

Windows 8 Encrypting a folder using EFS and Personal Key backup

The presentation will create a folder and encrypt the folder using EFS on Windows 8.0. The presentation will backup the personal key of the encrypting logon. The presentation will logon as administrator level access and attempt to access the file.

Preuss

2/28/2014



Tim Preuss



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The presentation logs onto Windows 8.0 as a standard person (user).

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C:\Users\Public\Documents

File Home Share View

Libraries Documents Public Documents

Search Public Documents

Name	Date modified	Type	Size
cptr2262_batch	1/28/2014 3:05 PM	File folder	
csci1110-2	2/27/2014 12:45 PM	File folder	
public_test	2/4/2014 2:24 PM	File folder	

3 items | State: Shared

The presentation creates a new folder in "Public Documents" folder.

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C:\Users\Public\Documents

File Home Share View

Libraries Documents Public Documents

Search Public Documents

Name	Date modified	Type	Size
cptr2262_batch	1/28/2014 3:05 PM	File folder	
csci1110-2	2/27/2014 12:45 PM	File folder	
<input checked="" type="checkbox"/> EFS_test	2/28/2014 3:41 PM	File folder	
public_test	2/4/2014 2:24 PM	File folder	

4 items | 1 item selected | State: Shared

The new folder name is "EFS_test".

C:\Users\Public\Documents\EFS_test

File Home Share View

Libraries Documents Public Documents EFS_test

Search EFS_test

Name	Date modified	Type	Size
1148101.pdf	2/28/2014 3:42 PM	PDF File	27 KB
1148102.pdf	2/28/2014 3:42 PM	PDF File	26 KB
1148103.pdf	2/28/2014 3:42 PM	PDF File	30 KB
1148104.pdf	2/28/2014 3:42 PM	PDF File	88 KB
1148105.pdf	2/28/2014 3:42 PM	PDF File	30 KB
1148106.pdf	2/28/2014 3:42 PM	PDF File	34 KB
1148107.pdf	2/28/2014 3:42 PM	PDF File	28 KB
1148108.pdf	2/28/2014 3:43 PM	PDF File	31 KB
1148109.pdf	2/28/2014 3:43 PM	PDF File	29 KB
1148110.pdf	2/28/2014 3:43 PM	PDF File	29 KB

10 items | State: Shared

These are the files in the folder "EFS_test".



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C:\Users\Public\Documents

File Home Share View

Libraries Documents Public Documents Search Public Documents

Name	Date modified	Type	Size
cptr2262_batch	1/28/2014 3:05 PM	File folder	
csci1110-2	2/27/2014 12:45 PM	File folder	
EFS_test	2/28/2014 3:43 PM	File folder	
test	2/4/2014 2:24 PM	File folder	

- Open
- Open in new window
- Pin to Start
- 7-Zip
- Scan for deleted files
- Share with
- Send to
- Cut
- Copy
- Create shortcut
- Delete
- Rename
- Open folder location
- Properties

4 items | 1 item selected | State: Shared

The presentation right clicks on the "EFS_test" folder. The presentation will select Properties from the list.





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C:\Users\Public\Documents

File Home Share View

Libraries Documents Public Documents

Name	Date modified	Type	Size
✓ cptr2262_batch	1/28/2014 3:05 PM	File folder	
csci1110-2	2/27/2014 12:45 PM	File folder	
EFS_test			
public_			

4 items | 1 item selected | State: Share

EFS_test Properties

General Sharing Security

EFS_test

Type: File folder

Location: C:\Users\Public\Documents

Size: 348 KB (356,585 bytes)

Size on disk: 368 KB (376,832 bytes)

Contains: 10 Files, 0 Folders

Created: Today, February 28, 2014, 2 minutes ago

Attributes: Read-only (Only applies to files in folder)
 Hidden

Advanced...

OK Cancel Apply

The presentation selects the Advanced .. button.



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C:\Users\Public\Documents

File Home Share View

Libraries Documents Public Documents

Name	Date modified	Type	Size
cptr2262_batch	1/28/2014 3:05 PM	File folder	
csci1110-2	2/27/2014 12:45 PM	File folder	
<input checked="" type="checkbox"/> EFS_test			
public_			

EFS_test Properties

Advanced Attributes

Choose the settings you want for this folder. When you click OK or Apply on the Properties dialog, you will be asked if you want the changes to affect all subfolders and files as well.

Archive and Index attributes

- Folder is ready for archiving
- Allow files in this folder to have contents indexed in addition to file properties

Compress or Encrypt attributes

- Compress contents to save disk space
- Encrypt contents to secure data

Details

OK Cancel

The presentation puts a check in the "Encrypt contents to secure data" box. The presentation selects the "OK" button.

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C:\Users\Public\Documents

File Home Share View

Libraries > Documents > Public Documents

Name	Date modified	Type	Size
✓ cptr2262_batch	1/28/2014 3:05 PM	File folder	
csci1110-2	2/27/2014 12:45 PM	File folder	
EFS_test			
public_			

4 items | 1 item selected | State: Share

EFS_test Properties

General | Sharing | Security

EFS_test

Type: File folder
Location: C:\Users\Public\Documents
Size: 348 KB (356,585 bytes)
Size on disk: 368 KB (376,832 bytes)
Contains: 10 Files, 0 Folders
Created: Today, February 28, 2014, 2 minutes ago
Attributes: Read-only (Only applies to files in folder)
 Hidden [Advanced...]

OK Cancel Apply

The presentation selects "Apply".



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C:\Users\Public\Documents

File Home Share View

Libraries Documents Public Documents

Name	Date modified	Type	Size
cptr2262_batch	1/28/2014 3:05 PM	File folder	
csci1110-2	2/27/2014 12:45 PM	File folder	
<input checked="" type="checkbox"/> EFS_test			
public_			

EFS_test Properties

Confirm Attribute Changes

You have chosen to make the following attribute changes:

encrypt

Do you want to apply this change to this folder only, or do you want to apply it to all subfolders and files as well?

Apply changes to this folder only

Apply changes to this folder, subfolders and files

OK Cancel

Attributes: Read-only (Only applies to files in folder)

Hidden

Advanced...

OK Cancel Apply

The presentation insures "Apply changes to this folder, subfolders and files" is selected. Then, the presentation selects "OK".



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C:\Users\Public\Documents

File Home Share View

Libraries > Documents > Public Documents

Name	Date modified	Type	Size
cptr2262_batch	1/28/2014 3:05 PM	File folder	
csci1110-2	2/27/2014 12:45 PM	File folder	
<input checked="" type="checkbox"/> EFS_test			
public_			

EFS_test Properties

General | Sharing | Security

EFS_test

Type: File folder

Location: C:\Users\Public\Documents

Size: 348 KB (356,585 bytes)

Size on disk: 368 KB (376,832 bytes)

Contains: 10 Files, 0 Folders

Created: Today, February 28, 2014, 3 minutes ago

Attributes: Read-only (Only applies to files in folder) Hidden Advanced...

The presentation selects "OK" once the screen has cleared.

Back up your file encryption key

OK This helps you avoid permanently losing access to your encrypted files.



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C:\Users\Public\Documents

File Home Share View

Libraries Documents Public Documents Search Public Documents

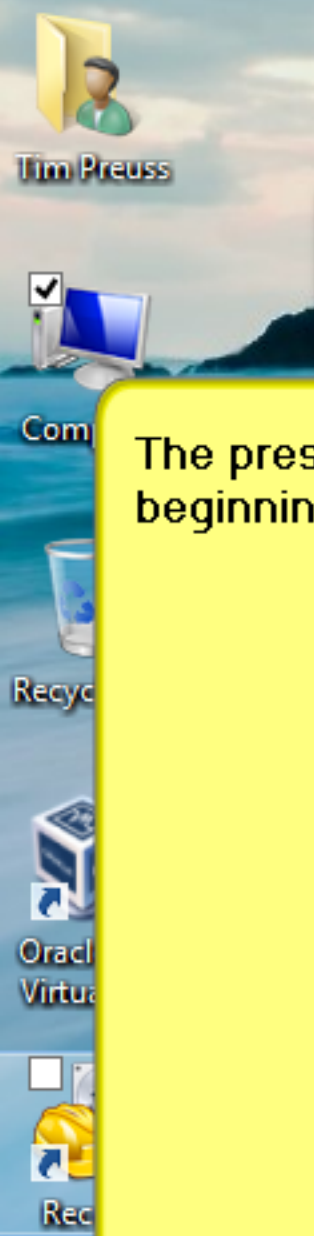
Name	Date modified	Type	Size
cptr2262_batch	1/28/2014 3:05 PM	File folder	
csci1110-2	2/27/2014 12:45 PM	File folder	
<input checked="" type="checkbox"/> EFS_test	2/28/2014 3:44 PM	File folder	
pub_test	2/4/2014 2:24 PM	File folder	

Spanned01 (F:)
Mirror01 (G:)
Network

4 items | 1 item selected | State: Shared

Windows color coded the folder to show it is encrypted.





Control Panel\All Control Panel Items

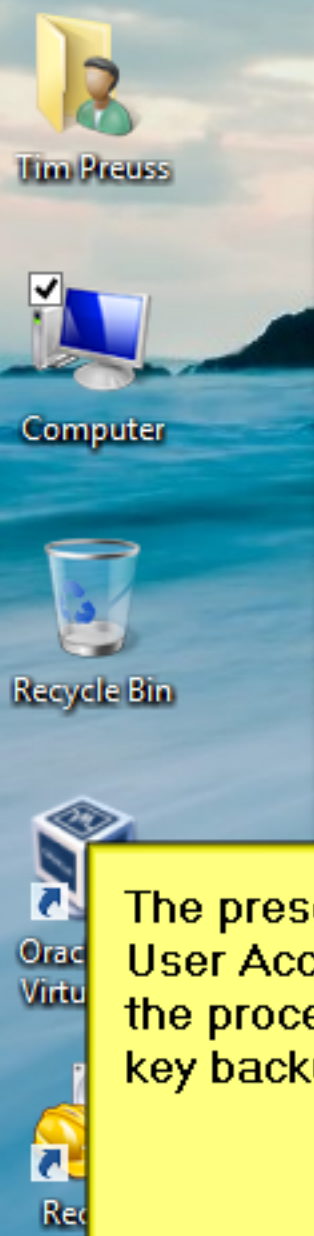
Control Panel > All Control Panel Items

Search Control Panel

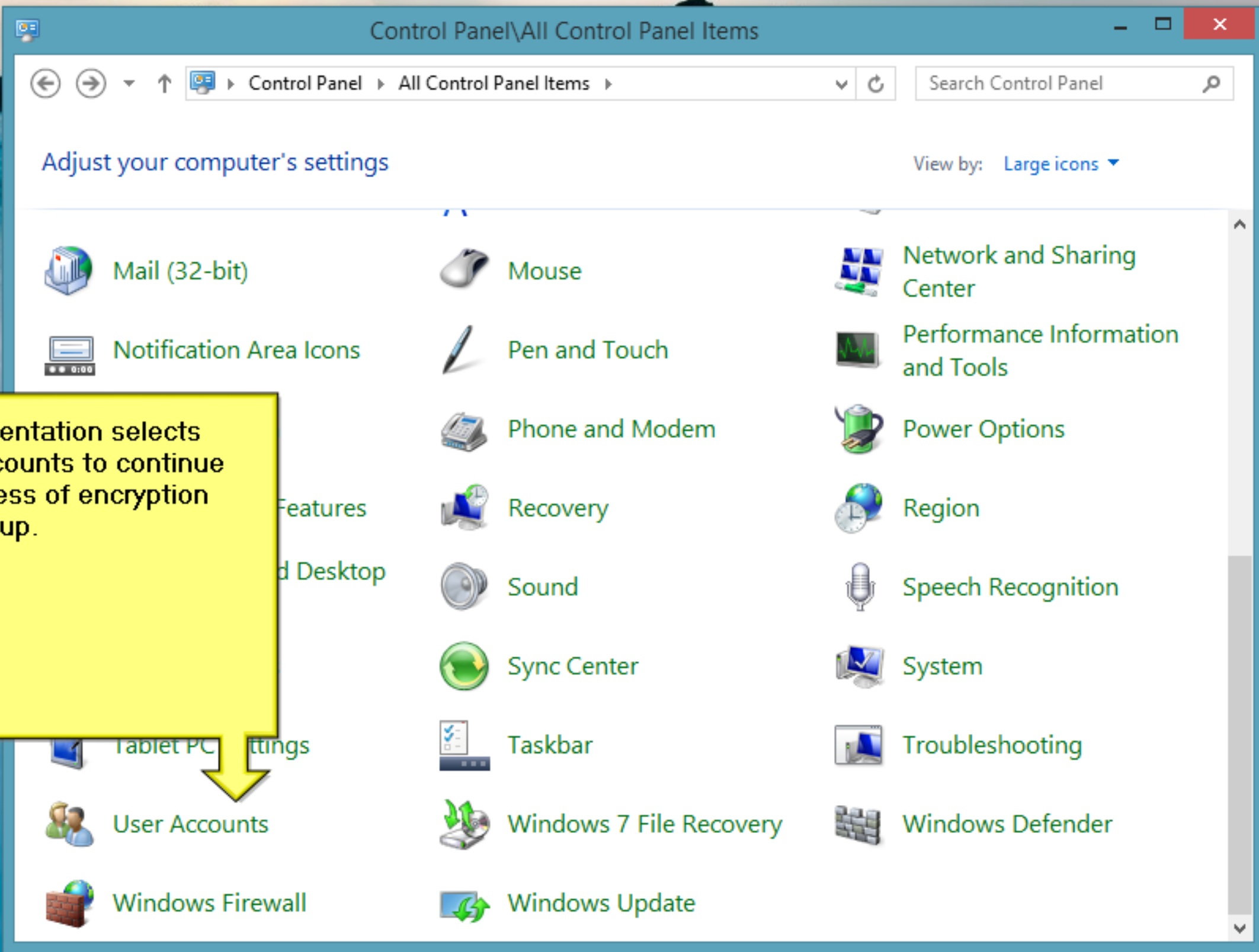
View by: Large icons

- Administrative Tools
- BitLocker Drive Encryption
- Device Manager
- Default Programs
- Display
- File History
- Fonts
- HomeGroup
- Indexing Options
- Internet Options
- Keyboard
- Language
- Location Settings
- Mail (32-bit)
- Mouse
- Network and Sharing Center

The presentation opens the Control Panel. This is the beginning of the encryption key backup process.



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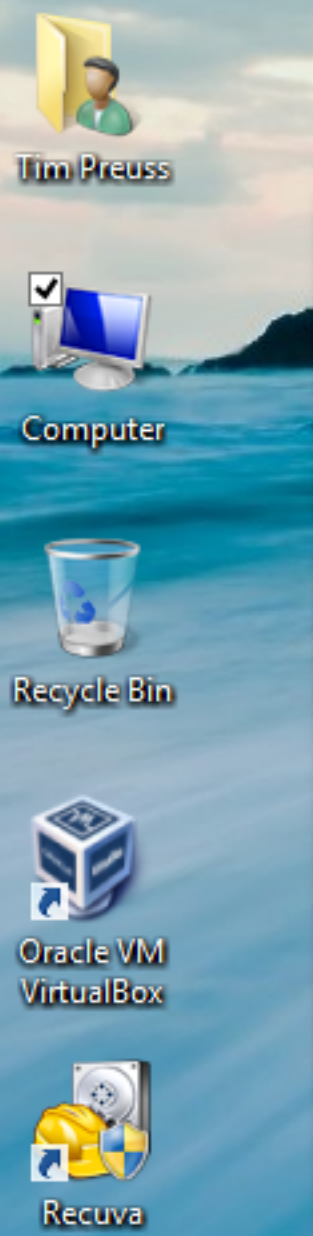
Control Panel\All Control Panel Items

Control Panel > All Control Panel Items > Search Control Panel

Adjust your computer's settings View by: Large icons

- Mail (32-bit)
- Mouse
- Network and Sharing Center
- Notification Area Icons
- Pen and Touch
- Performance Information and Tools
- Phone and Modem
- Recovery
- Power Options
- Region
- Sound
- Speech Recognition
- Sync Center
- System
- Taskbar
- Troubleshooting
- User Accounts
- Windows 7 File Recovery
- Windows Defender
- Windows Firewall
- Windows Update

The presentation selects User Accounts to continue the process of encryption key backup.



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Control Panel\All Control Panel Items\User Accounts

Control Panel Home

Make changes to your user account

- Manage your credentials
- Manage your file encryption certificates
- Configure advanced user profile properties
- Change my environment variables

Tim Preuss
tim_preuss@my.minnesota.edu
Password protected

See also
Family Safety

The presentation selects "Manage your file encryption certificates". The presentation only does this for the logon that created the encrypted files and folders.



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Encrypting File System

Manage your file encryption certificates

To encrypt files for additional security, you must have an encryption certificate and its associated decryption key on your computer or on a smart card. You can't access your encrypted files without this certificate and key.

Use this wizard to:

- Select or create a file encryption certificate and key.
- Back up the certificate and key to avoid losing access to your encrypted files.
- Set Encrypting File System to use a smart card.
- Update previously encrypted files to use a different certificate and key.

Next Cancel

The presentation reads the screen and selects the Next button.

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Control Panel

Manage

Manage certificate

Configure profile

Change variables

Encrypting File System

Select or create a file encryption certificate

Select an existing file encryption certificate or create a new one. If you have already encrypted files, you can update them to use this certificate.

Use this certificate
If you are using a smart card, select the certificate on the smart card.

Certificate details:

Issued to: tim_p_000
Issued by: tim_p_000
Expires: 2/4/2114

Create a new certificate

[View certificate](#)

[Select certificate](#)

[Next](#) [Cancel](#)

Search bar

innnesota.edu

The presentation reviews the Certificate details. It is important the certificate is issued to the logon that created the encryption is listed.

The presentation notes all is good. The presentation selects "Use this certificate". The presentation selects the Next button.

[View certificate for file encryption?](#)



Encrypting File System

Back up the certificate and key

This helps you avoid losing access to your encrypted files if the original certificate and key are lost or damaged.

Current certificate:

Back up the certificate and key now
You should back up the certificate and key to removable media.

Backup location:

Password:

Confirm password:

Back up the certificate and key later
Windows will remind you the next time you log on.

[Why should I back up the certificate and key?](#)

See also [Family S](#)

The presentation selects the browse button. The presentation will select a location for the backup.

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Save As

Control Panel

Manage

Manage certificat

Configu profile p

Change variables

See also

Family S

Name	Date modified	Type
cptr2262_batch	1/28/2014 3:05 PM	File folder
csci1110-2	2/27/2014 12:45 PM	File folder
EFS_test	2/28/2014 3:44 PM	File folder
public_test	2/4/2014 2:24 PM	File folder

File name: []

Save as type: Personal Information Exchange (*.pfx)

Hide Folders [] Save []

The presentation selects the "Public Documents" folder for the backup.

Name	Date modified	Type
cptr2262_batch	1/28/2014 3:05 PM	File folder
csci1110-2	2/27/2014 12:45 PM	File folder
EFS_test	2/28/2014 3:44 PM	File folder
public_test	2/4/2014 2:24 PM	File folder

File name: preuss_cert01
Save as type: Personal Information Exchange (*.pfx)

Save

The presentation gives the backup a name. Then the presentation selects the Save button.

Encrypting File System

Back up the certificate and key

This helps you avoid losing access to your encrypted files if the original certificate and key are lost or damaged.

Current certificate:

Back up the certificate and key now
You should back up the certificate and key to removable media.

Backup location:

Password:

Confirm password:

Back up the certificate and key later
Windows will remind you the next time you log on.

[Why should I back up the certificate and key?](#)

The presentation adds a password to the backup. Then, the presentation selects the Next button.

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Encrypting File System

Update your previously encrypted files

Select the folders containing encrypted files that you want to associate with the new certificate and key. Updating now helps you avoid losing access to your encrypted files if the previous certificate and key are lost.

Folders:

- All Logical Drives

I'll update my encrypted files later

Updating your files might take some time, depending on how many files you update. If you log off or remove your smart card during the process, your files will not be updated.

Next Cancel

The presentation checks "All Logical Drives". The presentation selects the Next button.

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Encrypting File System

Progress...

Updating your encrypted files...



The update takes a couple of minutes.

Cancel

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Encrypting File System

Some of your encrypted files were not updated

Certificate details:

Issued to: tim_p_000
Issued by: tim_p_000
Expires: 2/4/2114

Certificate and key backup location:
C:\Users\Public\Documents\preuss_cert01.pfx

View certificate

View log

Close

The update is complete. The presentation selects the Close button.



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C:\Users\Public\Documents

File Home Share View

Libraries Documents Public Documents Search Public Documents

Name	Date modified	Type	Size
cptr2262_batch	1/28/2014 3:05 PM	File folder	
csci1110-2	2/27/2014 12:45 PM	File folder	
EFS_test	2/28/2014 3:44 PM	File folder	
public_test	2/4/2014 2:24 PM	File folder	
preuss_cert01.pfx	2/28/2014 3:47 PM	Personal Informati...	3 KB

5 items | State: Shared

The "preuss_cert01.pfx" is the backup. It is necessary to keep this file secure.

This is the end of key backup.




Start

Snuffy 

The presentation is testing the encryption.
The presentation logs on to Windows 8.0 as an administrator.


Mail



People


Messaging


Desktop


Photos


S&P 500 - 2:12 PM EST
1,853.78 ▲ +0.47%



Weather


Internet Explorer



Maps



Sports



Russia reportedly sheltering Ukraine's president



Store 15

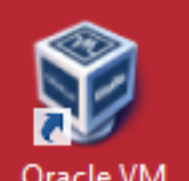
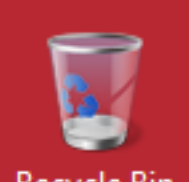

SkyDrive


Bing


Eiffel Tower


Games


Music



Public Documents

File Home Share View

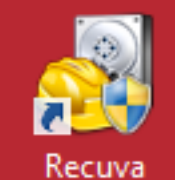
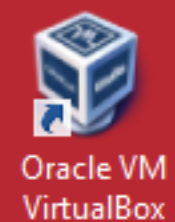
Libraries Documents Public Documents

Search Public Documents

Name	Date modified	Type	Size
cptr2262_batch	1/28/2014 3:05 PM	File folder	
csci1110-2	2/27/2014 12:45 PM	File folder	
EFS_test	2/28/2014 3:44 PM	File folder	
public_test	2/4/2014 2:24 PM	File folder	
preuss_cert01.pfx	2/28/2014 3:47 PM	Personal Informati...	3 KB

5 items | State: Shared

The presentation opens the folder containing the encrypted folders.



EFS_test

File Home Share View

Libraries Documents Public Documents EFS_test

Search EFS_test

Name	Date modified	Type	Size
1148101.pdf	2/28/2014 3:44 PM	PDF File	27 KB
1148102.pdf	2/28/2014 3:44 PM	PDF File	26 KB
1148103.pdf	2/28/2014 3:44 PM	PDF File	30 KB
1148104.pdf	2/28/2014 3:44 PM	PDF File	88 KB
1148105.pdf	2/28/2014 3:44 PM	PDF File	30 KB
1148106.pdf	2/28/2014 3:44 PM	PDF File	34 KB
1148107.pdf	2/28/2014 3:44 PM	PDF File	28 KB
1148108.pdf	2/28/2014 3:44 PM	PDF File	31 KB
1148109.pdf	2/28/2014 3:44 PM	PDF File	29 KB
1148110.pdf	2/28/2014 3:44 PM	PDF File	29 KB

10 items | State: Shared

The presentation opens the encrypted folder. The presentation double clicks on a file to open.

Sorry, can't display this file

Try reopening 1148101.pdf.

Close

The presentation finds the file is encrypted by another logon. This logon may not open the file.