



GroupWise Infrastructure Design: Using GroupWise SetupIP

Lawrence Kearney
Enterprise and Workgroup Service Analyst
Georgia Health Sciences University

lawrence.kearney@earthlink.net
<http://www.lawrencekearney.com>

Contributions by:
Tommy Mikkelsen, Senior Consultant , NKP
Paul Lamontagne, Novell ATT Engineer

- What GroupWise SetupIP is and how its used
- Why we need SetupIP, why it was used it then, why we use it now
- Designing and implementing GroupWise SetupIP components
- How SetupIP works
- Some advanced SetupIP tips and tricks
- If time permits, technical examples demonstrated

SetupIP is a way to use the GroupWise “**Windows**” installation program (**setup.exe**) over an unauthenticated, non-secure HTTP connection

- New GroupWise client installations
- GroupWise client auto-update installations
- Small enough to be emailed to users
- Delivered via removable storage
- Delivered from a web page
- Delivered using a simple ZCM application bundle

Administrators started moving away from direct access to GroupWise file systems as network access use cases and best practices changed.

- Misbehaving network clients corrupting file systems
- Installation over networks could be slow
- User credential provisioning models changed, but security requirements didn't
- More users were accessing services off the LAN and more devices were accessing those services off the wire
- Users aren't the only ones with Software Distribution Directory (SDD) access limitations these days
(NCP access for Linux POA's is awkward)

For new installations:

1. A user acquires and runs the “setupip.exe” file (less than 500 KB)
2. The GroupWise installation and installation response files are downloaded to the user’s computer over HTTP and executed locally
3. The user experiences an interactive or non-interactive GroupWise client installation after which they can use the software

For auto-update installations:

1. The user launches and authenticates using their GroupWise client
2. The GroupWise client checks with the POA to see if it should compare software versions, and then performs the version check
3. If the POA has access to a more recent version of the client, and auto-update over IP is enabled, the GroupWise client is provided the setupip.exe and supporting files over the client access port (1677)
4. The GroupWise installation and response files are downloaded to the user's computer over HTTP and executed locally
5. The user experiences an interactive or non-interactive GroupWise client installation after which they can use the updated software

1. A GroupWise POA that has access to a SDD

06:14:02 F469 Post Office Access Mode: Client/Server Only

06:14:02 F469 Database Version: 12

06:14:02 F469 Successfully accessed Software Distribution Directory:
/media/posix/mail10/gw/software

- NetWare POA's can, and often use UNC access to a common SDD
- Linux POA's "can", but rarely use UNC access to a common SDD

2. Storage and access to a URL on a web server accessible to users

Apache (NetWare, Unix or Linux)

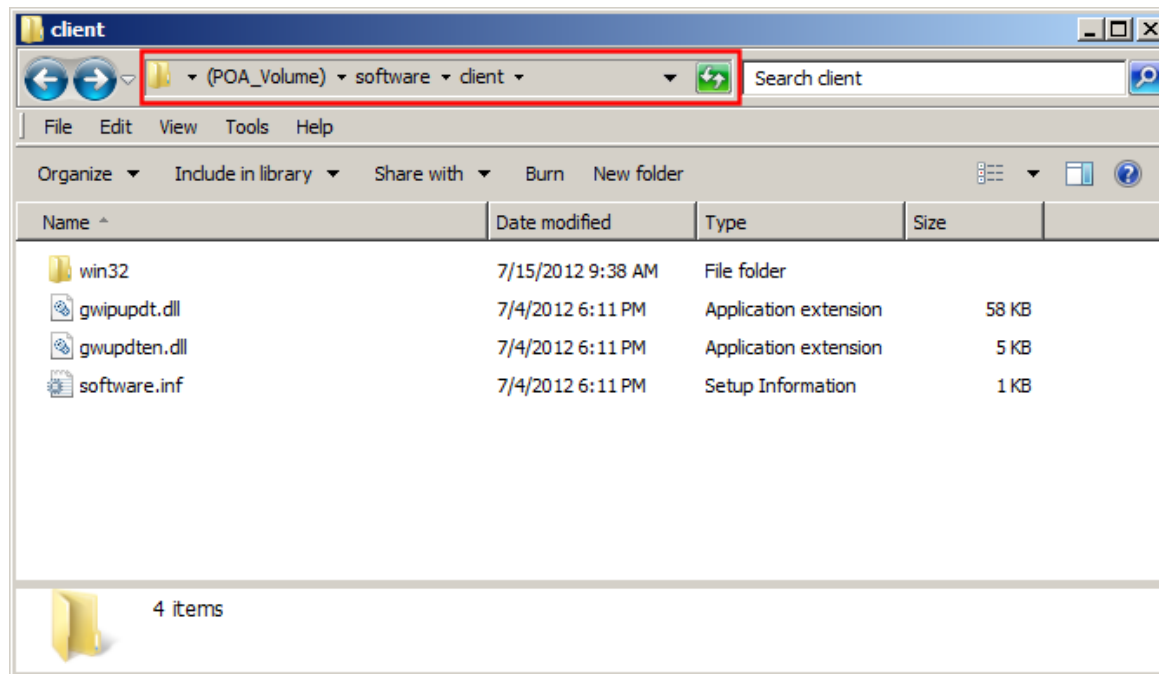
Microsoft IIS

3. The GroupWise "setupip.exe" file to provide to users

4. Users that have "Power User" rights on local workstations

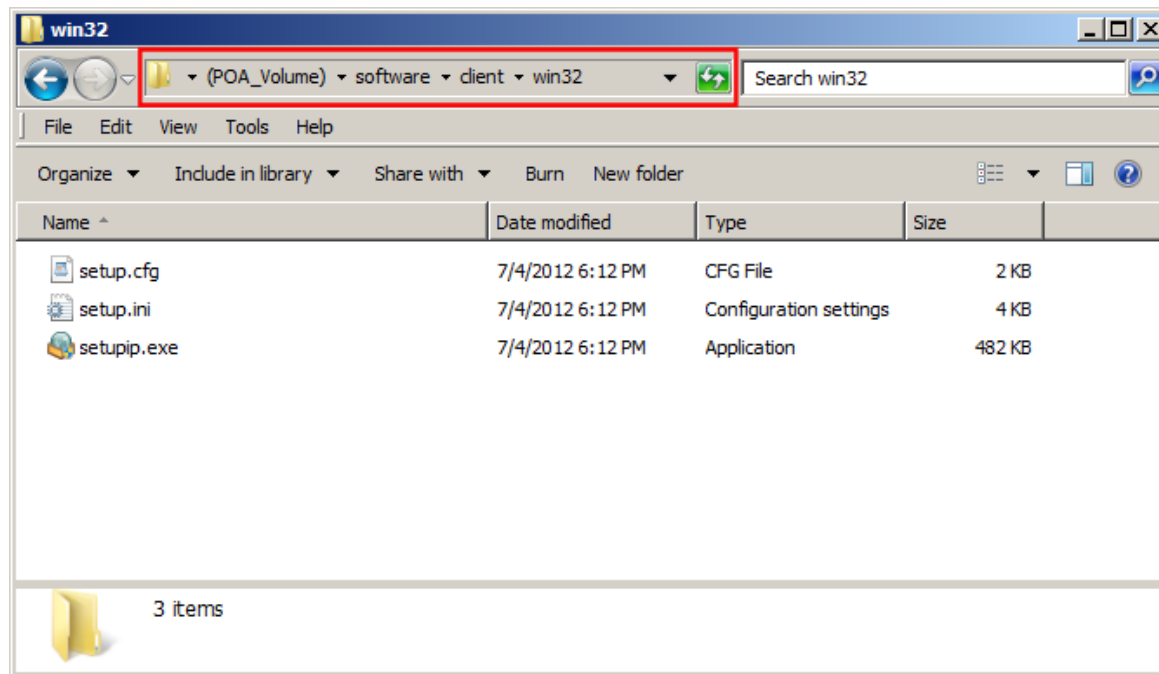
SetupIP uses a different client installation file set, so a much smaller and simpler SDD can be used.

Introducing the “micro-SDD”:



SetupIP uses a different client installation file set, so a much smaller SDD than normal can be used.

Introducing the “micro-SDD”:



The “setup.cfg” file briefly:

```
[ShowSetup]
```

```
ShowDialogs=Yes
```

```
ShowProgress=Yes
```

```
ShowFinish=Yes
```

```
[AutoUpdate]
```

```
Enabled=Yes
```

```
SetupIPEnabled=Yes
```

```
ForceUpdate=No
```

```
GraceLoginCount=0
```

```
PromptUntilUpdated=Yes
```

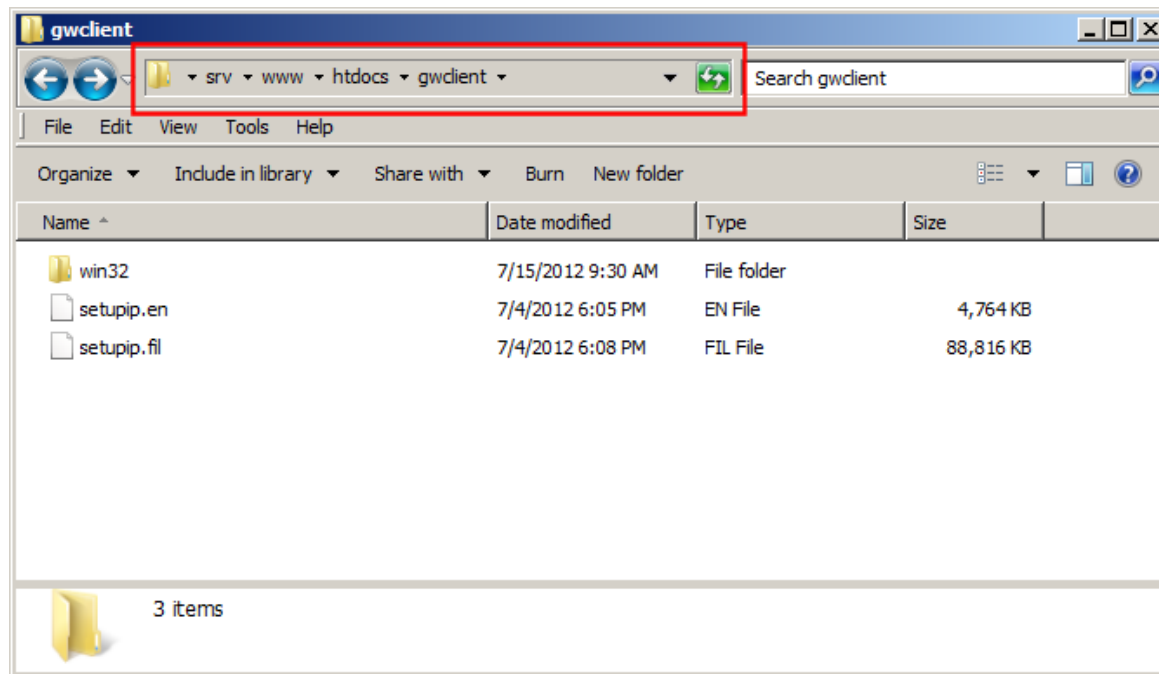
The “setup.ini” file briefly:

```
[Startup]
EnableLangDlg=Y
```

Web server directory:

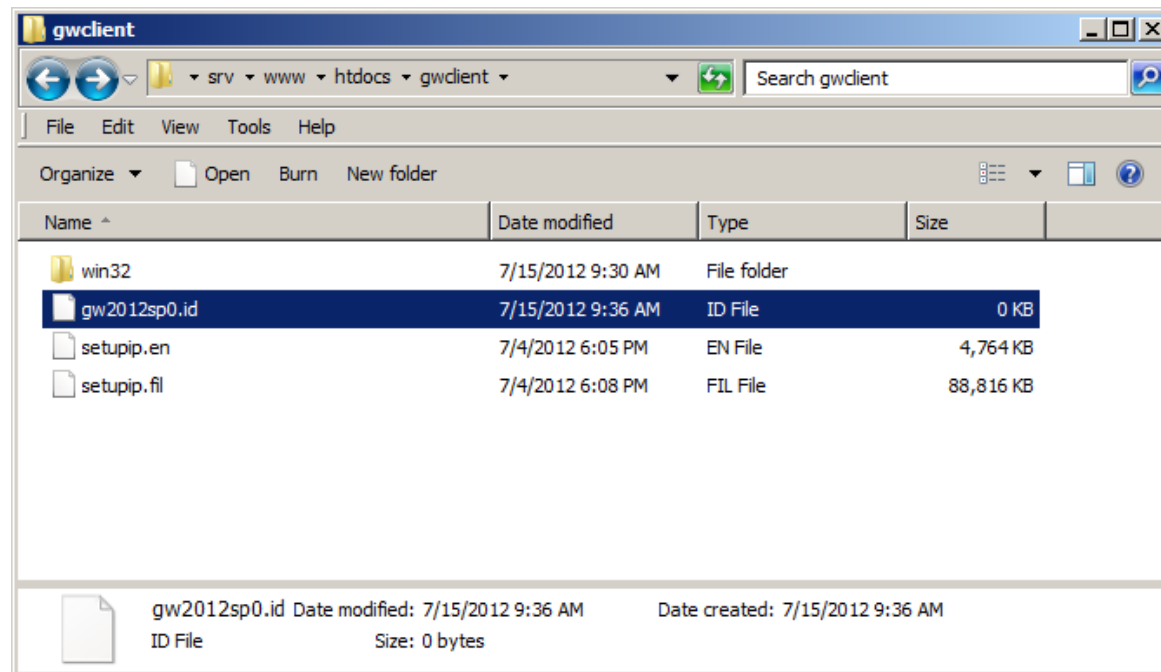
“setupip.exe” downloads files from a web server directory you configure

- Apache recommendation: `/srv/www/htdocs/gwclient`
- IIS recommendation: `C:\InetPub\wwwroot\gwclient`



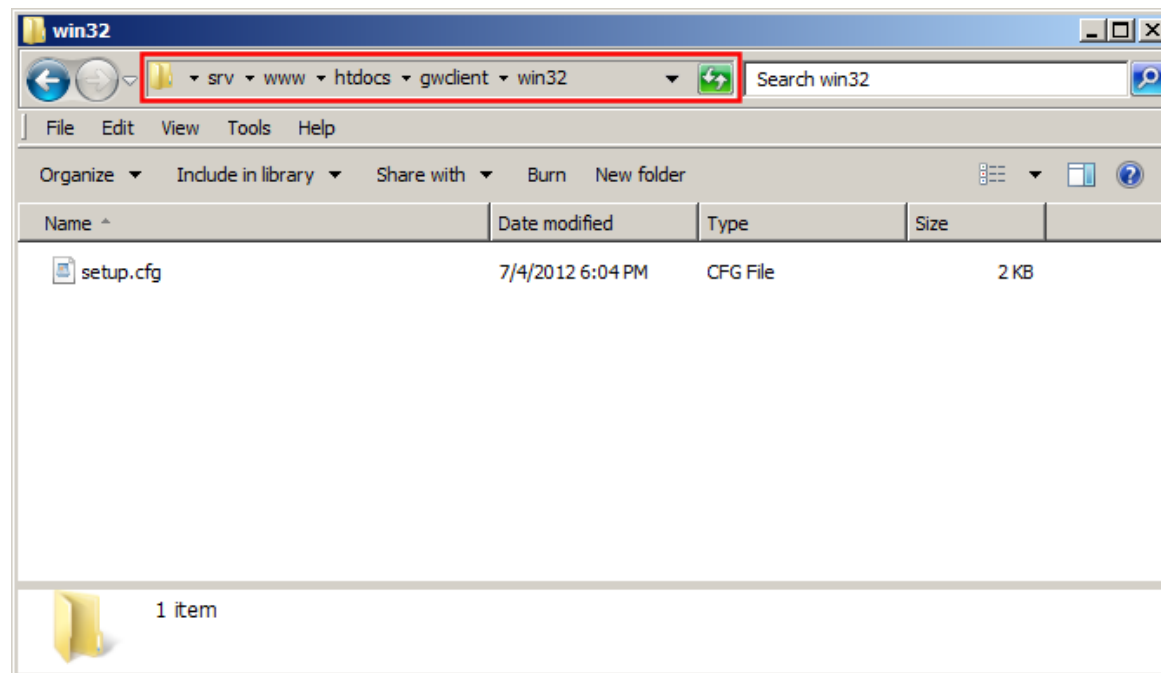
Web server directory:

“setupip.exe” downloads files from a web server directory you configure



Web server directory:

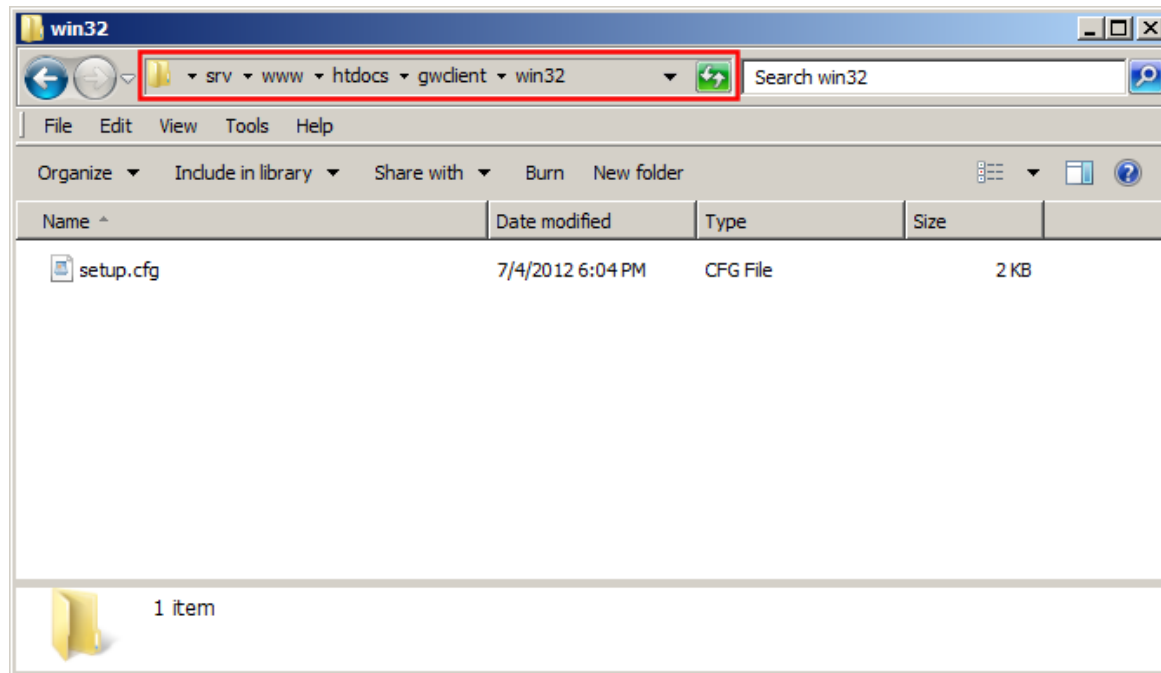
“setupip.exe” downloads files from a web server directory you configure



Web server URL:

Apache : Will use a “/etc/apache2/conf.d/setupip.conf” file that enables directory indexing

IIS : Directory browsing needs to be enabled using IIS Manager



Web server URL:

The minimum "setupip.conf":

```
<Directory /srv/www/htdocs/gwclient>  
    Options Indexes  
</Directory>
```

I would recommend:

Used to construct an Alias for case-insensitive url-path matching
AliasMatch (?i)^/gwclient(.*) /srv/www/htdocs/gwclient\$1

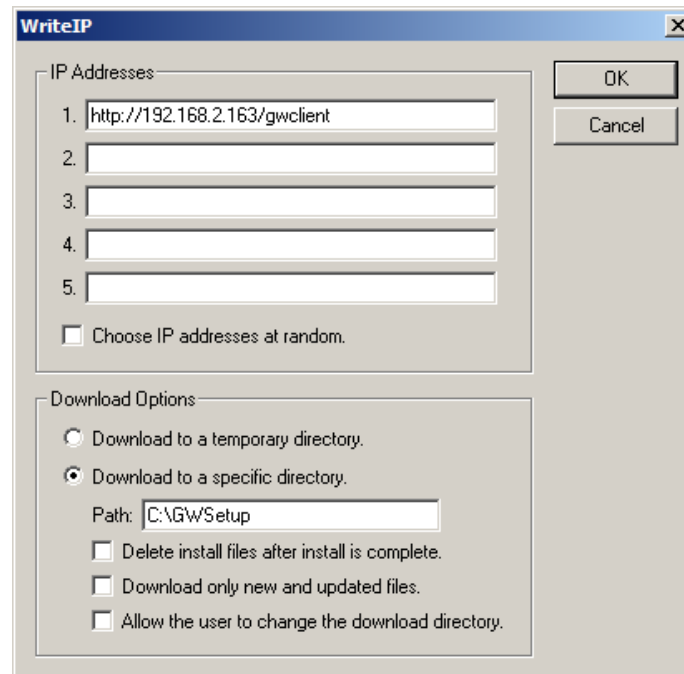
```
<Directory /srv/www/htdocs/gwclient>  
    Options Indexes  
</Directory>
```


Issues that might keep SetupIP from working as expected

- Legacy GroupWise clients were installed using the incorrect languages
- GroupWise clients were installed with legacy ZenWorks snapshots
- Silent SetupIP installs still prompt users for language selection

Building “setupip.exe”:

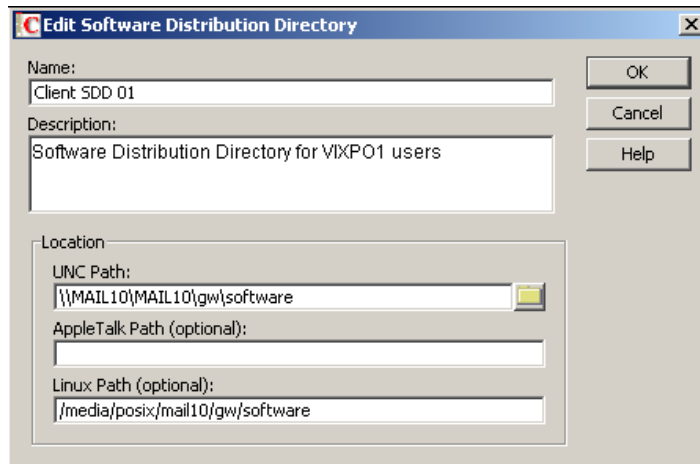
Run “<SDD>/admin/utility/setupip/writeip.exe”



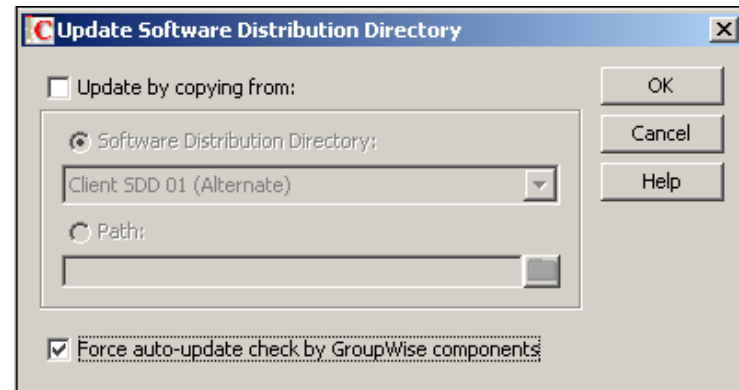
Creates “<SDD>/admin/utility/setupip/setupip.exe” and “writeip.ini” files

Turning on auto-update:

Assigning a SDD to the POA



Selecting the update option



Changes the “Software Bump Number” for the post office

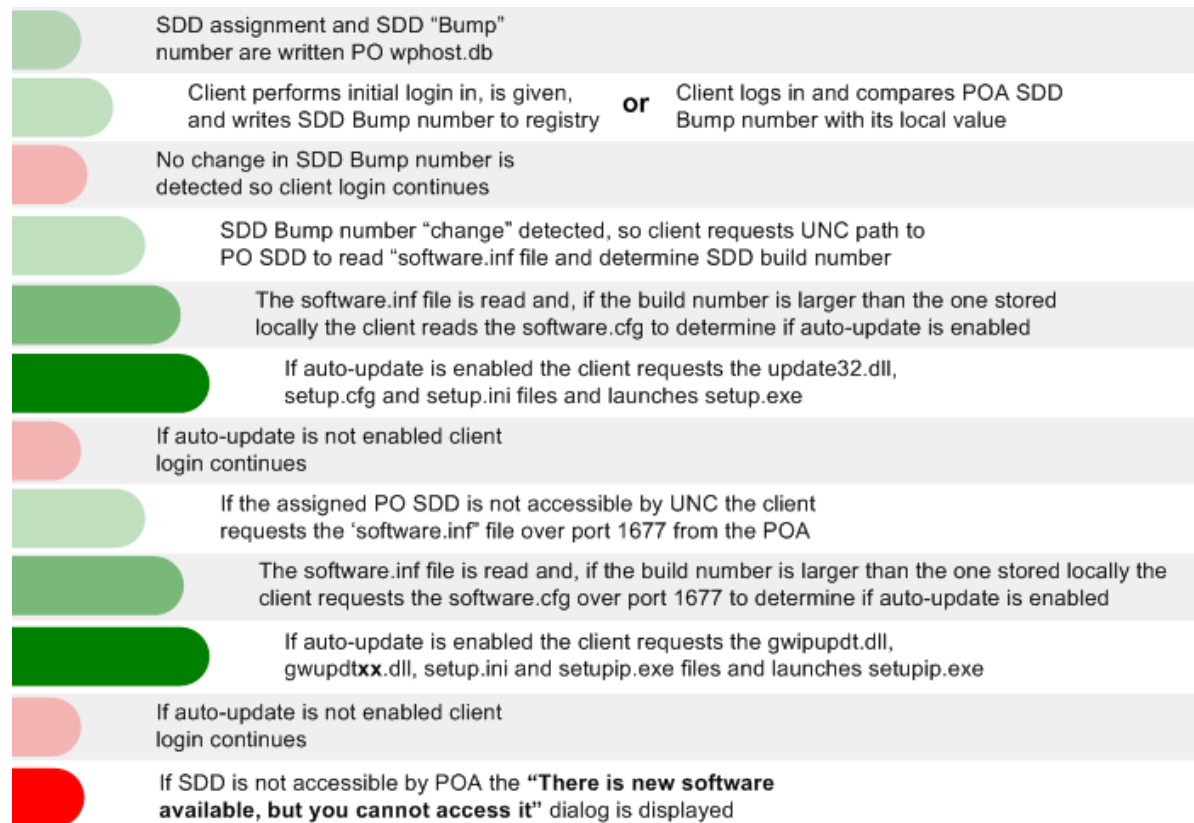
User rights to local machines:

Users are required to have “Power User” rights minimally to complete the installation

- Primarily a MSI/Windows installer dependency
- Tommy Mikkelsen wrote a utility that allows “setupip.exe” to complete the installation for users with lesser local rights

<http://www.novell.com/communities/node/6584/easyinst-groupwise>

GroupWise client update awareness, charted:



GroupWise client registry settings

Windows 9x/XP/7 (32bit):

<HKLM>\SOFTWARE\Novell\GroupWise\Client\5.0\NewSoftwareBump

<HKLM>\SOFTWARE\Novell\GroupWise\BuildNumber

<HKLM>\SOFTWARE\Novell\GroupWise\GraceLoginCount

Windows 7 (64 bit):

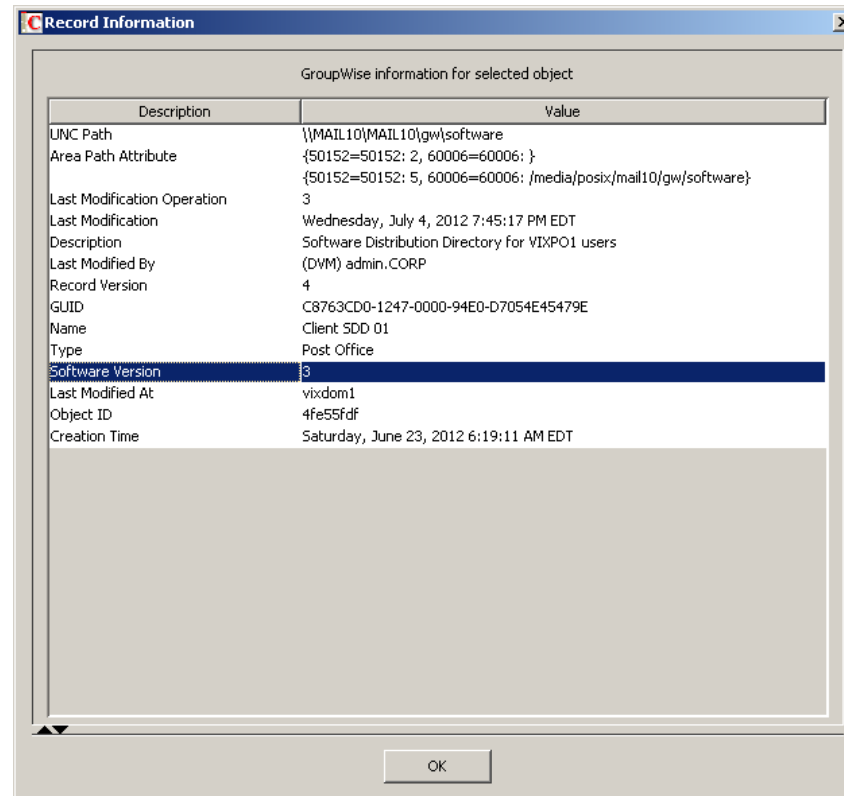
<HKLM>\SOFTWARE\Wow6432Node\Novell\GroupWise\Client\5.0\NewSoftwareBump

<HKLM>\SOFTWARE\Wow6432Node\Novell\GroupWise\BuildNumber

<HKLM>\SOFTWARE\Wow6432Node\Novell\GroupWise\GraceLoginCount

Verifying the Software bump number for a SDD

Tools->GroupWise->Diagnostics ->Record Enumeration->Areas by ID->Info->SoftwareVersion



Working the setup.cfg file:

Stops and starts a service that might prevent setup from completing

```
[GroupWiseSetup]  
StopService=<SomeProperServiceName>
```


Working the setup.cfg file:

Adding LDAP address books to the client configuration

```
[LDAP Account 1]
Description=Ldap Server1
Server=ldapserver1.com
Port=389
SearchRoot=c=us
Login=TRUE
```

```
[LDAP Account 2]
Description=Ldap Server2
Server=ldapserver2.co.uk
Port=389
SearchRoot=c=uk
Login=FALSE
```

Working the setup.cfg file:

Modifying the Windows Registry

[Registry Setting 1]

Action=Add

Type=String

Key=HKEY_LOCAL_MACHINE\SOFTWARE\Novell\GroupWise

Name=GroupWiseC3PO

Value=Installed

[Registry Setting 2]

Action=Delete

Key=HKEY_LOCAL_MACHINE\SOFTWARE\Novell\GroupWise

Name=GroupWiseC3PO

**** If a "Name" option is not specified using delete, then the entire key is deleted !!**

Question and Answer



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Thank you for your time and attendance