What's ID Vault & Why you can't live without it

Gabriella Davis
The Turtle Partnership
gabriella@turtlepartnership.com



Agenda

- ID Vault What It Is
- Creating an ID Vault
- Managing ID Vault
- Resetting Passwords
- Setting up a security policy for ID Vault
- Auto processing requests
- A bit more about how it works and limitations



First The Why

- ID Vault removes the pain from
 - Password Recovery
 - by allowing password resets without access to the id itself
 - Lost ids
 - by re-distributing the vault copy
 - Users with multiple id copies (we know you're out there)
 - by keeping multiple copies in sync
 - User renames
 - Re-issuing the keys
 - by doing both without needing any user involvement



So...

- It makes you happy because you can keep your environment secure and not wait on users to complete your work
- It makes users happy because they have one sync'd id and can easily get a password reset
- It makes audit happy because you no longer have that backup directory of id files "just in case"



How Does It Work - Downloading IDs

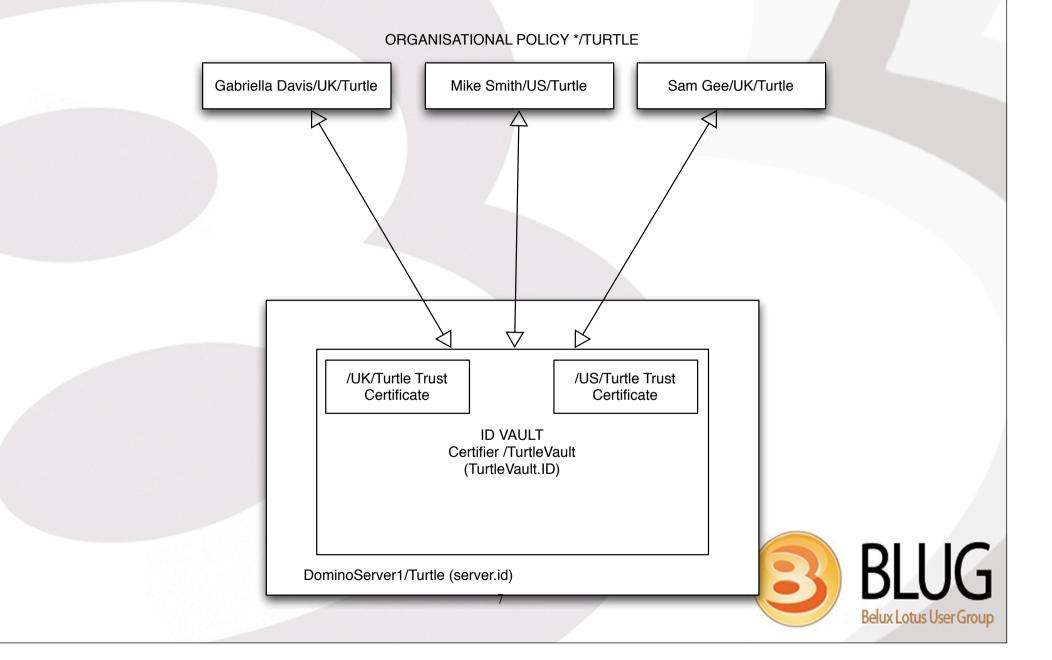
- If no ID exists on the workstation the notes.ini fields keyfilename and keyfilename_owner are used to identify which ID should be downloaded
- The ID can only be downloaded if the user knows the password for the ID stored in the Vault
 - So you can't hack a notes.ini file to steal someone's ID unless you already know their password

How Does It Work - Updating IDs

- When a user connects to their home server the client asks for a list of servers containing a vault that matches their security policy
 - the server chosen from the list is random and is then cached for a few sessions so think about where you are placing your ID Vaults
- If a change is made in the vault (such as a password reset) that is downloaded to the client as they login
- If a change is made on the client version of the id then it is uploaded to the randomised ID Vault server



How Secure Is It



Let's jump right in & create an ID Vault

- Verify you have the access required to create the Vault on the server(s) you are using
- Create the Vault
- Check that everything created correctly



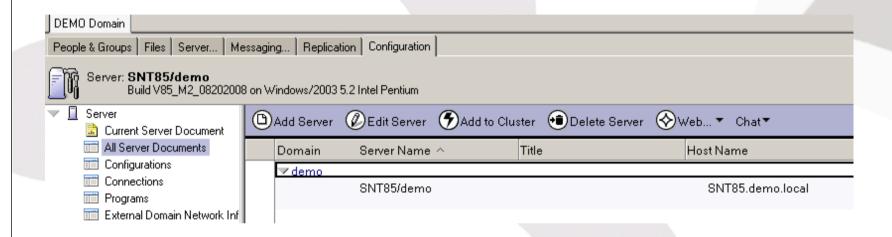
Editor Access to the Domino Directory



- Go to 'People and Groups" tab
- File- Application Access Control
- Ensure you or your group membership has Editor access (no specific roles)



What rights do you need to create an ID Vault?



- Rights to create databases and templates
 - Click on Configuration Tab
 - Select and Open Server Document



Rights to create databases & templates

Click on Server document 'Security Tab'

	Server: SNT85/demo SNT85.demo.local					
E	Basics Security Ports	Server Tasks	Internet Protocols			
	Basics					
	Server name:	SNT85/demo				
	Server title:					
	Domain name:	demo				
	Fully qualified Internet host name:	SNT85.demo.lo	cal			



Rights to create databases & templates

- Ensure your name or group is entered in the fields for
 - Create new databases and templates

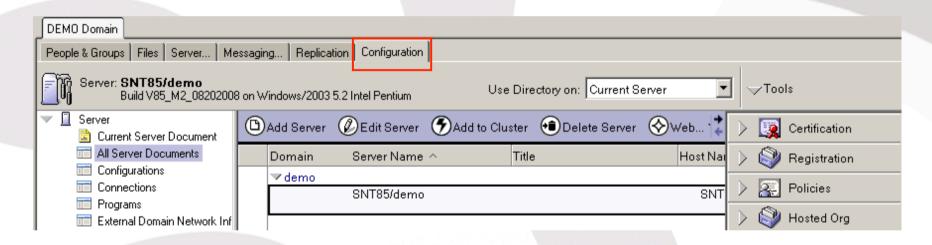
Server Access	Who can -	
Access server:	All users can access this server	
Not access server:		
Create databases & templates:	LocalDomainAdmins	
Create new replicas:		
Create master templates:		
Allowed to use monitors:	*	
Not allowed to use monitors:		
Trusted servers:		



You may have to wait...

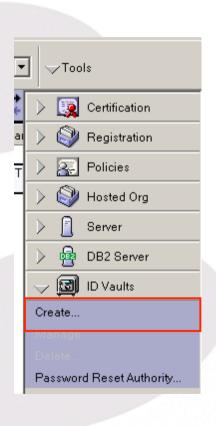
- If you modified the server document then it will cache
 - give it up to 30 mins or exit and start the server
 - don't do 'server restart'





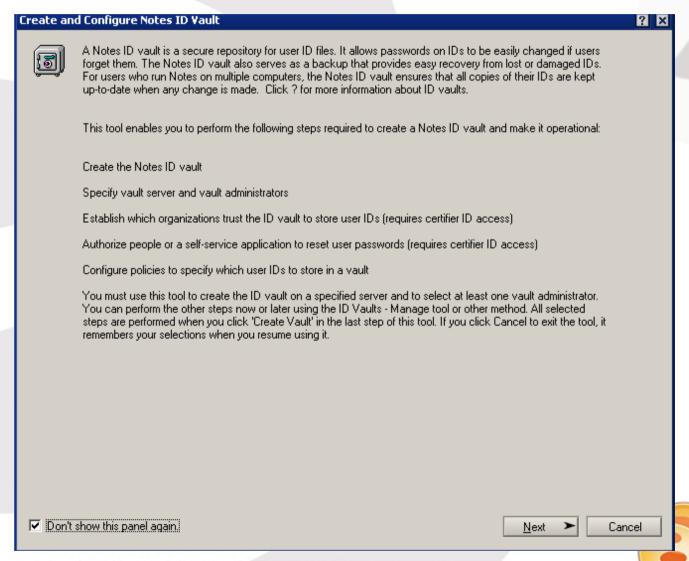
- Launch Domino Administrator
- Click the Configuration Tab



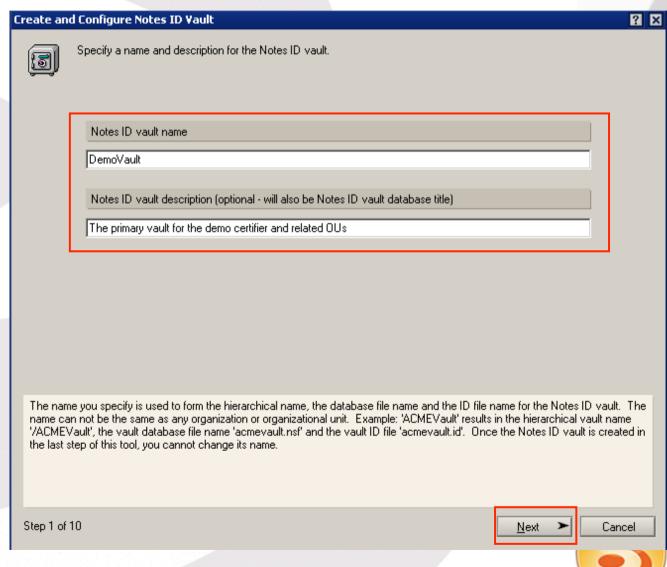


- Select from right hand 'Tools' menu
 - or top "Configuration" menu
- Tools ID Vaults Create





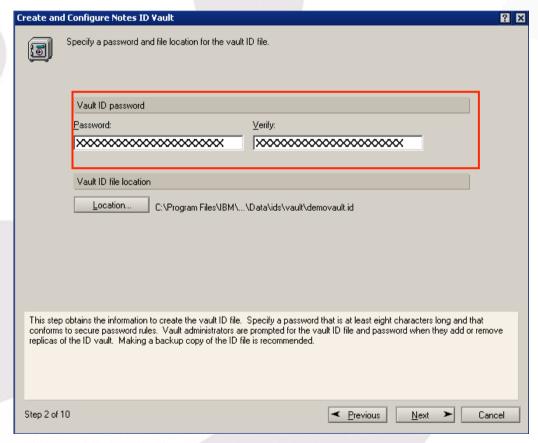
Add a name & description for this vault instance





Setting a password for the ID Vault

- An ID vault id is created automatically
 - the password you set must be used when Administrators attempt to create or delete replicas of the ID Vault itself





 Backup the vault id once it's created and any time you change its password



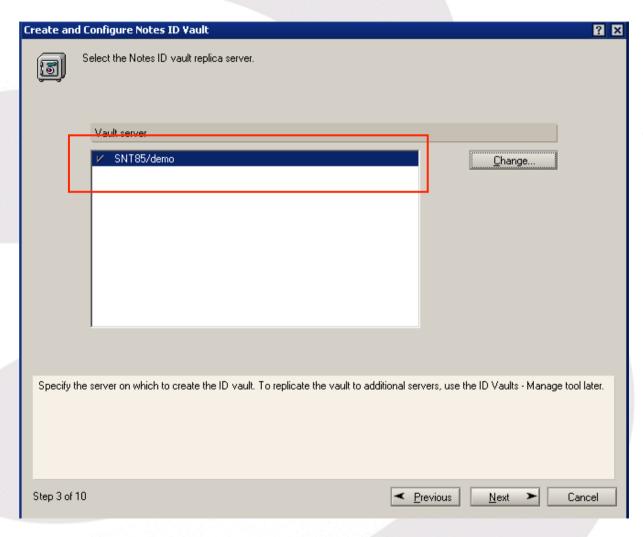
 The Vault ID and Server ID for the ID Vault server are the 2 keys to keeping your vault and the ids in it secure



 Keep both your server and server id secure by password protecting the server id itself.



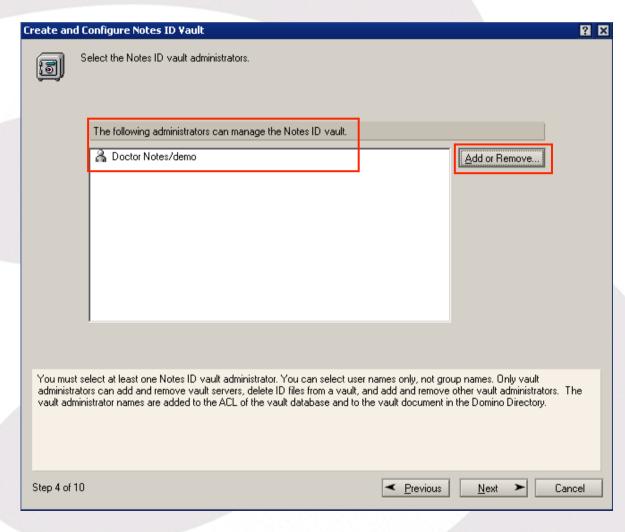
Choosing the ID Vault Replica Server



 You can specify only one server on initial creation but add others later ²²



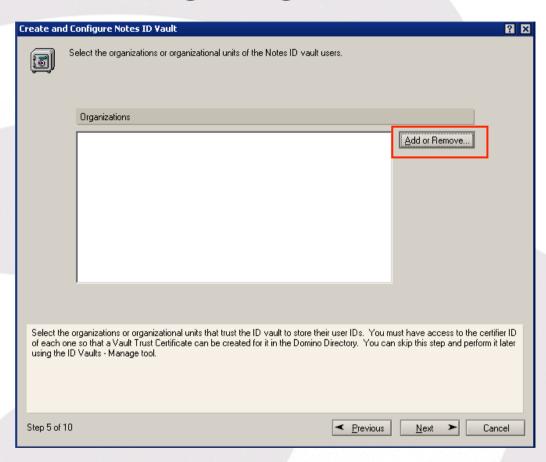
Setting up ID Vault Administrators



- Your name is automatically added as an administrator
- You can add other administrators and recovery authorities later



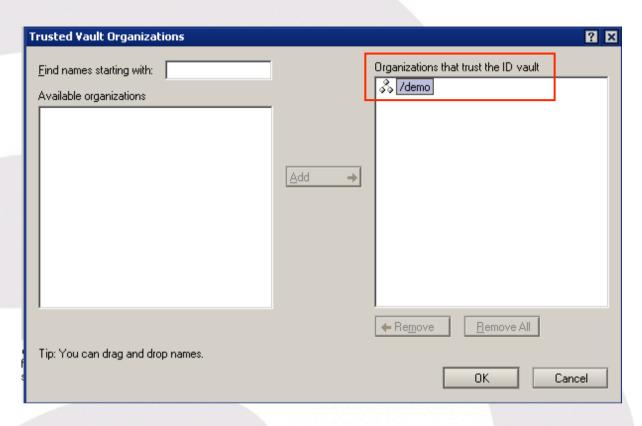
Adding organisations to the ID Vault



- A trust certificate is created between the organisation and the ID vault
- You must use a physical certifier not the CA process to do this



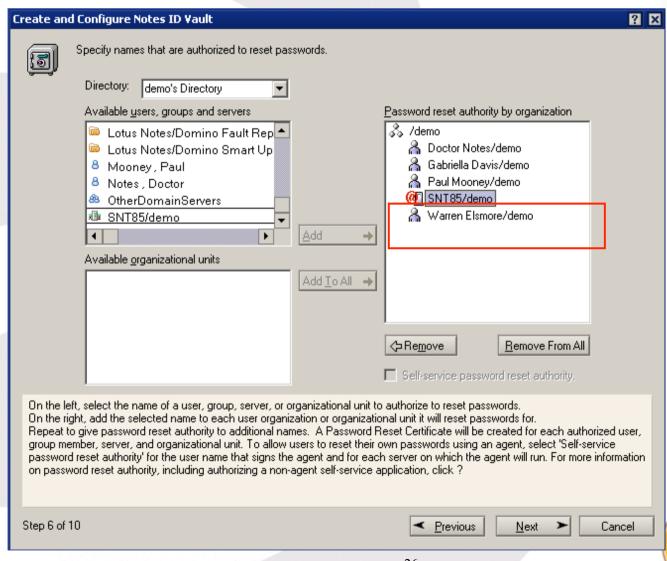
Selecting certifiers to add



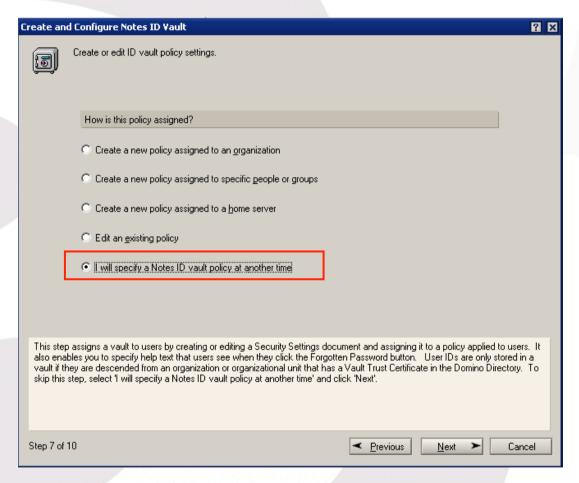
- Later on in the process I will be prompted to point to the physical certifier
 - The list of certifiers authorised for this ID Vault can be modified later
 - You can only store IDs in the ID Vault if their parent certificate is also there

Belux Lotus User Group

Users Authorised to Reset Passwords



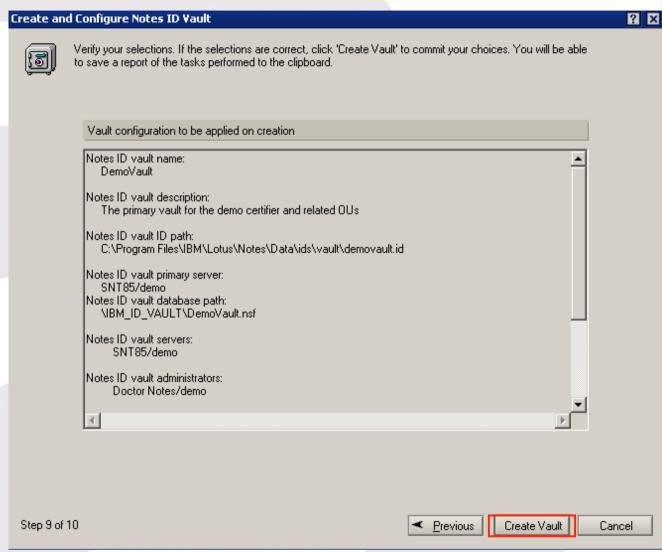
Applying an ID Vault To A User



- ID Vault relationships are set up in user policies
 - You can configure or edit a security policy when you create the ID Vault. Or later.

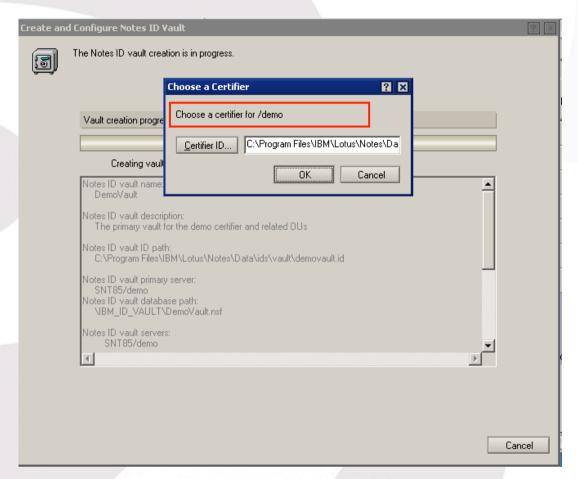


Summary of ID Vault Settings



 Click 'Create Vault' on the summary screen to complete the process

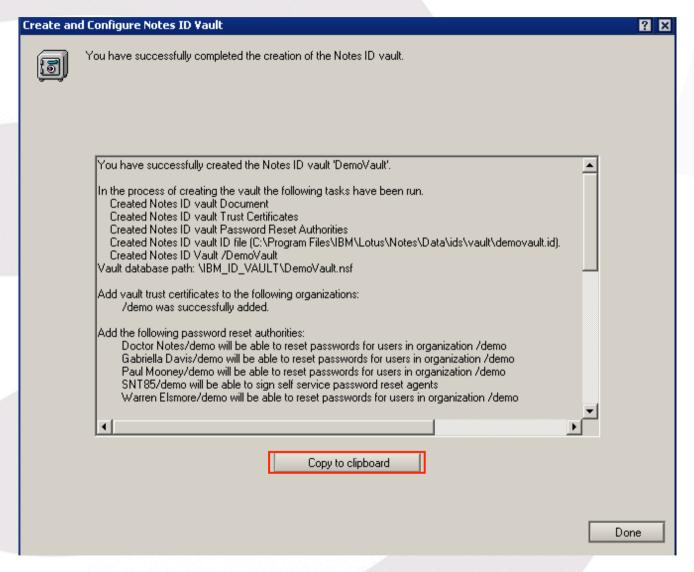




 As the ID Vault is created you will be prompted for the physical certifier and password for any organisations you specified be used

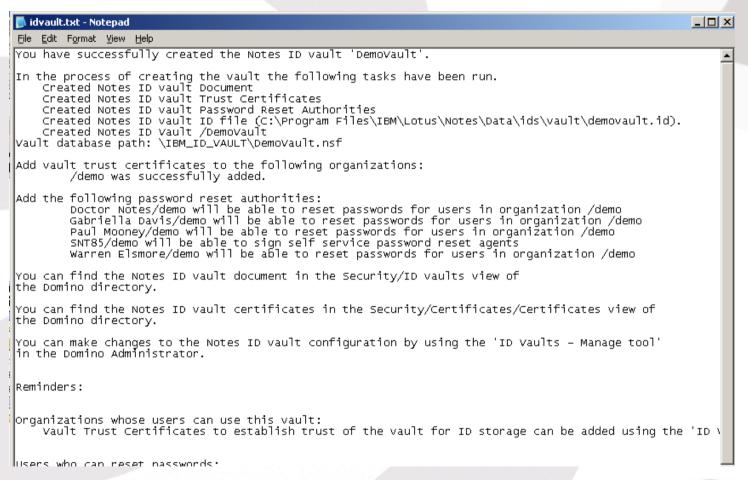


Final Summary Screen



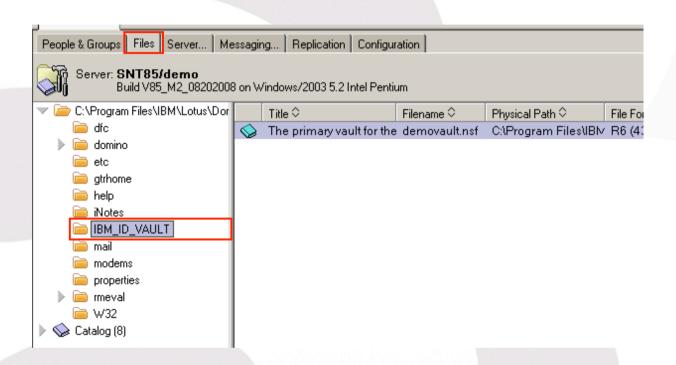


Store a Record of the ID Vault Summary Clipboard





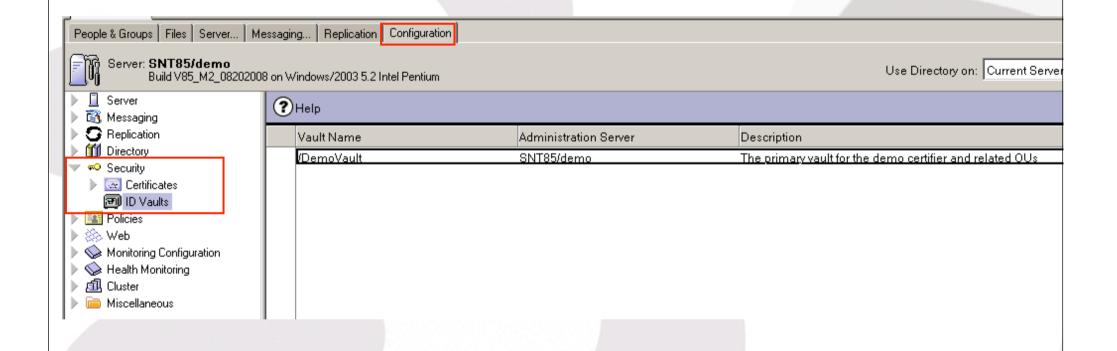
Verifying the ID Vault Created Correctly



 ID Vault db with the title you specified will be in the IBM_ID_VAULT directory on the server you selected

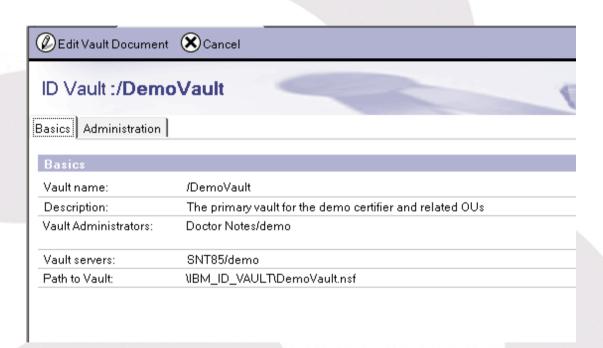


ID Vault Document Created Under Security





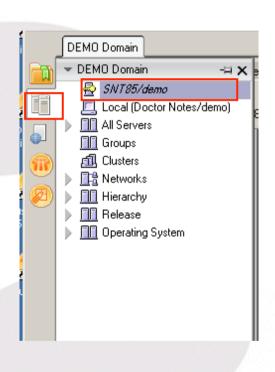
View of ID Vault Document



 Always user the 'Manage Vault' process rather than edit this document manually to ensure all steps are completed

Belux Lotus User Group

Managing Vault Admins



- Make sure you have selected the server in the bookmark bar
 - don't use File Open Server
 - if you find you have an empty list of 'Admins' to choose from
 - this could be why



Managing Vault Admins

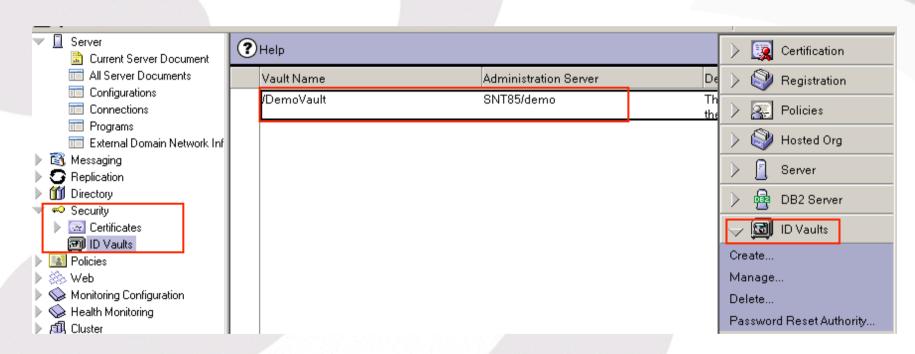


- To add someone as a Vault admin they must first have Administrator rights in the server document for the ID Vault server
- This setting caches on the server and without a restart will take a while to update

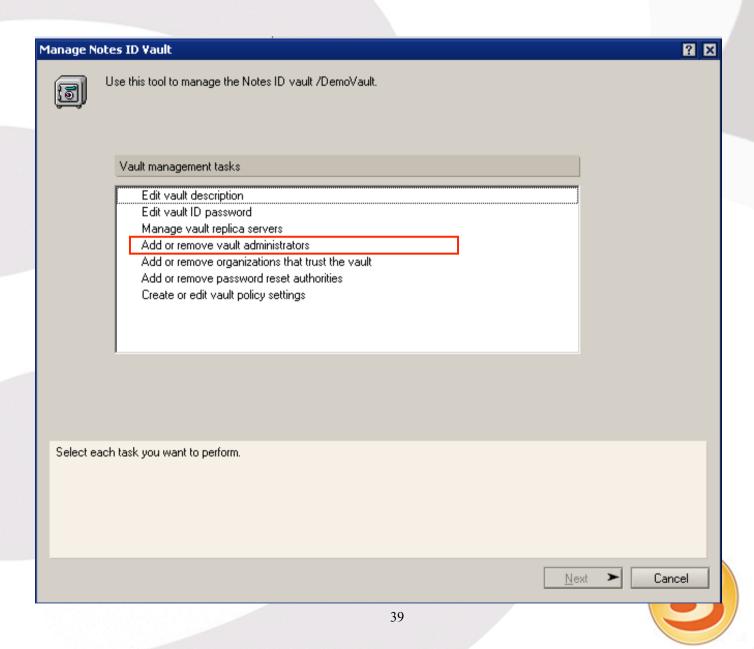
Belux Lotus User Group

- ID Vault Admins can make changes to the Vault itself including
 - adding or removing other admins
 - adding or removing certifiers
 - creating or deleting ID Vault replicas
- You do not have to give someone 'Administrator' rights if they are simply resetting passwords for users
 - They don't even need access to the user ids or to know the original user passwords

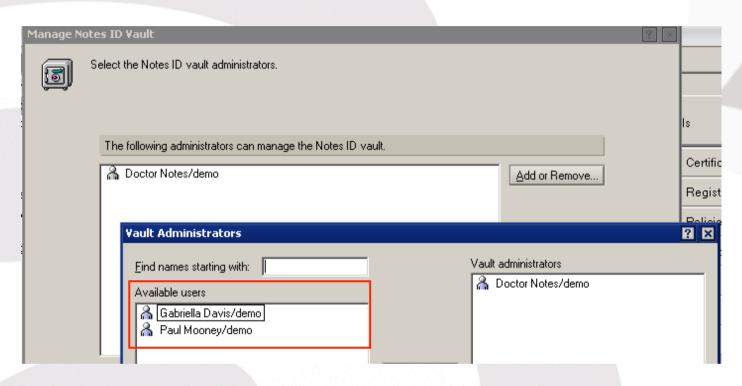
- ID Vault Security document must be selected
- Select Tools ID Vault Manage





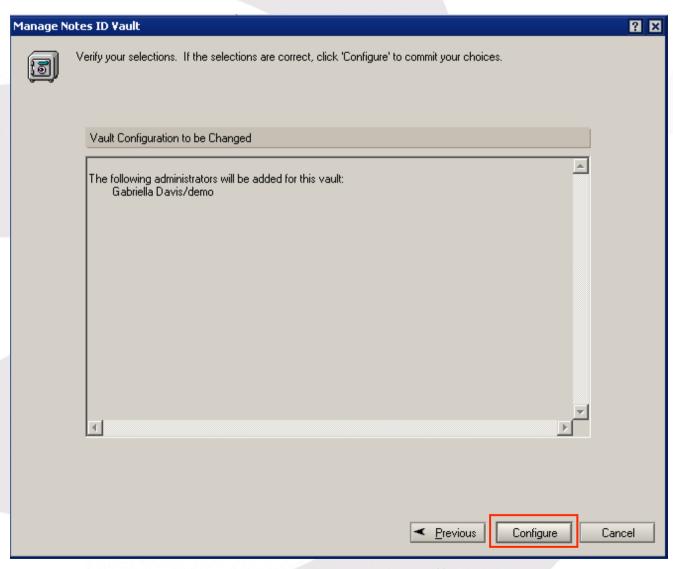






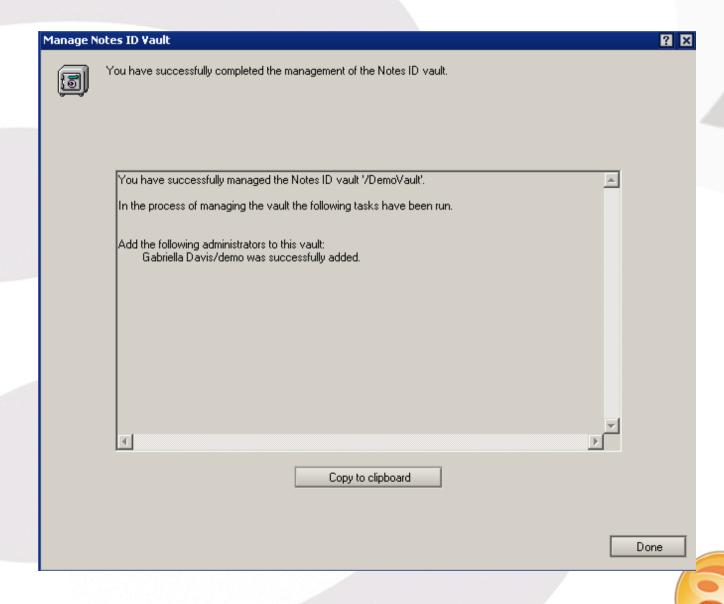
- Add or remove additional users as Administrators of this vault
 - Note you can only select from those listed in the 'Administrators' field of the server document

Belux Lotus User Group





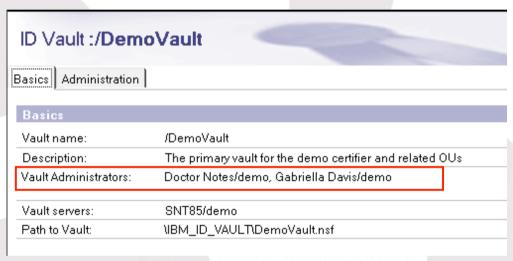
Managing Vault Admins - Summary Screen



Belux Lotus User Group

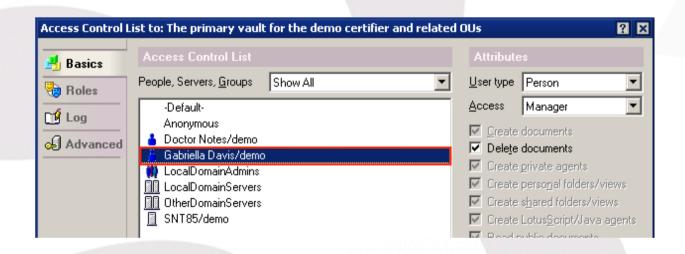
Verify Admin Change

ID Vault Security Document



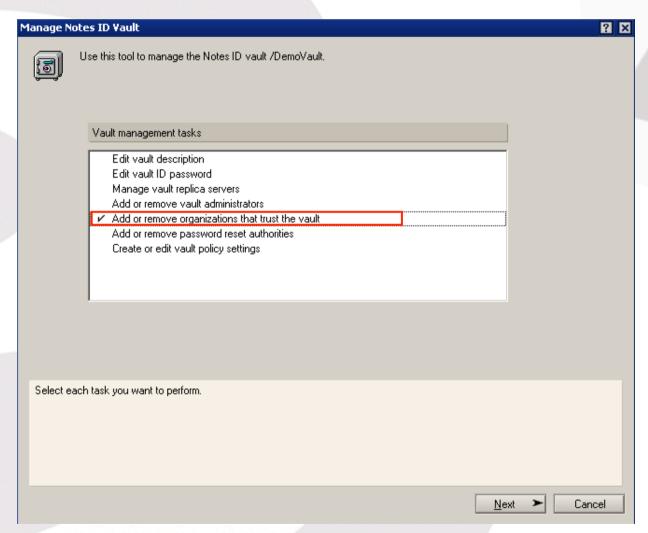


Verify Admin Change



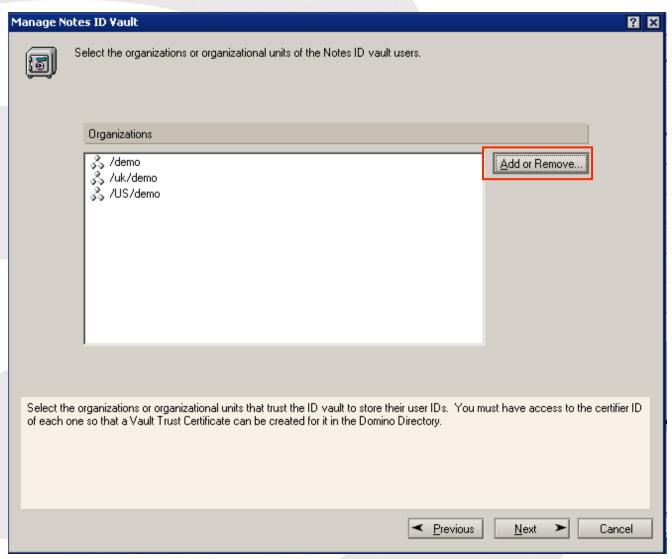
- ID Vault ACL
 - Default is Manager without the role 'Auditor'



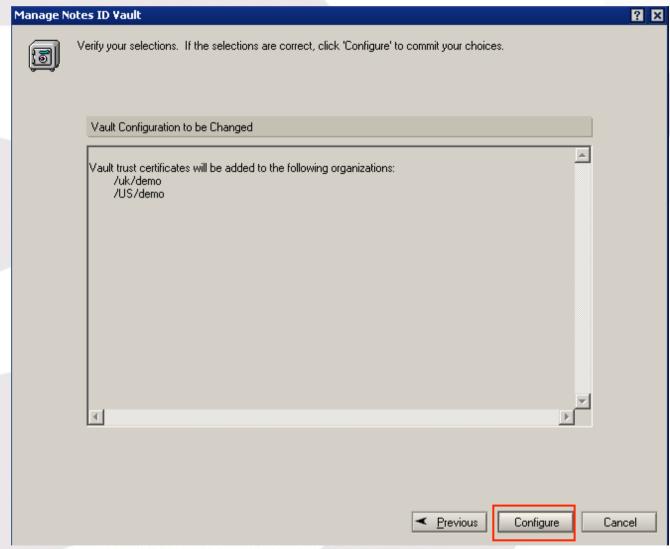


 A Vault can only store user ids if it holds a trust certificate for the parent certifier of that user

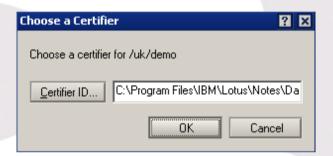


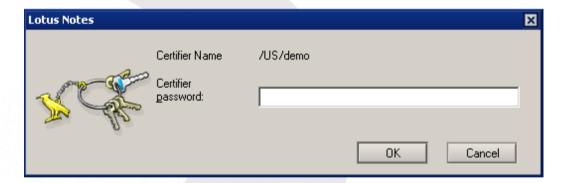




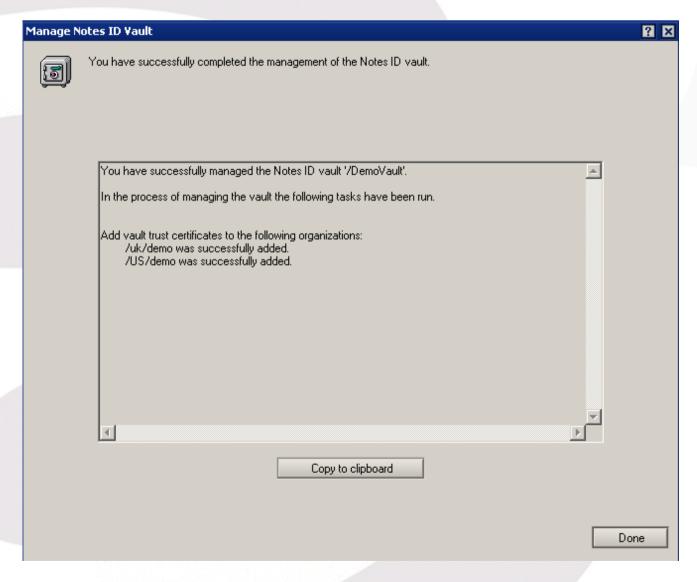






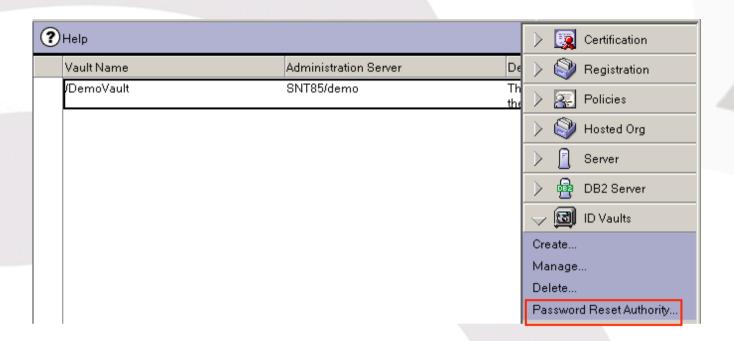








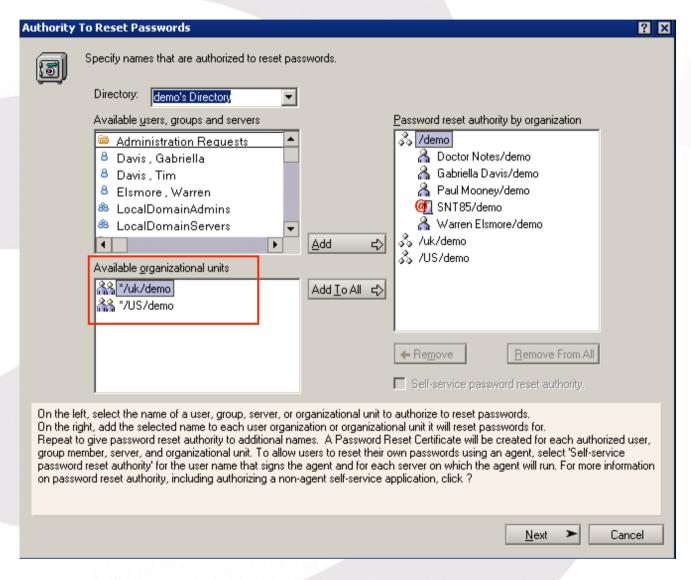
Configure Password Reset Authority



- Configuration Tab Select ID Vault Document under Security
 - Tools ID Vaults Password Reset Authority

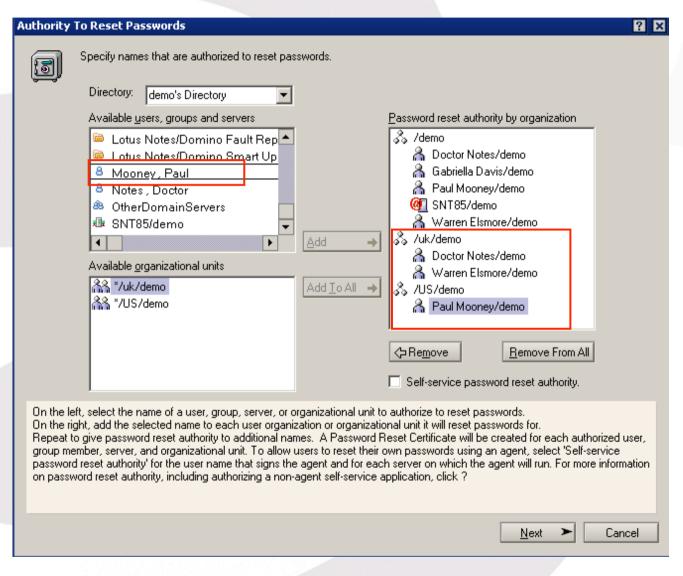


Configure Password Reset Authority



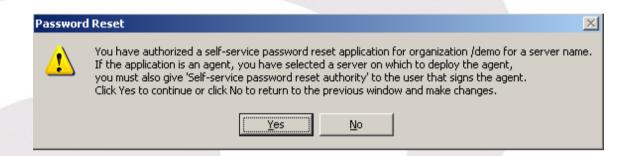


Configuring for additional certifiers





Configuring for additional certifiers

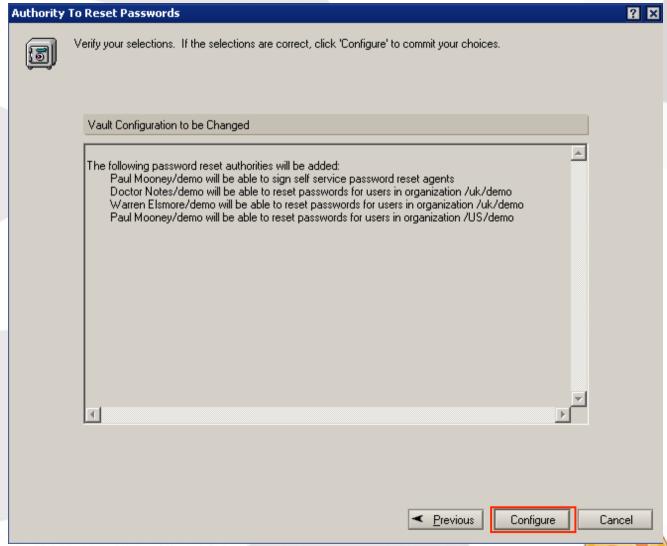




- If you are planning to use an application for auto processing password resets you will need a server authorised as 'Self Service Password Reset Authority' and also an agent signer
 - In this example an agent running on SNT85/
 Demo and signed by Paul Mooney/demo can process requests

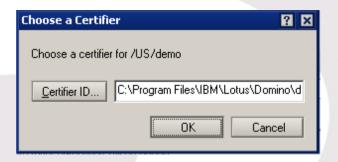


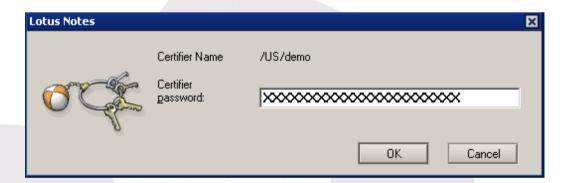
Complete Configuring for Password Reset Authority





Complete Configuring for Password Reset Authority

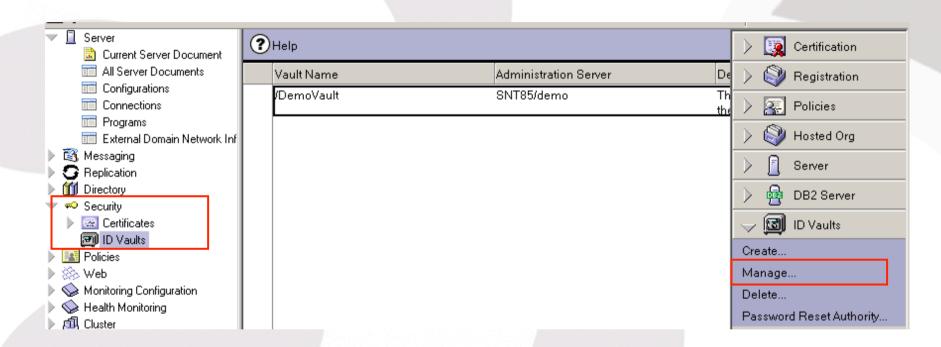






Setting up a Policy to use the ID Vault

ID Vault Security document must be selected Select Tools - ID Vault - Manage



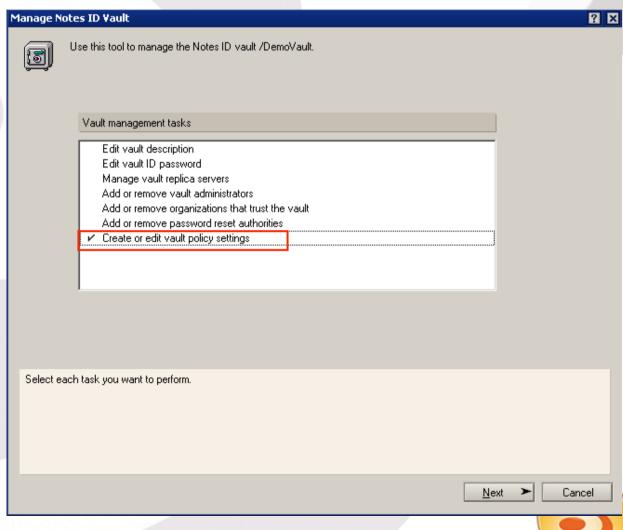
Configuration tab - Policies

-Tools - Policies - Create



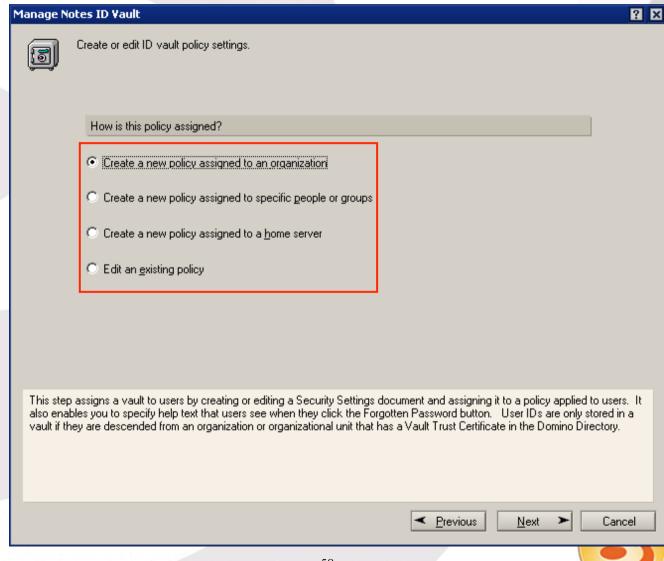
Create or edit vault policy settings

 If you work with policies you can create the security policy outside of this process



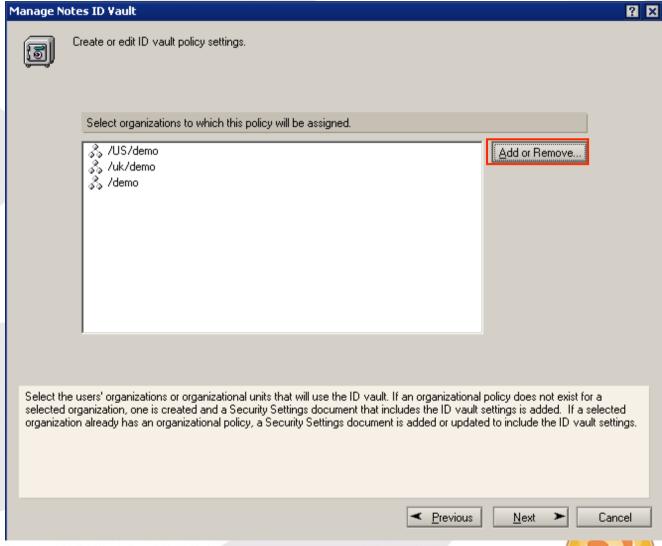


Select the type of policy to create or edit





Which certifiers are associated with this policy







Setting up a user prompt

- This is what the user sees when they select 'Forgot Your Password'
 - You have 8 lines to write and can also use HTML to point to a link or button





Verifying policies



- These were created automatically by the Manage ID Vault process
 - You could create and manage them manually



Adding an HTML link in the forgotten password help text

- 1. The link must be a full HTML link, including the tags
- 2. The tags are case sensitive, you must use upper case.
- 3. The target for the link must be enclosed in quote characters (").
- 4. The link must be the last part of the custom message. If you include the link in the middle of the message, any text after the link will be discarded.





Editing an ID Vault Security Policy

Security Settings : DemoVaultVaultSettingd			
Basics Password Management Executio	n Control List Keys and Certificates S	Signed Plug-ins Portal Server [O Vault C
ID Vault Options:		How to apply this setting:	Inh pai
Assigned vault:	/DemoVault	☐ Don't set value	
Forgotten password help text:	Call the helpesk on x3100 where you will asked to confirm your identity. Or click below. R eset	□ Don't set value	
Enforce password change after password has been reset:	Yes	☐ Don't set value	
Automatic ID Downloads:		How to apply this setting:	Inh pai
Allow automatic ID downloads:	Yes	☐ Don't set value	
Allow ID downloads for:	1 days	■ Don't set value	
	0 hours		
ID download authorization failure message:			



Automatic ID Downloads

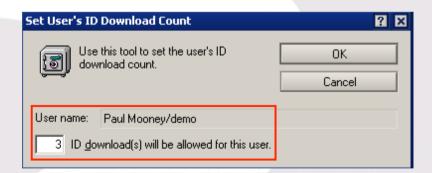
- Enabling 'Yes' for automatic ID downloads means an id is downloaded to whatever clients need it with no limit on the number of times they can be downloaded
 - If you know that a user has only 1 pc to work on then you can limit this by choosing 'no' and setting a number of downloads per user
- You can also control how long after an id change can that id still be downloaded
 - If you restrict it to 1 day then after than one day the id will no longer automatically download
- You can present a customised message to the user explaining that their updated id tried and failed to download and why



Limiting the number of ID downloads



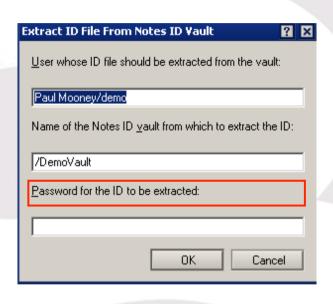
- Domino Administrator People and Groups Tab
 - Select a Person
 - Tools ID Vaults Set ID download count



 If you haven't set the policy to allow unlimited downloads you might want to restrict how many times an updated id can be downloaded



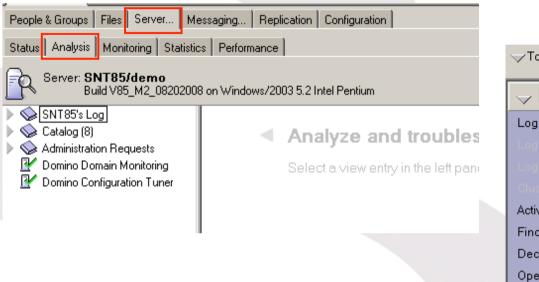
Extracting an ID from the Vault



- Domino Administrator -People and Groups Tab
 - Select a Person
 - Tools ID Vaults Extract ID from Vault
 - The password you will be asked for is the user id password not the vault password
 - [Auditor] role in the ID Vault ACL allows the id to be extracted without requiring the user password
 - SECURE_DISABLE_AUDITOR=1 disables the Auditor feature from that server



ID Vault Logging and Events

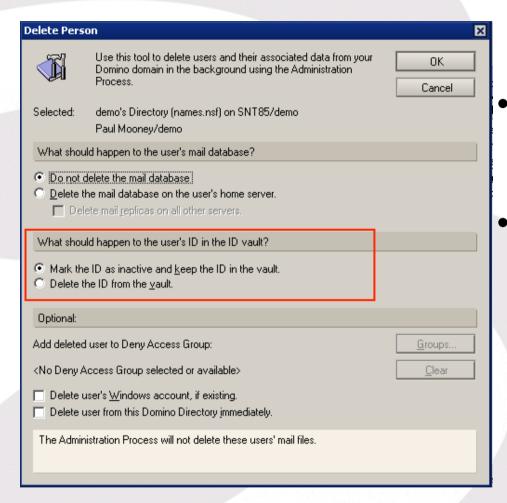




- Review all Vault activity for a date range
- Domino Administrator Server Tab Analysis
 - Tools Analyze Vault Security Log



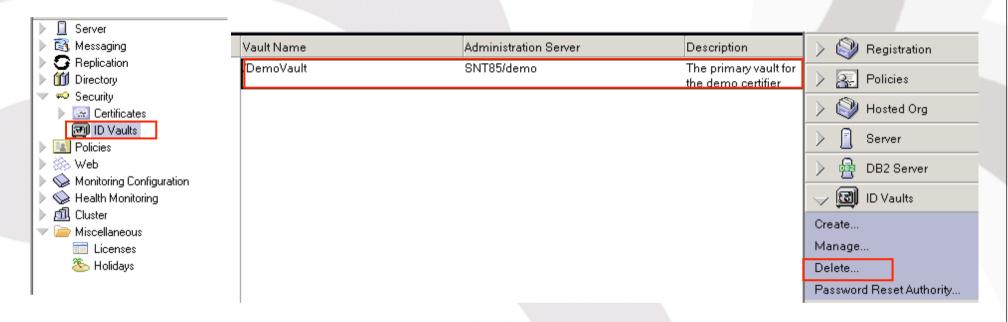
Deleting IDs or Marking Them Inactive



- Deleting an ID stored in the Vault can now be part of the "Delete Person" process
- Deleting the id removes it from the vault
 - Marking it inactive leaves it in the vault but inaccessible



Deleting an ID Vault

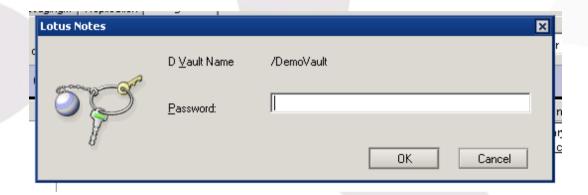


- Select the ID Vault document in Administrator
- If the vault is a replica choose 'Manage' and then "Manage Vault Replicas"
- If it's the primary ID Vault then choose 'Delete' from the ID Vaults menu
 - Make sure you have removed all other replicas via
 ID Vault Manage Manage Vault Replicas first



Deleting an ID Vault

Enter the password for the ID Vault when prompted



- The ID Vault is deleted by the server
 - If the database is open the ID Vault will try to delete it later
 - It will try once a day
 - "show idvaults" on the server console will also force a retry



Deleting an ID Vault - What Happens

- The database in the IBM_ID_Vault directory is deleted
- Deletes all Vault Trust Certificates for the vault from the Security - Certificates view of the Domino Directory.
- Deletes the vault document from the Security ID Vaults view of the Domino Directory.
- Removes the vault name from all Security Settings documents that specify it.



ID Vault Problems or Status

On server console type "sh idvaults"

```
PSNT85/demo: Lotus Domino Server

e

> sh idvaults

ID Vault /DenoVault (IBM_ID_UAULI\DemoVault.nsf)

Control Vault Name: /DemoVault
Control Vault Servers: SNT85/demo
Vault Operations Key: VO-vgjx-bsia/SNT85/DemoVault
Servers: SNT85/demo
Vault Name: /DemoVault
Description: The primary vault for the demo certifier and related OUs
Administrators: Doctor Notes/demo
Administrators: Gabriella Davis/demo
Servers: SNT85/demo
Administration Server: SNT85/demo
Administration Server: SNT85/demo
Ademo trusts this vault
/US/demo trusts this vault
/US/demo trusts this vault
/demo trusts Warren Elsmore/demo to reset passwords
/demo trusts Paul Mooney/demo to reset passwords
/demo trusts Gabriella Davis/demo to reset passwords
/demo trusts Taul Mooney/demo to reset passwords
/US/demo trusts Taul Mooney/demo to reset passwords
/US/demo trusts Taul Mooney/demo to reset passwords
/US/demo trusts Paul Mooney/demo to reset passwords
/US/demo trusts Varren Elsmore/demo to reset passwords
/US/demo trusts Warren Elsmore/demo to reset passwords
/US/demo trusts Warren Elsmore/demo to reset passwords
/US/demo trusts Warren Elsmore/demo to reset passwords
/UK/demo trusts Worten Elsmore/demo to reset passwords
/UK/demo trusts Doctor Notes/demo to reset passwords
```



Possible Reasons Why an ID Wouldn't Be Stored In The Vault

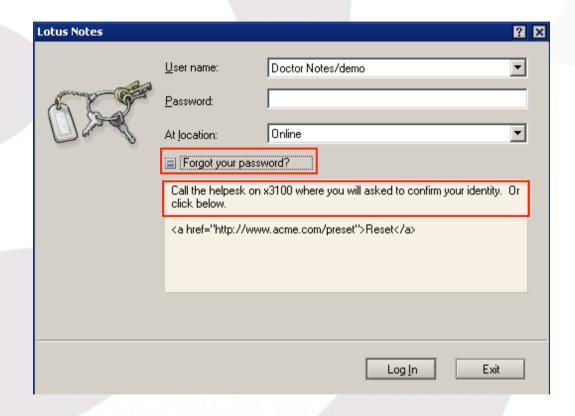
- Client isn't 8.5x
 - upgrade
- Local names.nsf isn't 8.5x
 - replace design
- No security policy exists for that user
 - check \$policies view in local names.nsf
- Notes.ini problems
 - verify keyfilename= matches the id being used
 - remove all ID Vault references already in notes.ini



Resetting Passwords



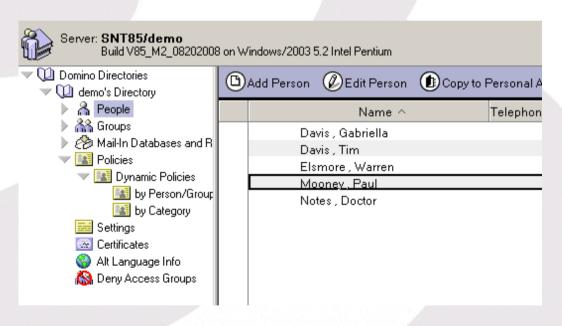
User Interface When Forgetting Their Password





To reset a user password as an authority

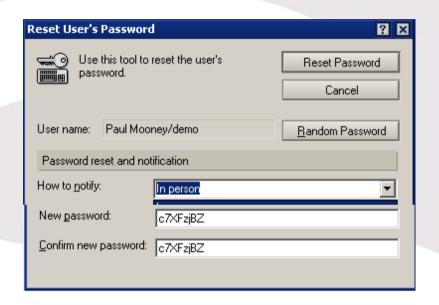
- Domino Administrator People and Groups Tab
 - Select a Person
 - Tools ID Vaults Reset Password







To reset a user password as an authority





Belux Lotus User Group

- When resetting a user password you have the option of
 - Notifying the user in person
 - Emailing an encrypted message to their Manager with the password enclosed
- Once you've reset the password the user can use this new one to login

Autoprocessing Reset Password Requests

- A sample password reset application is available on the server
 - open pwdresetsample.nsf
 - set -Default- to Editor in the ACL
 - set whoever is to be the agent signer as 'Manager' in the ACL
 - sign the agent with the 'Manager's id
- Put a copy of the database on any server you want to enable password reset on
 - These needn't be ID Vault servers but they must run HTTP
- Ensure the agent signer has the right to run restricted lotuscript agents on those servers
 - That setting is in the server document security tab



Autoprocessing Reset Password Requests

- Each server id the database is installed on and the agent signer id must be configured as Password Reset Authorities in the ID Vault
 - They must also have the checkbox "Self Service Password Reset Authority selected"
- To request a password reset the user browses to
 - http://servername/pwdresetsample.nsf



 Obviously you need to know your HTTP password to reset your Notes ID password

So a summary of the good stuff.....

- ID Vault means user ids are held securely and encrypted on Domino servers and not in the Domino Directory or on a file server somewhere
- Since ID Vault downloads the ID for each user as they log in you don't need to distribute ids to the desktops for new users
- You also don't need to worry about ids being kept in sync since ID Vault takes care of that too
 - if the user changes their password or their id it is uploaded to the ID Vault in the background and downloaded to their other machines when they go to use them
- User renames and certificate rollovers no longer require any user involvement
- Passwords can be reset by helpdesk people with no access to the ids themselves and no knowledge of existing passwords



You know there has to be a BUT.....

- If the user ID is stored in a mail file, the ID Vault can only update that in v8.5.1 or later
- Smartcard enabled ids can't be stored in the ID Vault
- A Vault must be contained within a single Domino Domain
- All users of a Vault must be in that Domain
- If a client isn't connected to the network the ID from the vault can't download so
 if they change their password in the office and then work offline at home their
 id will still have the old password until they sign online
- If you use the CA process the id that is stored in ID Vault on registering a user doesn't contain the hierarchical certificate and will not be usable when it downloads to the workstation on setup
 - You need to switch to that user's id and access the server so the certificates are updated and a new copy of the ID is sent to the vault

Contact Details

- Gabriella Davis
- gabriella@turtlepartnership.com
- http://blog.turtleweb.com
- Gabriella Davis on Skype, LotusLive etc
- Nerd Girl Community on LinkedIn

