the "SC" tool from the resource kit:
    - Sc config "Lotus Domino Server (LotusDominoData)" binPath= "=c:\lotus\domino\notes.ini -jc"
  - Edit the Imagepath in the registry
    - HKEY_LOCAL_MACHINE / System / CurrentControlSet / Services / LotusDominoServer(notesdata)

The Domino Console

The other half of the best kept secret in the world of Administration – Really!

ADMIN 2004 DEVELOPER

What is the Domino Console?

- **A slick remote console – Better than sitting at the server**
  - Not as cold as the server room!
- **The same remote console available in the Web Administration Database**
- **Does not tied up, or get tied up, by your Notes Client and Designer threads**
- **Works even after a server crash to allow recovery & restart**
- **Schedule console commands, or repeat commands at intervals**
- **Store your commonly issue command strings for reuse!**

Starting & Running the Domino Console

- **Just run "jconsole" from the Notes or Domino program directory**
  - or anyplace if that directory is in you path
- **Run on any server or client operating system except Macintosh**
  - Provided either the Server or the Admin client is installed

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Demo Time!

Using the Domino Console to manage a remote server!

Part 2. Performing Everyday Tasks Faster & Better

This part of the talk is largely live demonstration – Screenshots are included for those playing the home game

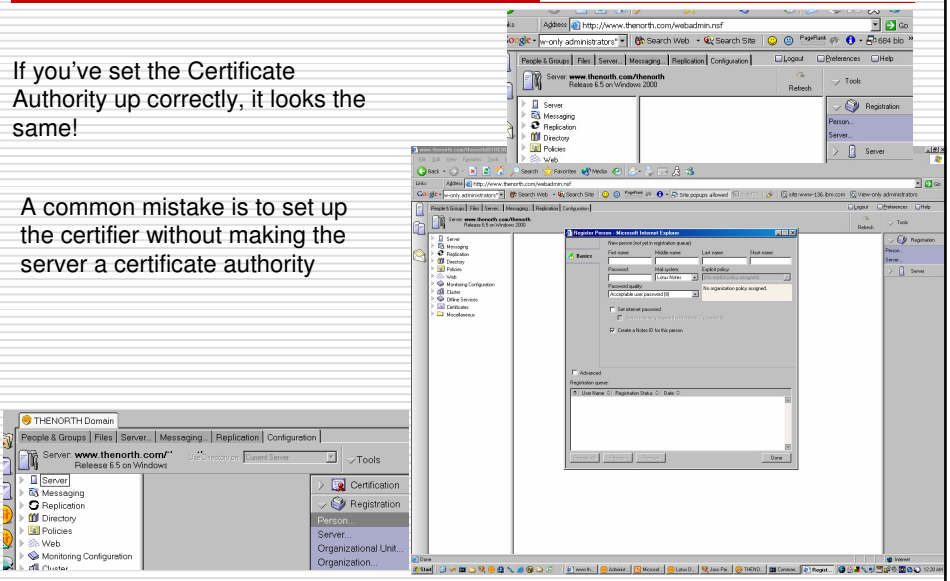
User Management

It's all about the people

Register a new user

If you've set the Certificate Authority up correctly, it looks the same!

A common mistake is to set up the certifier without making the server a certificate authority



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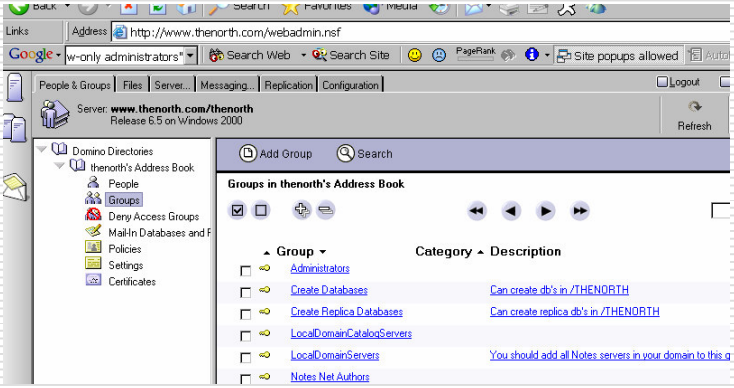
Group Management

- **Just as easy as opening the address book from the Notes Client like we've been doing for years**



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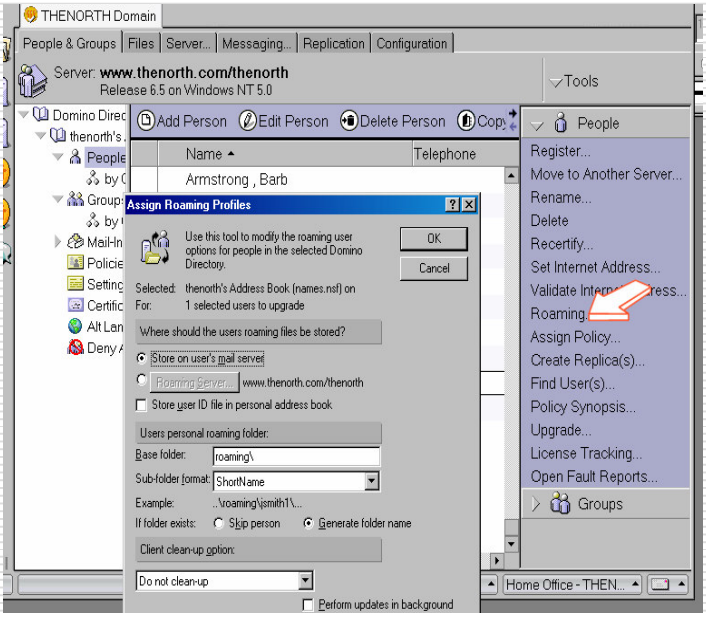
Set User Roaming Status



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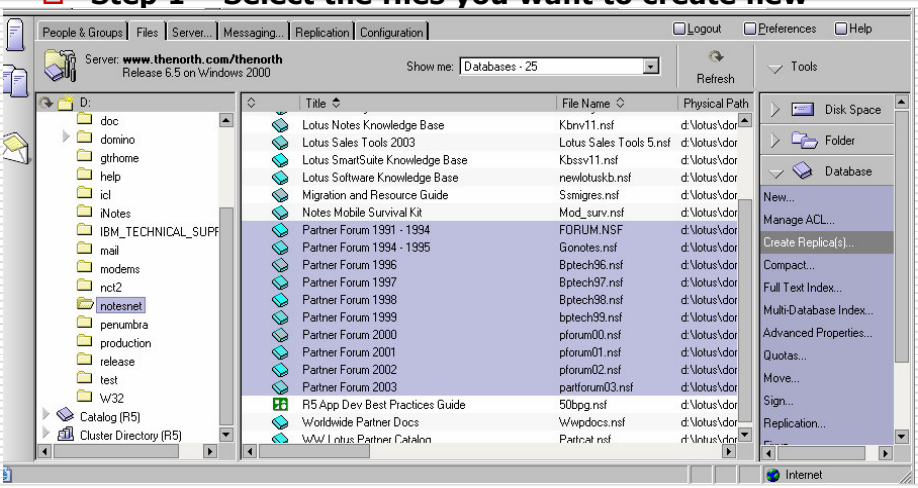
Database Management

Ever waited while your Notes client made a replica from one server to another?

Create New Replicas

Yes, this is the web administration database!

- **Step 1 – Select the files you want to create new**



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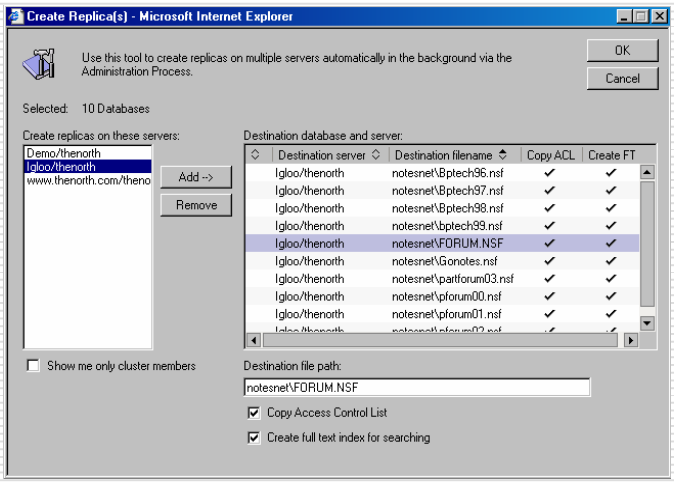
Create New Replicas

- **Step 2 – Select one or more target servers**



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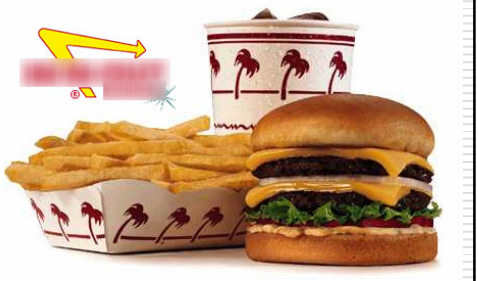
Create New Replicas

- **Step 3 – Go to Lunch!**
- **The Administration Process Takes over**
- **A replica stub is placed on the target server**
- **Replication fill in the data**
  - In a cluster, its even faster



Even if the target server does not directly replicate with the source, the target server replicates the database as part of its normal replication schedule

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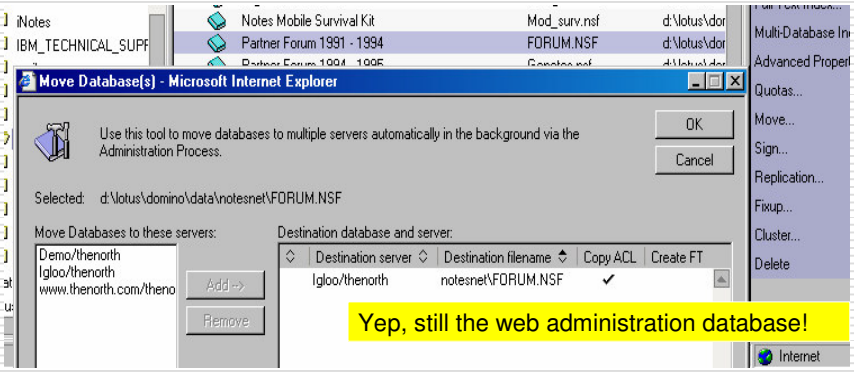
Move A Database

- **Let the Administration Process Handle it while you play Doom 3**



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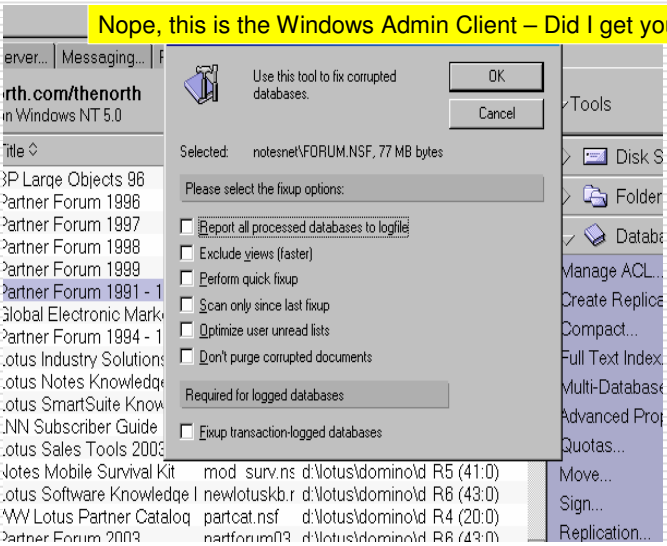
Fix, Compact, or Full Text Index

Nope, this is the Windows Admin Client – Did I get you?



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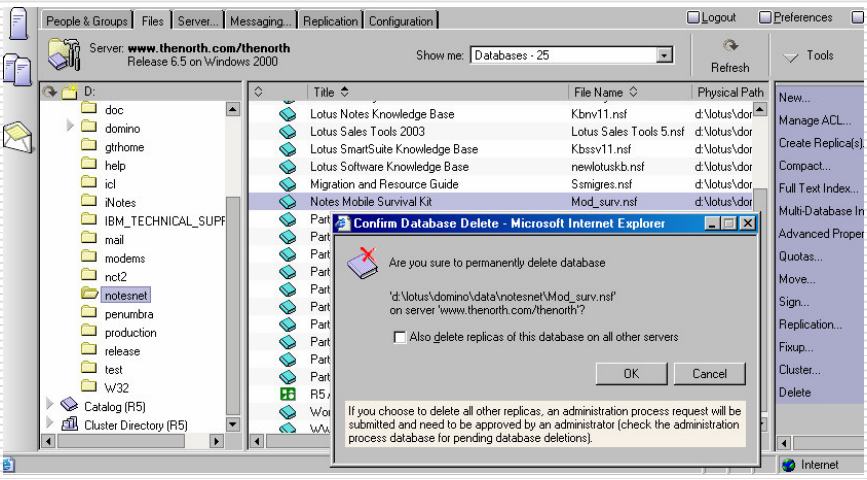
Delete a Database – Or all replicas, everywhere!



Finally, back to the Web Client – Its enough to make you think a web browser might some day be a decent place to work

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Server Management

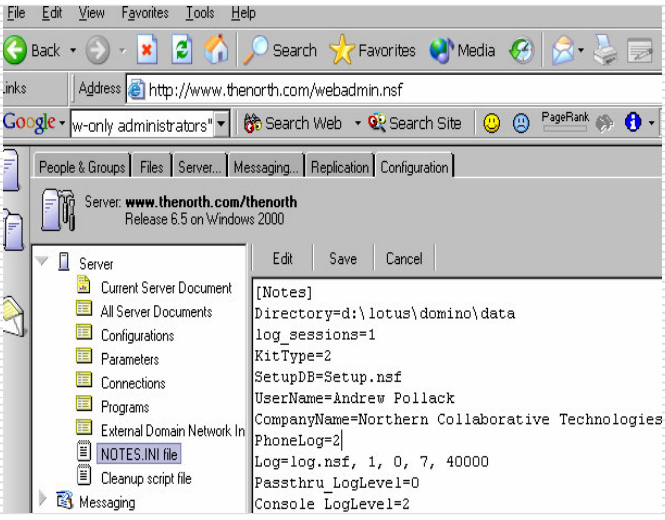
Things you've been going to the cold, noisy server room to do that you could be doing from the Administration client

ADMIN 2004 DEVELOPER

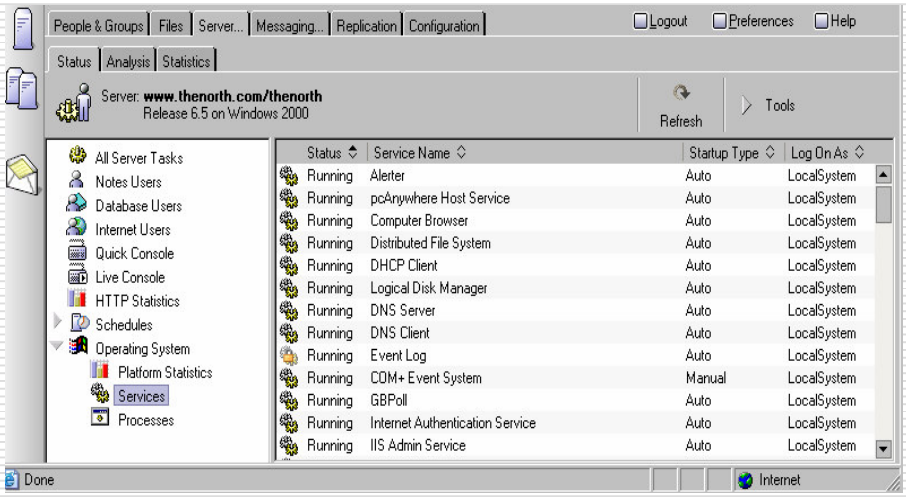
Changing the NOTES.INI file

ADMIN 2004 DEVELOPER

- **Who would have thought the easiest way to change the NOTES.INI would be through a Web Browser?**



Viewing Windows Services & Logs



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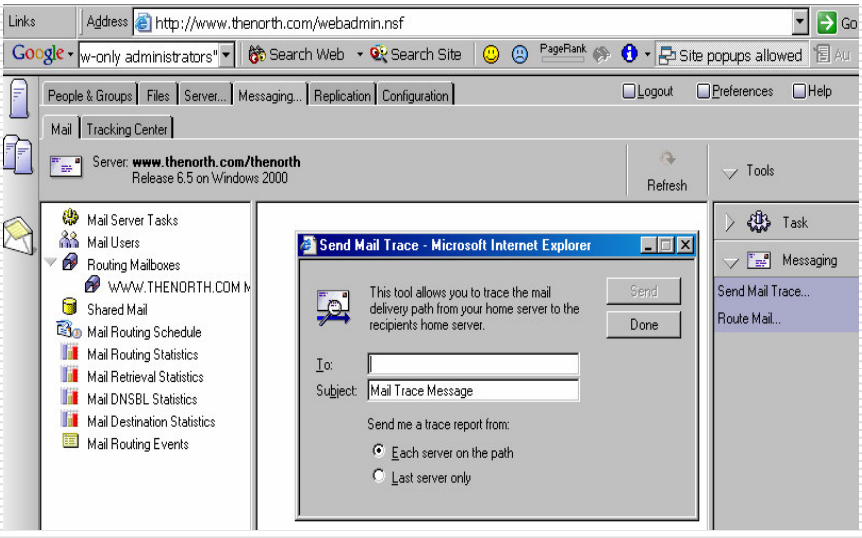
Mail Trace from the Admin Console



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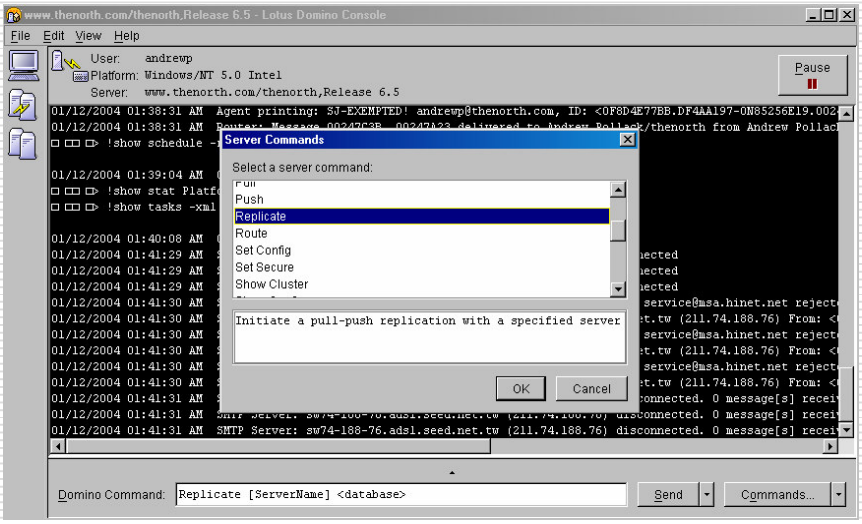
Forcing Replication



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Thank you for playing!

- **We're all administrators here, please ask your questions so others can here the answers**
- **You may also contact me directly if you like**
- **Please fill out your evaluations**
- **The latest copy of this presentation will also be available at my website: http://www.thenorth.com**
- **For those playing the home game, direct questions & comments to:**

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