

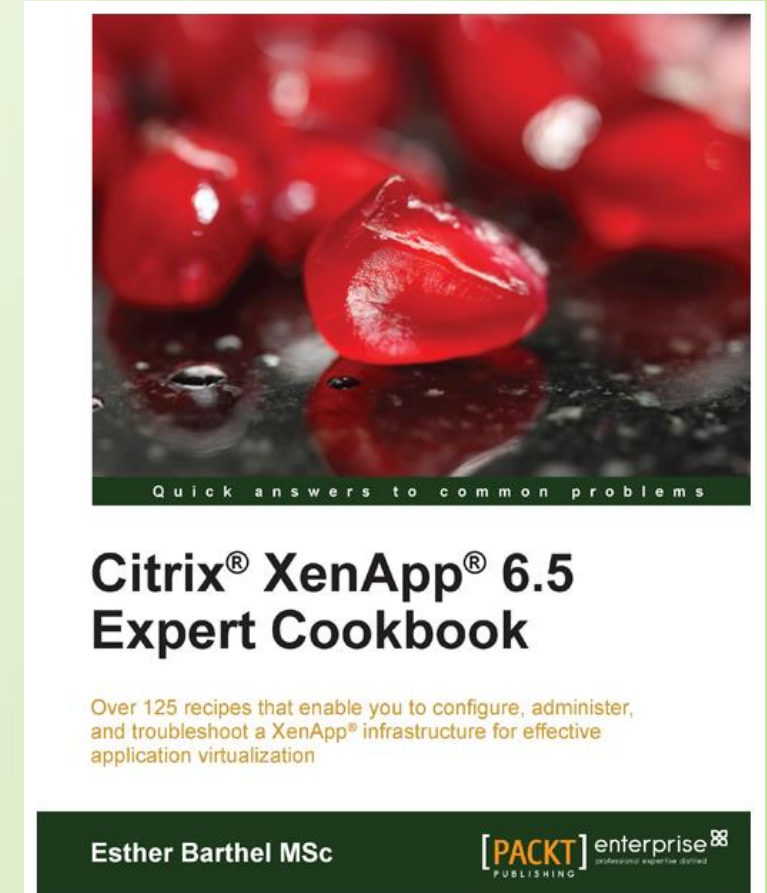


Citrix ShareFile

Usability vs. Manageability

About Esther

- ✓ 15+ years of Technical Consulting
 - ✓ Senior Consultant at PepperByte
 - ✓ MSc Computer Science
 - ✓ Design | Implement | Troubleshooting
 - ✓ Small vs. Large Infrastructures
 - ✓ Government | Industry | Commerce
- ✓ Author of:
 - ✓ Citrix XenApp 6.5 Expert Cookbook



About Martijn

- ✓ 15 years of working in IT
 - ✓ CCV-E, CCP-M, CCEE, NCITP, CCIA
 - ✓ Bachelor of Engineering in Logistics
 - ✓ Government | Healthcare | Construction
 - ✓ Design | Build | Advice
 - ✓ 200 – 10000+ seats
 - ✓ Internal teacher for Groupe Open
- ✓ Avid Cyclist



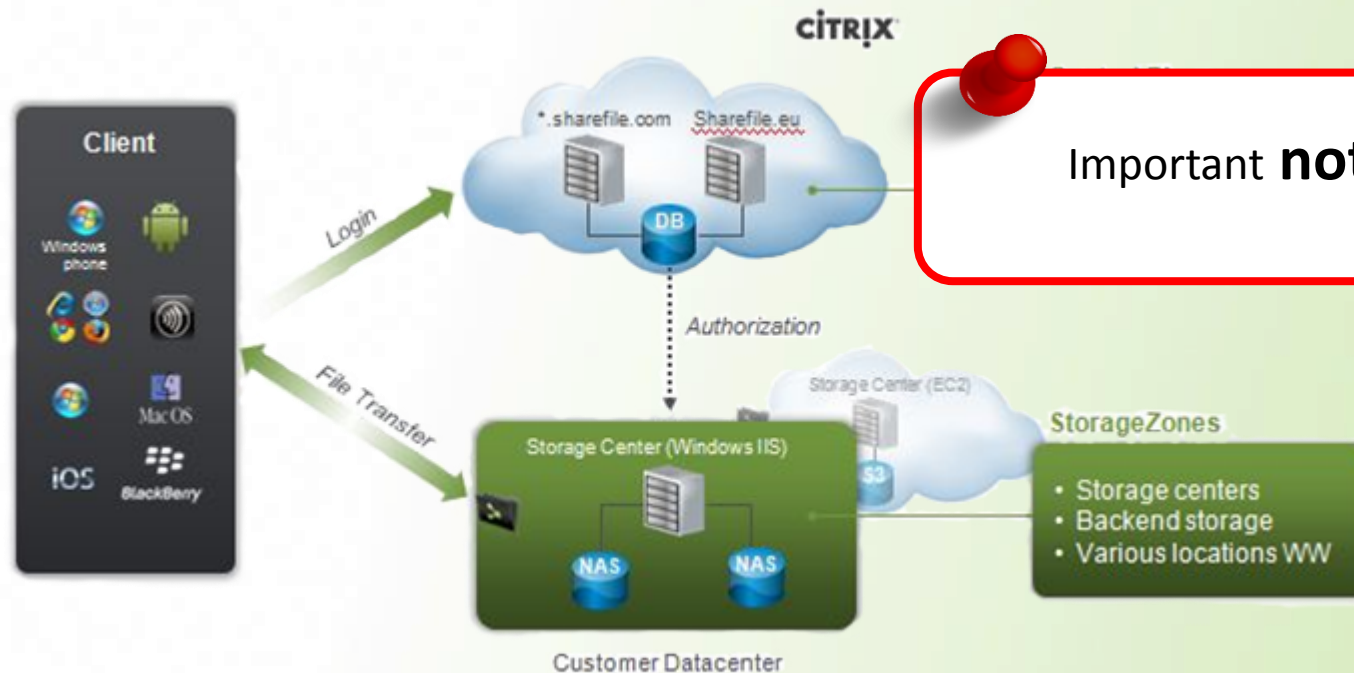
Agenda

- ✓ ShareFile introduction:
- ✓ ShareFile Usability:
- ✓ ShareFile Manageability:

Architecture, Editions & Licensing

Clients, Features & Lessons Learned

Admin tools & Lessons Learned

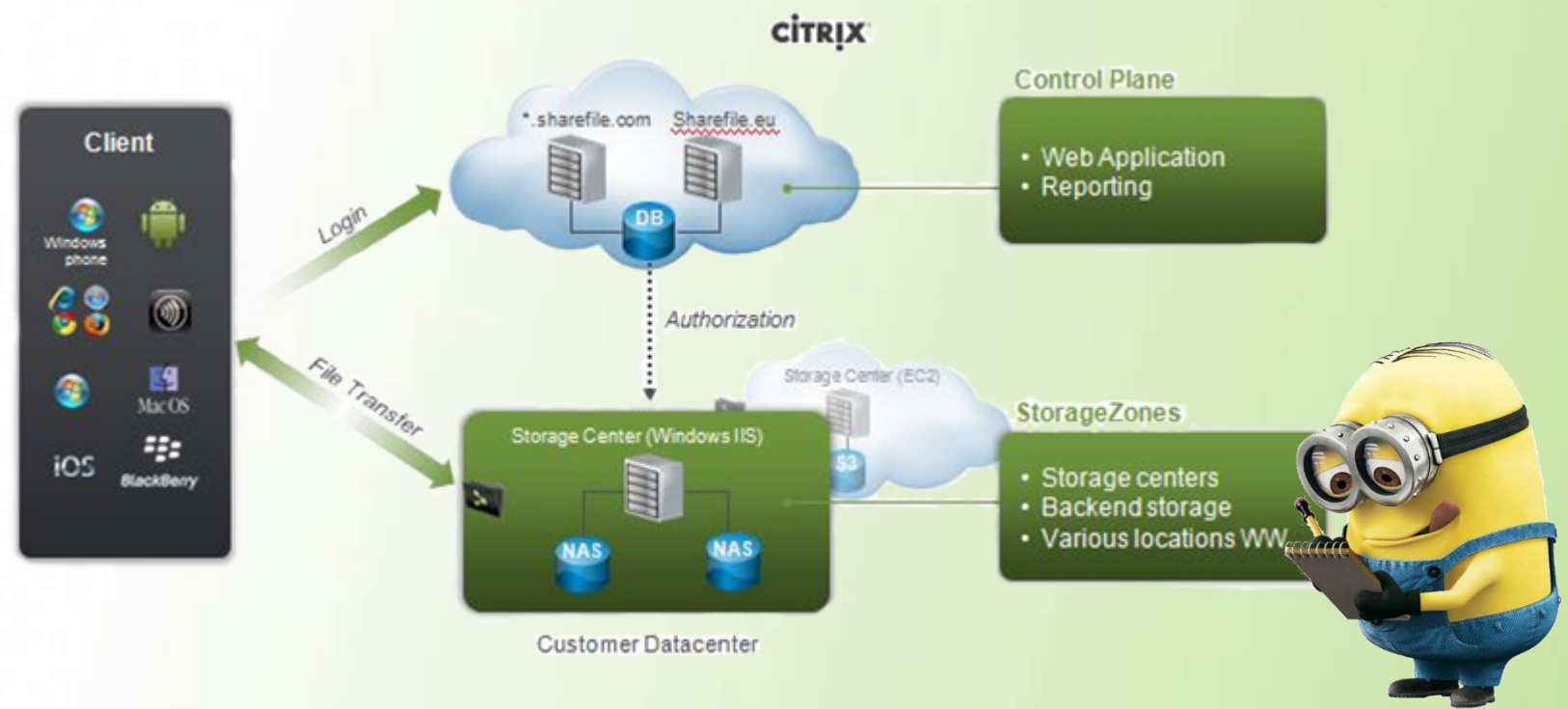


Important **notes** during presentation!



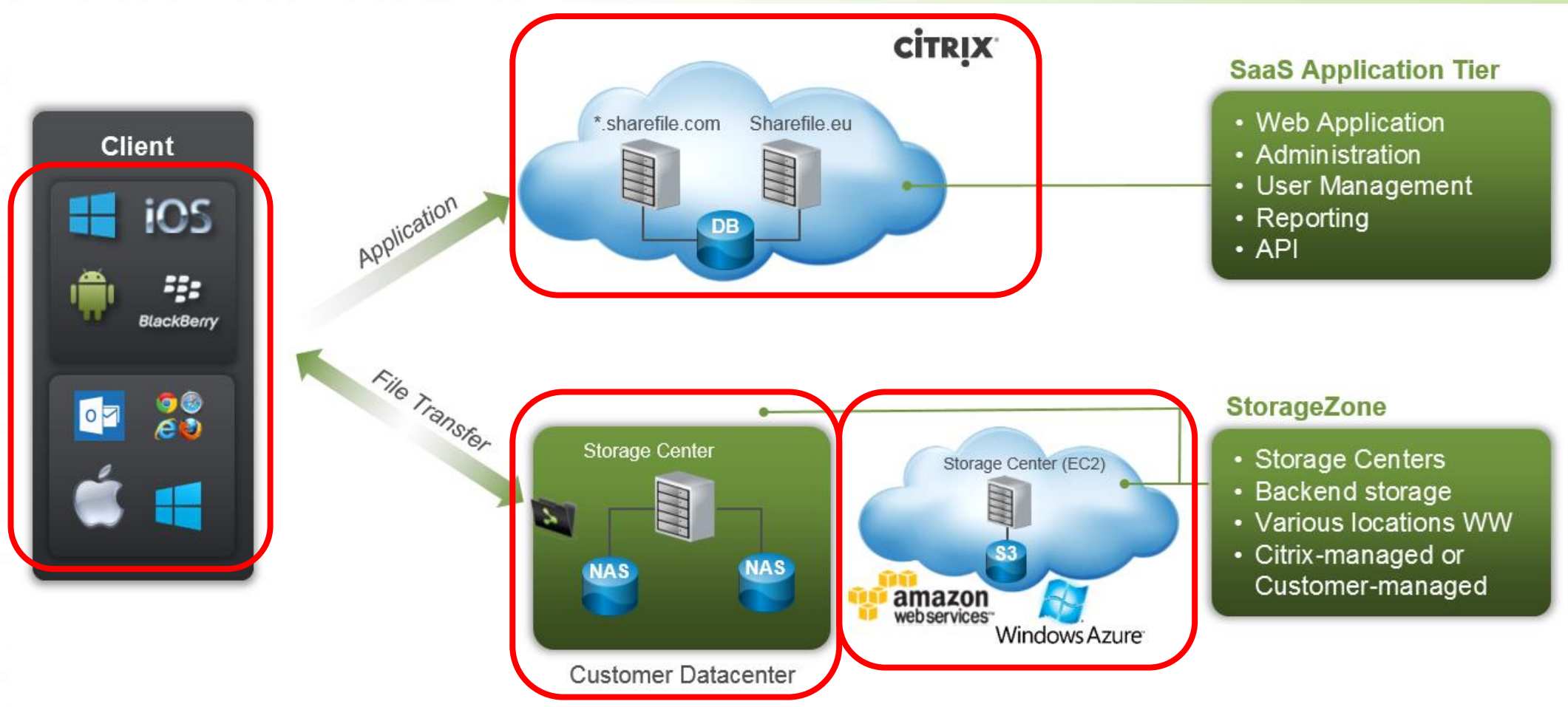


ShareFile Introduction





ShareFile Architecture





ShareFile Editions & Features

ShareFile Feature	Basic	Professional	Corporate	Enterprise
Storage/Bandwidth	5 GB	10 GB	20 GB	-
Employee accounts	2	10	20+	-
Unlimited Client Users	x	x	x	x
Custom Branding	x	x	x	x
Encrypted transfer and storage	x	x	x	x
Support				
24/7 Telephone support	x	x	x	x
Mobile app				
Browse/download docs from SharePoint/CIFS shares	x	x	x	x
Mobile editing (only iOS)	x	x	x	x
Mobile Device Security			x	x
Desktop app				
Plugin for Microsoft Outlook		x	x	x
Desktop Sync		x	x	x
Management				
User Management Tool			x	x
Enterprise Directory Integration (SAML)				x
Store Data On or Off Premises				x
IT Managed Follow-Me Data (On-Premise)				x
Costs (per month)	\$29.95	\$59.95	\$99.95	TBD





ShareFile Enterprise License Model

- ✓ User licensing
 - ✓ Citrix-managed StorageZones
 - ✓ Annual
 - ✓ Off-premise Citrix managed Cloud Storage
 - ✓ Customer-managed StorageZones
 - ✓ Perpetual or annual
 - ✓ On-premise StorageZone





ShareFile Usability



ShareFile Mobile Apps



ANDROID



Windows Phone



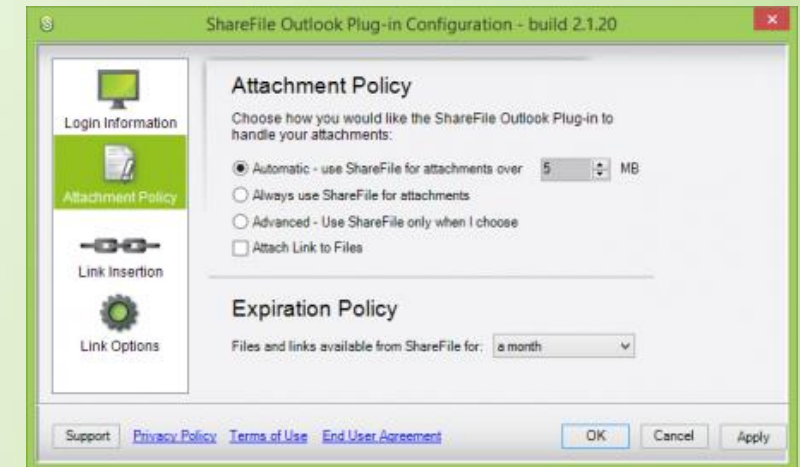
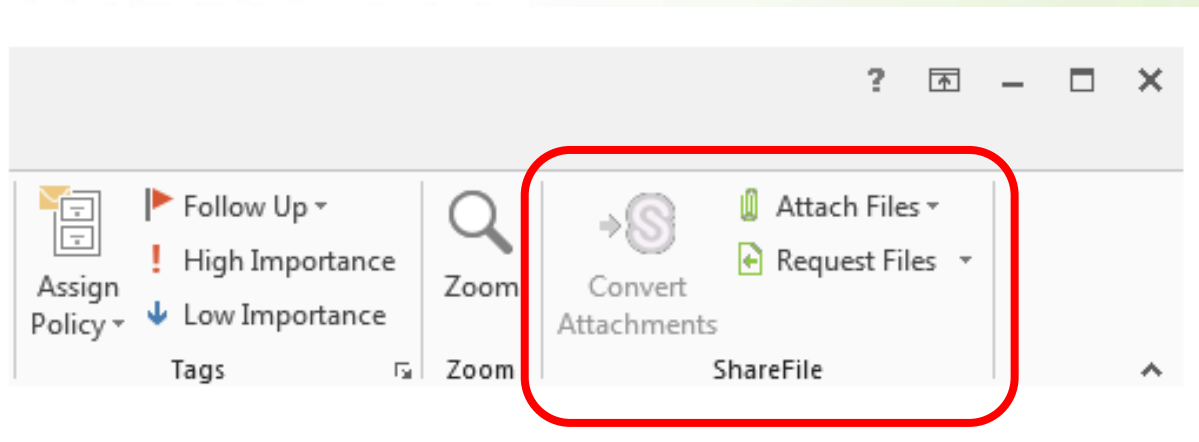
Windows 8



⇒ ShareFile Desktop Apps



- ✓ ShareFile Sync for Windows & Mac
- ✓ ShareFile Plugin for Microsoft Outlook

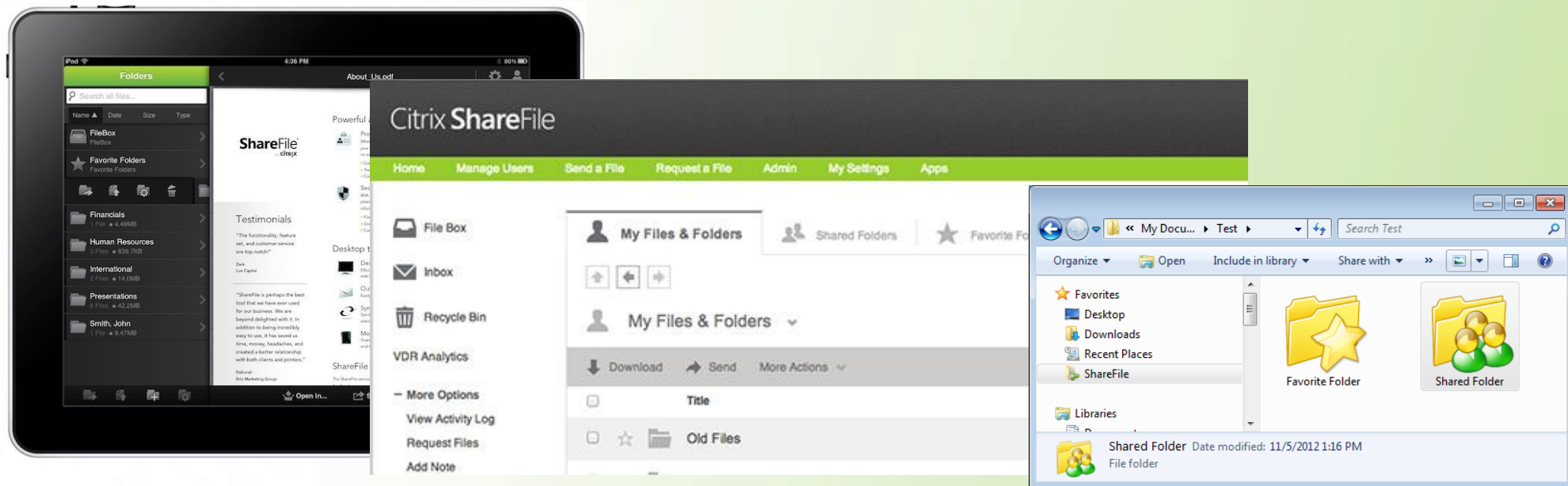


View Files



✓ ShareFile app

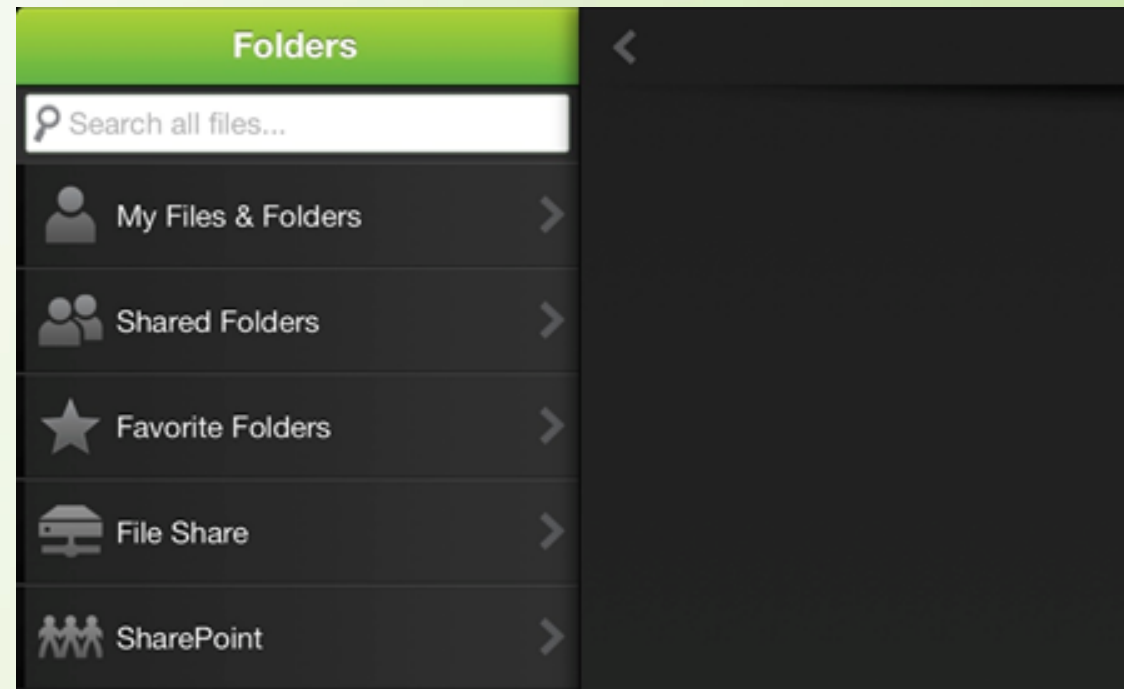
- ✓ Browse, download & view documents
- ✓ Send & request files via email
- ✓ Add users to existing folders
- ✓ View files offline





✓ StorageZones for **ShareFile Data**

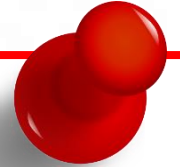
- ✓ Personal Folders
- ✓ Shared Folders
- ✓ Favorite Folders



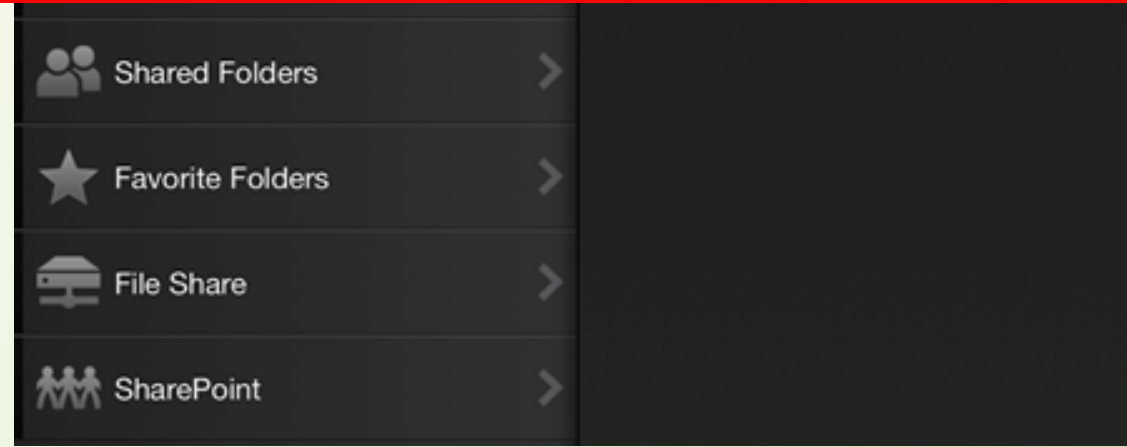


✓ StorageZones **Connectors**

- ✓ CIFS/NFS Shares (R/W)
- ✓ SharePoint Document Libraries (R/W)

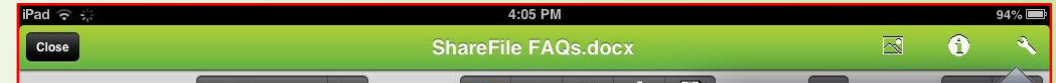


Connecting to **StorageZone Connectors** is only supported for mobile devices.





- ✓ ShareFile QuickEdit
 - ✓ Embedded document editor (create, edit & re-upload documents)



File editing is **only supported for iOS devices** (iPhone & iPad).

Only **PDF, Word, Excel, PowerPoint & text** files can be **edited**

Olympic sports.

Fewer countries participate in the Winter Olympics than the Summer Olympics. The original Winter Olympics was held in Chamonix, France, in 1924. Prior to this, figure skating and ice hockey had been events at the Summer Olympics. The Winter and Summer Games resumed in 1948 and were held in the same year until 1992. Starting in 1994 each Winter Olympics has been held in its own year, separate from the Summer Games. The Winter Olympics continue to be celebrated every four years.

Accept

Reject

More...

Stuart 27/09/2012 15:38
Deleted first

Stuart 27/09/2012 15:39
Deleted 1992





Share Files



- ✓ ShareFile Mobile app
- ✓ ShareFile Web



Citrix ShareFile

Home Manage Users **Send a File** Request a File My Settings Apps

Send a File (Step 1 of 2)

With Send a File, you can share files by including a hyperlink in an email message. The recipients don't need to be ShareFile users.

Email Sending Options

☒ Send email using ShareFile
☐ Give me a link I can copy and send using my own email software

* Required

To: * [Personal address book](#)
[Shared address book](#)
[Distribution groups](#)

Subject: *

Message:

☐ Remember subject and custom message for next time

☐ Send me a copy of the email ☐ Require recipients to log in ?

☒ Email me when the file has been downloaded

Downloads per user: **Unlimited** ▼

Next Step [Cancel](#)



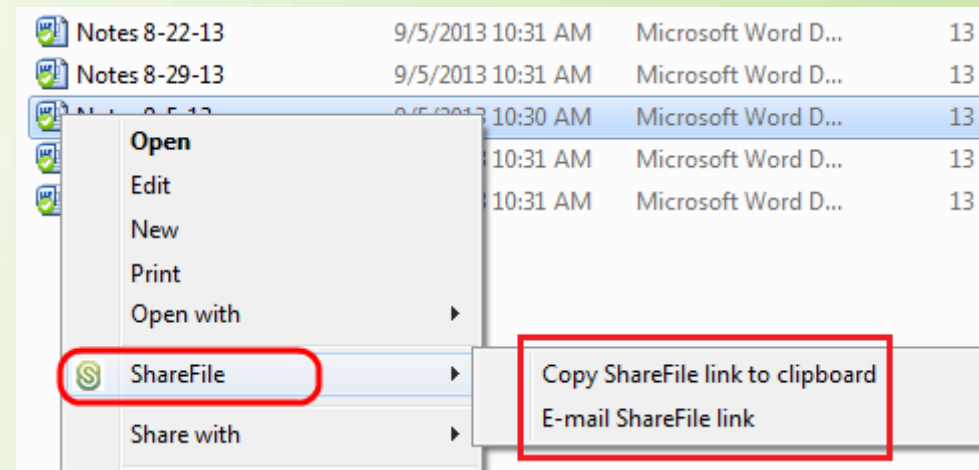
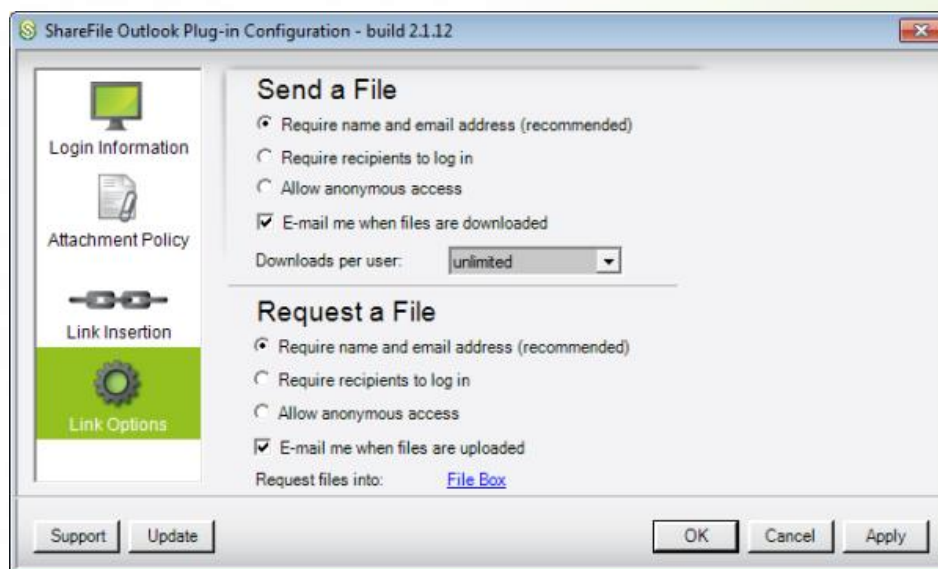


Share Files



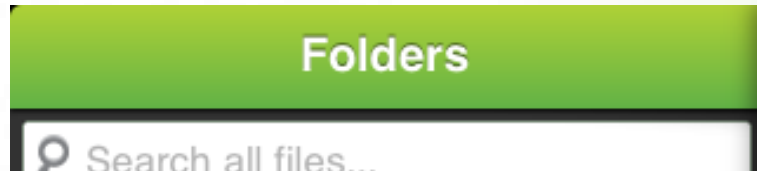
✓ ShareFile Explorer/Finder integration

✓ ShareFile Outlook plugin

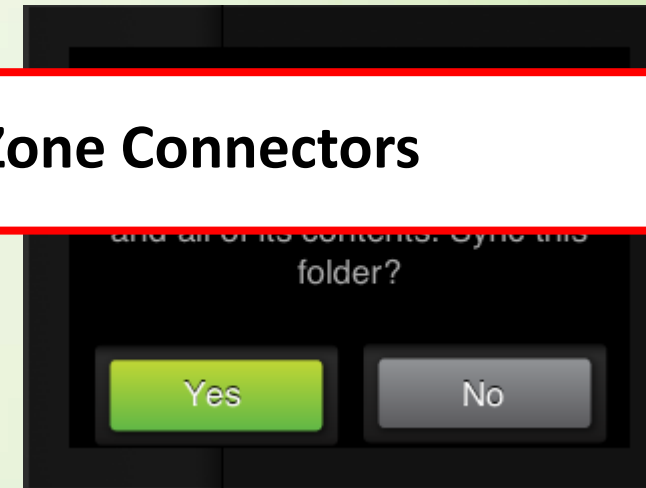
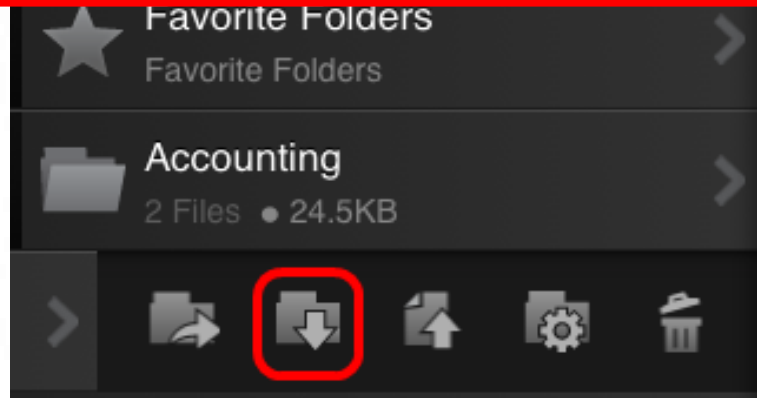




- ✓ ShareFile mobile app
 - ✓ Sync is limited to WiFi connections
 - ✓ Syncs folder and all subfolders



Folder Sync is **not** supported for **StorageZone Connectors**





✓ ShareFile Sync for Windows

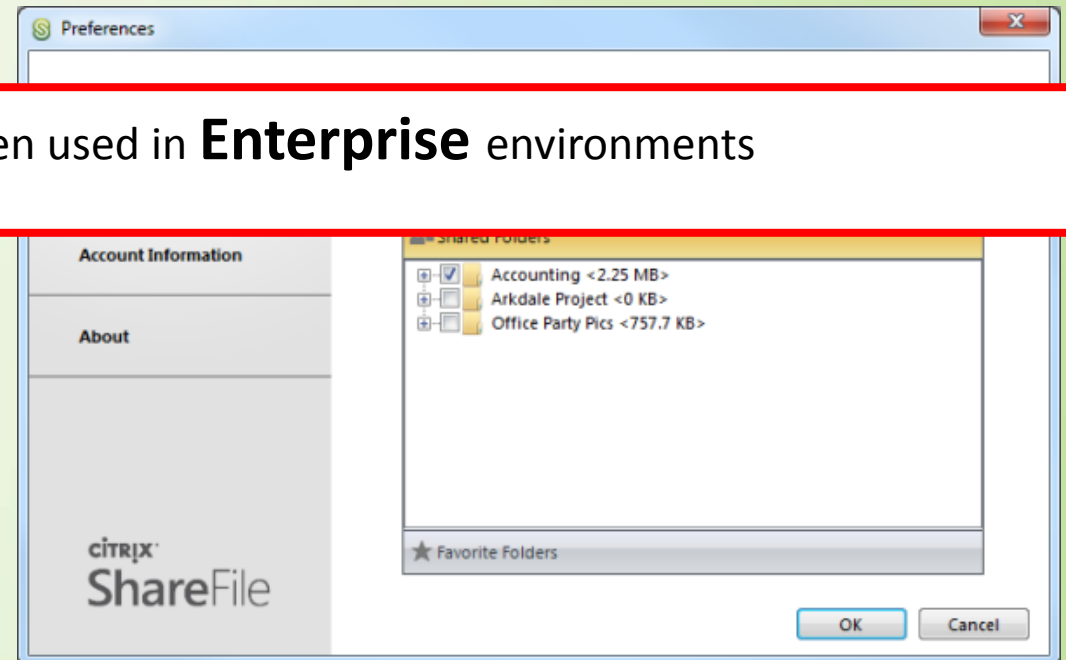
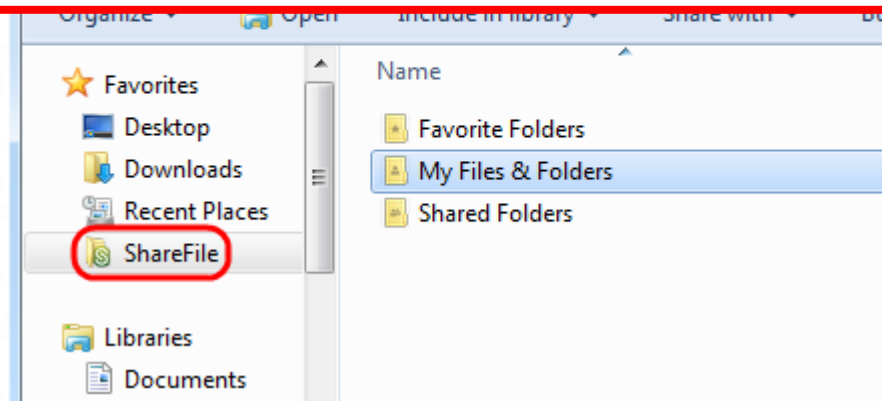
- ✓ Auto sync My Files & Folders
- ✓ Config w/ GPO or custom config file

GPO: (HKCU\Software\Policies\Citrix\ShareFile\EnterpriseSync)

File: (%ProgramFiles%\Citrix\ShareFile\Sync\SyncEngine.exe.config)

- ✓ Explorer integration

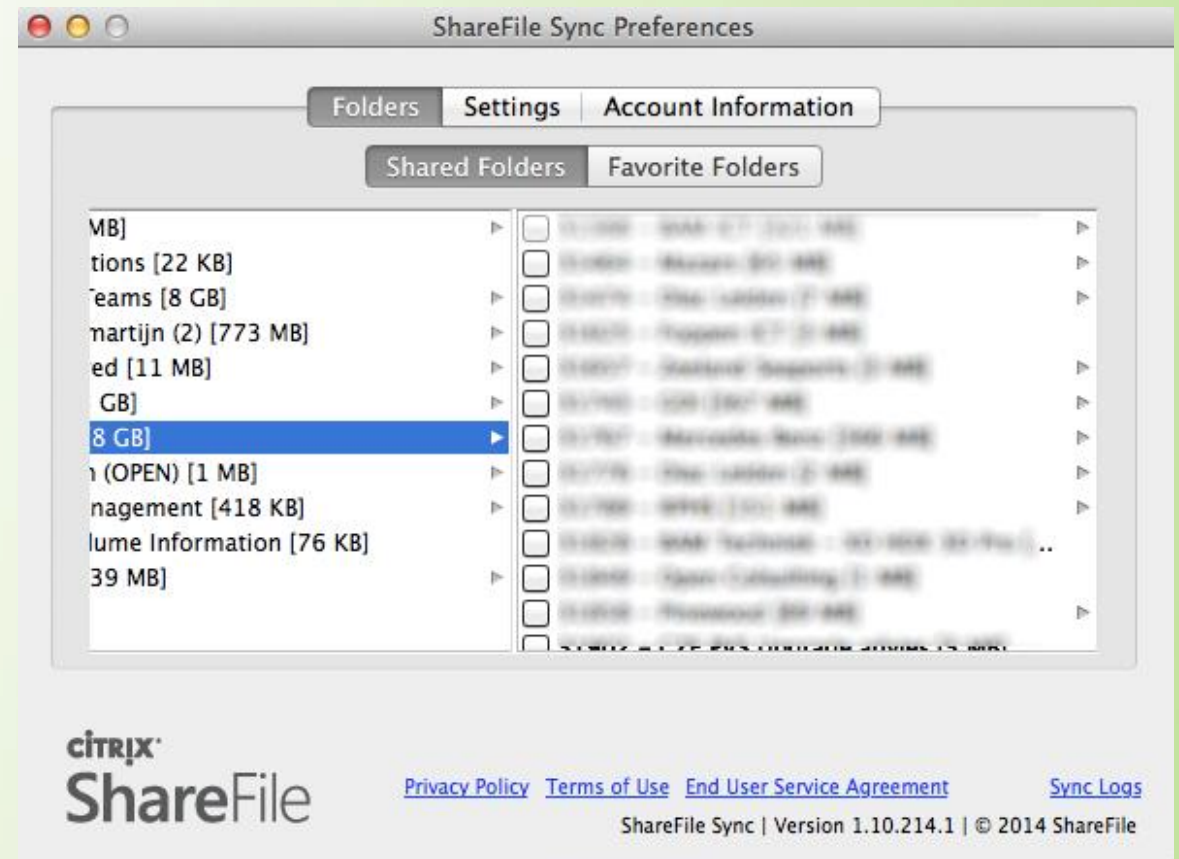
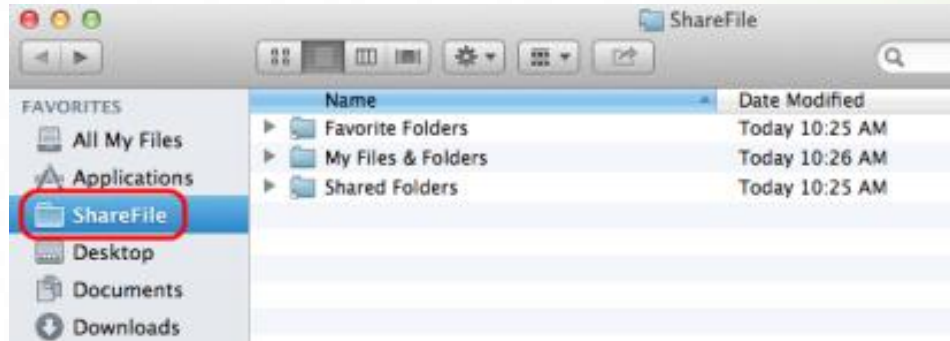
Extra **user instructions** might be required when used in **Enterprise** environments



⇒ Sync Files



- ✓ ShareFile Sync for Mac
 - ✓ Auto sync My Files & Folders
 - ✓ Config w/ plist file
 - ✓ Finder integration



⇒ On-Demand Sync

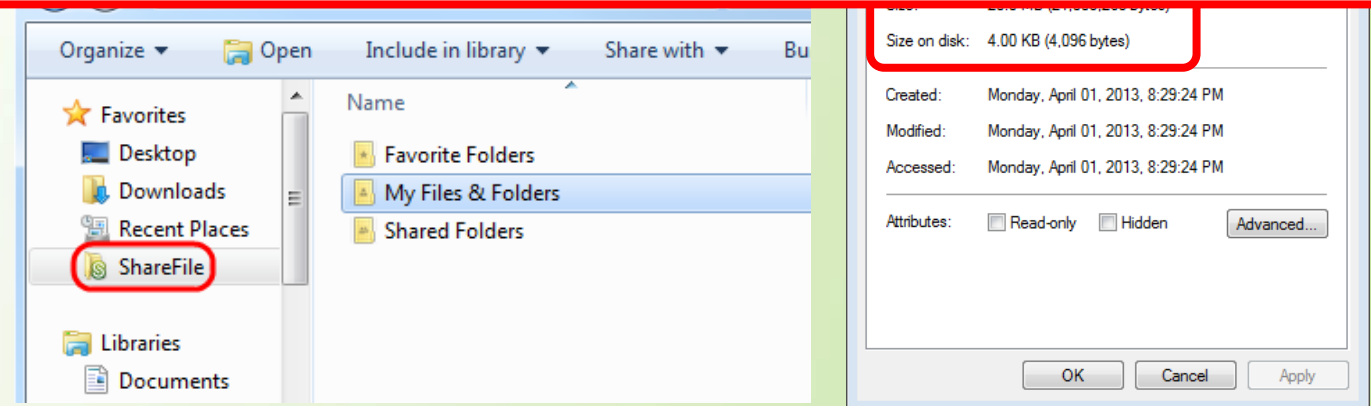


- ✓ ShareFile On-Demand Sync
 - ✓ Same look & feel as Windows Sync
 - ✓ Uses Windows rehearse point files
 - ✓ NTFS feat. using 4 KB placeholder for each file



ShareFile Sync for Windows 2.10 is On-Demand certified for XenApp & XenDesktop and **prevents automatic full file downloads** which can cause **capacity issues** on PVS or MCS.

ShareFile Sync for Windows 2.13 is not certified for XenApp & XenDesktop





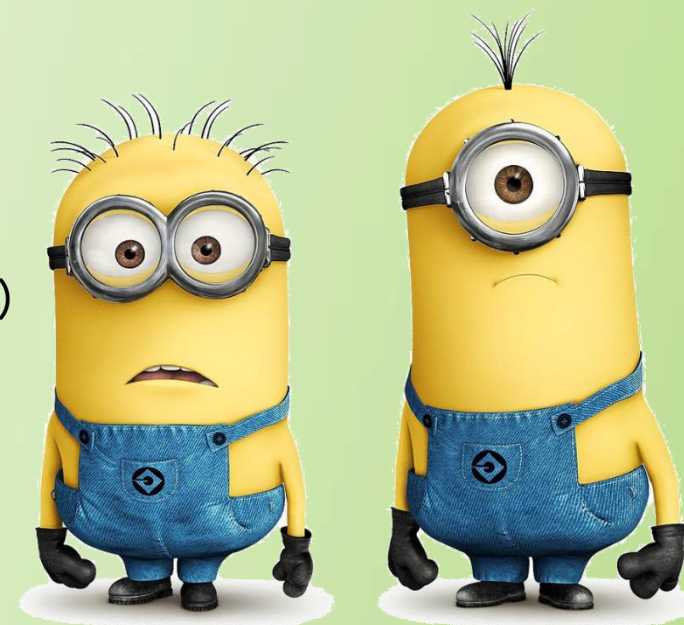
Lessons Learned on Usability

✓ Mobile:

- ✓ Features differ per mobile OS
 - ✓ No file edit for Android/Windows
- ✓ Folder Sync only with WiFi & ShareFile Data
 - ✓ No Folder sync for StorageZone connectors

✓ Desktop:

- ✓ Sync behavior differs per client
 - ✓ On-demand Sync only for XenDesktop/XenApp
 - ✓ Auto-sync of root folder by default (My Files & Folders)
- ✓ No support for StorageZone Connectors
 - ✓ "Sync" client Windows/Mac doesn't support CIFS Share integration



ShareFile Manageability





ShareFile Management Tools

- ✓ ShareFile Control Plane (hosted by Citrix)
- ✓ ShareFile Command Line Interface (SFCLI)

The screenshot displays the ShareFile Control Plane web interface. The top navigation bar includes links for Home, Manage Users, Send a File, Request a File, Admin, My Settings, and Apps. A search bar for 'Search Files and Folders' is also present. The main content area is titled 'Browse Employees' and features a sidebar with options like 'Manage Users Home', 'Browse Employees', 'Browse Clients', 'Shared Address Book', 'Personal Address Book', 'Distribution Groups', and 'Resend Welcome Emails'. The 'Browse Employees' section includes a search bar, a 'Search Users' button, and a '+ Create Employee' button. Below these is a table with columns for Name, Email, Last Login, and Manage. A terminal window is overlaid on the bottom right, showing the command prompt 'C:\WINDOWS\system32\cmd.exe' and an example of the SFCLI command: `sfcli -l "c:\files\file.doc" -sf <guid here> -up -u bob@example.com -pw pASswORD -s mysubdomain -o -move`. The terminal text explains that this command would upload file.doc from c:\files to a ShareFile folder with the specified ID, overwriting any existing file, and then delete the local file.





ShareFile Management Tools

- ✓ Application Programming Interface (API)
 - ✓ REST
 - ✓ PowerShell SDK
 - ✓ .NET SDK
- ✓ User Management Tool (UMT)

The screenshot shows the Citrix ShareFile website's 'SDKs for ShareFile' section. It includes links for 'Getting Started' (Quick Start Guide, OData Implementation, FAQ), 'Get an API Key' (Authentication, API Reference), and 'Access Controls' (Accounts, Async Operations, Capabilities). Below these are three SDK cards: 'StorageZone Connector SDK' (for building custom connectors), 'PowerShell SDK' (a PowerShell snap-in for the API), and '.NET SDK' (for leveraging ShareFile capabilities in C# applications).

The screenshot shows the Citrix ShareFile User Management Tool (UMT) interface. It has a top navigation bar with 'Dashboard', 'Rules', 'Users', 'Groups', and 'Zones'. The main content area features three large icons for 'Rules', 'Users', and 'Groups'. Below these are sections for 'Status' (ShareFile Subdomain, User, Active Directory Domain, User) and 'History' (a table of operations).

Success?	Started	Ended	Errors
✓	8/18/2014 10:00 PM	8/18/2014 10:00 PM	No Error(s)
✓	8/18/2014 2:33 PM	8/18/2014 2:33 PM	No Error(s)





Provisioning Users & Groups

- ✓ ShareFile Control Plane
 - ✓ Add from Excel sheet (Users only)
- ✓ API

Citrix ShareFile

Create Employee

POST <https://account.sf-api.com/sf/v3/Users/AccountUser>

Home Manage Users Send a File Request a File Admin My Settings Apps

Be aware of the ShareFile **Control Plane timeouts** when adding **large amounts** of users

```
"Password": "password",
"StorageQuotaLimitGB": 50,
"Preferences": {
  "CanResetPassword": true,
  "CanViewMySettings": true
},
"DefaultZone": {
  "Id": "zoneid"
},
"IsAdministrator": false,
"CanCreateFolders": false,
"CanUseFileBox": true,
"CanManageUsers": false
}
```

```
"Name": "Name",
"IsShared": true,
"Contacts": [
  { "Email": "user.one@domain.com" },
  { "Email": "user.two@domain.com" }
]
```

Creates a new group.

Add Contacts to Group

POST [https://account.sf-api.com/sf/v3/Groups\(id\)/Contacts](https://account.sf-api.com/sf/v3/Groups(id)/Contacts)
[{"Email": "user.one@domain.com"}, {"Id": "abcd"}]

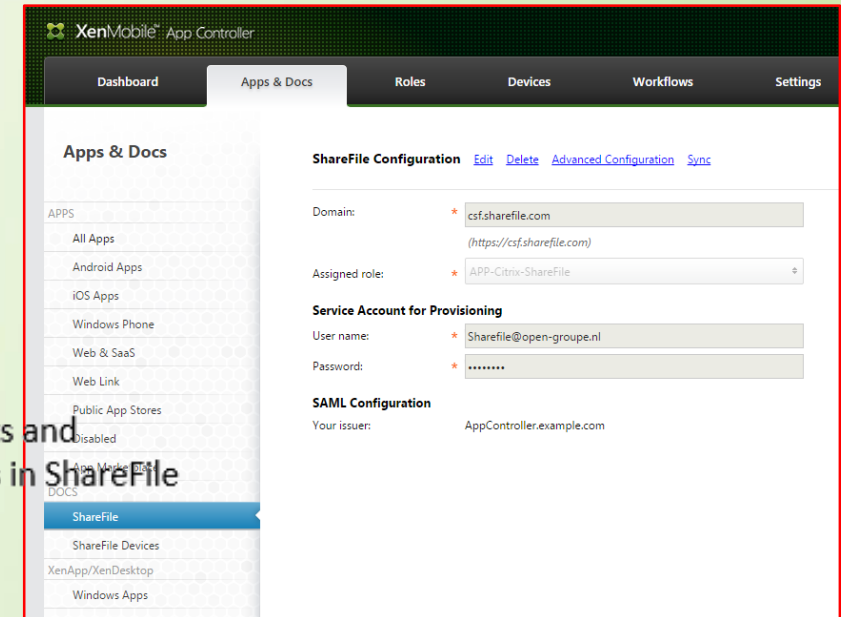
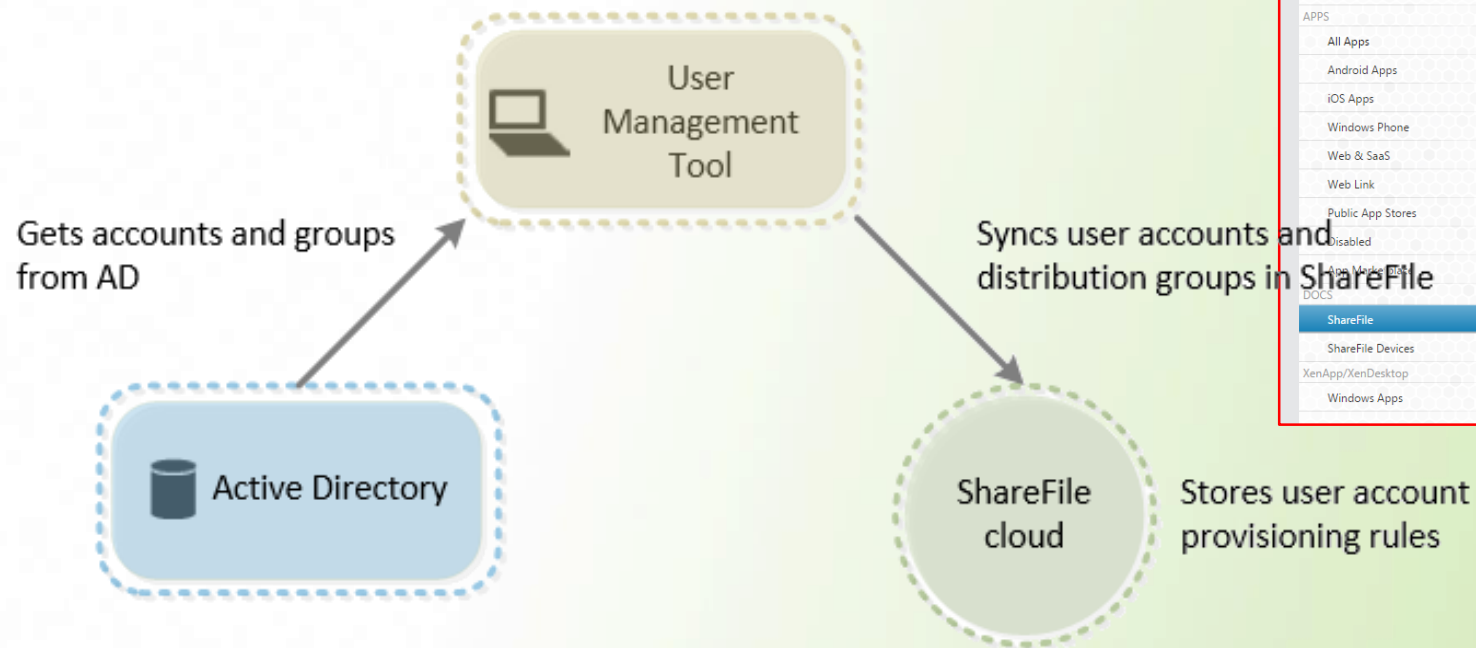
Adds a list of contacts to a group. The contact list may contain either contact ID (same as User ID) or Email.



⇒ Provisioning Users & Groups

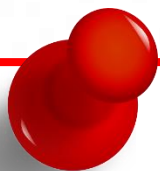
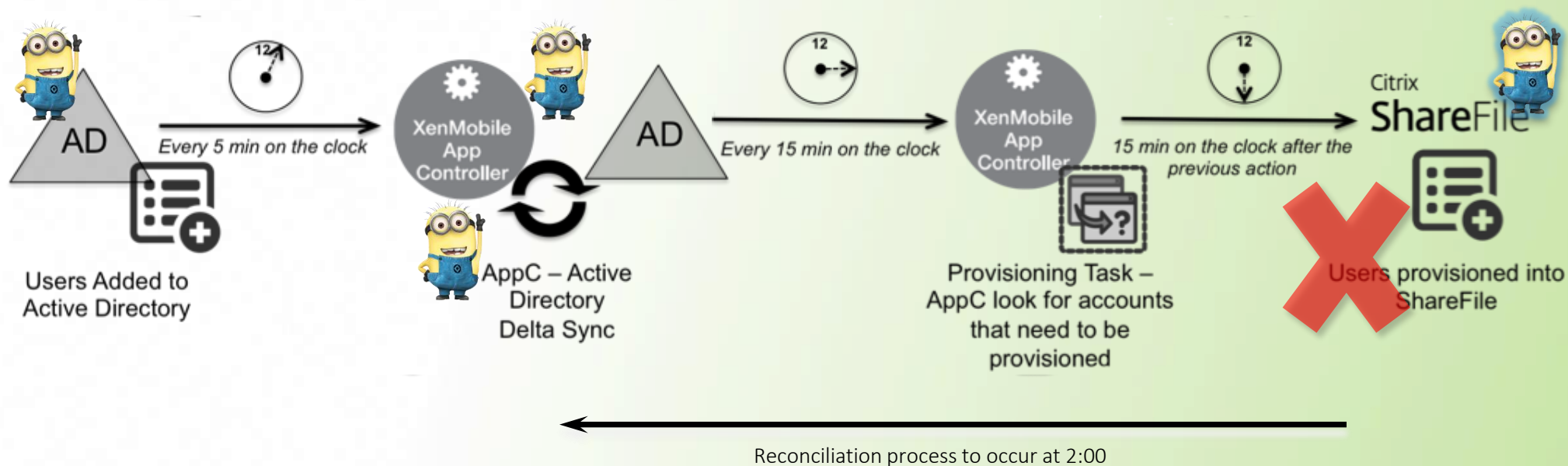


- ✓ XenMobile AppController Management Console (AMC)
- ✓ User Management Tool (UMT)





Provisioning Users w/ XenMobile



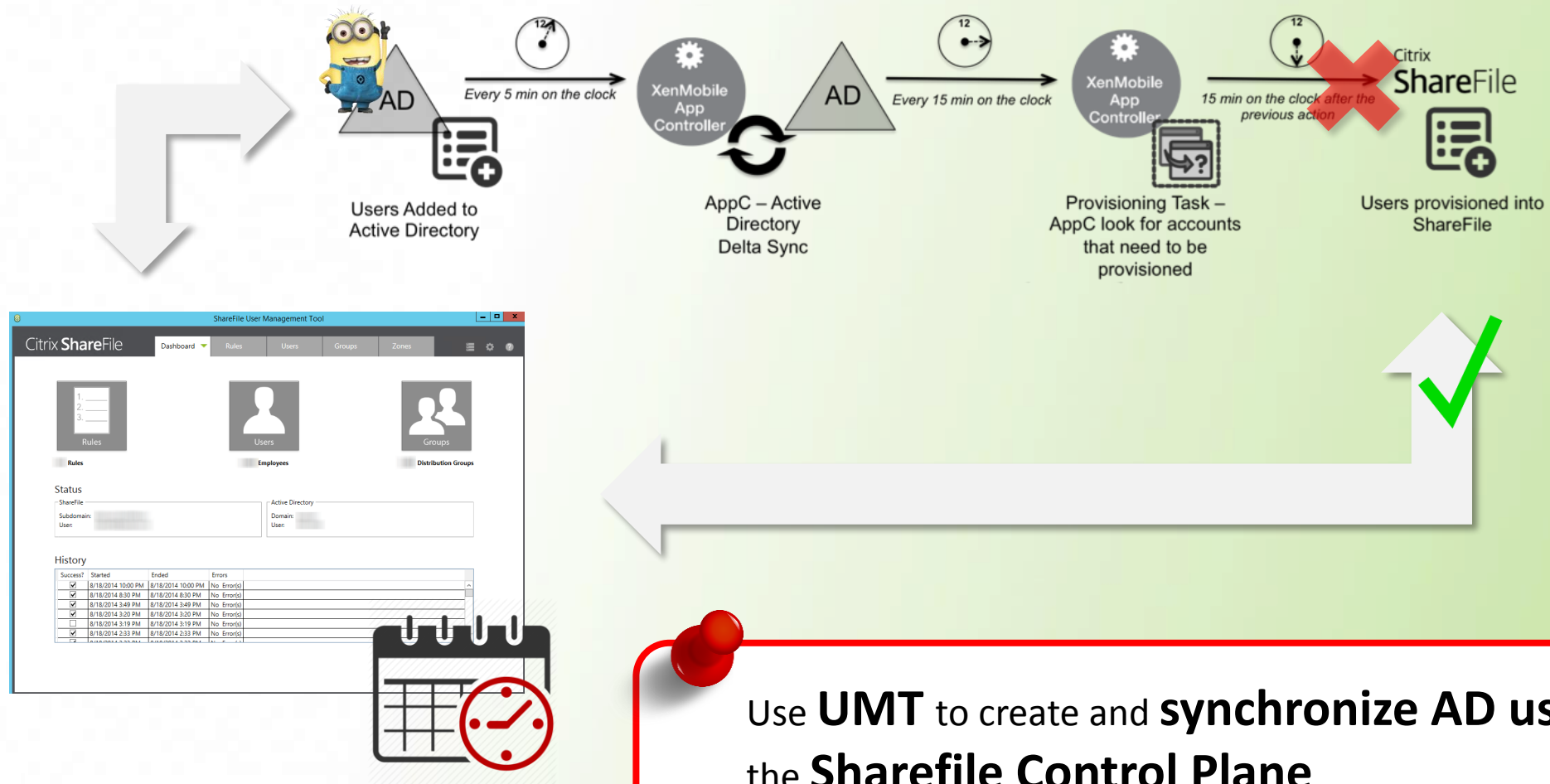
Check out the **blogpost** from **Citrix** at

<http://blogs.citrix.com/2014/09/08/demystifying-the-sharefile-user-provisioning-process-through-xenmobile-app-controller/>





Provisioning Users w/ UMT a/ XenMobile



Use **UMT** to create and **synchronize AD users** with the **Sharefile Control Plane**





Provisioning Groups w/ UMT



Home Manage Users Send a File Request a File Admin My Settings Apps

Help Log Out
Search Files and Folders
Advanced Search

UMT requires **groups and users** to be **created by UMT**!

The screenshot shows the Citrix ShareFile User Management Tool (UMT) interface. The main window has tabs for Rules, Users, Groups, and Zones. The Groups tab is active, showing a list of distribution groups. A large double-headed arrow points from the UMT interface to a box labeled 'AD Groups' containing a Minion illustration.

Group Name	Members	Group Owner
z:\ L	17	R. Spies
z:\ L	16	M. Hulsman
z:\ SF-Algemeen-Full	0	R. Spies
z:\ SF-Algemeen-Modify	0	R. Spies
z:\ SF-Algemeen-Read	0	R. Spies
z:\ SF-Projecten-Full	0	R. Spies

AD Groups


Use UMT to **synchronize** ShareFile distribution groups with Active Directory groups!










Set Folder & File Access Rights

- ✓ ShareFile Control Plane
- ✓ API

This Folder is Shared With 

Name	Download	Download Alerts	Upload	Upload Alerts	Delete	Admin
 Super Users	✓		✓		✓	✓
 SF-ExpertiseTeam-Full	✓		✓		✓	
 SF-ExpertiseTeam-Modify	✓		✓			
 SF-ExpertiseTeam-Read	✓					
 van den Berg, Jaco (Groupe OPEN Nederland) (Owner)	✓		✓		✓	✓

Create AccessControl

```
POST https://account.sf-apo
{
  "Principal":{"url":"https:
  "CanUpload":true,
  "CanDownload":true,
  "CanView":true,
  "CanDelete":true,
  "CanManagePermissions":true,
  "Message":"Message"
}
```

Creates a new Access Controls entry for a given Item. Access controls can only define a single Principal, which can be either a Group or User. The 'Principal' element is specified as an object - you should populate either the URL or the ID reference.





Upload & Migrate Data

✓ SFCLI

```
c:\> sfcli -encrypt pa$$w0rd  
c:\> {MNq9SdDMiOZR4iXm}  
c:\> sfcli -up -l <localpath> -sf <sfpayload> -u <user> -pw {MNq9SdDMiOZR4iXm} -s <sfsdomain> -recurse
```

✓ API

✓ ShareFile

Upload File

POST https://account.sf-api.com/sf/v3/Items(id)/Upload?method=method&various...

Prepares the links for uploading files to the target Folder. This method returns an Upload Specific... the upload method, provider, and resume parameters passed to the upload call. The Method dete... uploads use a single HTTP POST message to the ChunkUri address provided in the response. All... do not support Resume. Streamed uploads use multiple HTTP POST calls to the ChunkUri address... index, offset and hash to the end of the ChunkUri address. Index is a sequential number represen... represents the byte offset for the block; and hash contains the MD5 hash of the block. The last HT... parameter. Threaded uploads use multiple HTTP POST calls to ChunkUri, and can have a number... must append index, offset and hash to the end of ChunkUri, as explained in Streamed. After all ch...

Import the ShareFile sync engine module:

```
Import-Module "C:\Program Files\Citrix\ShareFile\Sync\SFSyncEngine.dll"
```

Listing Available Commands

Check out the **blogpost** from **Helge Klein** at

<https://helgeklein.com/blog/2014/01/configuring-citrix-sharefile-sync-powershell>

all uploaders: the result code for the HTTP POST calls to Chunk and Finish Uri can either be a 40... indicating some kind of error; or 200 with a Content Body of format 'ERROR:message'. Successfu... Body, or with Body of format 'OK'.

Cmdlet	Add-SyncJob	SFSyncEngine
Cmdlet	Get-FileLink	SFSyncEngine
Cmdlet	Get-FolderIdByName	SFSyncEngine
Cmdlet	Get-FolderLink	SFSyncEngine
Cmdlet	Get-HomeFolderId	SFSyncEngine
Cmdlet	Get-SyncJobs	SFSyncEngine
Cmdlet	Get-SyncJobState	SFSyncEngine
Cmdlet	Remove-SyncJob	SFSyncEngine





Backup & Restore

✓ On-premise Data:

✓ Connectors

=> Daily Operations

✓ ShareFile Data

=> Backup the persistentstorage folder

✓ Meta data (SF Control Plane)

✓ Archived by ShareFile

Storage layout

You are responsible for backing up your **StorageZones Controller local file storage**.

ShareFile archives the corresponding file **metadata** that resides in the ShareFile cloud for **3 years**.

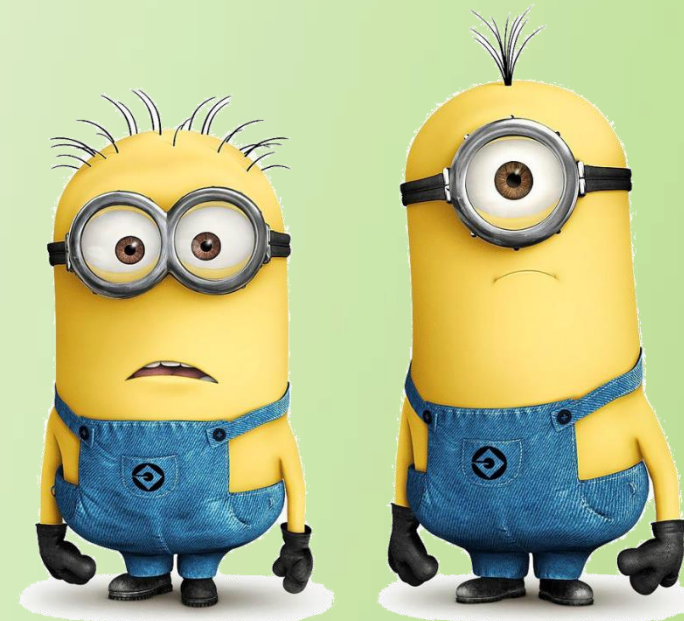
```
\a024f83e-b147-437e-9f28-e7d03634a142  
  \fi3d85dc_1d6c_49b0_8faa_1f36ef3d83b5  
  \fi7d5cbb_93c8_43f0_a664_74f27e72bc83  
  \fi47cd7e_64c4_47be_beb7_1207c93c1270
```





Lessons Learned on Manageability

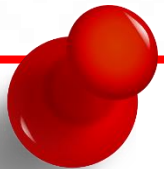
- ✓ Managing users & groups:
 - ✓ Use UMT to sync users and groups from Active Directory
 - ✓ Disable user synchronization within XenMobile AppController
 - ✓ Minimize the number of distribution groups
 - ✓ Large amount of distribution groups slows down the adding users
- ✓ Managing data:
 - ✓ Transferring large amount of data takes time
 - ✓ plan ahead!
 - ✓ Think about Backup & Restore
 - ✓ User recovery is 7 days
 - ✓ Citrix Managed Storage is 30 days (Citrix support)
 - ✓ Check out storage limits for folders/files
 - ✓ ShareFile creates GUIDs for all objects
 - ✓ Change MaxDirSize on NetApp



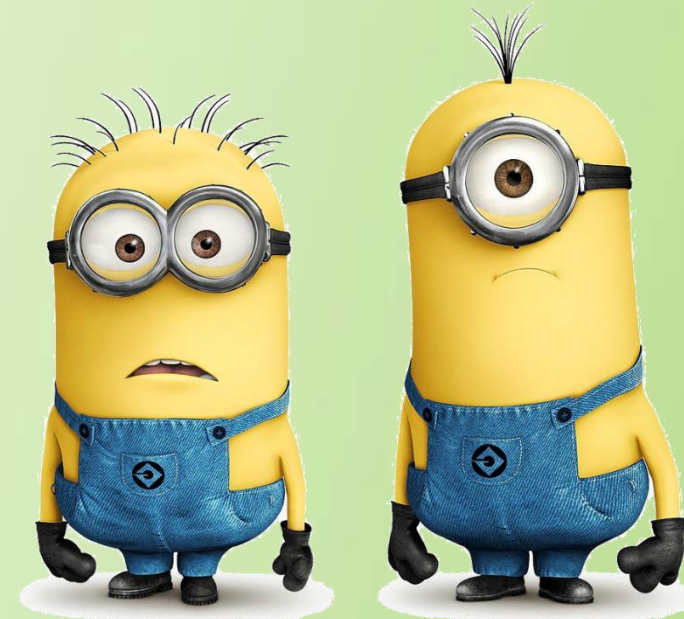


Lessons Learned on Manageability

- ✓ 1000+ ShareFile Users:
 - ✓ Contact Citrix for their Success Management Program
- ✓ Tools:
 - ✓ Separate tools for management tasks (UMT, PowerShell, API)
 - ✓ Large environments need API



The **default tooling** for ShareFile is **not yet sufficient**





One More Thing ...



About Rink

- ✓ 15 years of working in IT
 - ✓ CCV-E, CCP-M, CCEE, MCITP, CCIA, CCP-N
 - ✓ Government | Healthcare | Construction
 - ✓ Design | Build | Advice
 - ✓ 200 – 10000+ seats

open
services & innovations numériques

⇒ ShareFile Community Tools

✓ Sharefile Explorer

✓ ShareFile Passphrase Recovery Tool

 Downloads available on **www.SF-GURU.com**

⇒ SF
GURU
EXPLORER



⇒ SF
GURU
PASSPHRASE
RECOVERY TOOL



⇒ Demo time!

DEMO
DEMO
DEMO



⇒ Questions?



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Thank You



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Senior Technical Consultant PepperByte

Senior Technical Consultant Groupe Open




Senior Technical Consultant Groupe Open



✔ Citrix ShareFile

- 
-  **ShareFile Global Customer Support**
https://support.citrixonline.com/en_US/sharefile
-  **Citrix ShareFile Community Support**
<https://community.sharefilesupport.com/citrixsharefile>
-  **Citrix Blogs: Demystifying ShareFile user provisioning**
<http://blogs.citrix.com/2014/09/08/demystifying-the-sharefile-user-provisioning-process-through-xenmobile-app-controller>

✓ Community

-  **Rink Spies: Citrix ShareFile : Lessons learned in real life**
<http://www.rinkspies.com/2014/09/01/citrix-sharefile-lessons-learned-in-real-life/>
-  **Rink Spies: How to improve the Citrix NetScaler Monitor for ShareFile**
<http://www.rinkspies.com/2014/09/10/how-to-improve-the-citrix-netscaler-monitor-for-sharefile/>
-  **Helge Klein: Configuring Citrix Sharefile Sync from PowerShell**
<https://helgeklein.com/blog/2014/01/configuring-citrix-sharefile-sync-powershell>