

Replacing OS X Server With Windows

Charles Edge
Chief Technology Officer, 318

Feelings...

Management...

Business & SLAs

3,000 vs. 400,000,000
1:133,333

3,000 vs. 400,000,000
1:133,333

SWAG!

A Quick Note On Rack Density

Overview

Server

HARDWARE

test.pretendco.com

ACCOUNTS

Users

Groups

STATUS

Alerts

Logs

Stats

SERVICES

Calendar

Contacts

DNS

File Sharing

FTP

Mail

Messages

NetInstall

Open Directory

Profile Manager

Software Update

Time Machine

VPN

Websites

Wiki

Xsan

test.pretendco.com

Overview

Settings

Network

Storage

Hardware

Model MacBook Air

Processor 1.7 GHz Intel Core i5

Serial Number C02GG3K5DJWV

Storage 250.58 GB

Memory 4 GB

Software

Startup Disk Macintosh HD

System Version OS X 10.8.1 (Build 12B19)

Server Version Server 2.0.23 (Build 12S307)

















Running for 9 days, 19 hours, 36 minutes

Next Steps

















Reading Messages settings

Wednesday, September 12, 12

SERVICES

















-  Calendar
-  Contacts
-  DNS
-  File Sharing
-  FTP
-  Mail
-  Messages
-  NetInstall
-  Open Directory
-  Profile Manager
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















Exchange

SERVICES

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












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Exchange

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Exchange
Exchange
DNS Service

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Exchange
Exchange
DNS Service
Windows File Sharing

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Exchange


Exchange

DNS Service

Windows File Sharing

Internet Information Services (IIS)

SERVICES

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DNS Service

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Exchange

Exchange

DNS Service

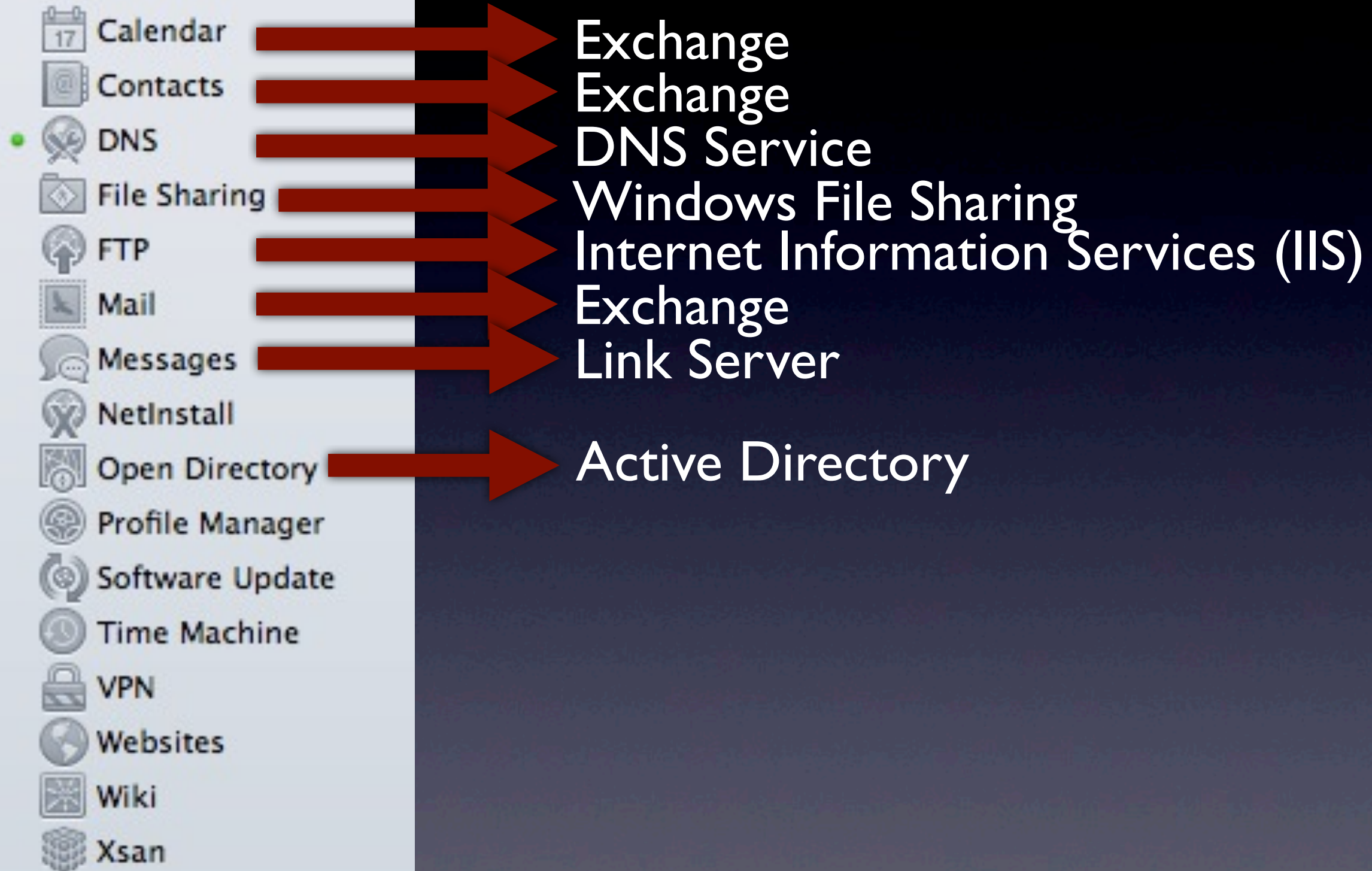
Windows File Sharing

Internet Information Services (IIS)

















Exchange

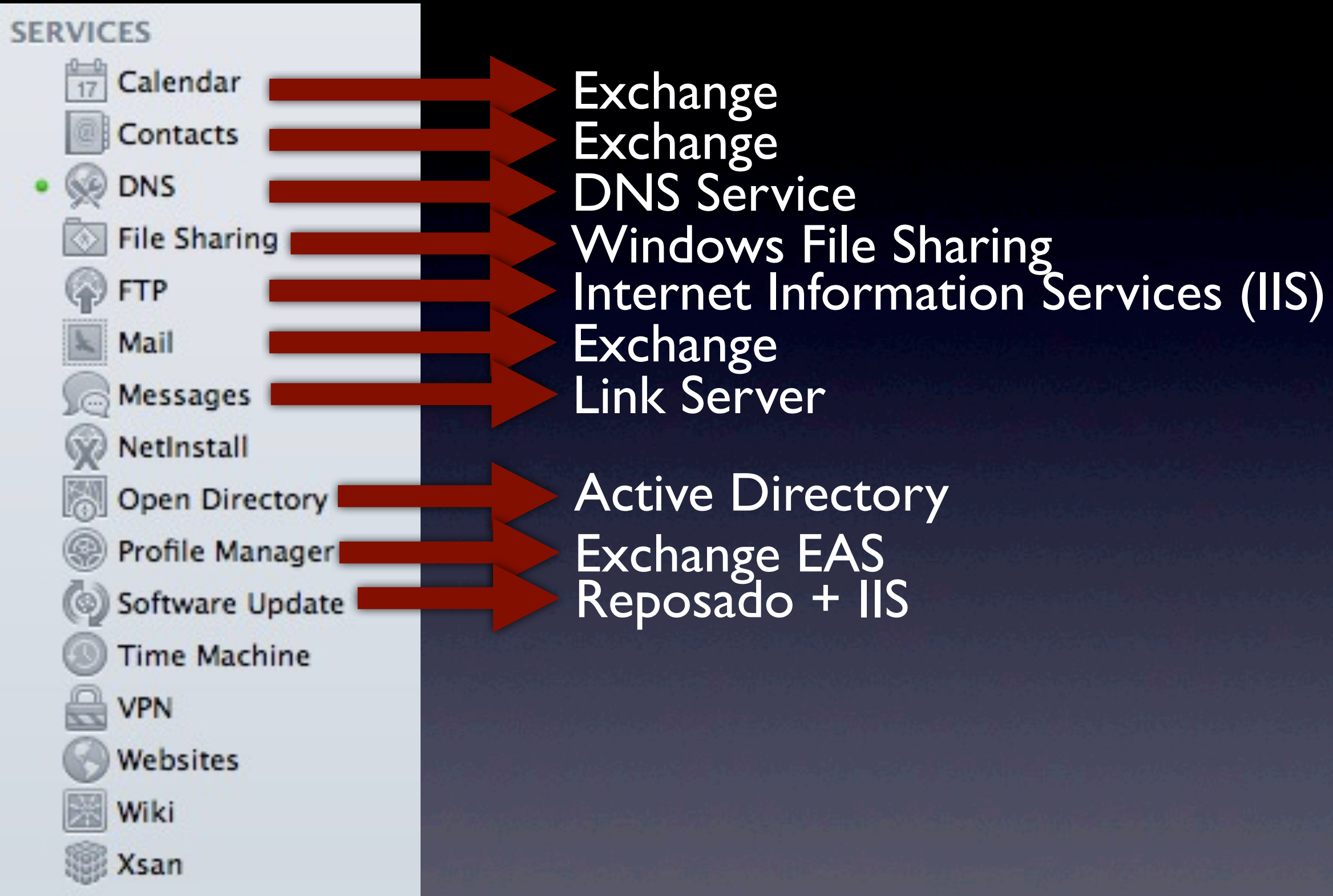
Link Server

SERVICES



















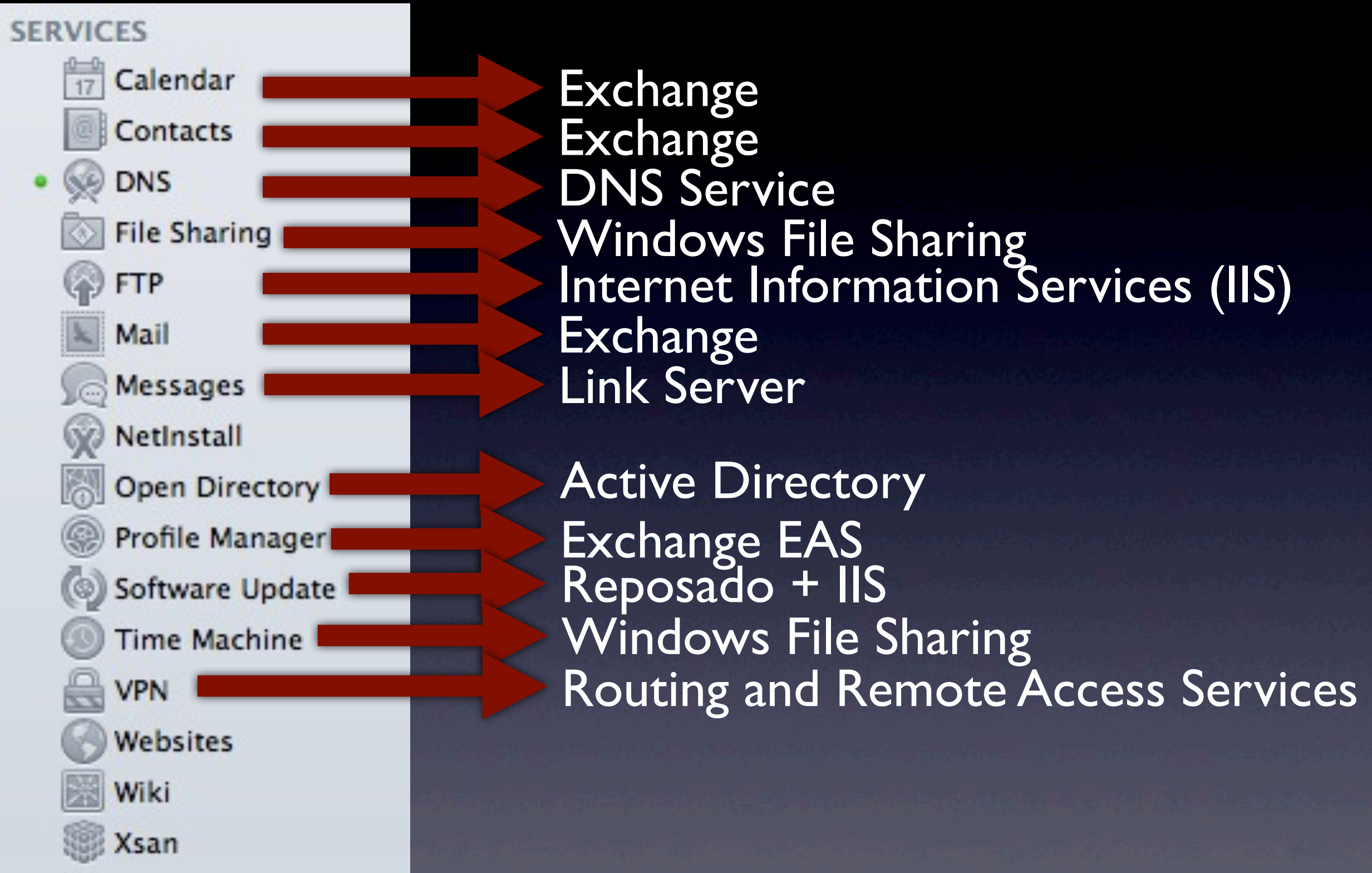
SERVICES

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	Contacts	→	Exchange
	DNS	→	DNS Service
	File Sharing	→	Windows File Sharing
	FTP	→	Internet Information Services (IIS)
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	NetInstall		
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	Profile Manager	→	Exchange EAS
	Software Update		
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

















SERVICES

















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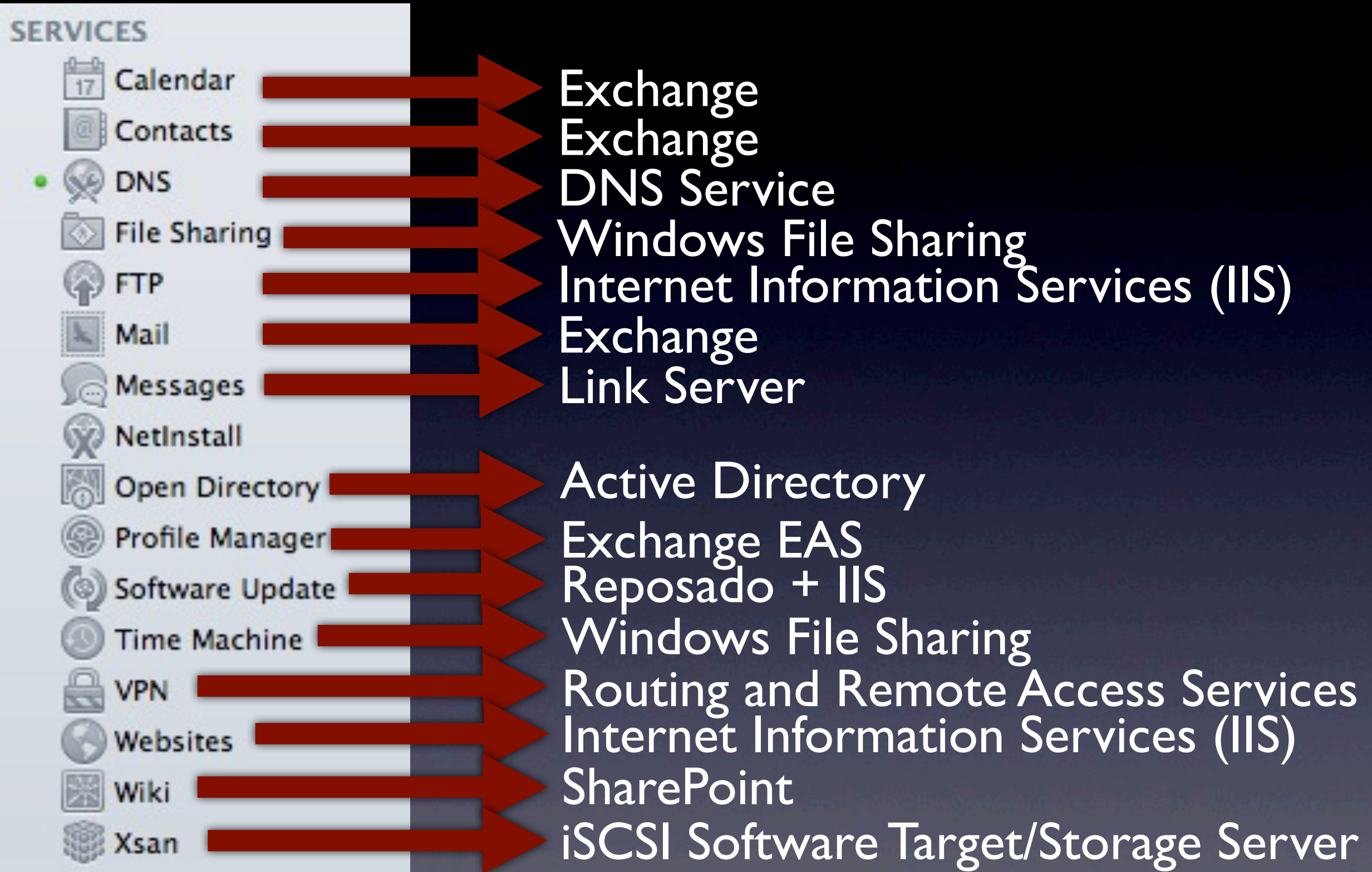


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 Wiki	→	SharePoint
 Xsan		



What was missing?

NetBoot

3rd Party Products

Windows Server

Mature

Not Difficult

Well, Incrementally
Difficult...

Well Supported

Scriptable

Windows PowerShell ISE (x86)

File Edit View Tools Debug Add-ons Help

PS C:\Users\test> Get-NetFirewallProfile -All

```
Name : Domain
Enabled : True
DefaultInboundAction : NotConfigured
DefaultOutboundAction : NotConfigured
AllowInboundRules : NotConfigured
AllowLocalFirewallRules : NotConfigured
AllowLocalIPsecRules : NotConfigured
AllowUserApps : NotConfigured
AllowUserPorts : NotConfigured
AllowUnicastResponseToMulticast : NotConfigured
NotifyOnListen : True
EnableStealthModeForIPsec : NotConfigured
LogFileName : %systemroot%\system32\LogFiles\Firewall\pfirewall.log
LogMaxSizeKilobytes : 4096
LogAllowed : False
LogBlocked : False
LogIgnored : NotConfigured
DisabledInterfaceAliases : {NotConfigured}
```

```
Name : Private
Enabled : True
DefaultInboundAction : NotConfigured
DefaultOutboundAction : NotConfigured
AllowInboundRules : NotConfigured
AllowLocalFirewallRules : NotConfigured
AllowLocalIPsecRules : NotConfigured
AllowUserApps : NotConfigured
AllowUserPorts : NotConfigured
AllowUnicastResponseToMulticast : NotConfigured
NotifyOnListen : True
EnableStealthModeForIPsec : NotConfigured
LogFileName : %systemroot%\system32\LogFiles\Firewall\pfirewall.log
LogMaxSizeKilobytes : 4096
LogAllowed : False
LogBlocked : False
LogIgnored : NotConfigured
DisabledInterfaceAliases : {NotConfigured}
```

```
Name : Public
Enabled : True
DefaultInboundAction : NotConfigured
```

Commands

Modules: All Refresh

Name:

Get-NetFirewallPortFilter
Get-NetFirewallProfile
Get-NetFirewallRule
Get-NetFirewallSecurityFilter

Parameters for "Get-NetFirewallProfile":

ByAssociatedNetIPsecMainModeRule
ByAssociatedNetIPsecRule ByName
GetAll ByAssociatedNetFirewallRule

☒ All
☐ AsJob

CimSession:
GPOSession:
PolicyStore:
ThrottleLimit:

Common Parameters

Run Insert Copy

Completed Ln 64 Col 19 100%

10:46 PM 9/9/2012

Scalable

Well Documented

14,518 vs 1,173

Secure

SMB

IIS

SharePoint

AD-Integrated DNS

Enterprise CA Services (e.g. SCEP)

Active Directory

Scalable

Easy to Use

LDIFDE

Schema Extensions

Centrify

Status of MCX?

Exchange Server

Outlook & Mail

Not Fully Featured

As Scalable As It Gets

Mature

Well Engineered

Filtering & Clustering

Large Pool of Engineers

Cloud + On Premesis

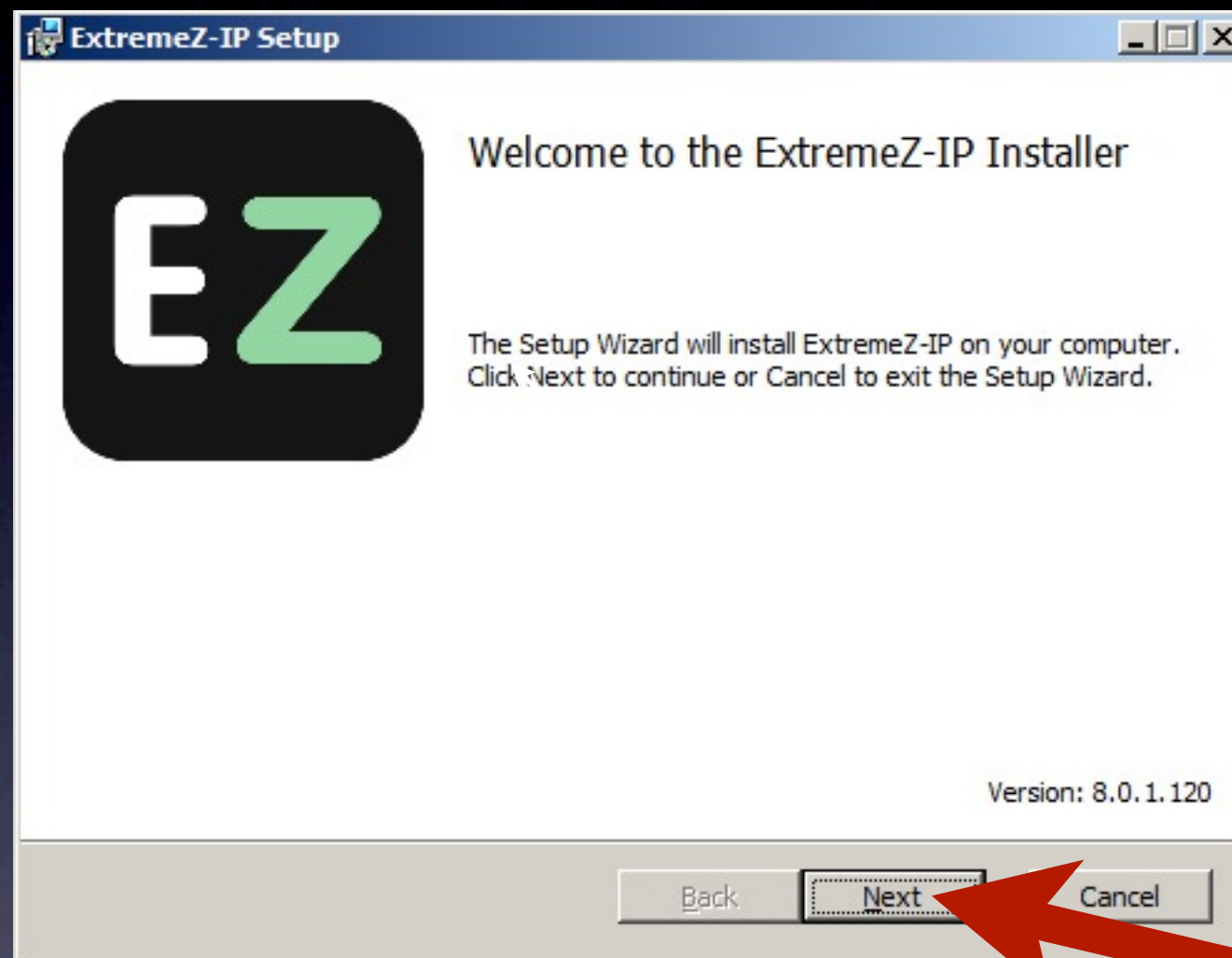
Steep Learning Curve

Then There's Google
Apps...

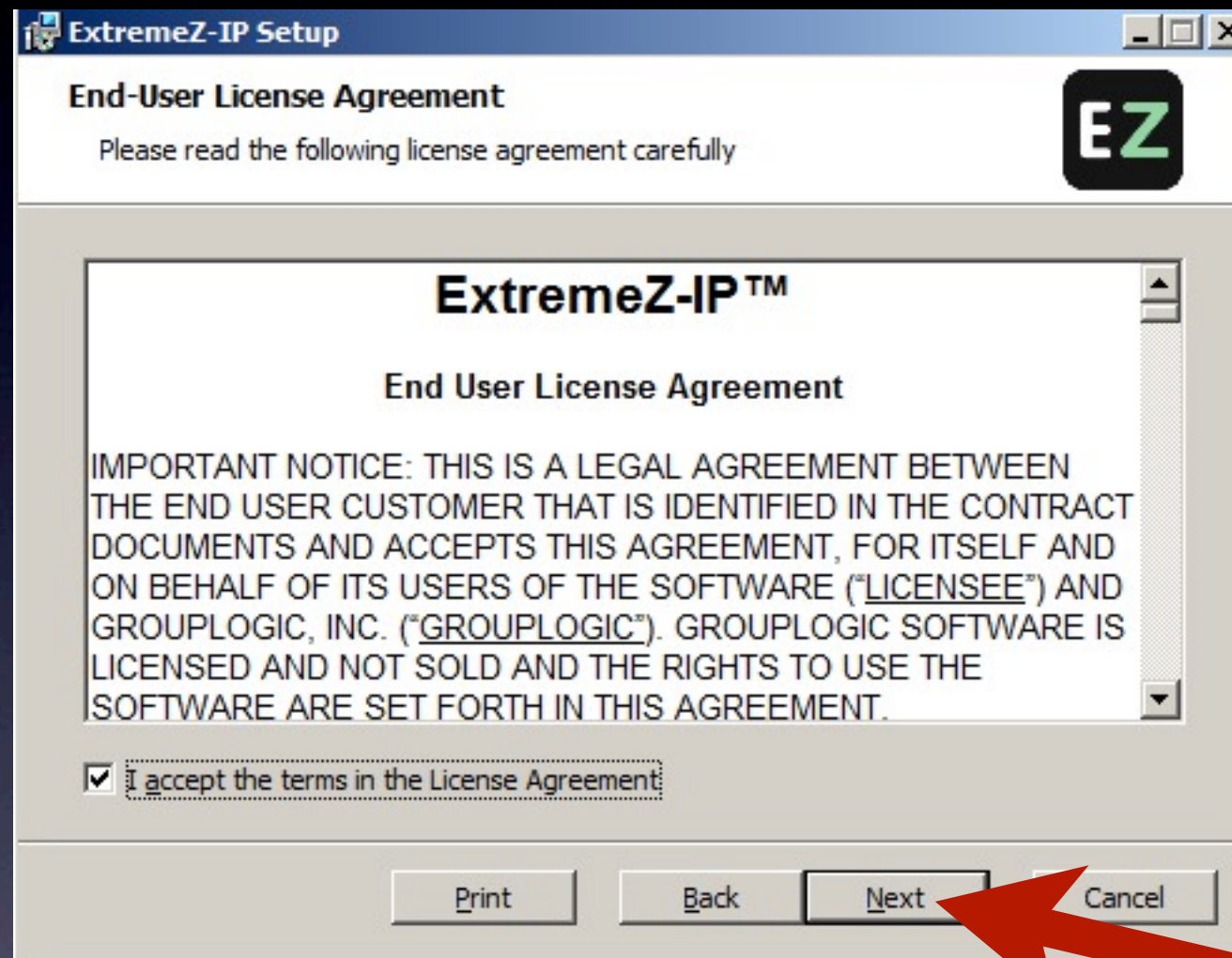
GroupLogic

ExtremeZ-IP

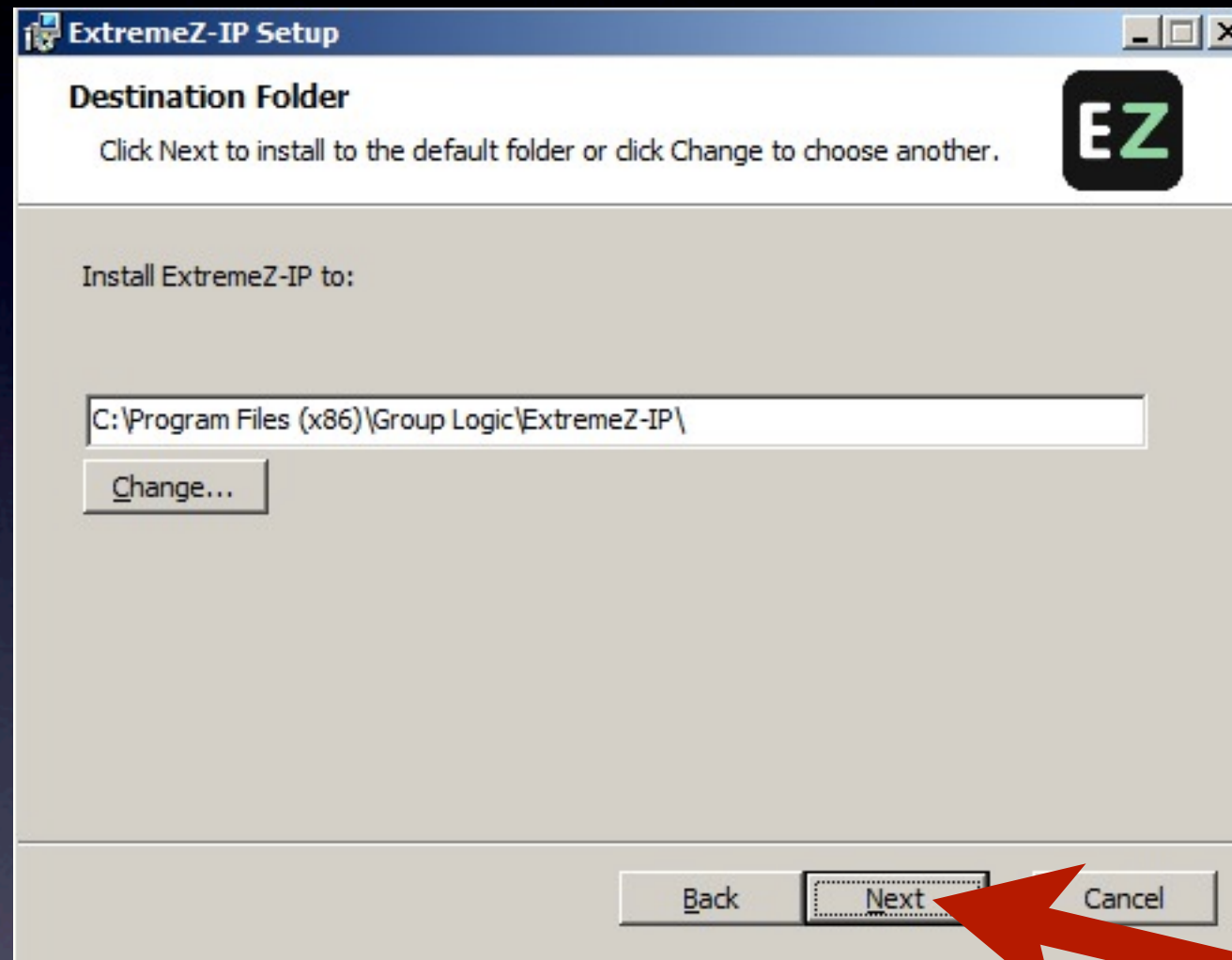
Installation



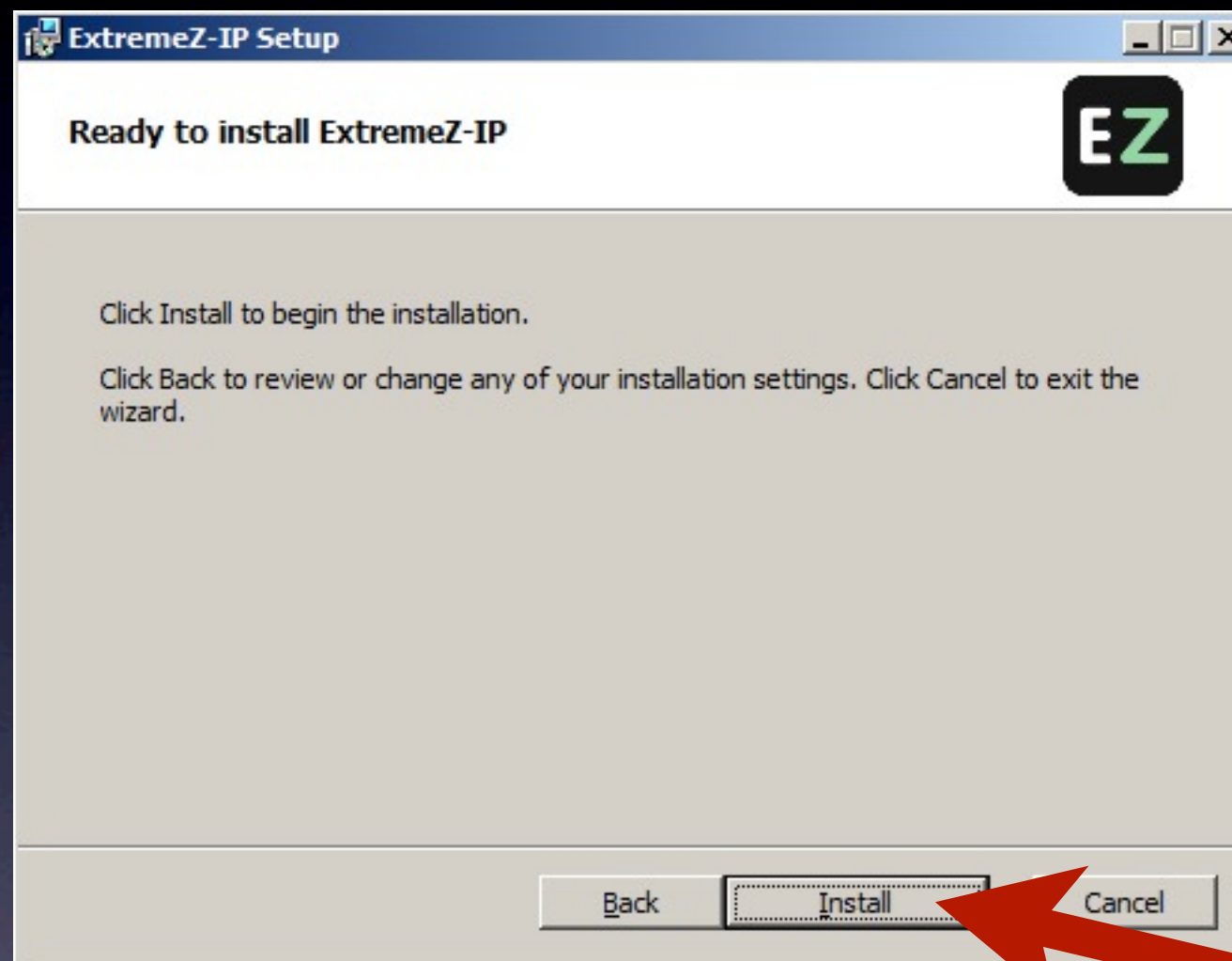
Open & Click Next



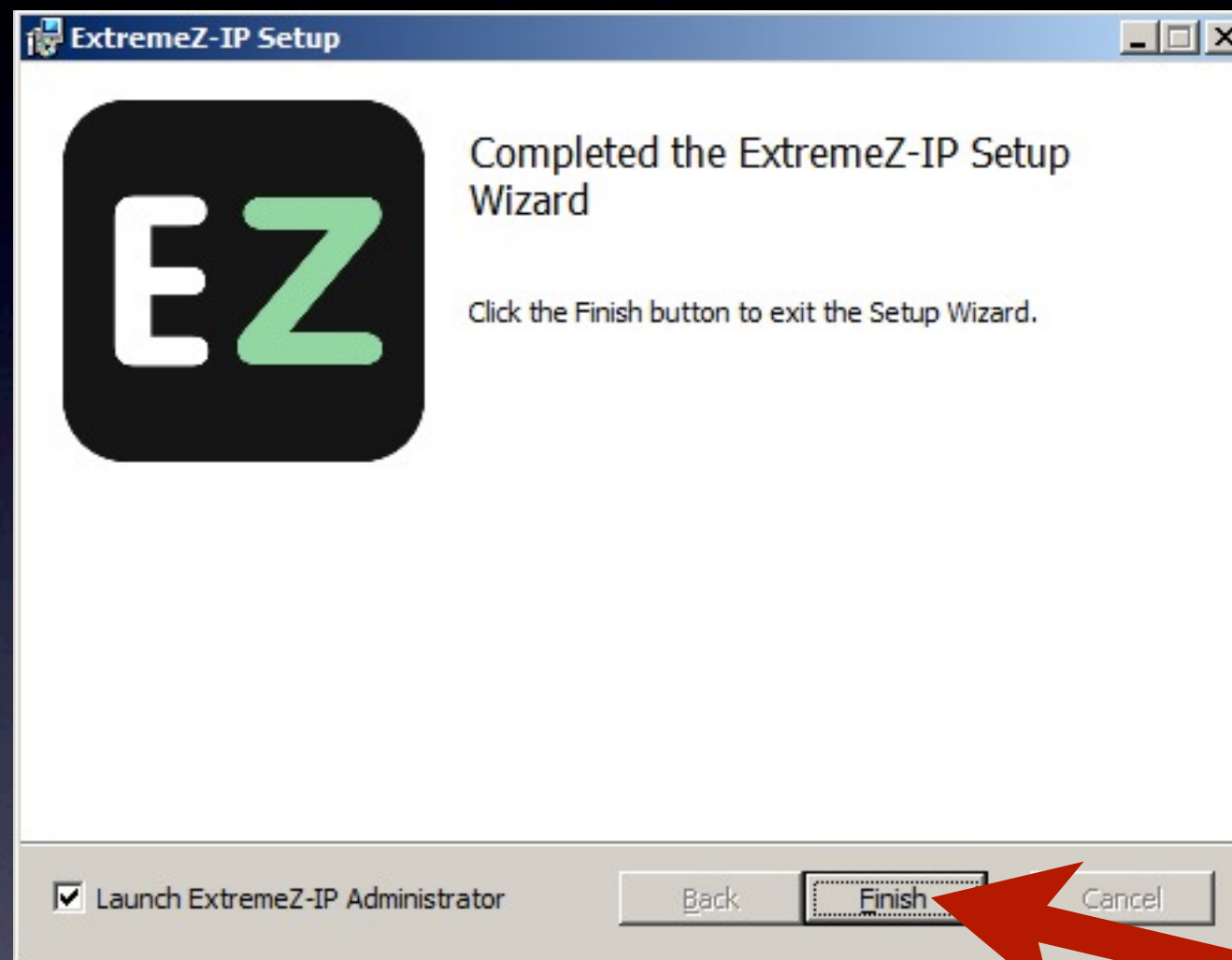
Check a Box & Click Next



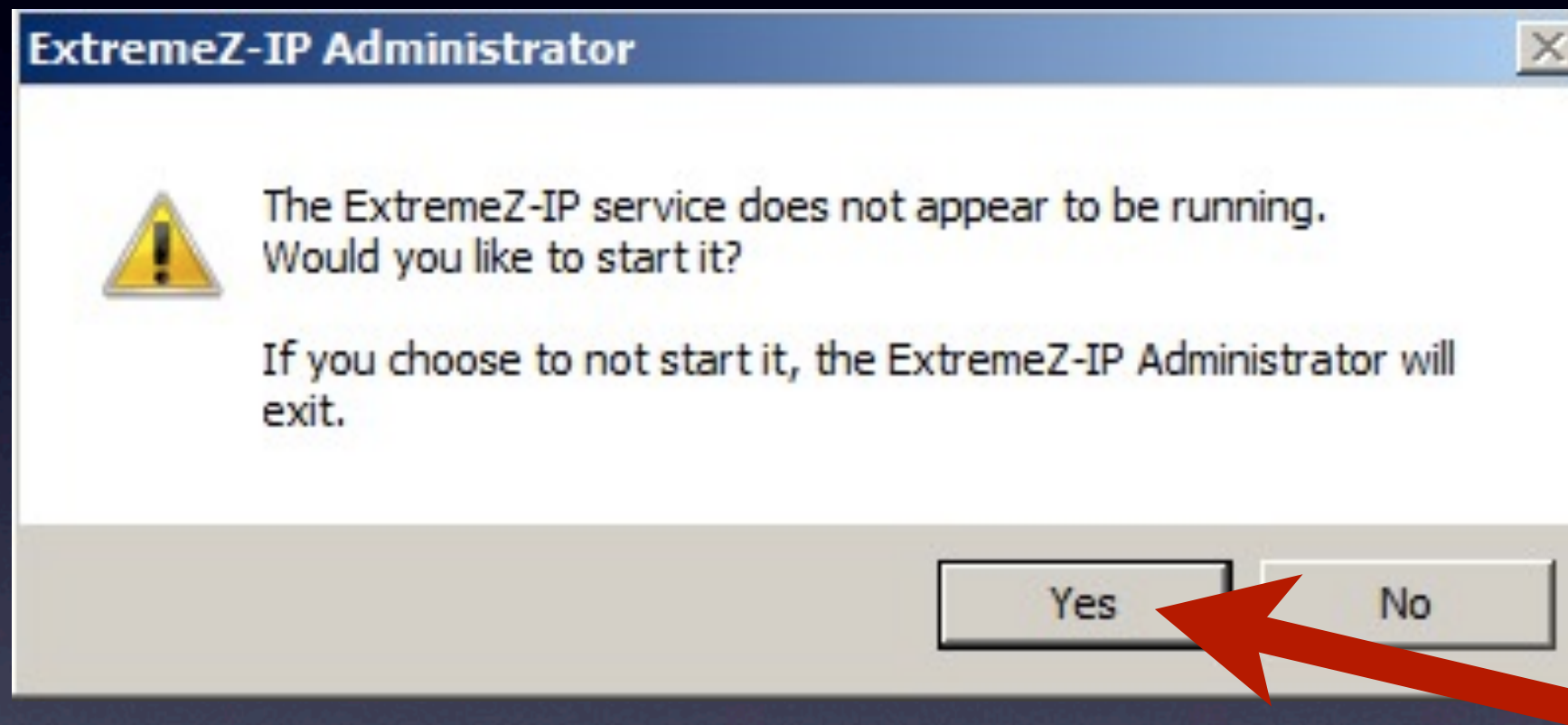
Choose a Location & Click Next



Click Install



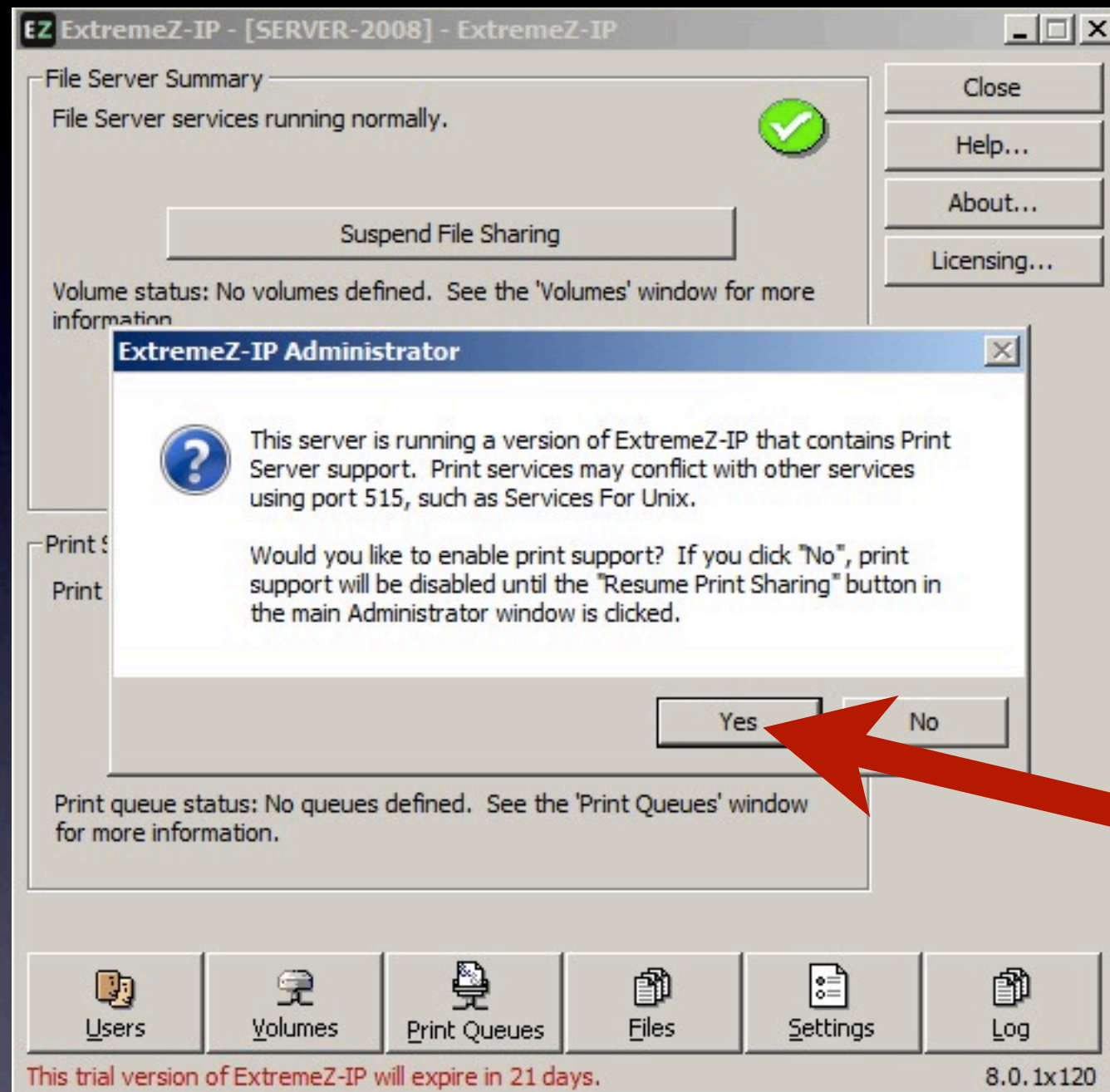
Click Finish



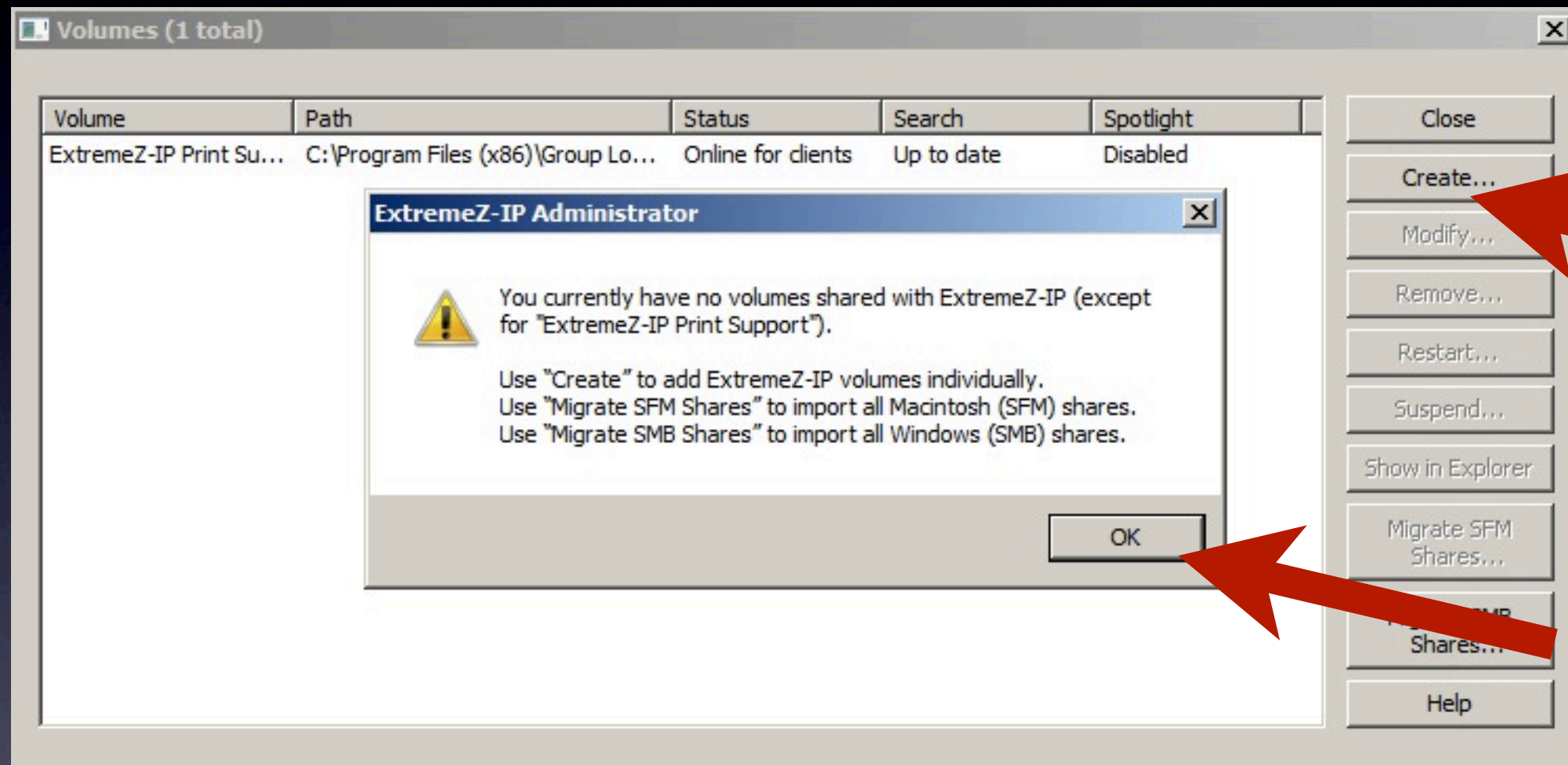
Services Not Started Yet



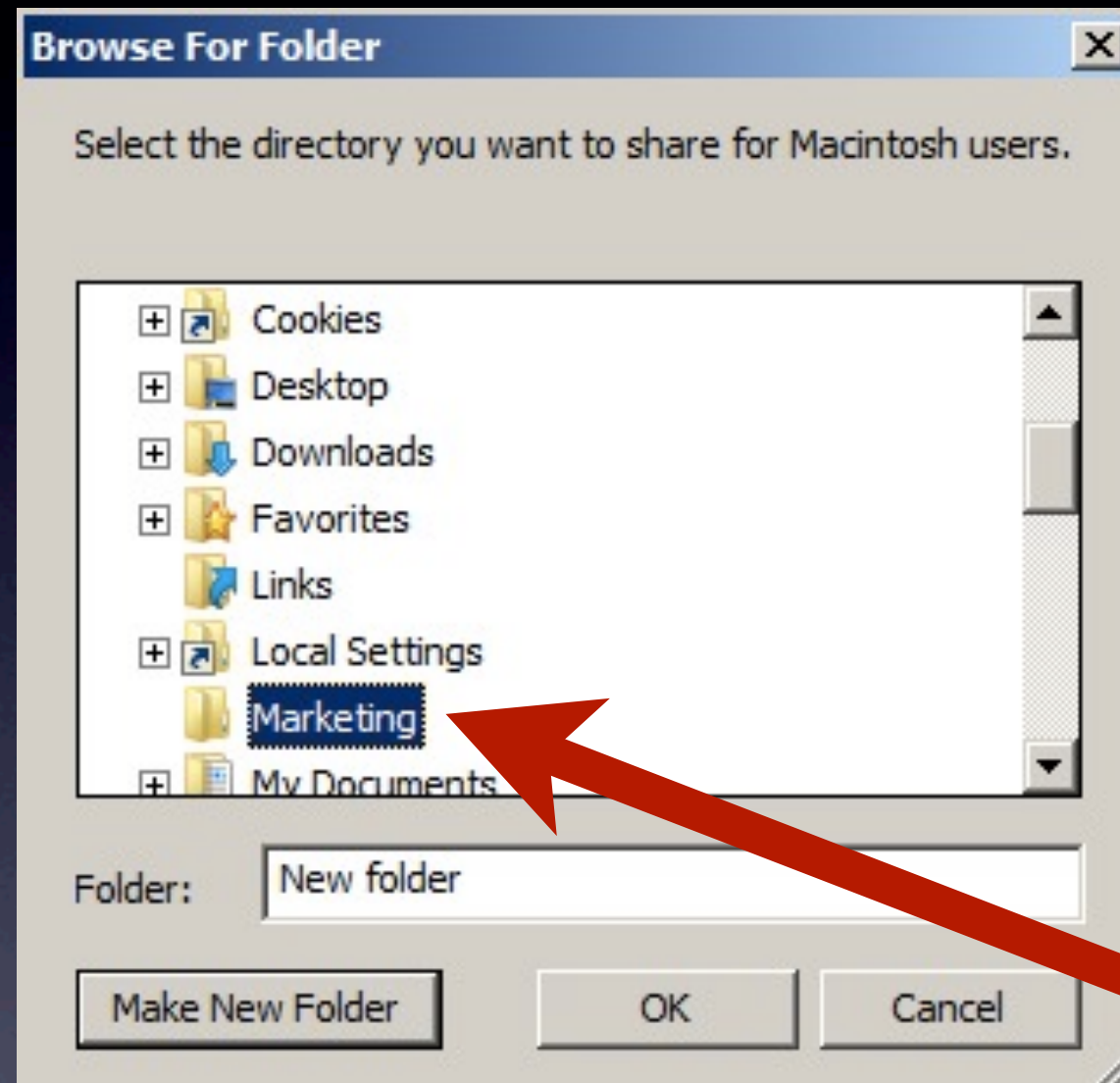
Ports Opened?



Print Services?



Create a Share?



Share Goes Where?

Volume Properties [X]

Volume Name:

Path: ...

Attributes

- ☐ Volume is read-only
- ☐ Allow guests to use volume
- ☒ Use volume as home directory
- ☐ Reset permissions on move
- ☐ Enforce Filename Policy
- ☐ Volume supports ACLs

Search

- ☒ Index volume for search
- ☐ Use custom index file path
- Path: ...
- ☐ Support Spotlight Searching

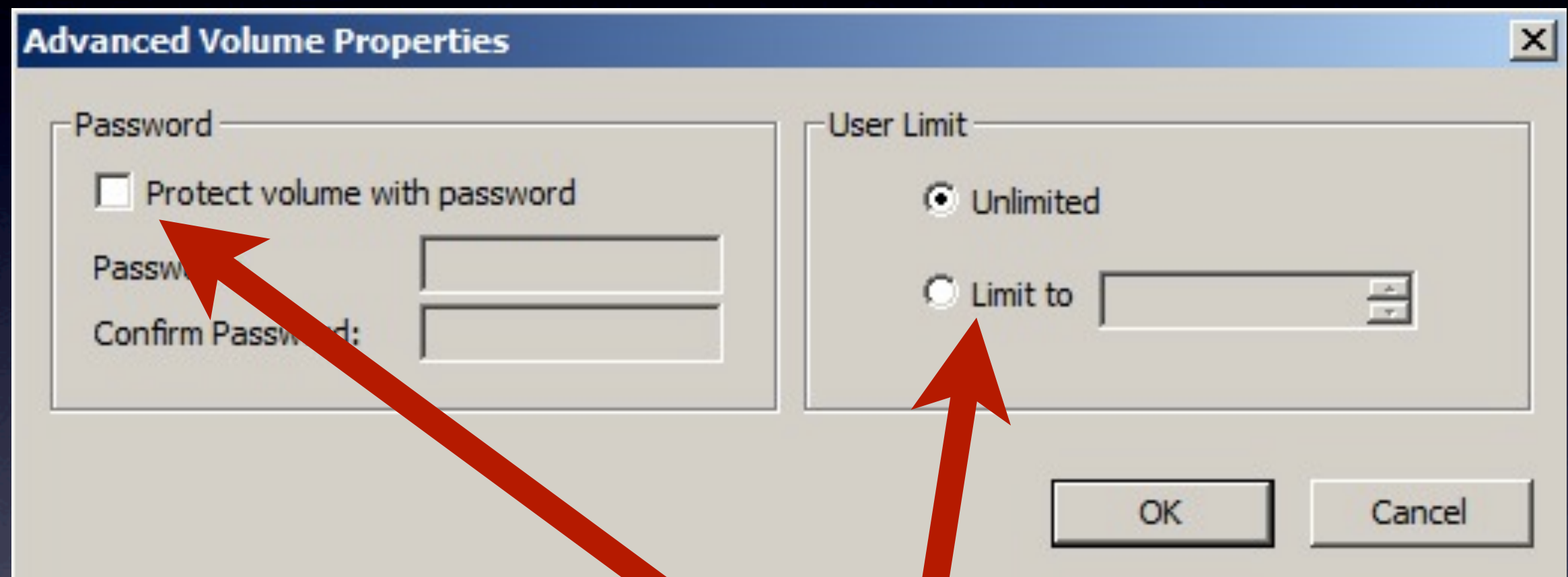
ArchiveConnect

- ☐ Bring online explicitly

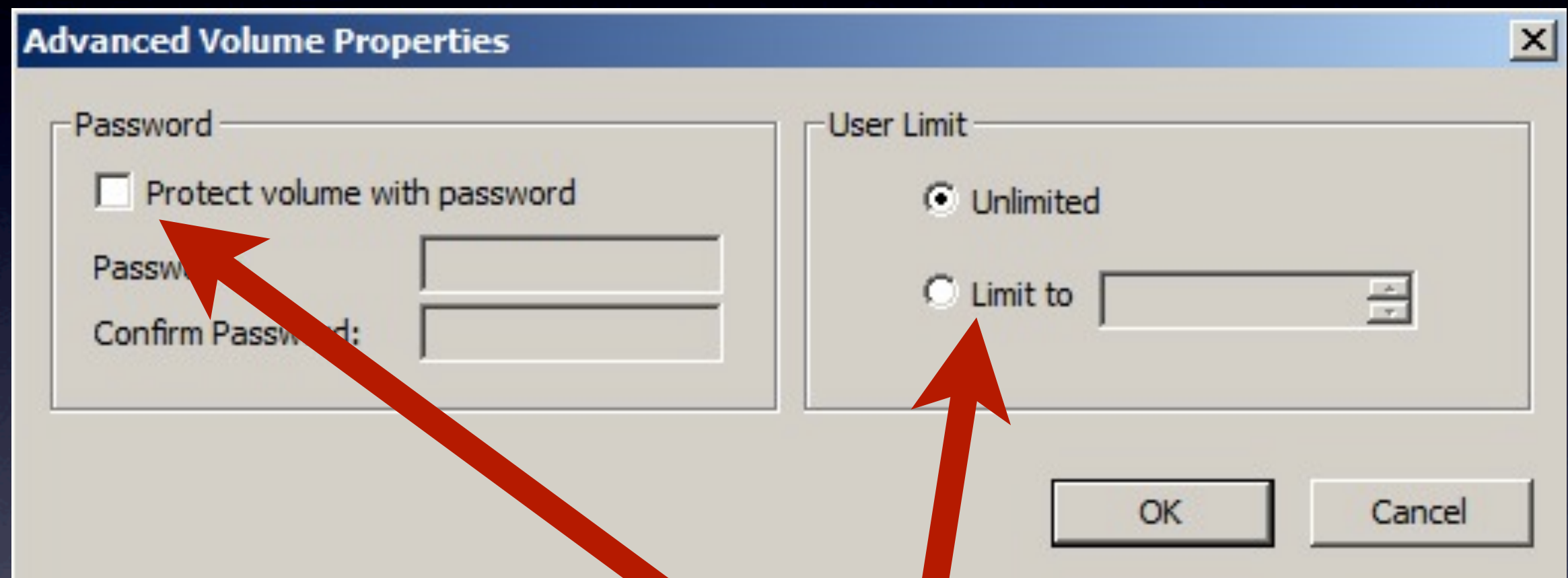
Time Machine

- ☐ Support Time Machine backup
- ☐ Limit users without custom quotas GB
-

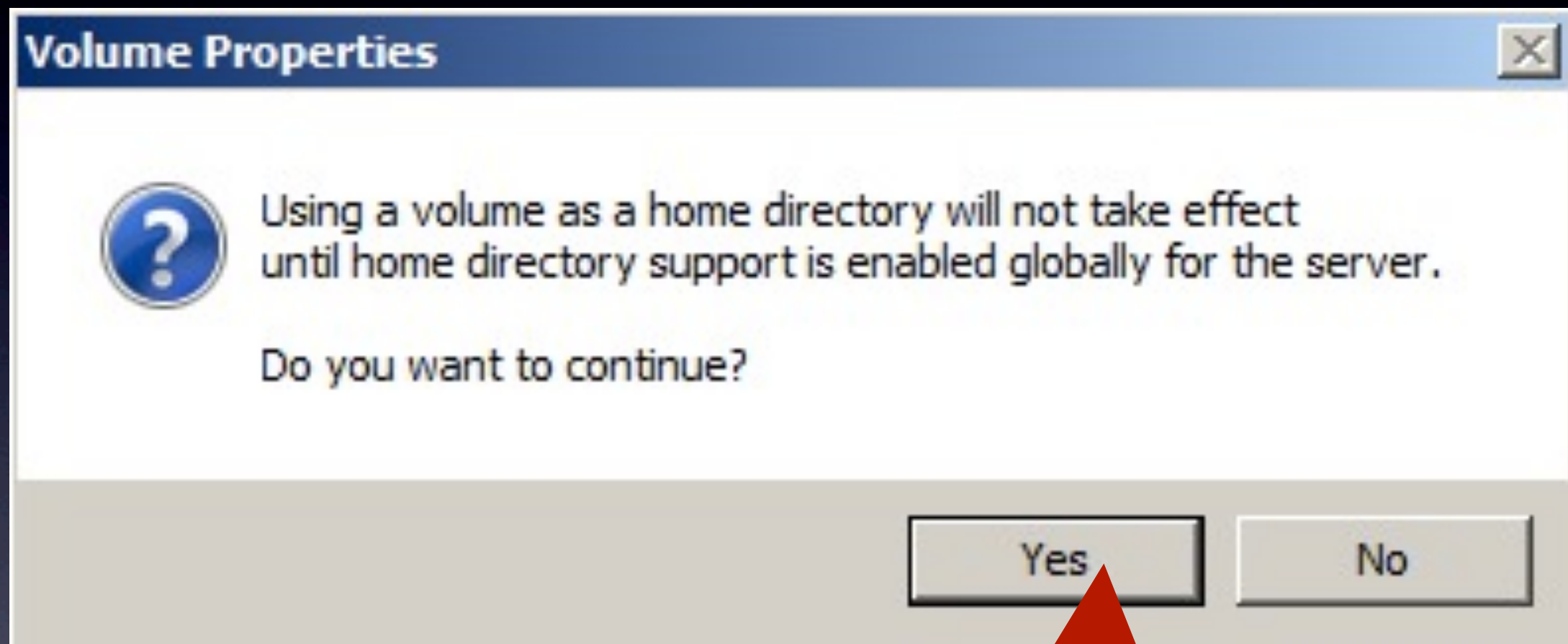
Share Properties



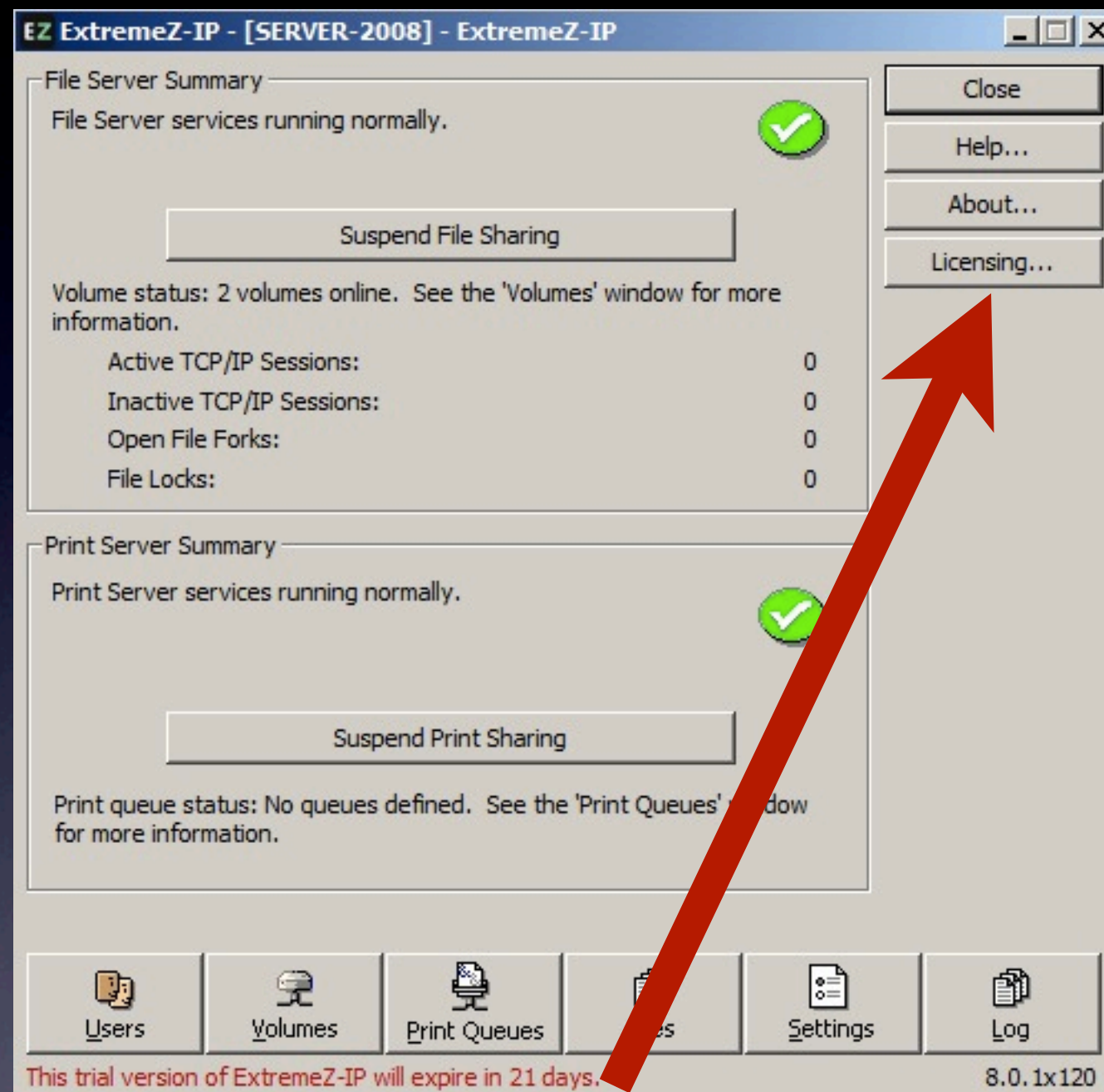
OMG, Advanced



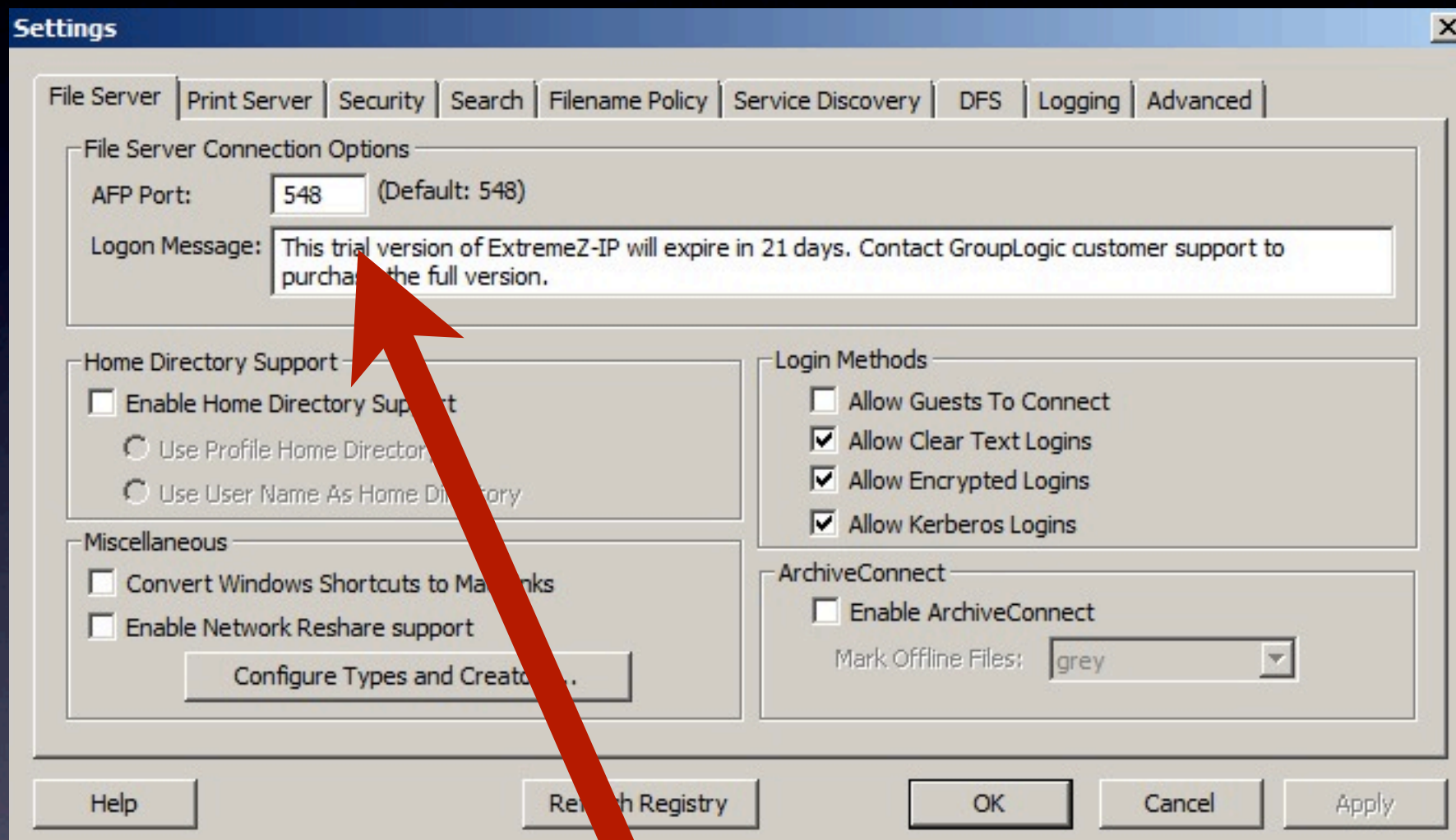
OMG, Advanced
Pwnies FTW!



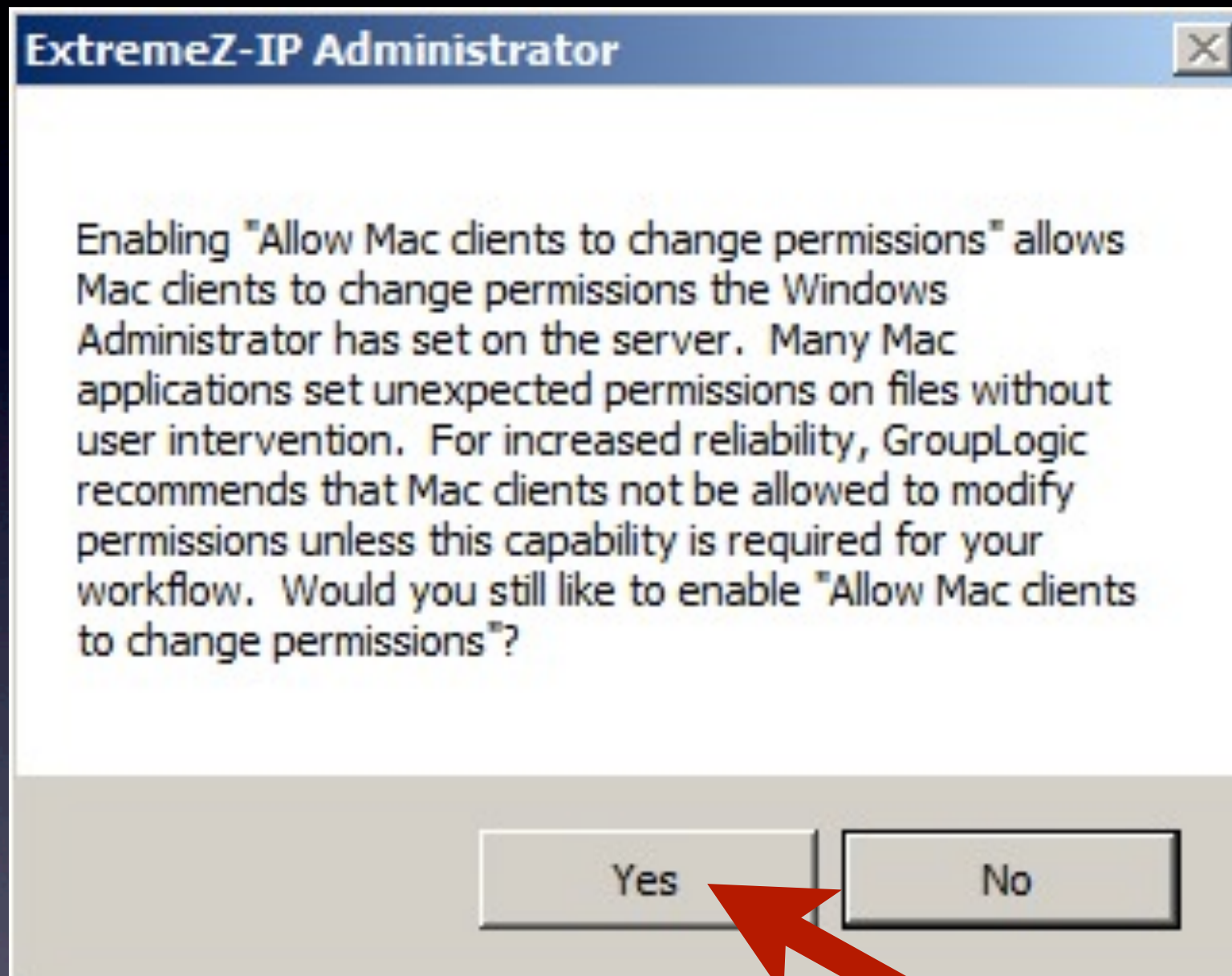
Home Dirs?



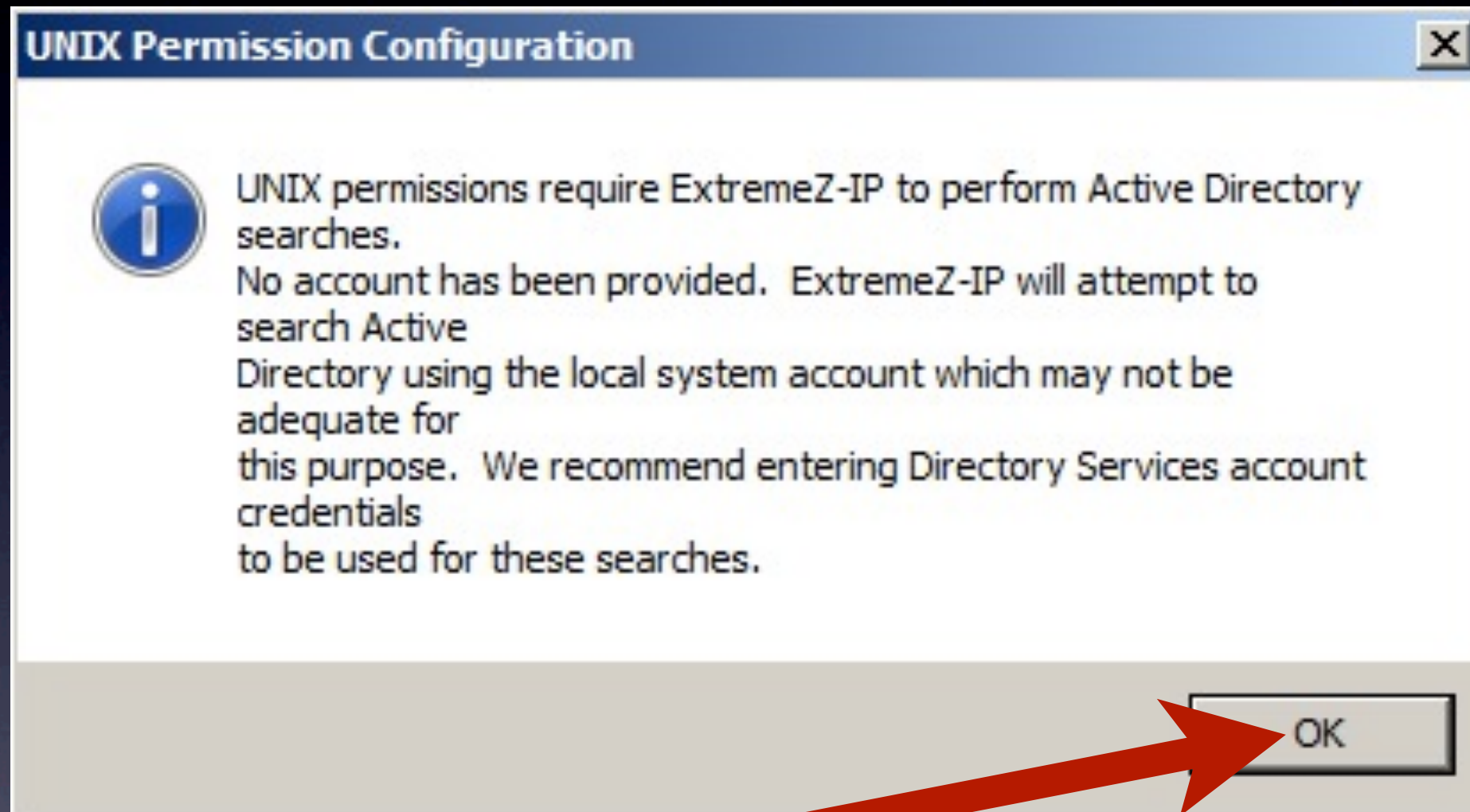
That's It!



Global Settings



Allow Users to Change ACLs



Integrate W/ AD

Directory Services

Required to verify Active Directory domain account credentials, for UNIX permissions, and for ACL support.

Use ☒ Global Catalog ☐ SSL

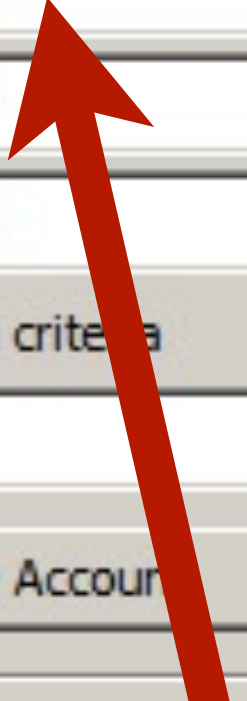
Account

Password

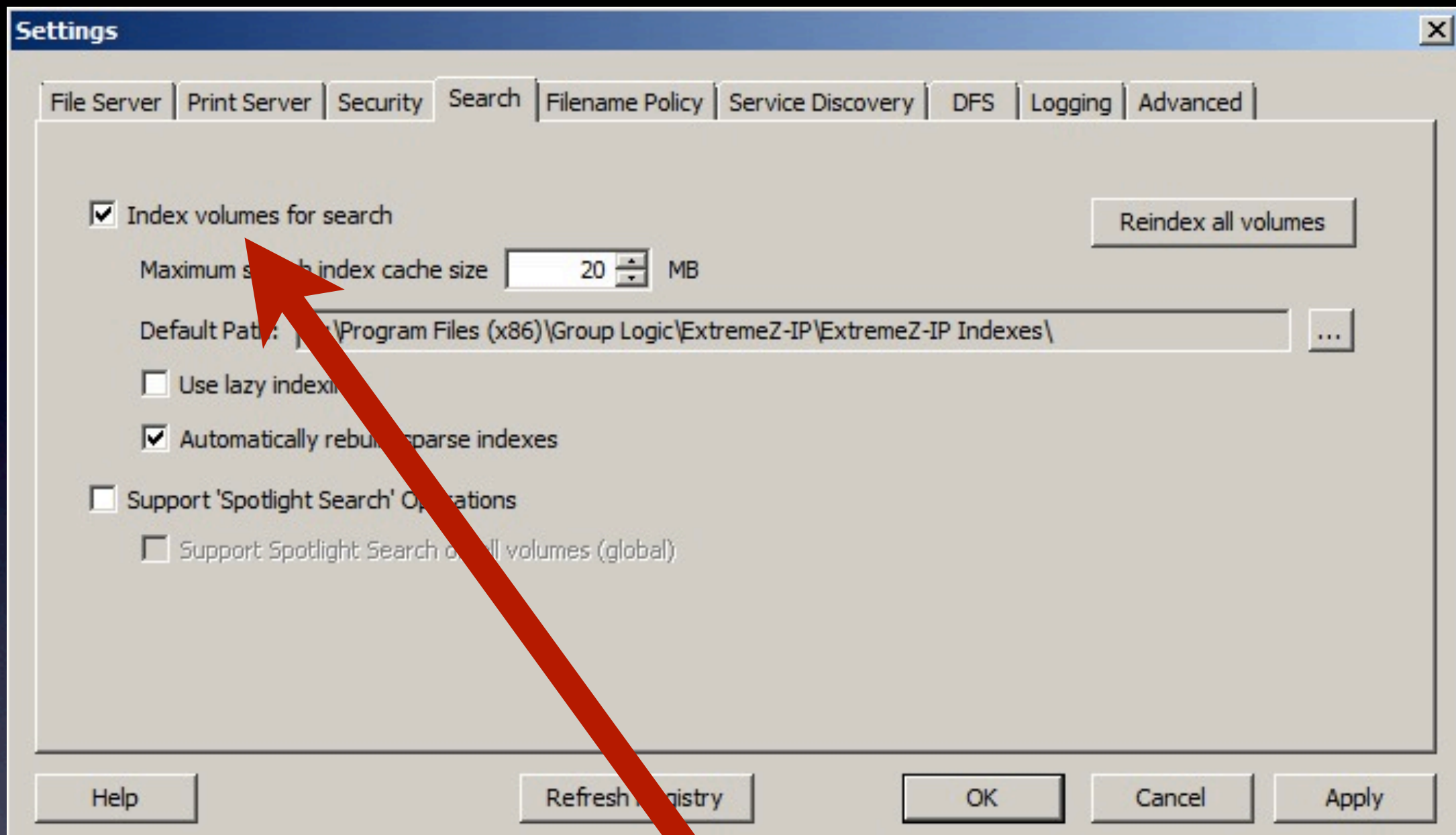
Domain

Additional directory search criteria

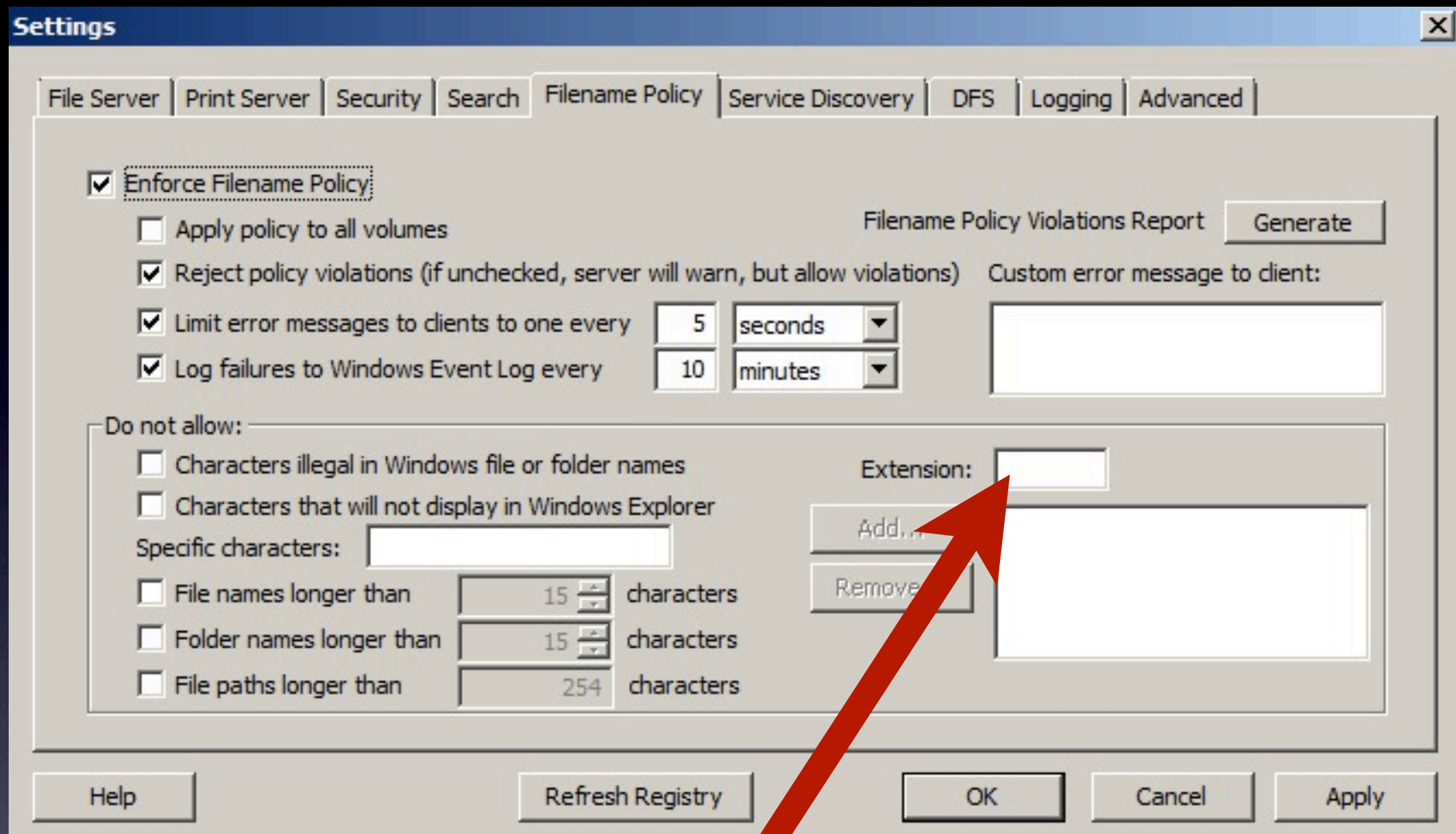
Validate Account



Very Hard...



Configure Searching



File Naming Policies

Settings

File Server | Print Server | Security | Search | Filename Policy | Service Discovery | DFS | Logging | Advanced

Server Name: SERVER-2008 IP

File Print DFS

☒ ☒ AppleTalk

☒ ☒ Bonjour

☒ ☒ ☒ Zidget/HTTP

Port: 8081

Master Server: ExtremeZIPServerList

Location/Zone:

Description:

☒ ☒ Network Browser/SLP

Scope:

Host Name:

☐ Register Service Connection Point

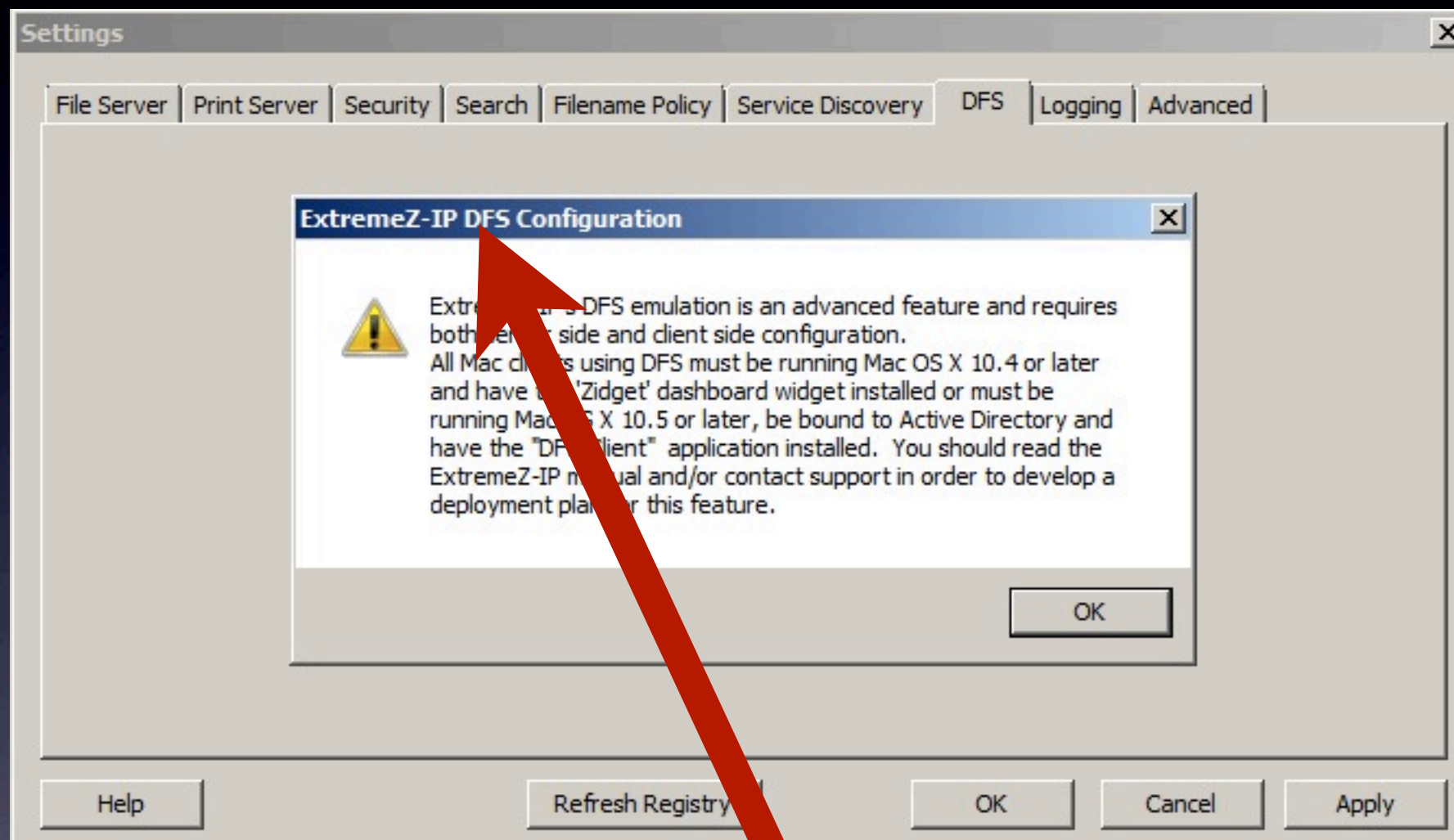
Help Refresh Register OK Cancel Apply

Wait, AppleTalk?

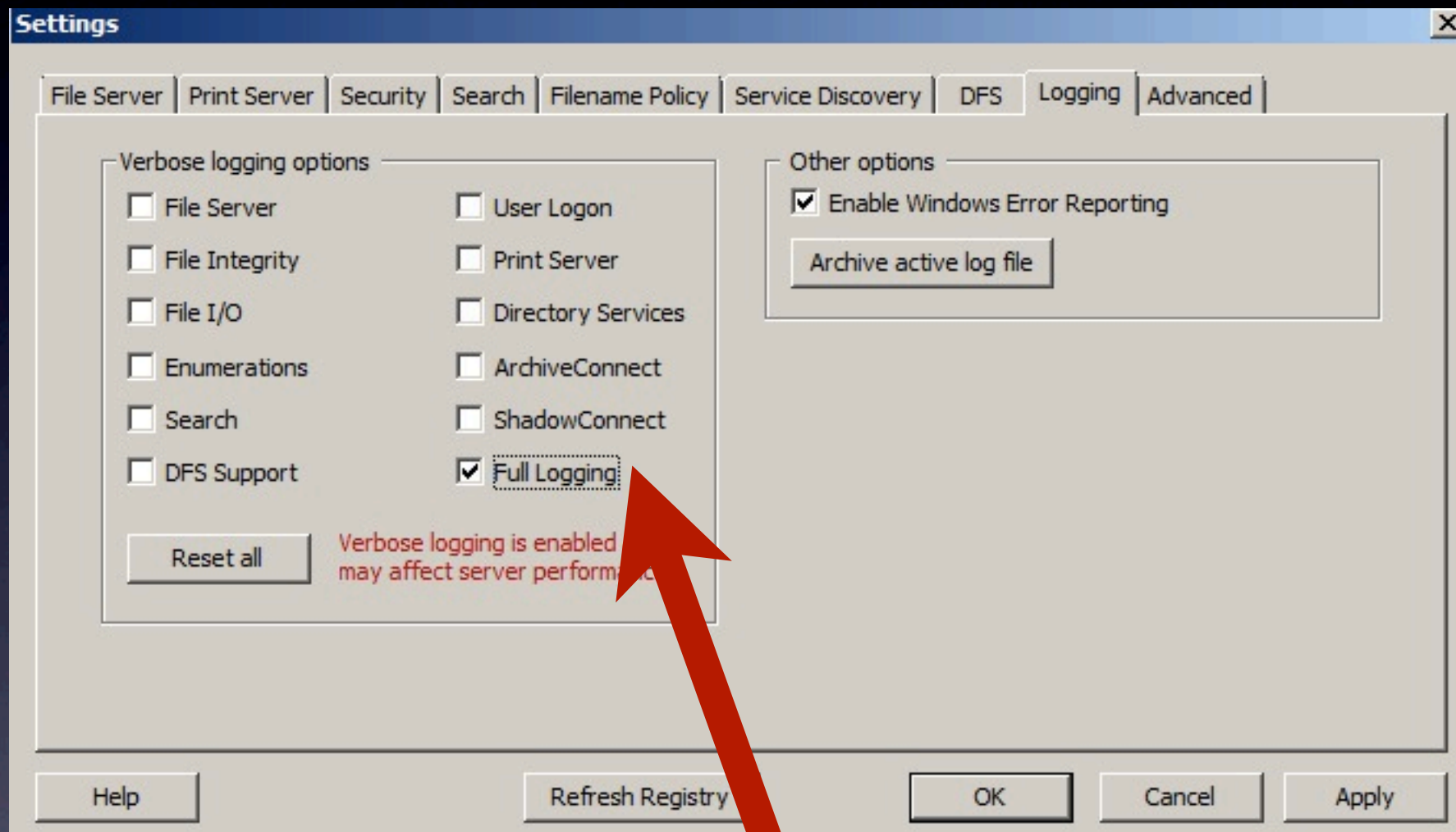
Does OS X Server Still Support AppleTalk?

Does OS X Server Still Support AppleTalk?

Swag

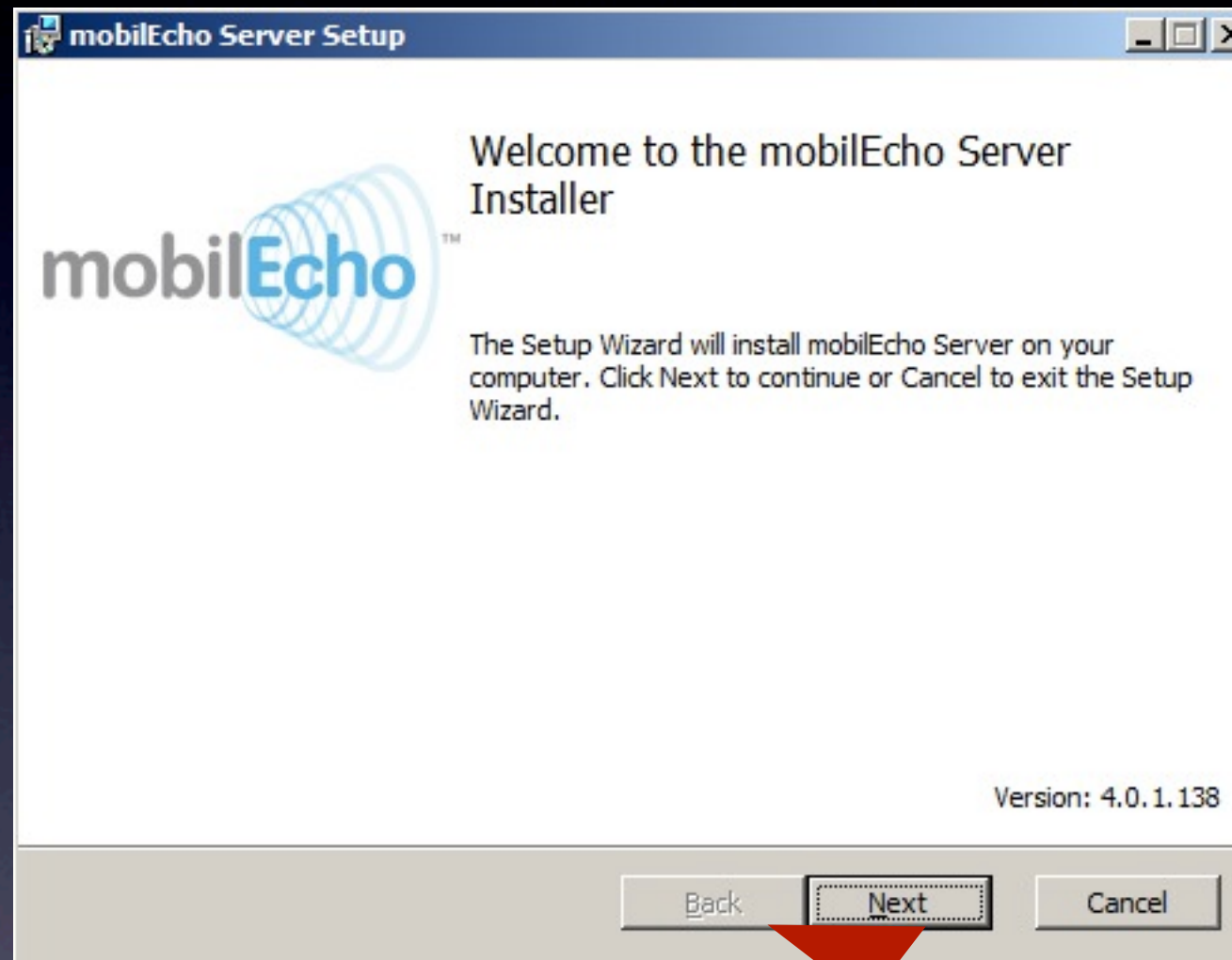


DFS = Zidget

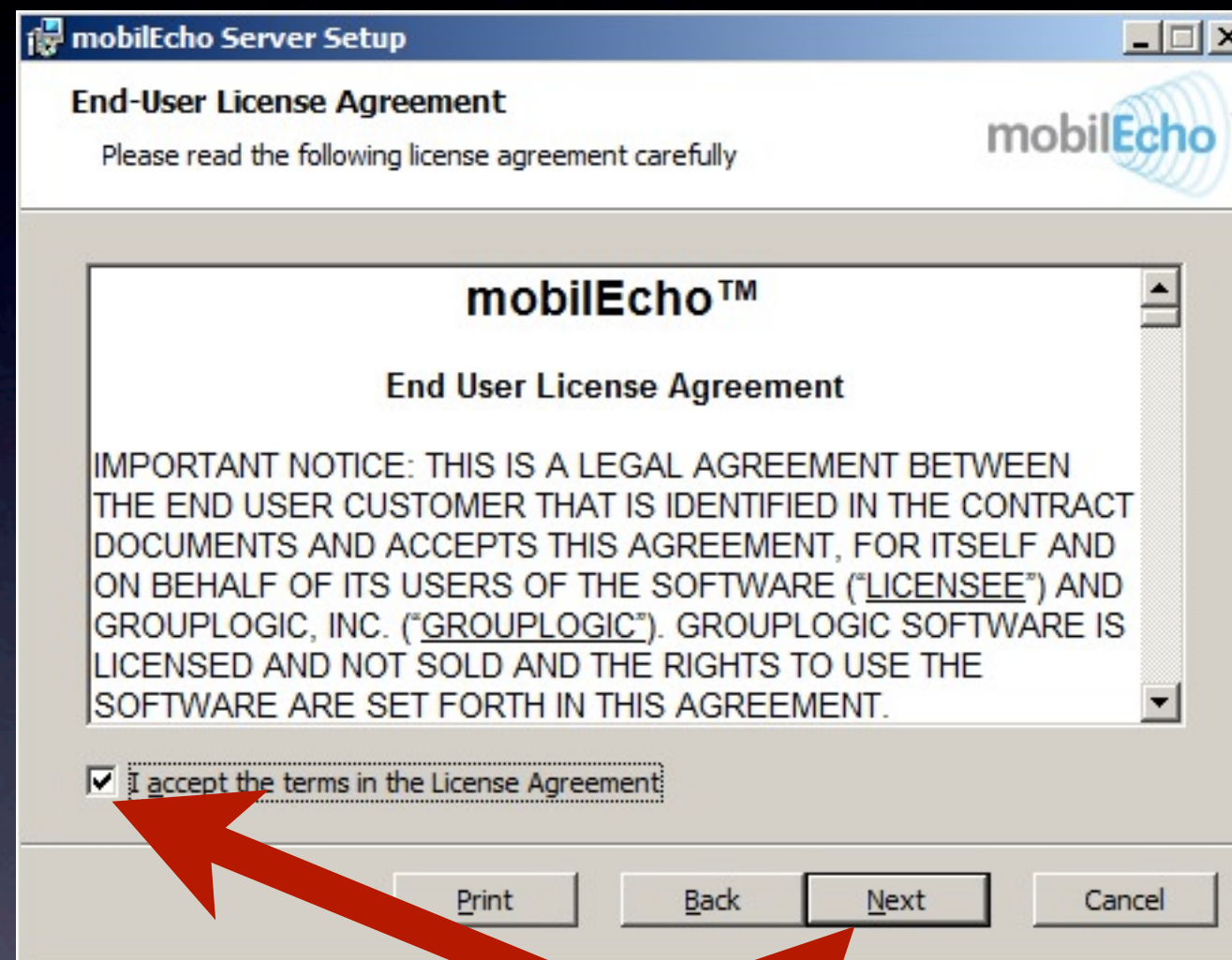


Logs Make Me Happy

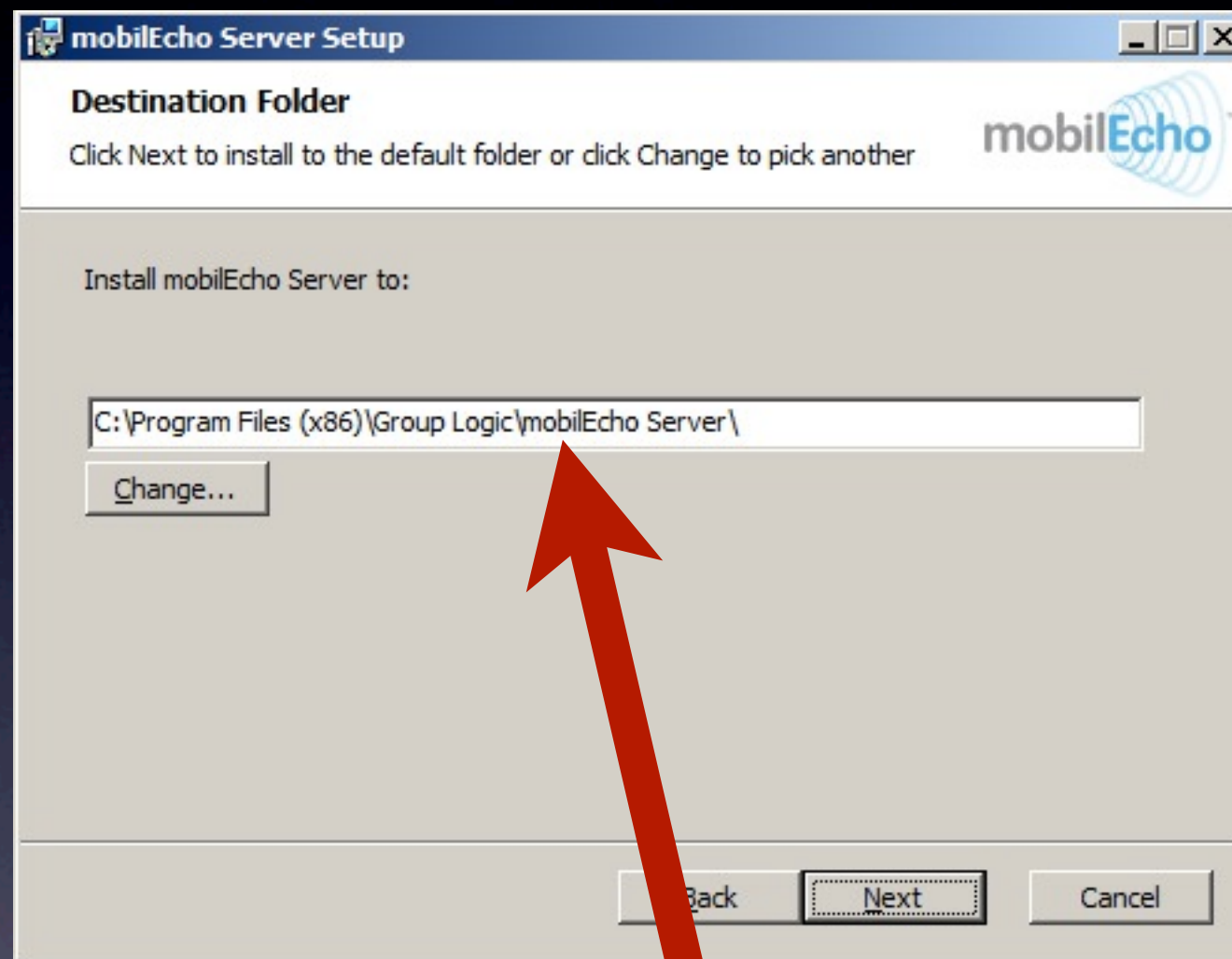
mobilecho



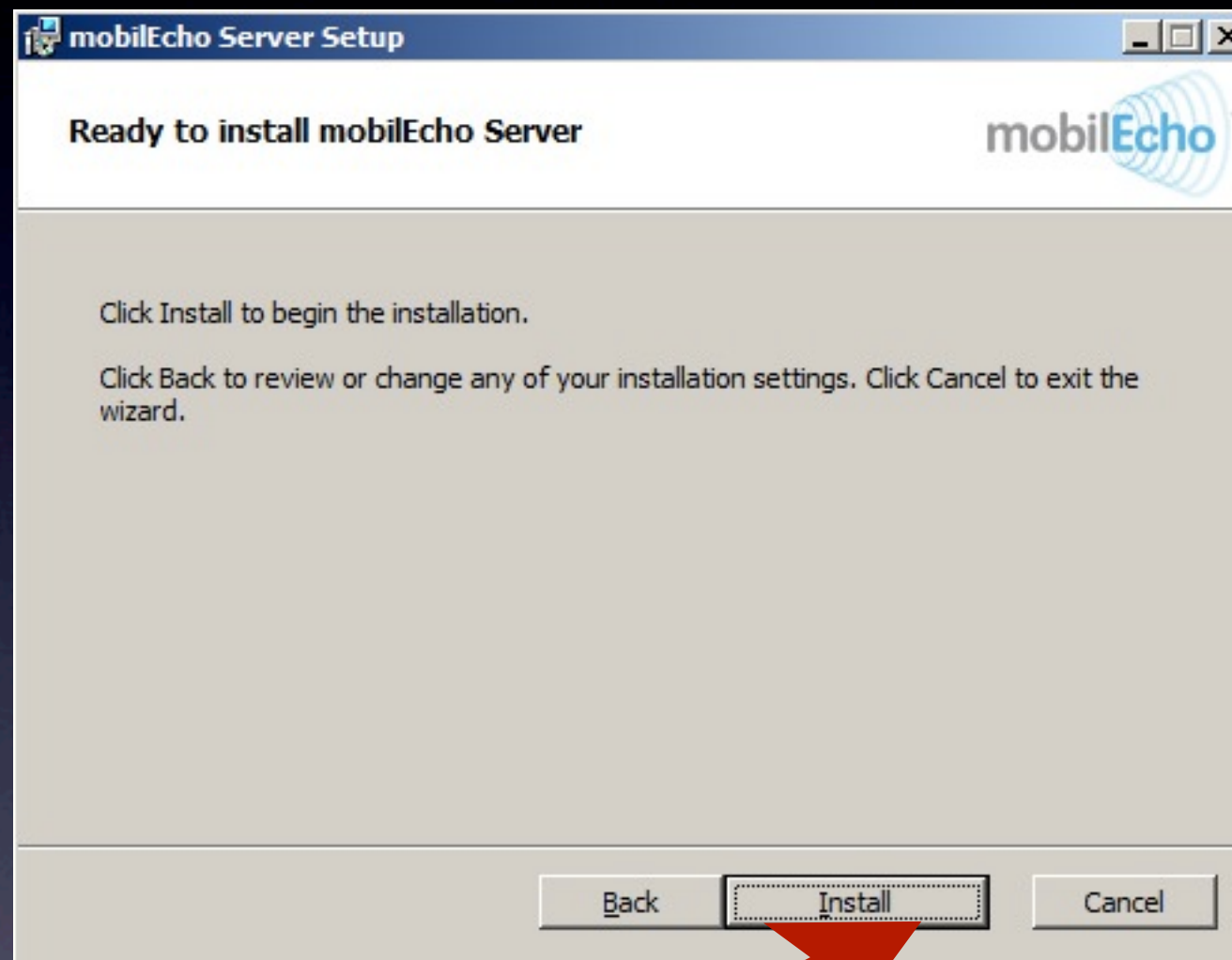
Open, click Next.



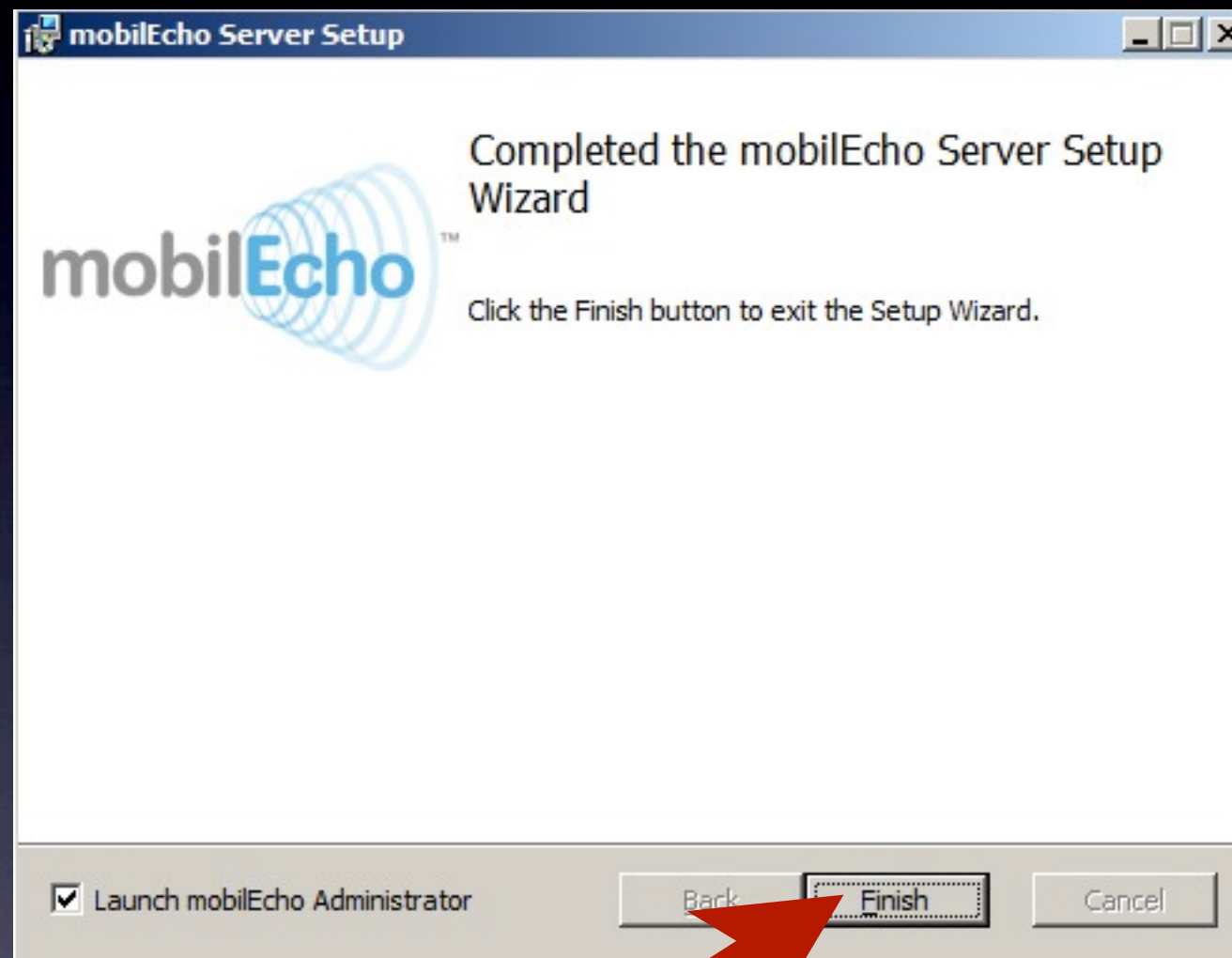
Accept Licensing



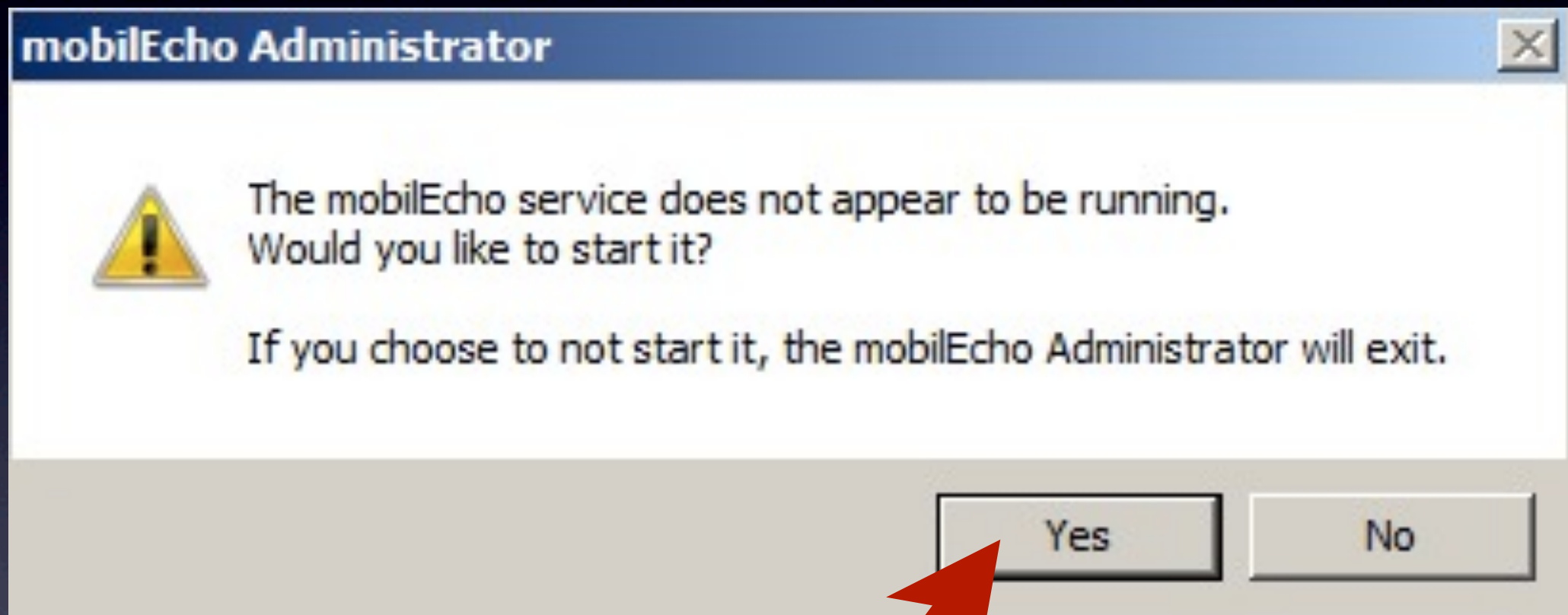
Where To Install?



Just Click Install



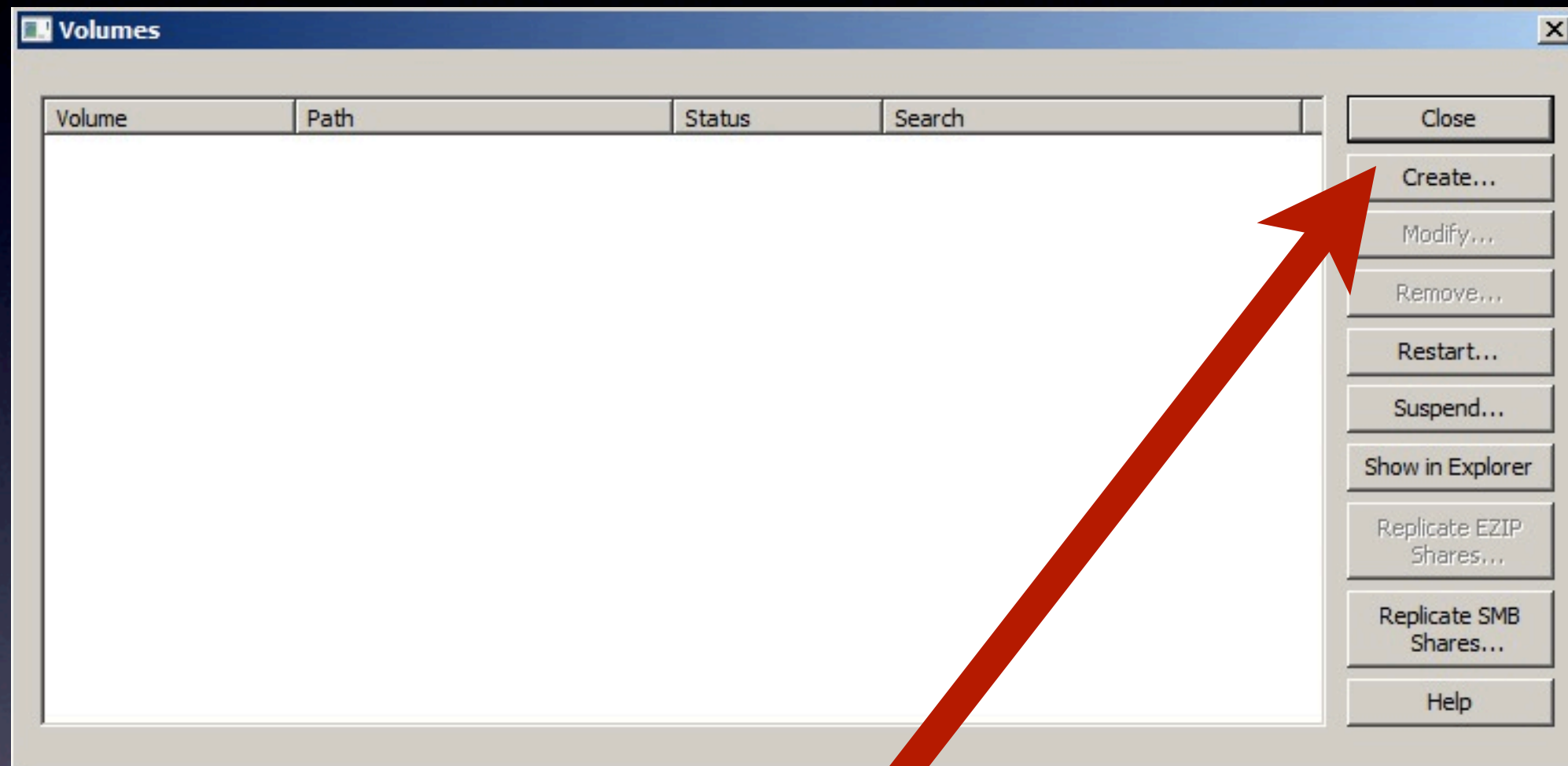
Click Finish



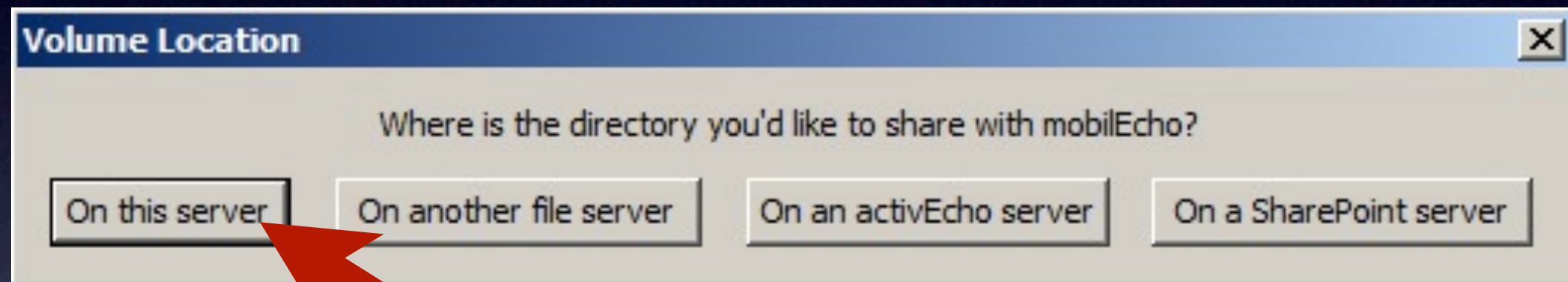
OMG, Advanced



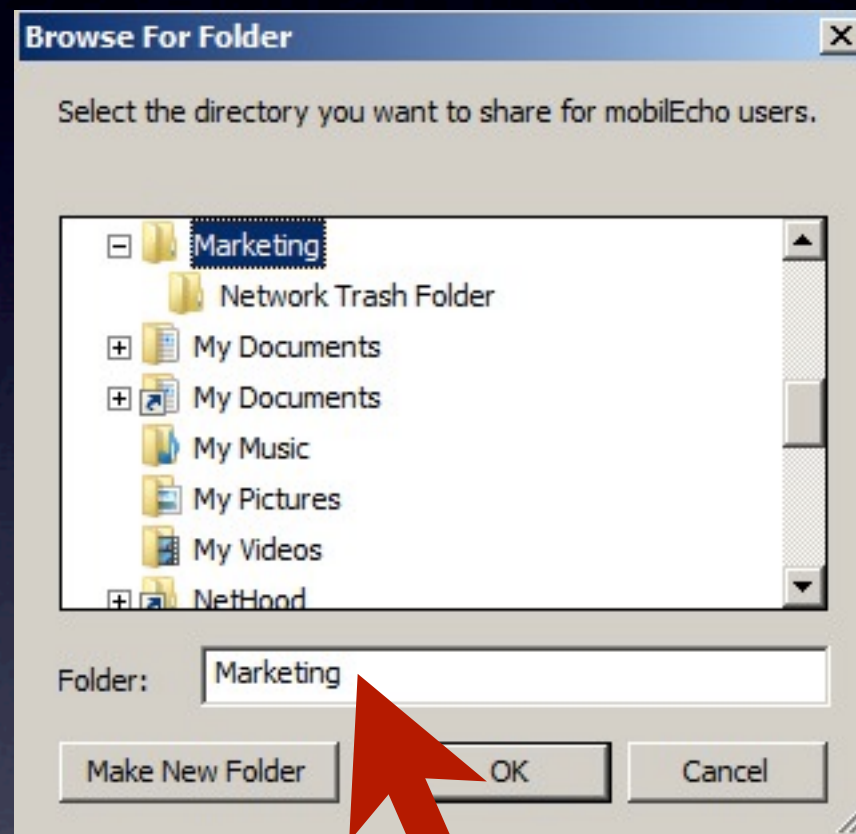
No Shares



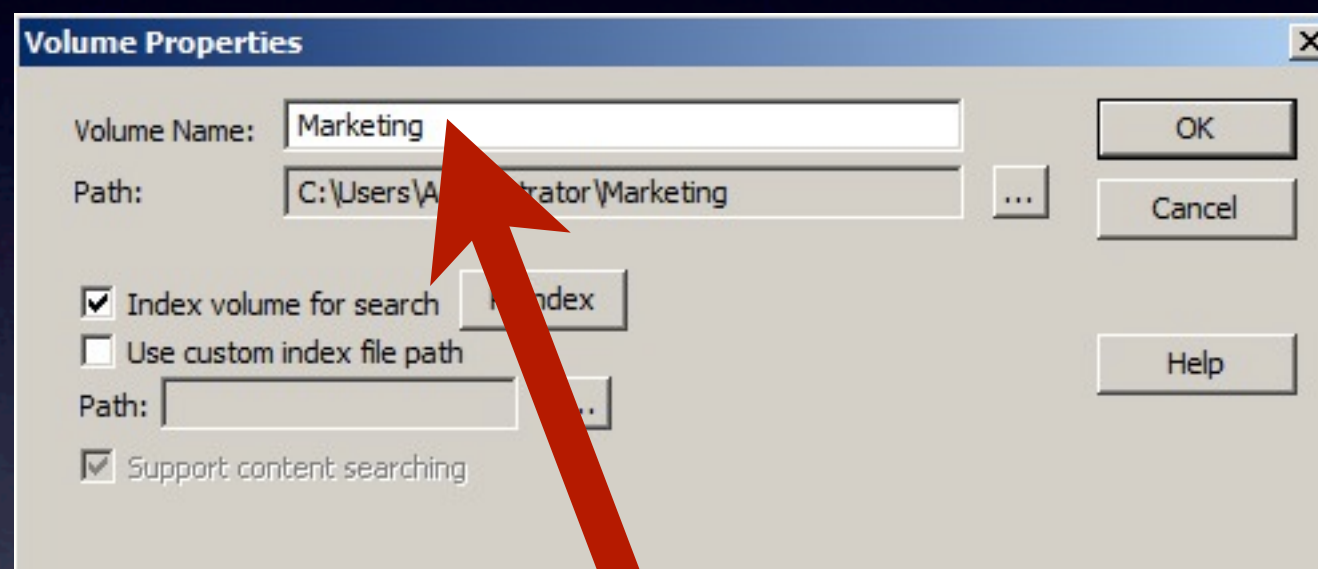
So Create One



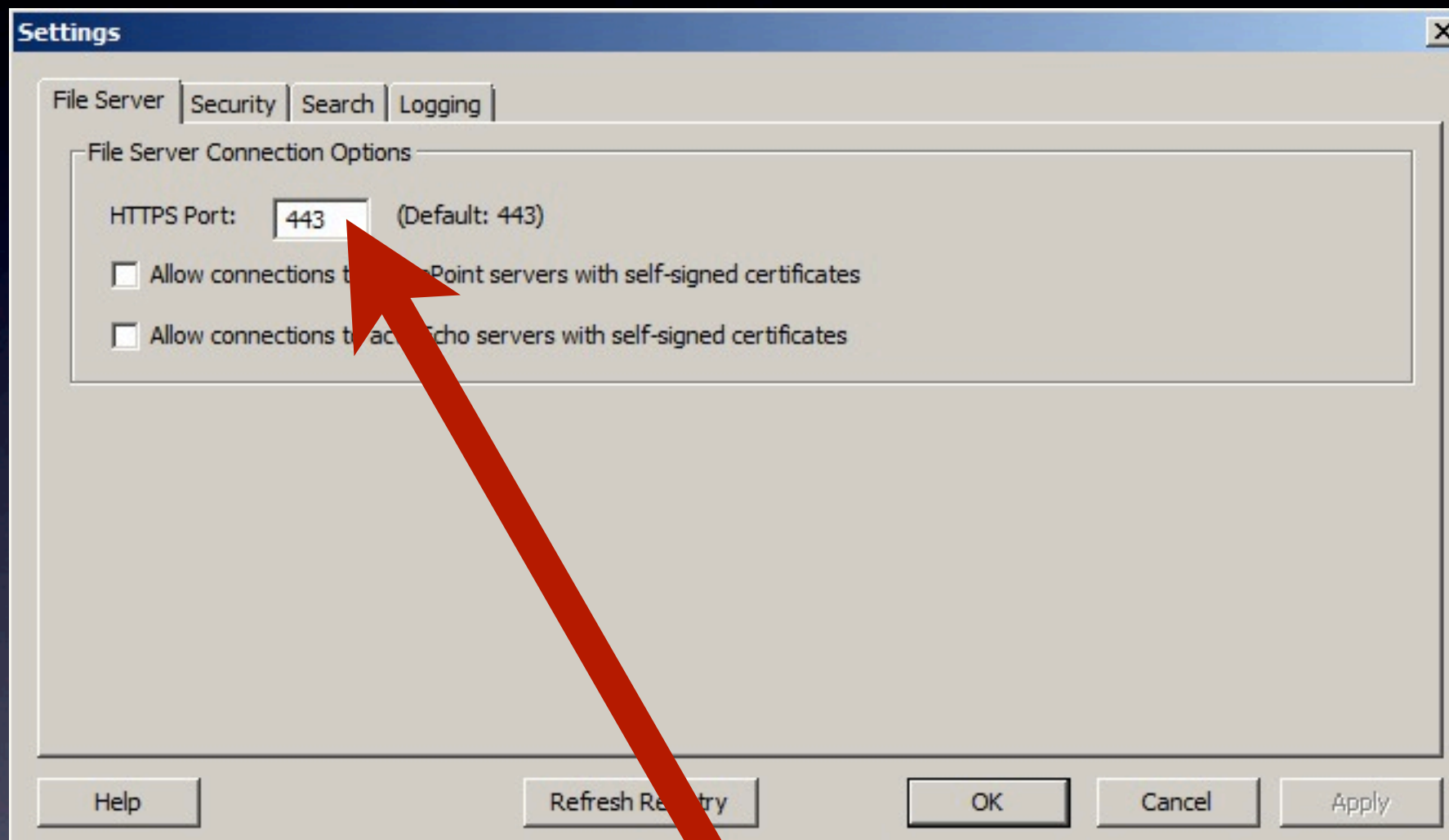
Where?



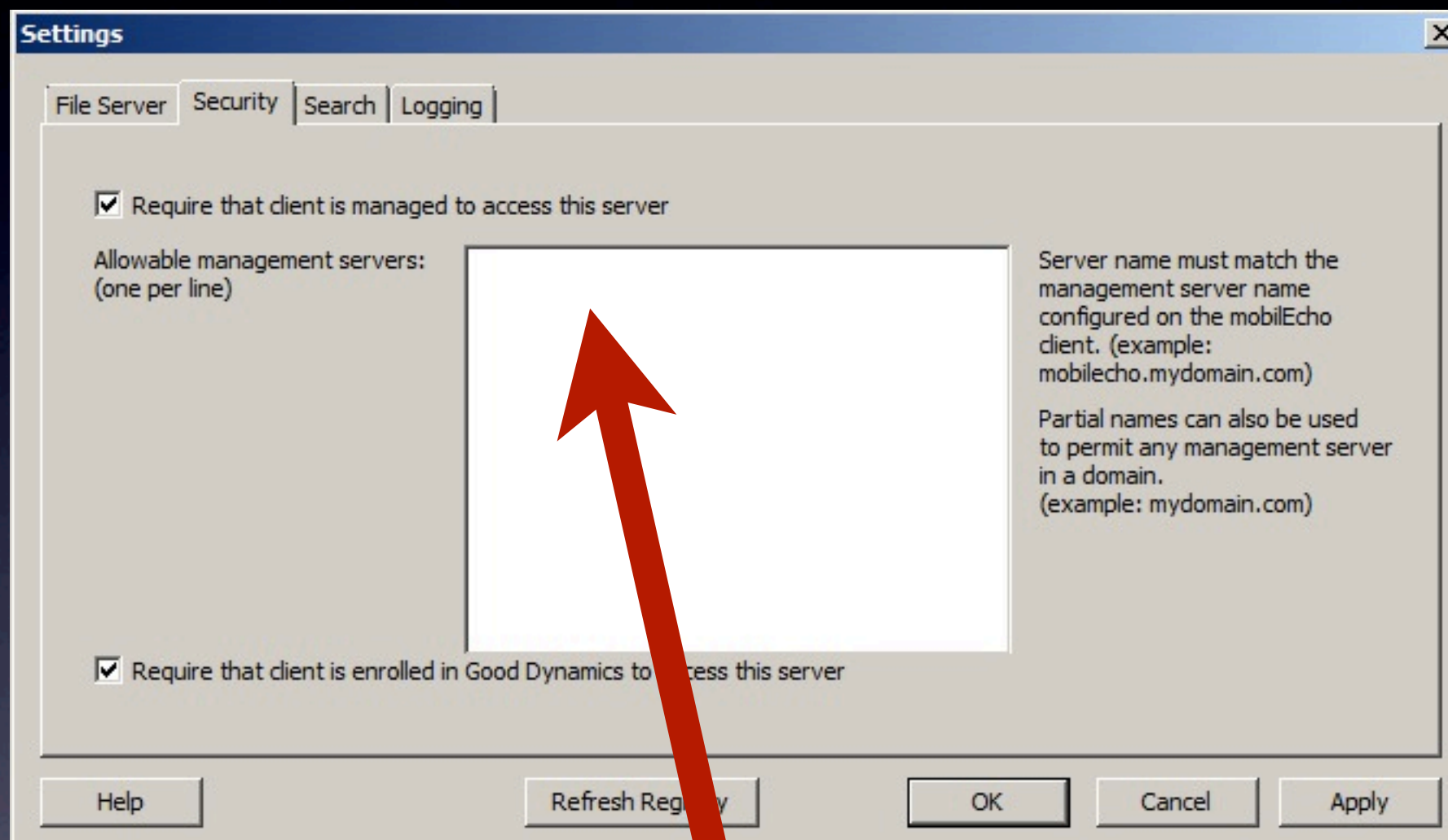
Select A Location



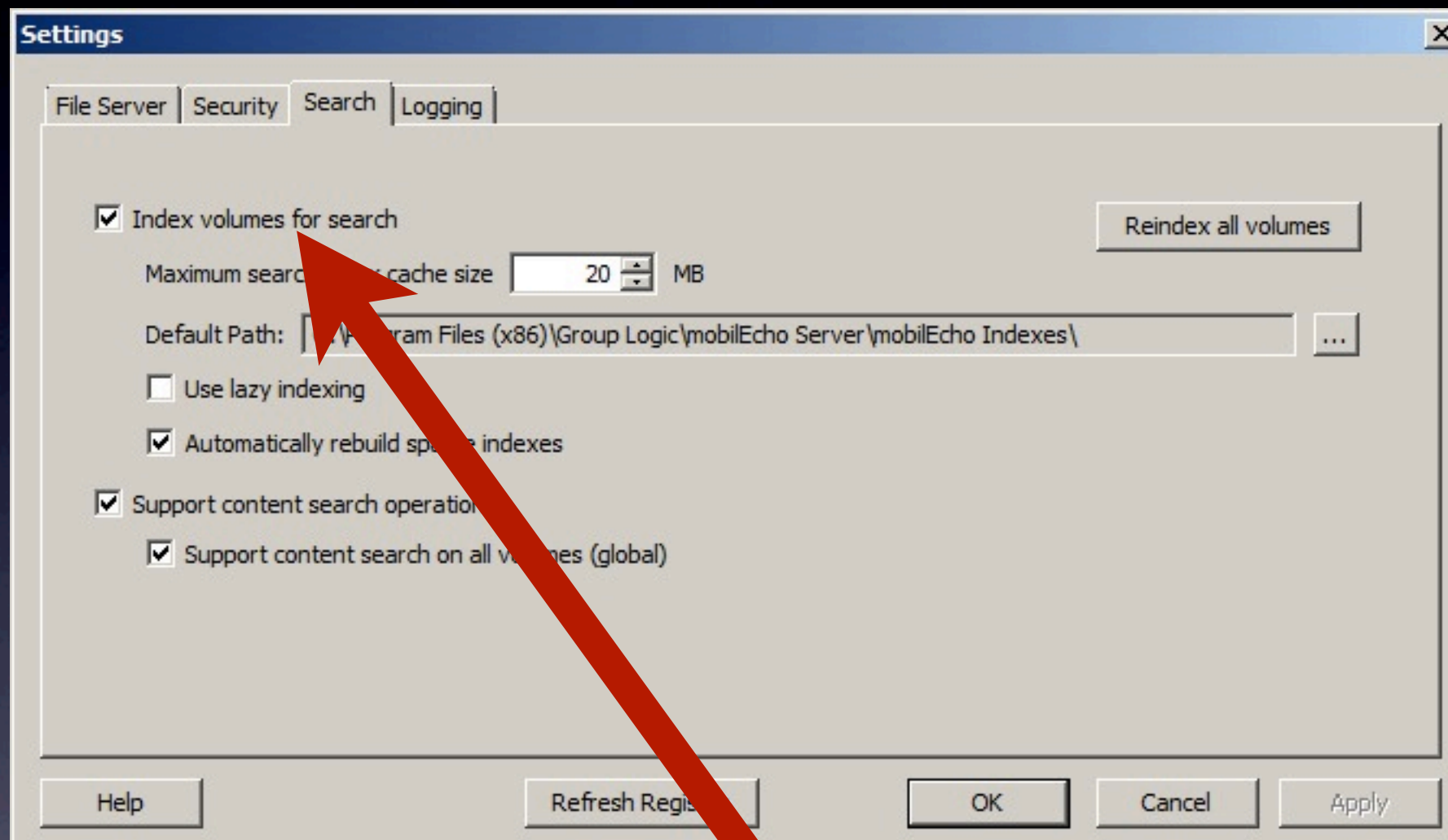
Name It



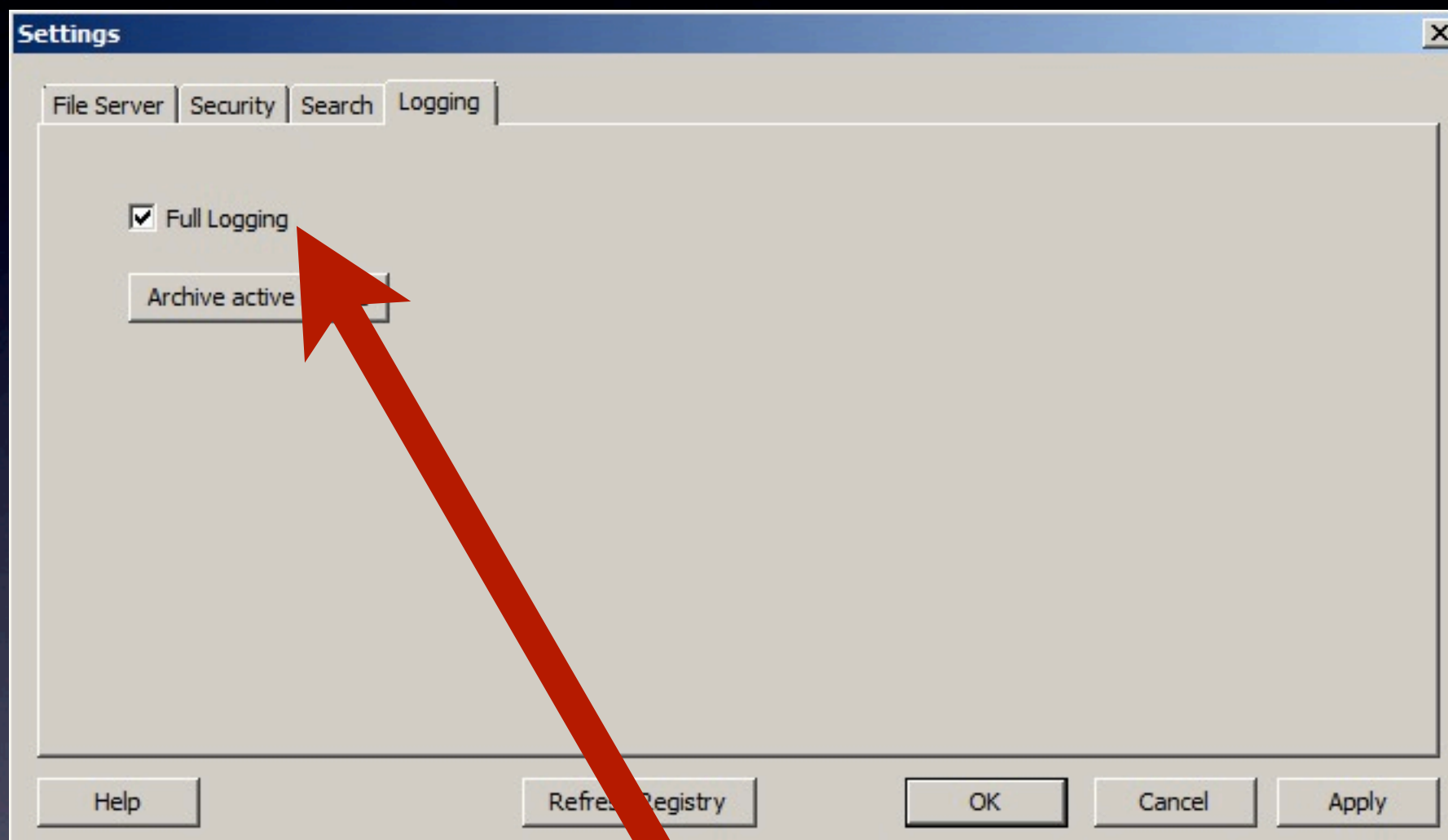
Port



Wait, MDM???



Searching



Logging

Scripting

Location Services In Retail

802.1x Cert Revocation

App Versions

Restricting Apps

Application Data

activeEcho

Virtualization

ESX

vSphere

Xen

The Future