Installing Lotus Connections v2.0 for Windows

Written by Jon Mell

trovus
Rewarding dialogue

Please direct all comments and suggestions to **jon.mell@trovus.co.uk**

Read Jon Mell's blog – http://jonmell.co.uk

Find Jon Mell on Facebook http://www.facebook.com/p/Jon_Mell/657095205

Contents

trovus
Rewarding dialogue

Introduction

A year after IBM released Lotus Connections 1.0, version 2.0 is out and there are lots of new features. According to IBM, it's the fastest growing software product ever released. Trovus was the first organisation to publish a guide to help companies get up and running with v1.0. Since then, IBM has greatly improved the installation procedure for those who want to quickly try out Lotus Connections with the Pilot install. If anyone simply wants to try out the features then we suggest they use this approach.

If, however, a more advanced installation is required, such as for a proof of concept, a test environment or a production system it can still be pretty tricky. By popular demand, we have updated our installation guide to cover Lotus Connections v2. Enjoy, and please let us know about your experiences with Lotus Connections. This guide describes installing everything on a single machine, and is therefore not suited for production environments. However, the principles outlined in this document can be applied to a production environment. We've done our best to highlight where the install will be different for production by use of the word **advanced**.

Contact Me

I'd love to hear from you about how this can be improved, whether anything needs to be made clearer or whether or not alternative OS's, databases or LDAP directories should be added. If you find any errors (and I'm sure there are some!) then please do let me know and I'll endeavour to correct!

I can be contacted at jon.mell@trovus.co.uk or on Facebook at http://www.facebook.com/p/Jon_Mell/657095205.

You can follow my blog at http://jonmell.co.uk

Preamble

This document is intended to assist those interested in IBM Lotus Connections to get the software up and running on a single Windows machine using either Domino or Active Directory as an LDAP. It is our understanding that you would need to be licensed separately to use Domino. You should note that Active Directory mandates Windows 2003 – XP or Vista won't cut it. Domino works fine on an XP Service Pack 2 environment. Note this document assumes a clean install. It makes changes to your system settings. For this reason it is strongly recommended that you use virtualisation software such as VMWare to protect your machine and the network it sits on from adverse affects.

Note – due to the availability of Domino I have not included instructions on setting up Tivoli Directory Server as it was a pain. However, if there is demand for it email me and I will see what I can do.

Disclaimer

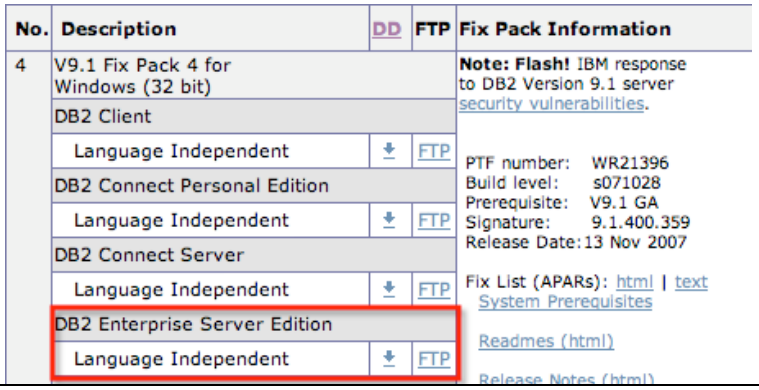
Required software

You need to download everything listed in the base required software table.

If you want to install Profiles download the software in the profiles table.

You must then choose which LDAP server to use, Active Directory or Domino and download the software accordingly.

Base required software

Software	Location
WebSphere Application Server 6.1	Part C87QTML from Passport Advantage
WebSphere Application Server 6.1 Supplements	Part C87PNML from Passport Advantage
Connections 2.0	Part C1F0SIE from Passport Advantage
Connections Database Configuration and Profiles Population Wizards	Part C1HA3IE from Passport Advantage
DB2 9.1 Fix Pack 4	http://www-1.ibm.com/support/docview.wss?rs=71&uid=swg21255394 This is actually a full install, so you don't need to download and install another copy of DB2 beforehand. You will apply a license key provided with Connections. Download Fix Pack for DB2 Enterprise Server Edition 
WebSphere Application Server 6.1 Updater	http://www-1.ibm.com/support/docview.wss?rs=180&uid=swg24012718 (download the Windows package – download.upddi.61017.windows.ia32.zip) Note that 61017 may change as IBM release future versions
WebSphere Application Server 6.1 Fixpack 13	http://www-1.ibm.com/support/docview.wss?rs=180&uid=swg24017334 Download these files (you don't need to download the update installer requisite as we are downloading above): 32-bit x86 AMD/Intel AppServer 6.1.0-WS-WAS-WinX32-FP0000013.pak 32-bit x86 AMD/Intel Plug-ins 6.1.0-WS-PLG-WinX32-FP0000013.pak 32-bit x86 AMD/Intel HTTP Svr 6.1.0-WS-IHS-WinX32-FP0000013.pak
6.1.0.11-WS-WAS-IFPK60528.pak	http://www-1.ibm.com/support/docview.wss?uid=swg24019122

Additional software required for Profiles

Software	Location
Windows 2003 install disk or image	Microsoft or provided with server

Additional software required for Active Directory install

Software	Location
Tivoli Directory Integrator 6.1.1	Part C9666ML from Passport Advantage
Tivoli Directory Integrator Fix Pack 3	http://www-1.ibm.com/support/docview.wss?rs=697&context=SSCQGF&uid=swg27010509#ver611

Additional software required for Domino install

Note if you wish to use an earlier supported version of Domino (7.0.2 or 8.0) you can probably get by with these instructions

Software	Location
Notes 8.0.1 client	Part C19U0EN from Passport Advantage
Domino 8.0.1 server	Part C18XPEN from Passport Advantage

Required Information

You will need the following information. It is useful to print this sheet out and refer to it during the installation. Where these tags appear in the document they need to be replaced with your values. If in doubt use the sample values in this document.

Name	Description	Value
<wasadminuser>	Administrative userid to use for the WebSphere console – eg wasadmin	
<wasadminpwd>	Password for <wasadmin> 0 eg wasadmin	
<winadminuser>	Administrator user id for Windows 2003 – eg Administrator	
<winadminpwd>	Password for <winadminuser>	
<hostname>	Computer hostname – eg connections	
<domain>	Network domain for computer – eg trovus.co.uk	
<fullyqualifiedname>	Fully qualified hostname of computer <hostname>.<domain> - eg connections.trovus.co.uk	
<db2install>	Location of your DB2 installation - - eg C:\SQLLIB	
<db2user>	Windows 2003 DB2 username – eg db2admin	
<db2pwd>	Password for <db2user>	
<wasinstall>	Location of your WebSphere installation – eg C:\WebSphere\AppServer	
<httpinstall>	Location of your HTTP Server – eg C:\HTTPServer	
<httpuser>	Username to administer HTT server – eg httpadmin	
<httppwd>	Password for <httpuser>	
<connectionsserver>	The name of the WebSphere Application Server instance used to install connections	
<connectionsadmin>	The URL to administer <connectionsserver>	Provided by Connections installer
<connectionshome>	The URL to the Connections homepage	Provided by Connections installer

If installing Profiles

<tdiinstall>	Installation directory for Tivoli Directory Server – eg c:\TDI	
<tdisol>	A subdirectory of your choosing under *<tdiinstall>* where you will extract TDISOL.zip from the Lotus Connections install media	

If using Active Directory

<ipaddress>	Your current IP address	
<subnet>	Your current subnet mask	
<gateway>	Your current TCP/IP gateway	
<dns>	Your current DNS servers	

If using Domino

<domnioadmin>	Domino administrator	
<dominopwd>	Password for <dominoadmin>	
<orgname>	Domino organisation name – eg Trovus	
<orgpwd>	Certifier password used to register users in Domino	
<dominoinstall>	Install directory for Domino	
<dominodata>	Data subdirectory for Domino	

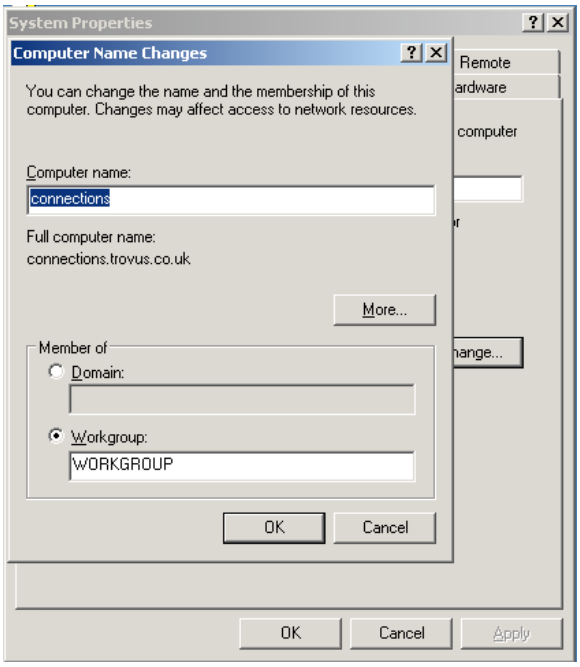
Set network name

Log into a clean installation of Windows as the Administrator.

You must set up a computer name and domain before starting. Localhost will not work. To do this right click on My Computer and click Properties

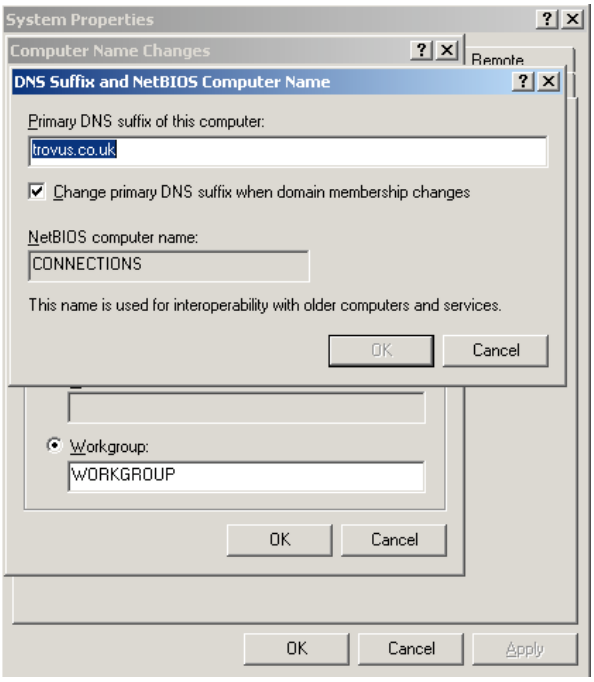
Click the Computer Name tab and press Change

Under computer name enter <*hostname*> - eg connections



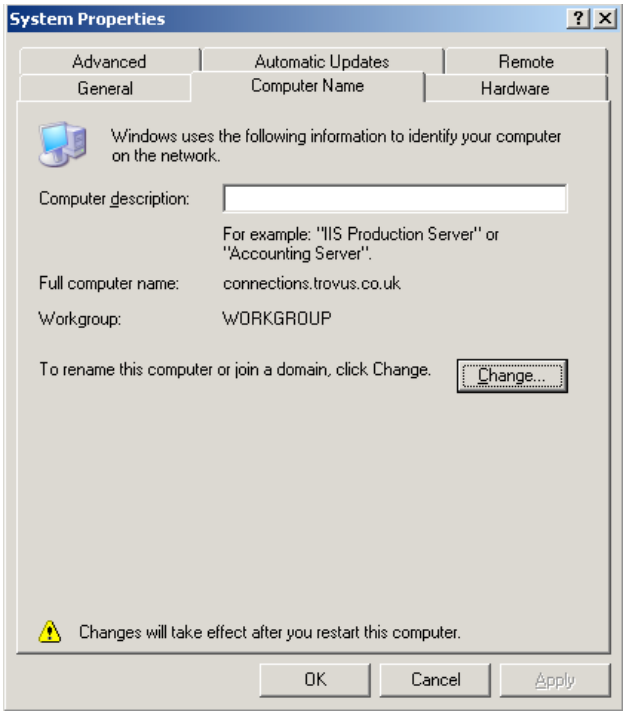
Click more – and now enter <*domain*> eg – trovus.co.uk. **Do not** leave this blank and **do not** include <*hostname*>.

trovus
Rewarding dialogue



Advanced: if installing over multiple machines in a production environment this step must be performed on all machines.

Press OK and OK again and you should be back at the Computer name tab showing your full hostname and domain name. This should be the same as <*fullyqualifiedname*>.



Press OK and you will need to restart your machine.

Install DB2

Install DB2

Extract the media from `v9fp4_win_ese.exe`

Run `setup.exe` from the DB2 media.

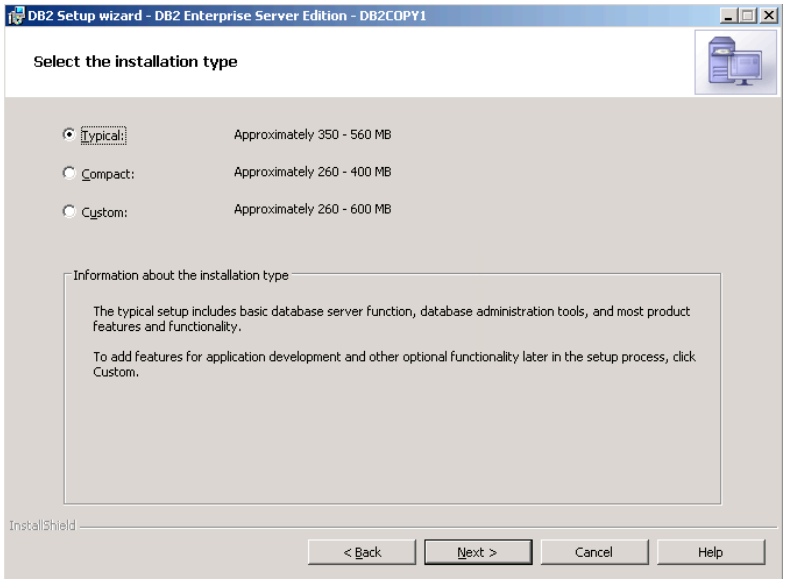
From the DB2 Setup Launchpad click "Install a Product" from the left hand side.

Under DB2 Enterprise Server Edition click "Install New".

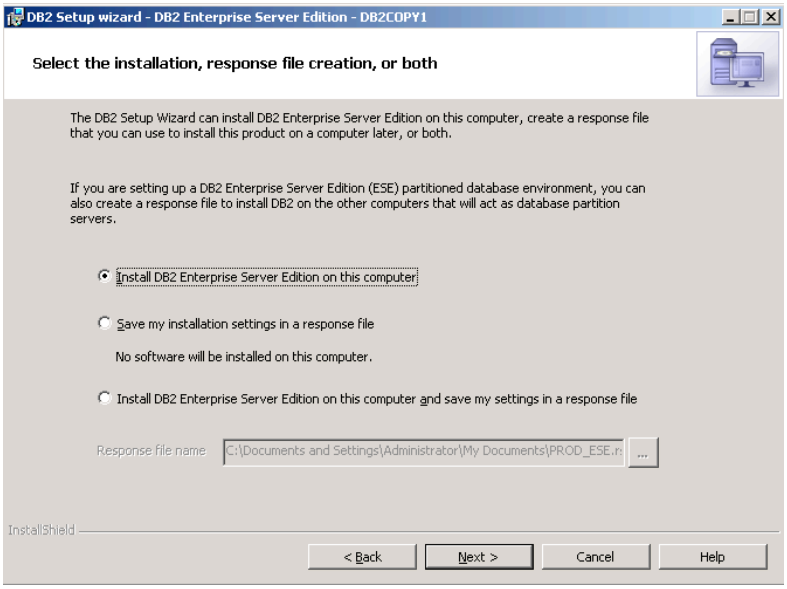
The install wizard will now launch. Click Next on the Welcome screen.

Accept the license terms and click next.

Keep Typical installation type selected and click next.

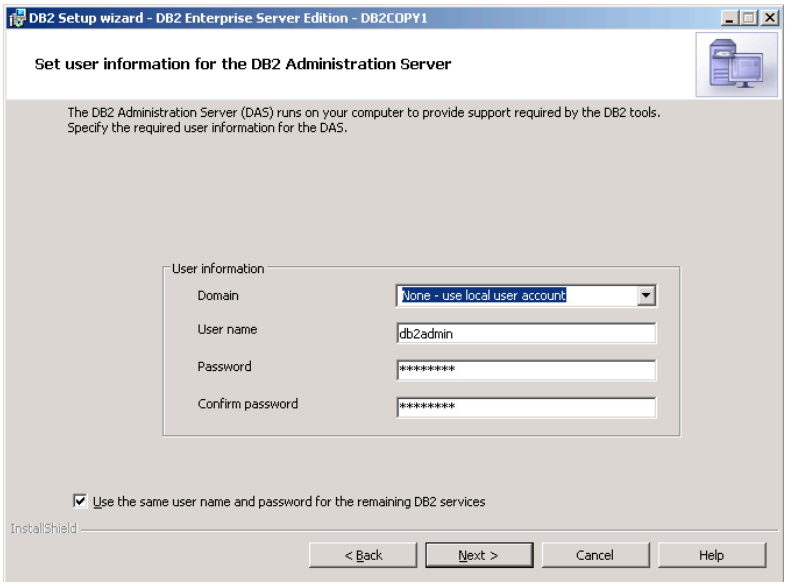


Click Install DB2 Enterprise Server Edition on this computer and press next.

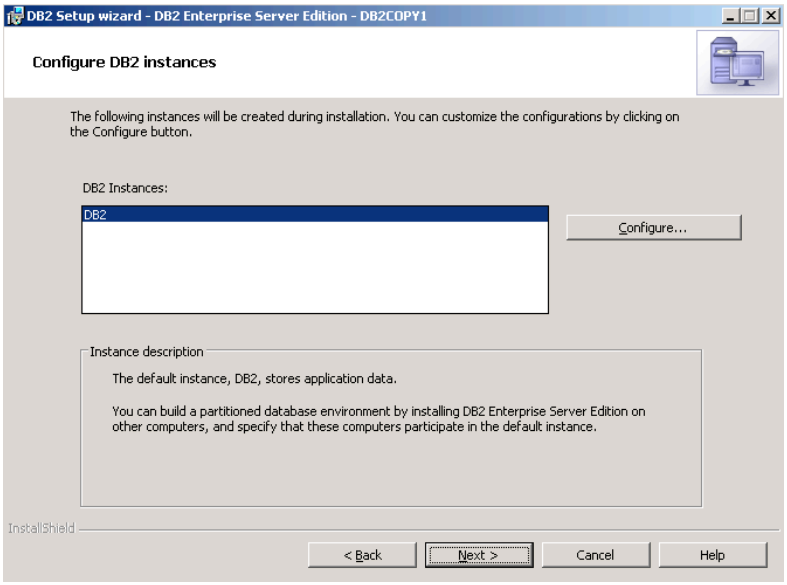


I tend to change the install directory to something more using friendly – change it if you like and press next. This value is <*db2install*>.

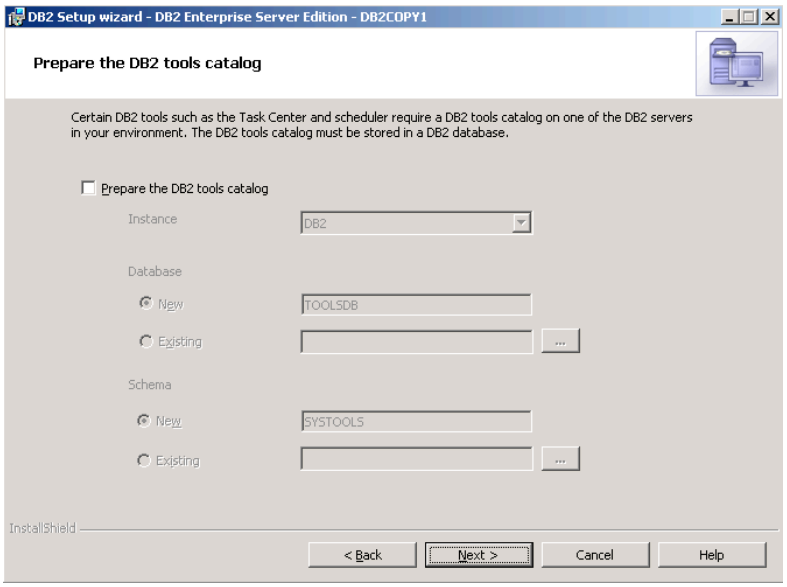
On Set user information set Domain to “None – use local account” and enter values you chose for your DB2 user (*<db2user>* and *<db2pwd>*). These users do not have to exist. Ensure that the check box to use the same user name and password for the remaining DB2 services is selected. Click next



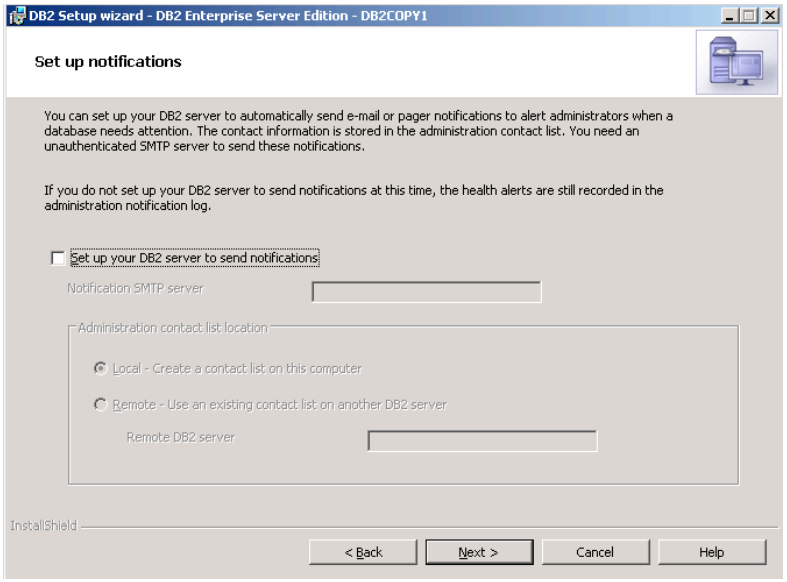
On configure DB2 instances click next



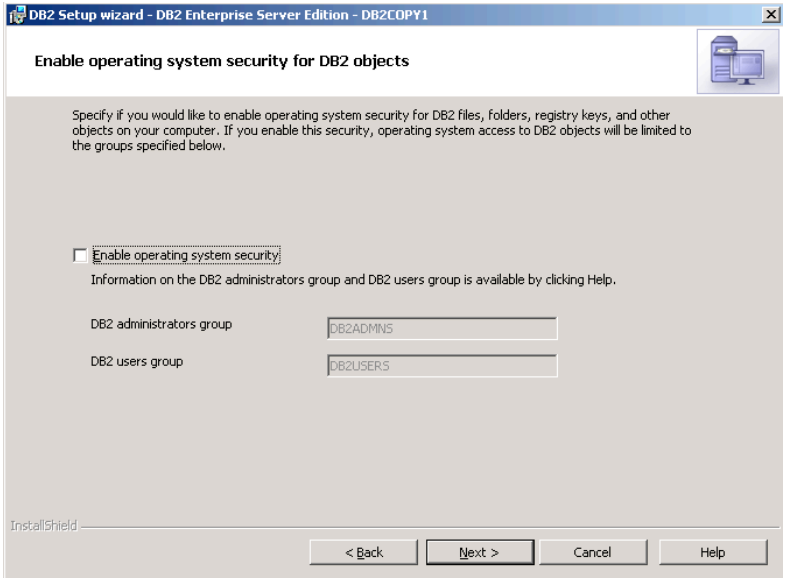
Leave Prepare the DB2 tools catalog unselected and press next



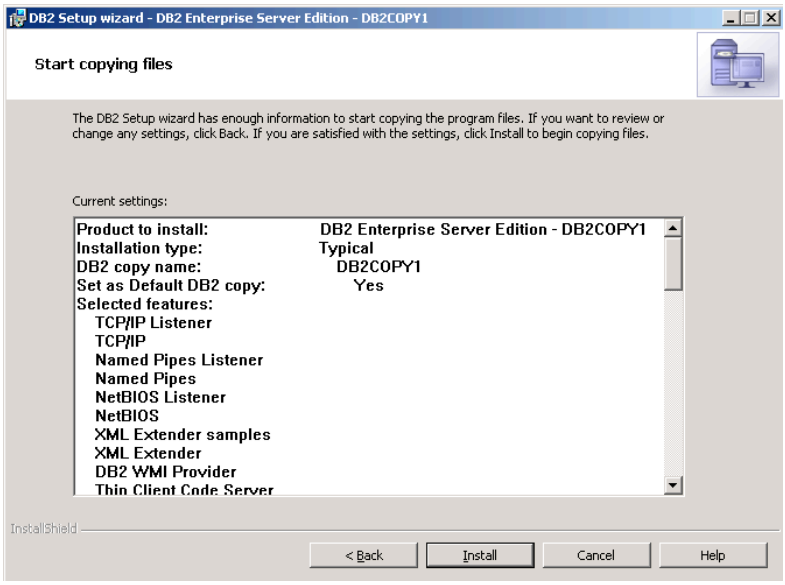
Deselect Set up your DB2 server to send notifications and press next



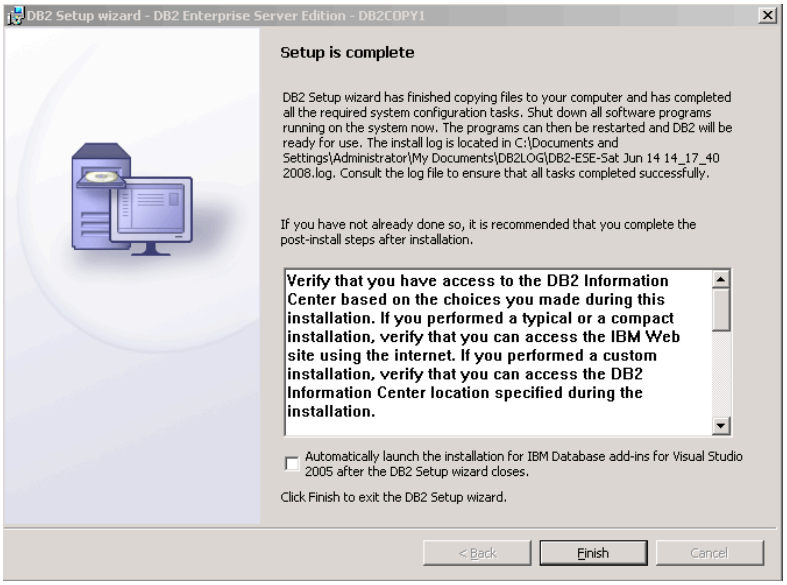
Deselect Enable operating system security for DB2 objects and click next.



On the summary screen click install



On a successful install you should see this screen. Click Finish.

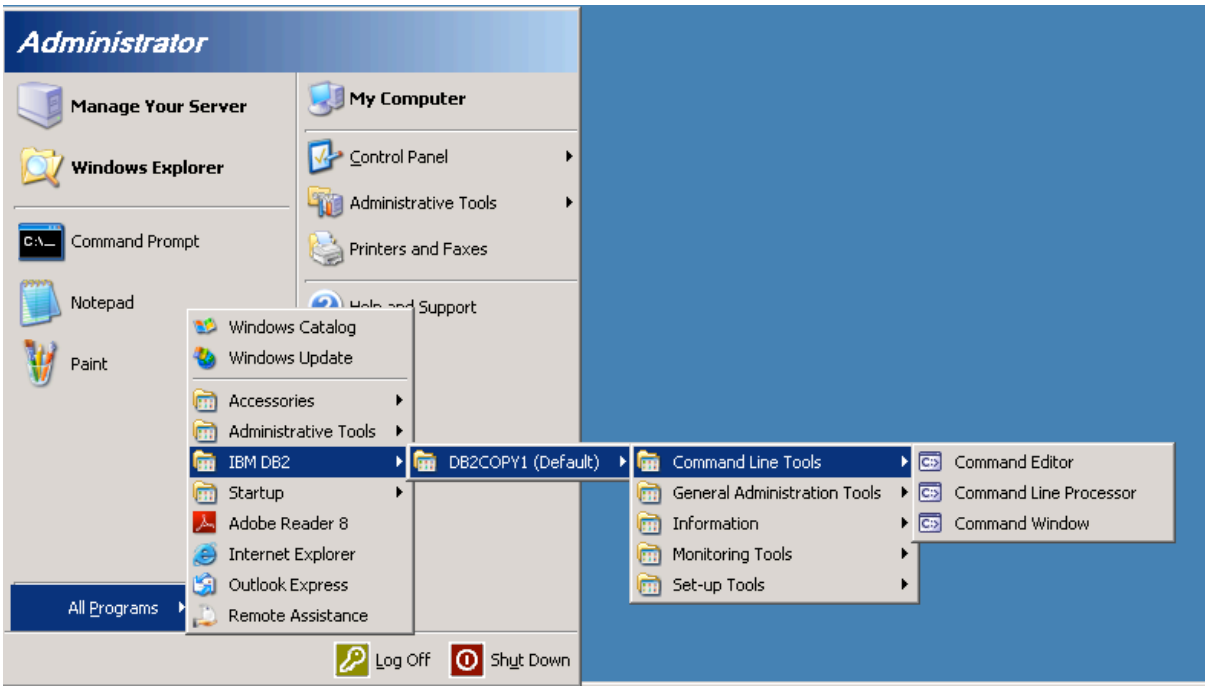


From the DB2 First Steps screen that launches you can test your install if you wish by clicking the Database Creation on the left hand side and click Create SAMPLE Database. Exit the First Steps screen when done.

Apply DB2 License Key

You are licensed to use DB2 as part of Lotus Connections. This step licenses DB2 to be used exclusively with Lotus Connections. If you have licensed DB2 separately, you should not perform this step, and consult whoever in your organisation is responsible for DB2 licensing.

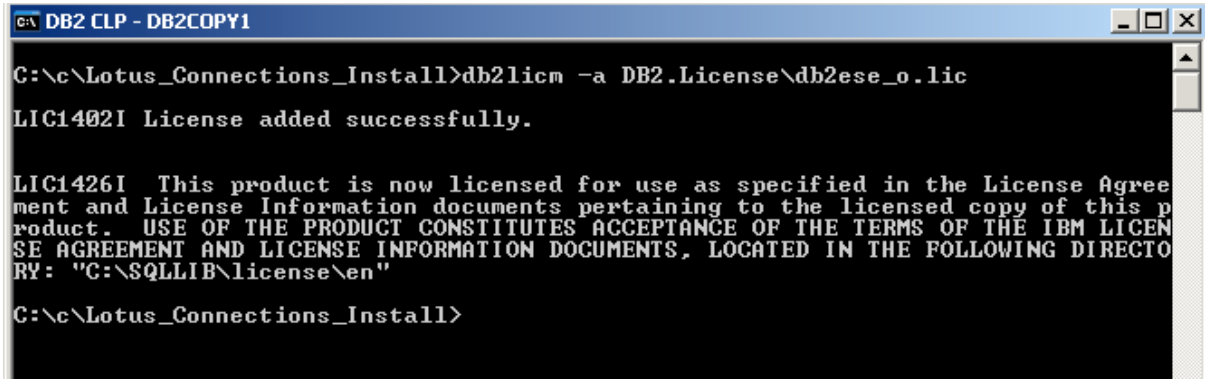
Click Start -> IBM DB2 -> DB2COPY1 (Default) -> Command Line Tools -> Command Window



Navigate to the `Lotus_Connections_Install` directory on the Connections 2.0 media (part C1F0SIE from Passport Advantage).

From the `Lotus_Connections_Install` directory type `db2licm –a DB2.License\db2ese_o.lic`

You should get the following successful result



Set up LDAP

Choose either to install Active Directory or Domino

Install Active Directory

Note this section changes your network settings and sets a static IP address. Use VMWare if in any doubt. You may need your Windows 2003 media for this step.

Set up a static IP address

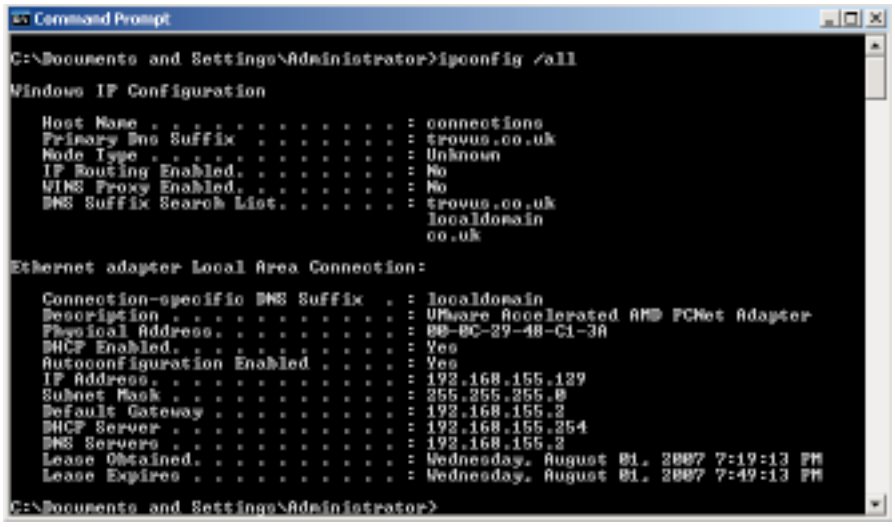
From a command prompt run `ipconfig /all` and make a note of the following information:

IP Address – note this as <*ipaddress*>

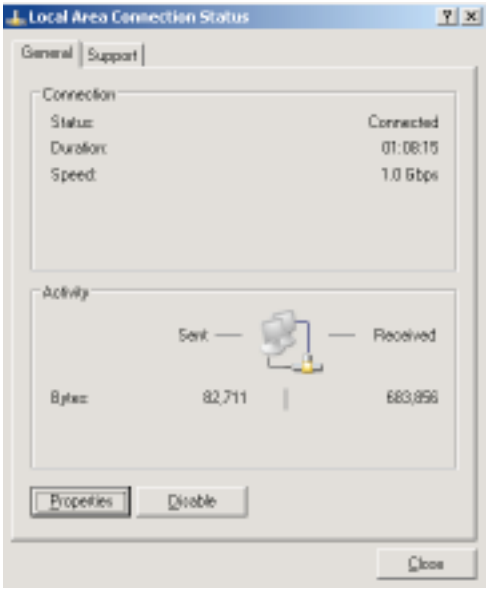
Subnet mask – note this as <*subnet*>

Default gateway – note this as <*gateway*>

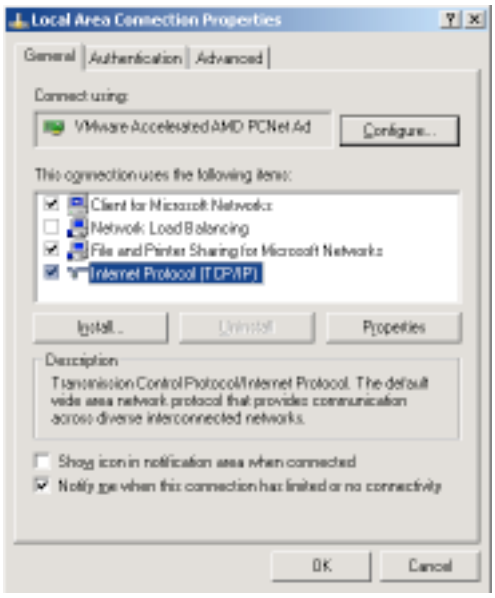
DNS Servers – note this as <*dns*>



Click Start -> Control Panel -> Network Connections -> Local Area Connection



Click Properties



Click Internet Protocol (TCP/IP) and click Properties.

Click the "Use the following IP address" radio button and the "Use the following DNS Server addresses" radio button

Enter:

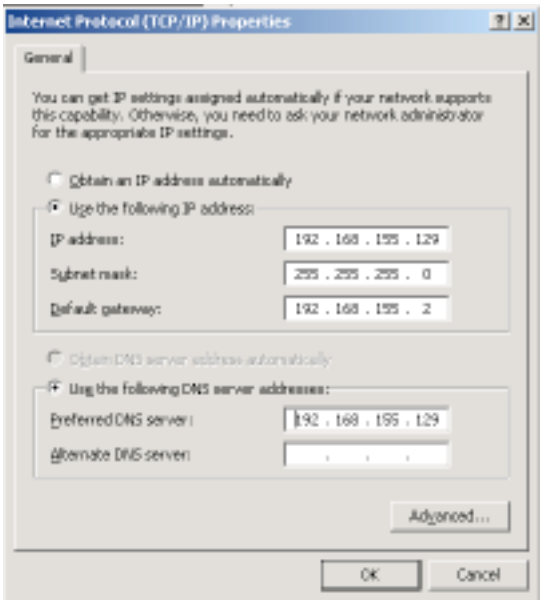
IP Address with <*ipaddress*>

Subnet mask with <*subnet*>

Default gateway <*gateway*>

DNS <*ipaddress*>

Do not fill in the DNS Server with <*dns*>. Instead this should be <*ipaddress*>.



Press OK then press Close.

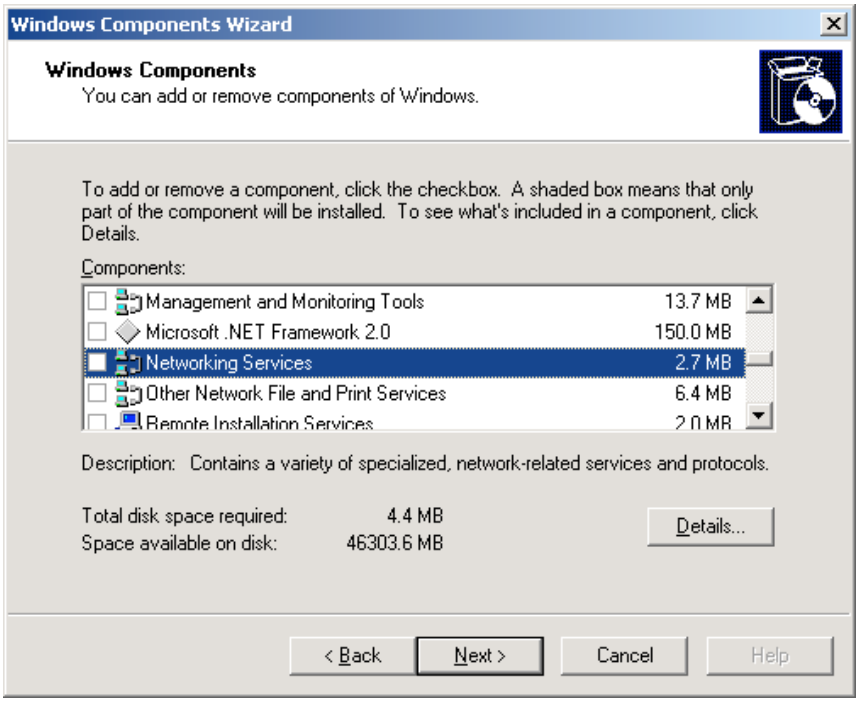
Set up DNS

Active Directory requires you to have a Domain Name Server (DNS) service running on your machine.

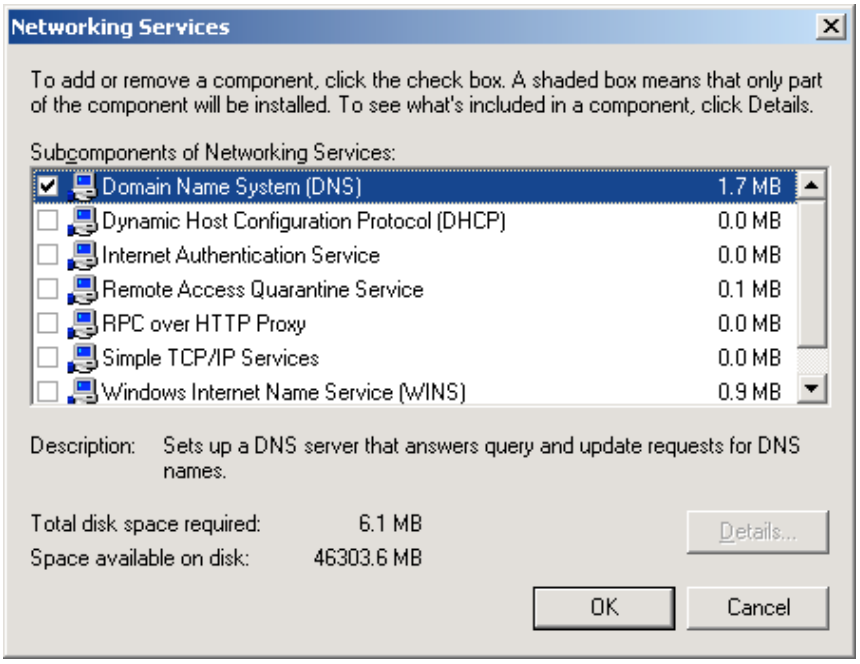
Click Start -> Control Panel -> Add or Remove Programs

On the left hand side click Add/Remove Windows Components

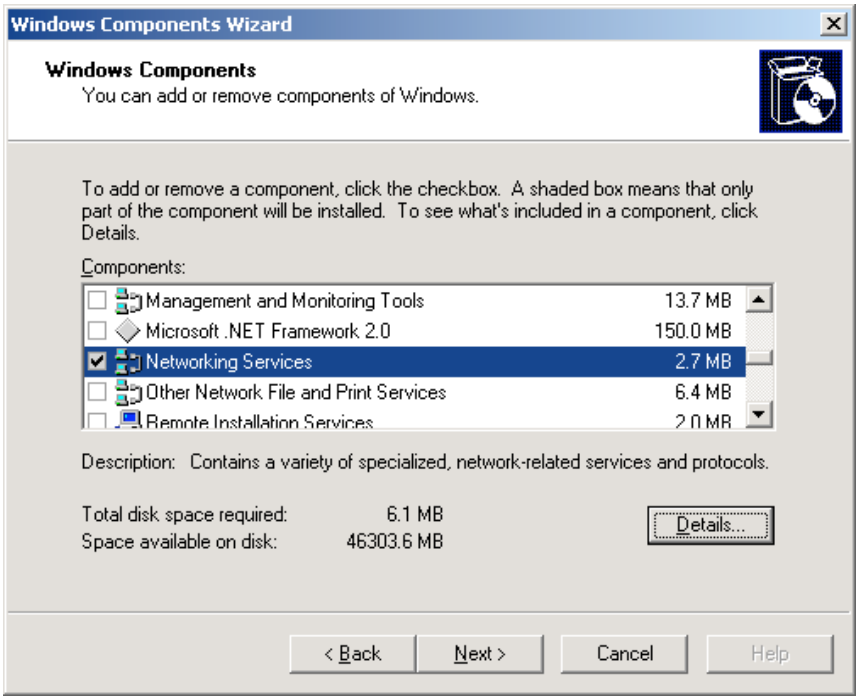
Select Networking Services and press Details



Select Domain Name System (DNS) and press OK



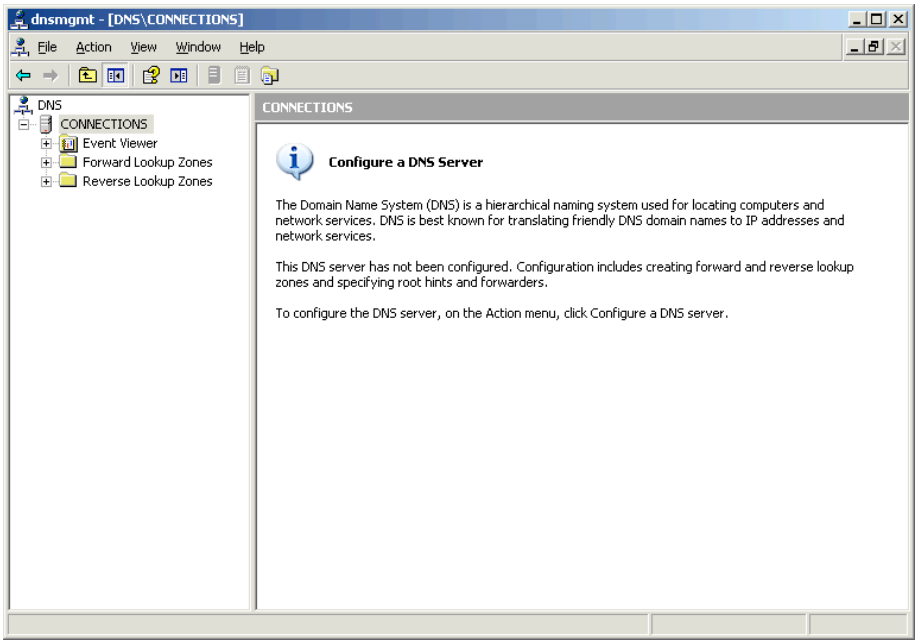
Networking services should now have a grey checked box. Press Next. Set up may require you to enter the location of your Windows 2003 media or install image during this step.



After a few moments you should see a successful completion screen. Press Finish

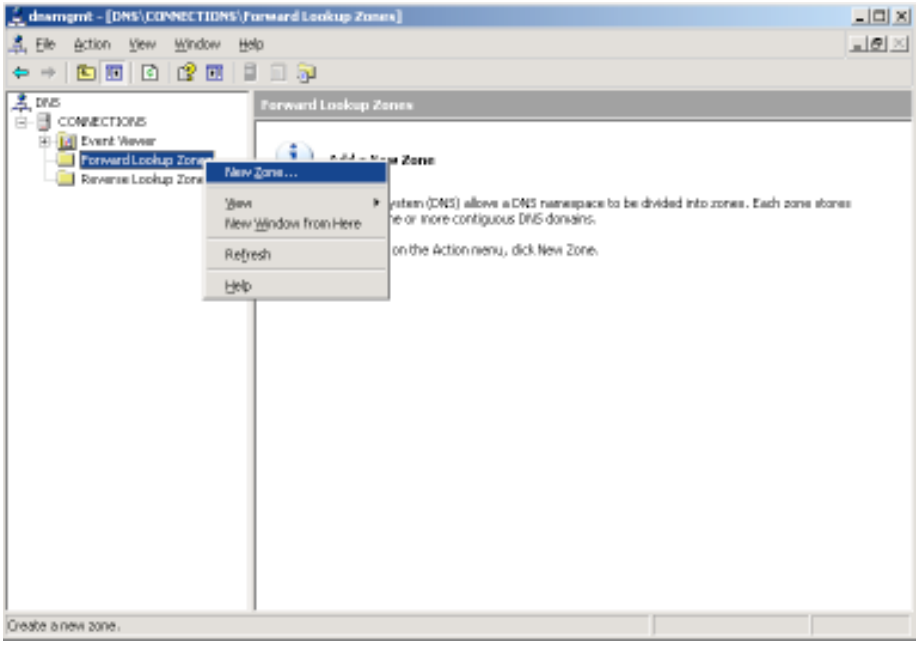
Close Add or Remove Programs.

Click Start -> Administrative Tools -> DNS



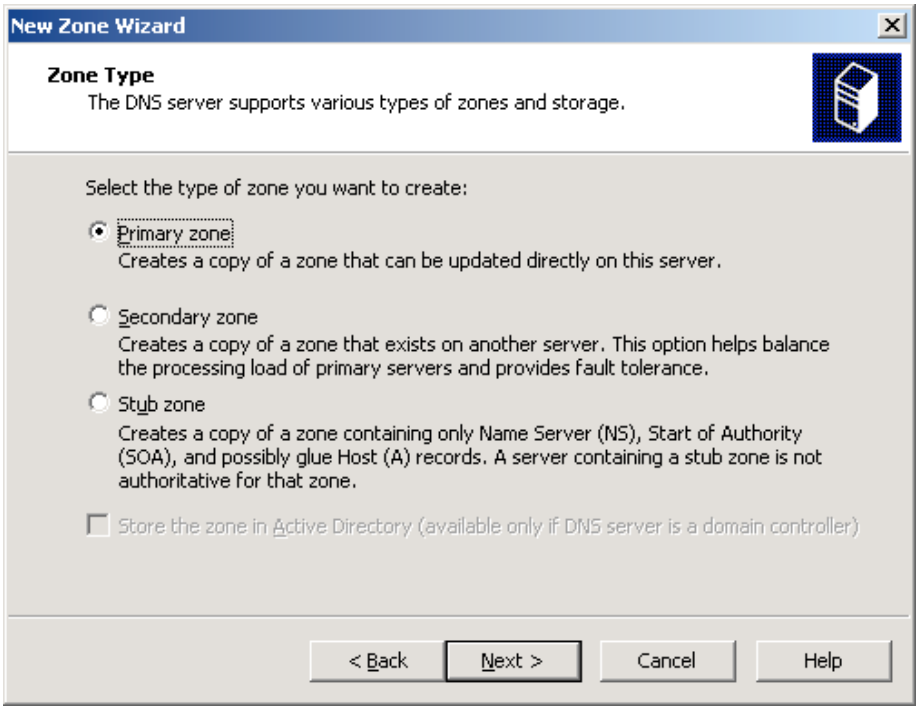
Left click Forward Lookup Zones.

Right click Forward Lookup Zones and click New Zone…

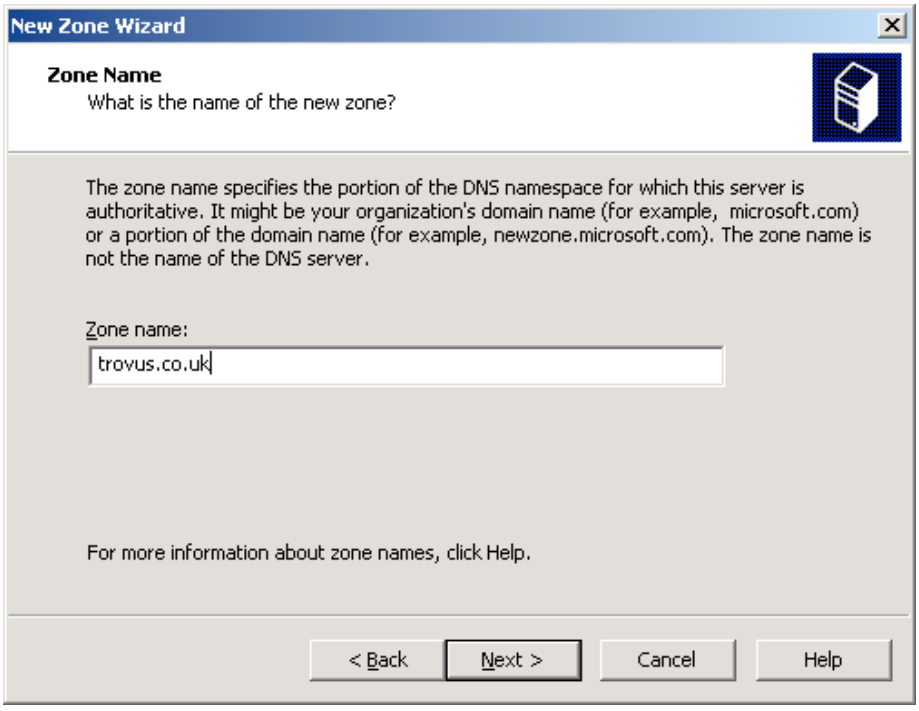


Click next on the welcome screen of the New Zone wizard.

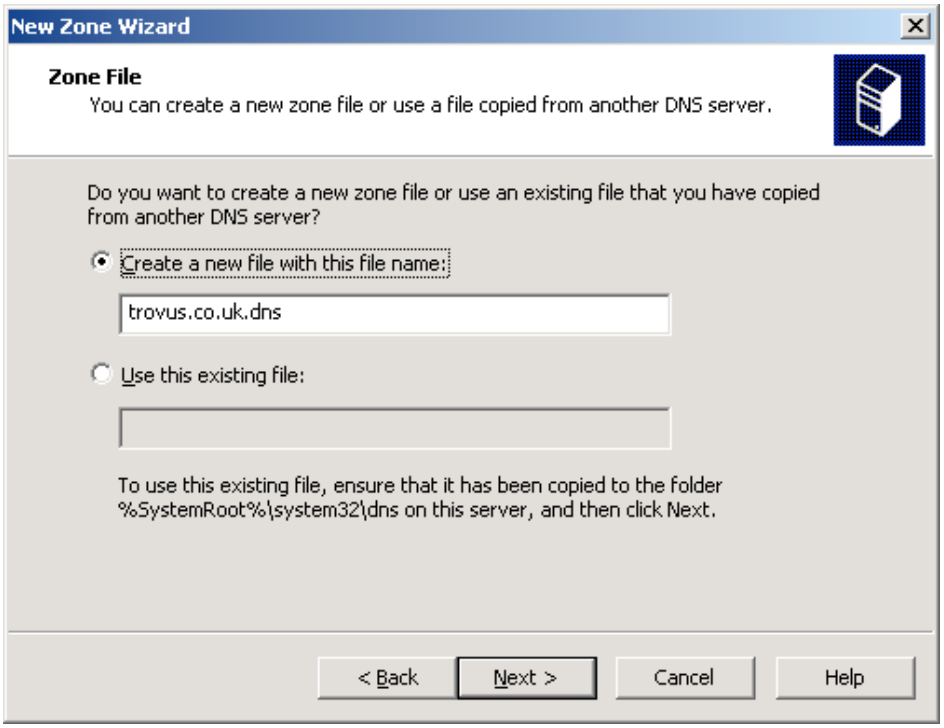
On the Zone Type screen keep Primary Zone selected and press next.



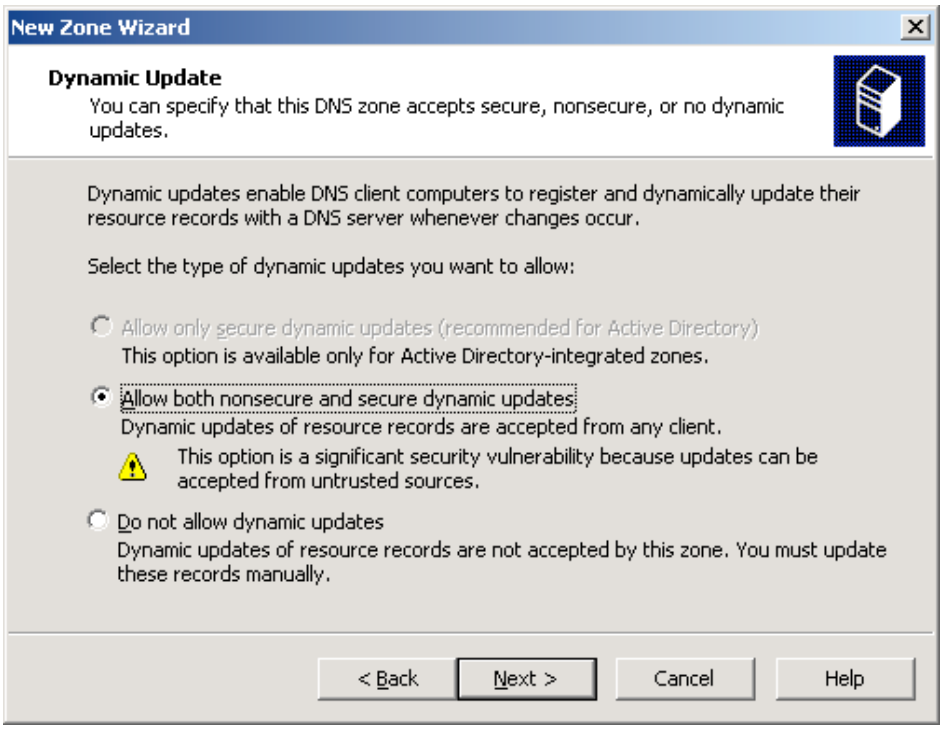
In Zone name enter <*domain*>. This should just be the domain name (eg trovus.co.uk) and not include the hostname. Click Next.



Leave the Zone file settings as the default and press Next

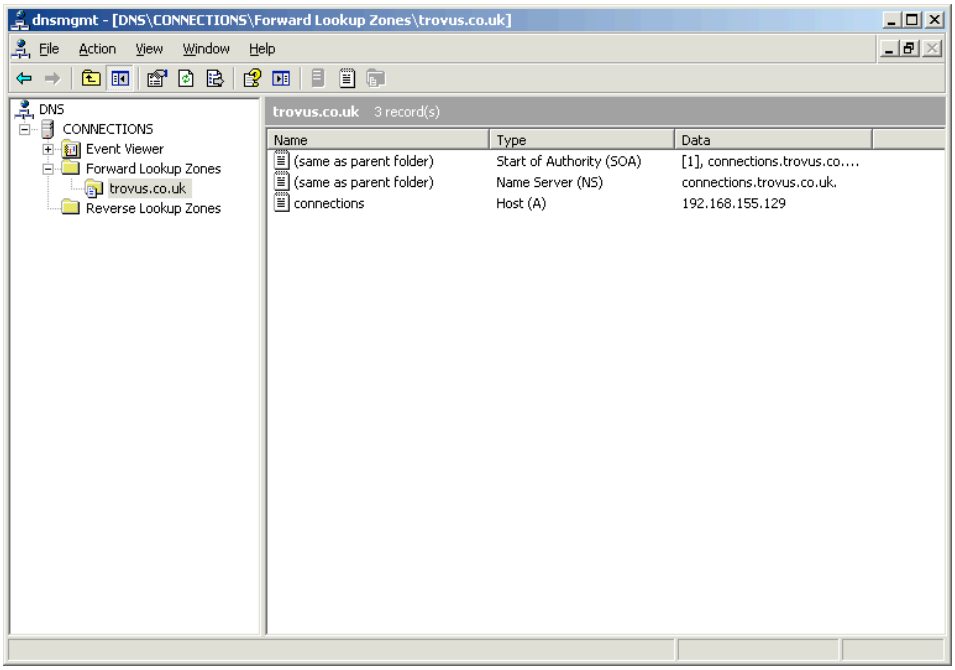


Allow both nonsecure and secure dynamic updates and press Next

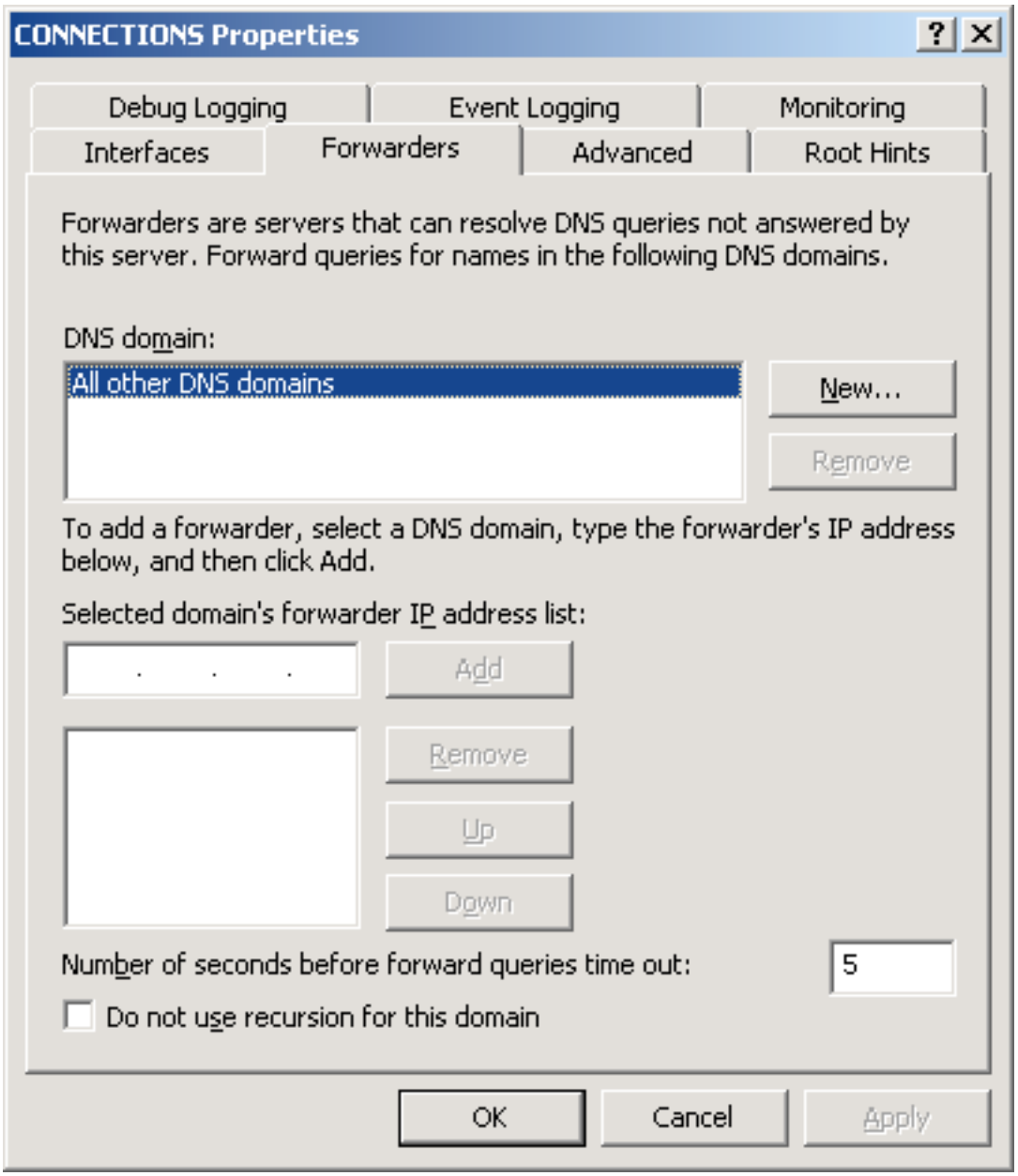


On the summary screen press Finish

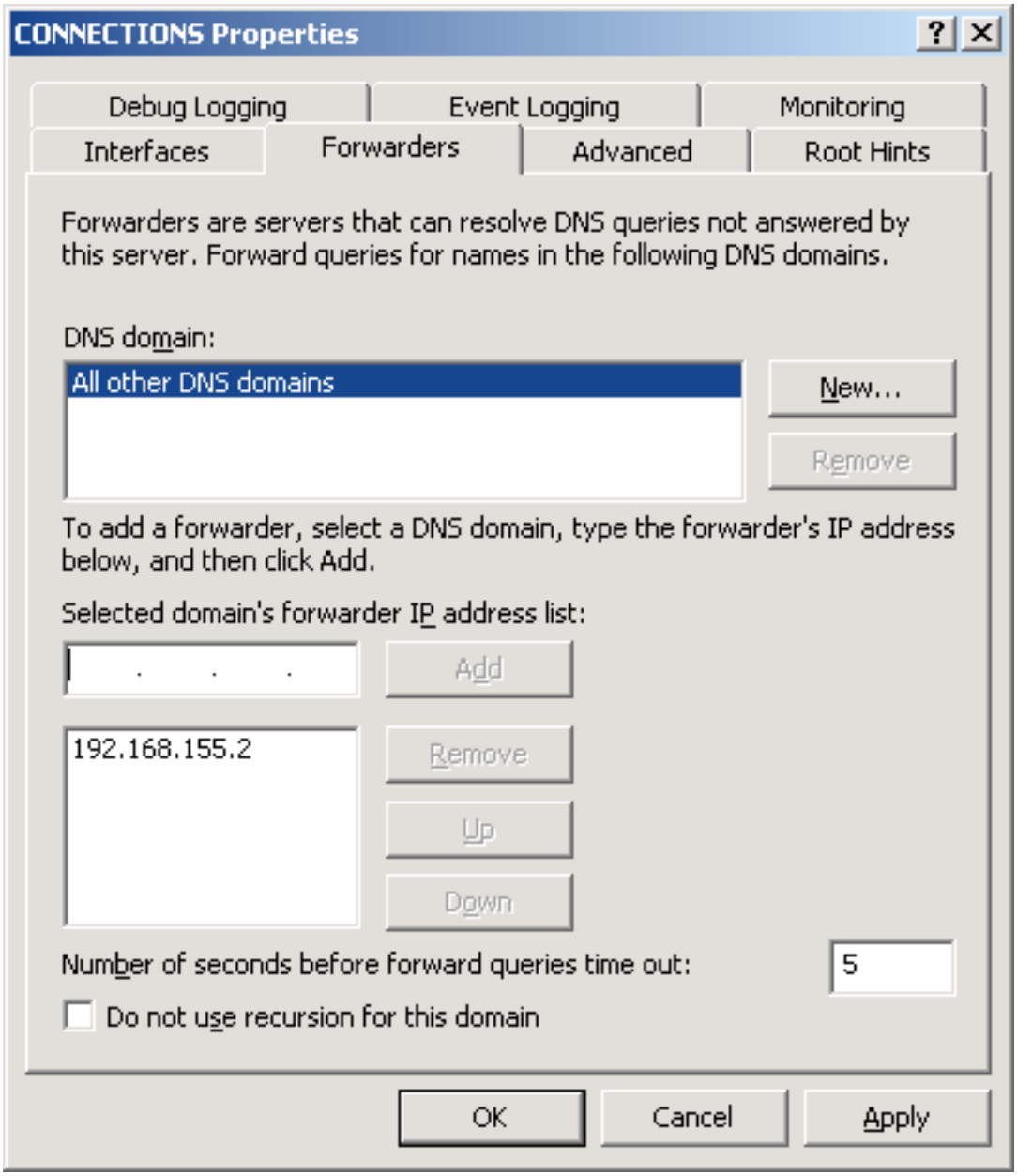
You should have a zone created that looks like the following:



If you want to enable your machine to use a 'real' DNS server (it won't be able to access the internet unless you do) then right click on your server (eg CONNECTIONS) on the left hand tree and click properties. Click the Forwarders tab on the properties screen.



Enter <*dns*> in the Selected domain's forwarder IP address list box and press Add



Click OK.

Close the DNSMGMT screen.

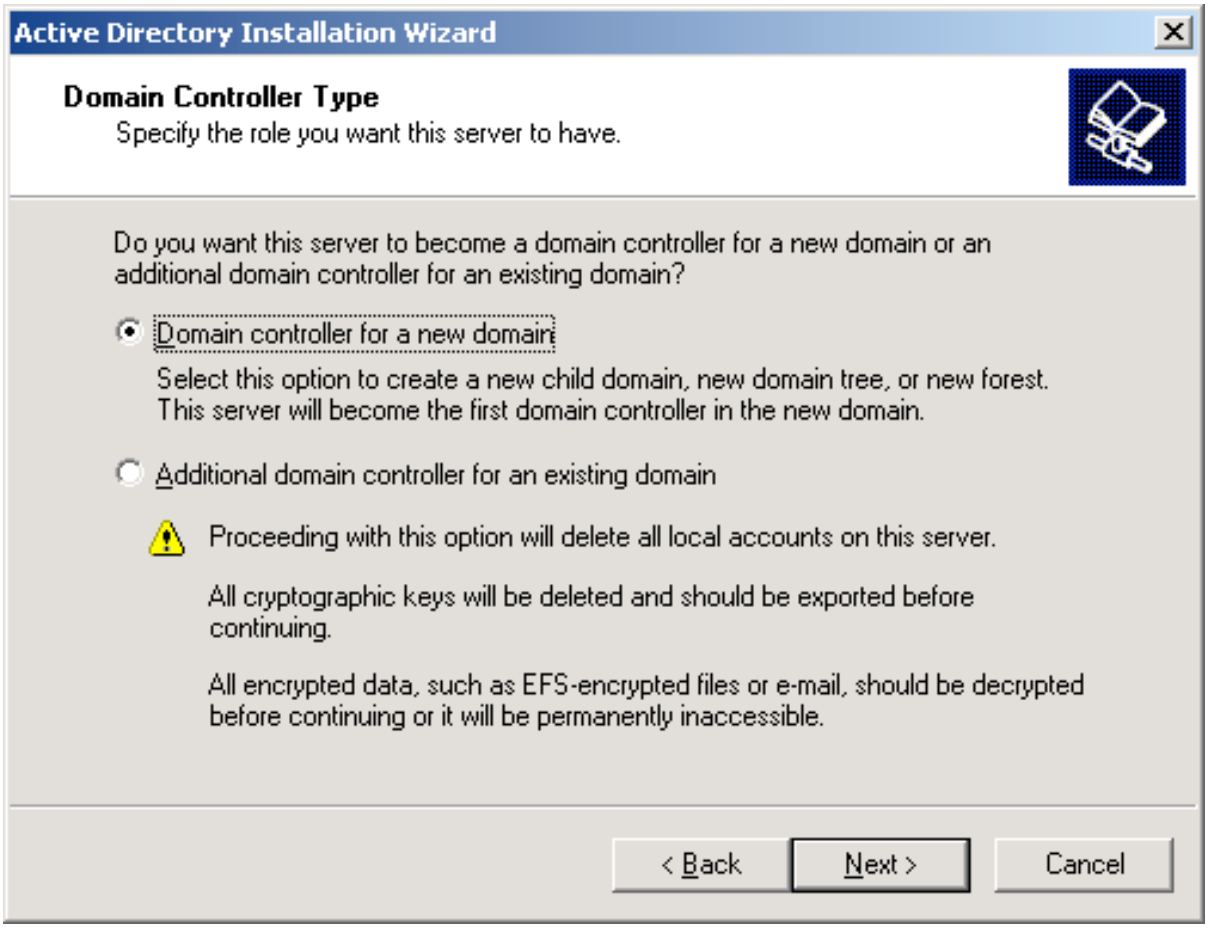
Install Active Directory

From a command prompt run `dcpromo`

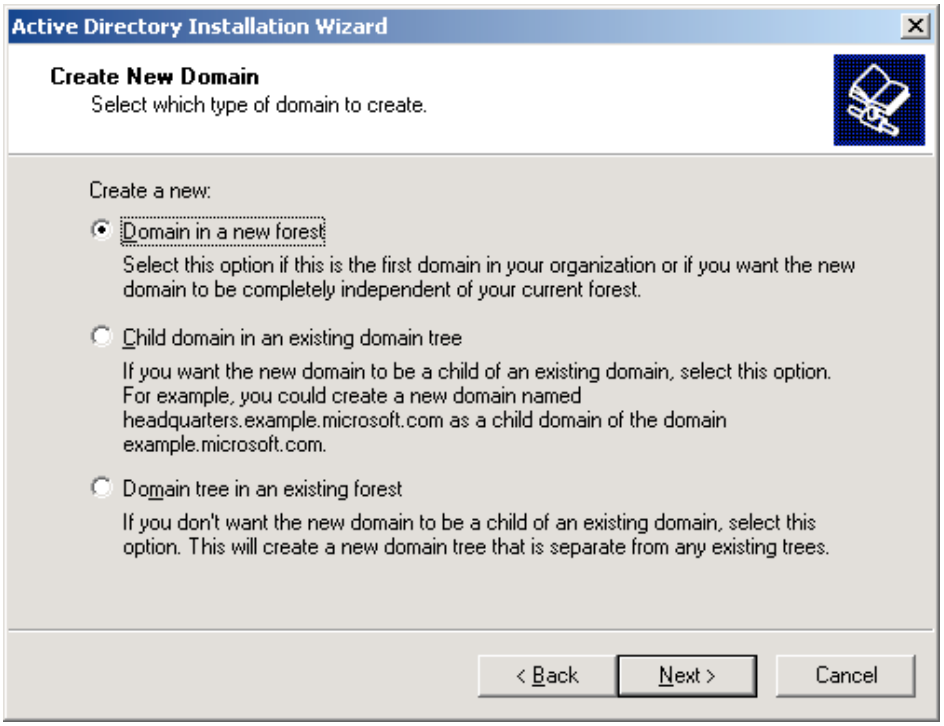
You should see the Active Directory installation wizard welcome screen. Click Next.

You will then see a screen about Operating System Compatibility. Click Next.

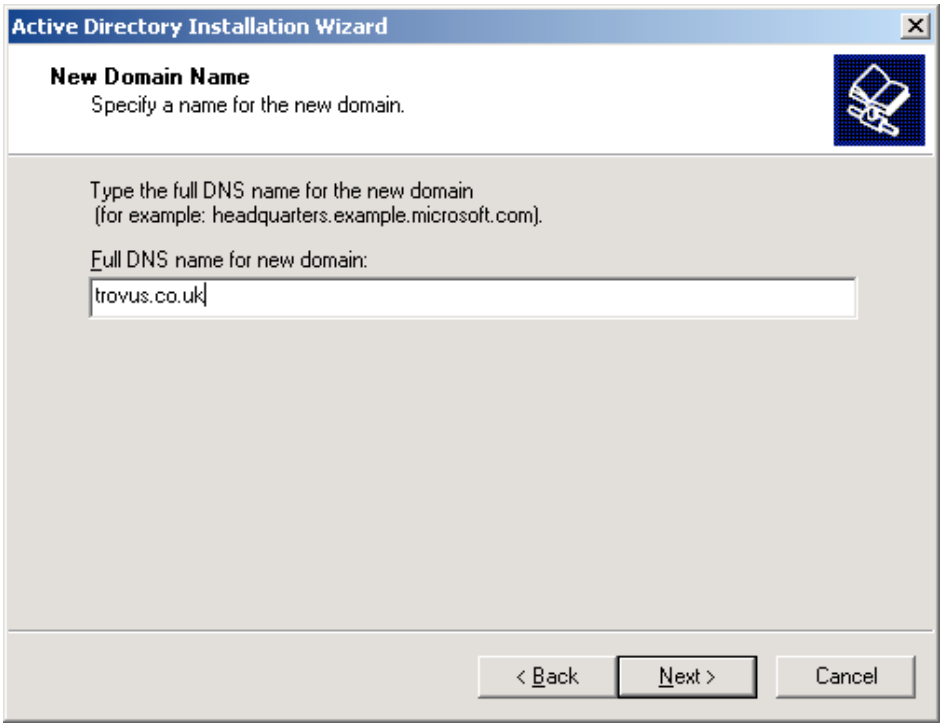
On the Domain Controller Type screen leave Domain controller for a new domain selected and press Next.



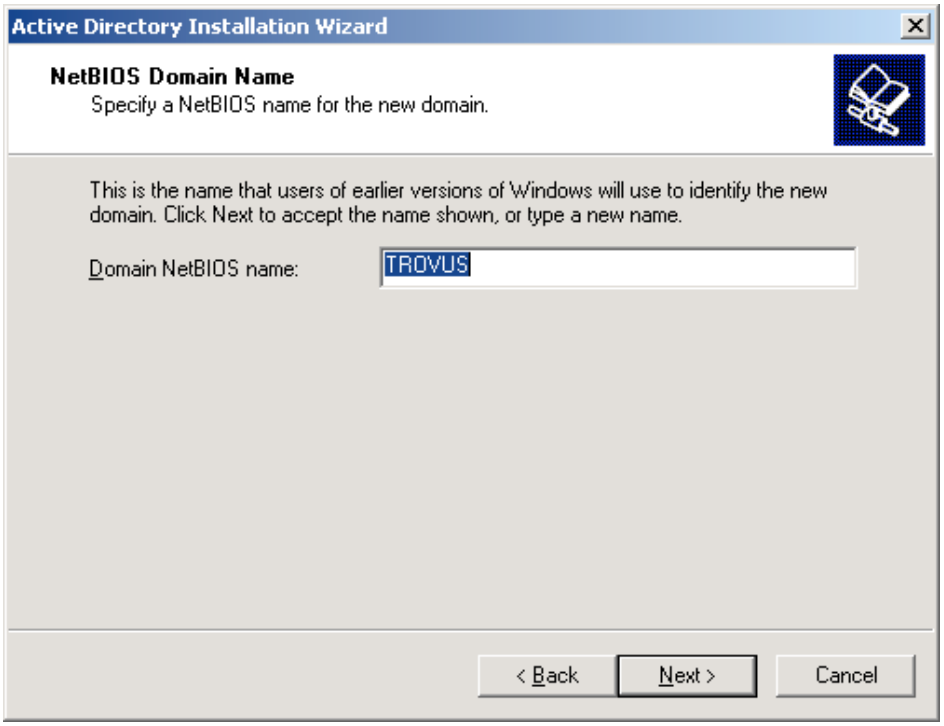
On the Create New Domain screen leave Domain in a new forest selected and press Next.



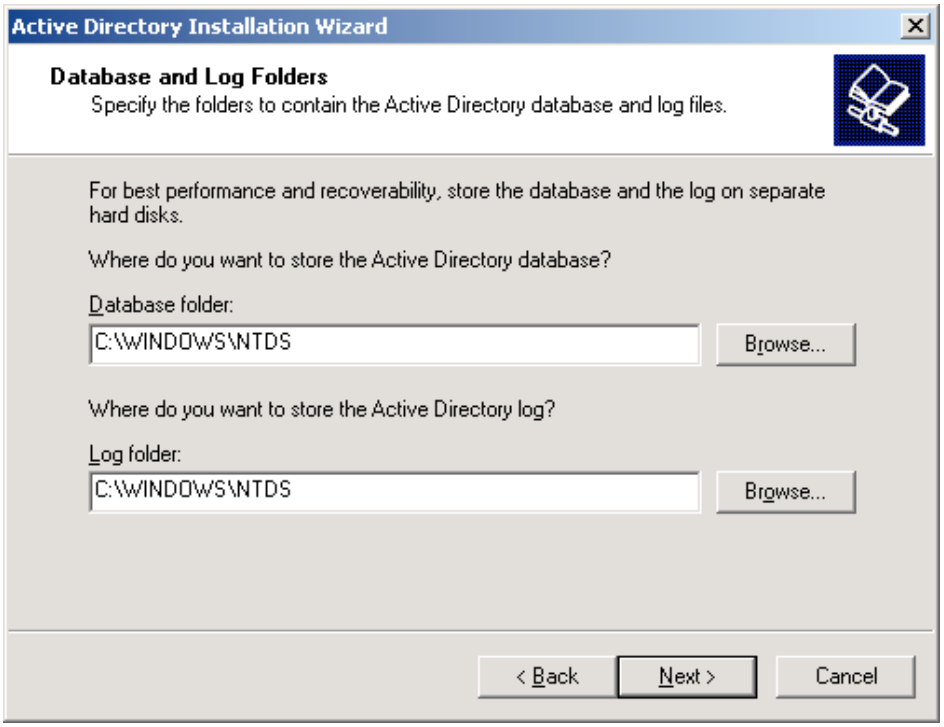
In New Domain Name enter <*domain*> (eg trovus.co.uk). Click Next.



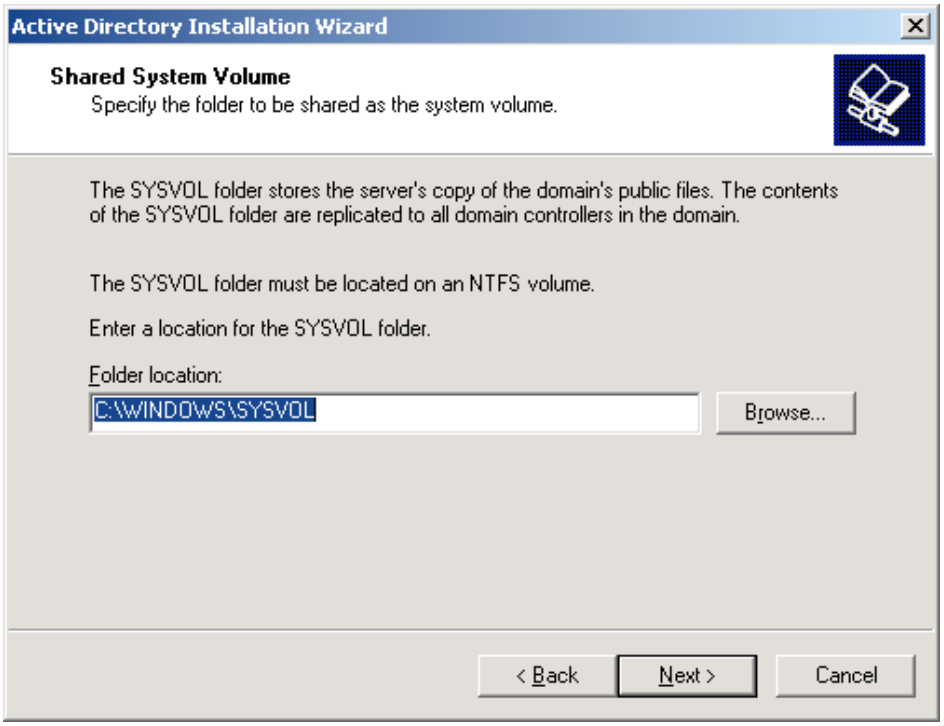
Accept the default Domain NetBIOS name and press Next.



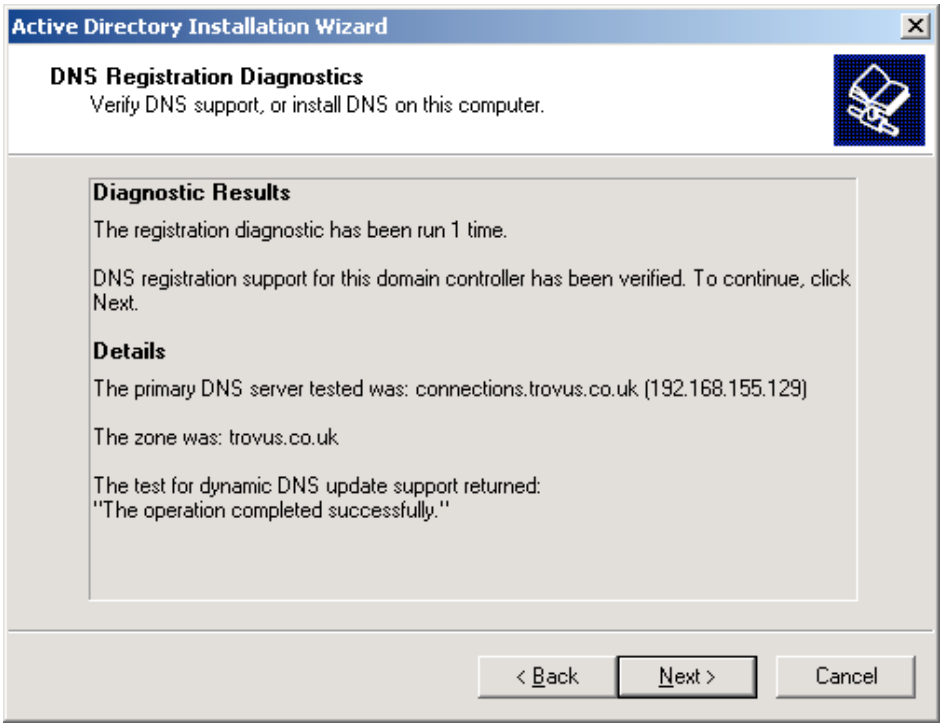
Accept the default Database and Log folders and click Next



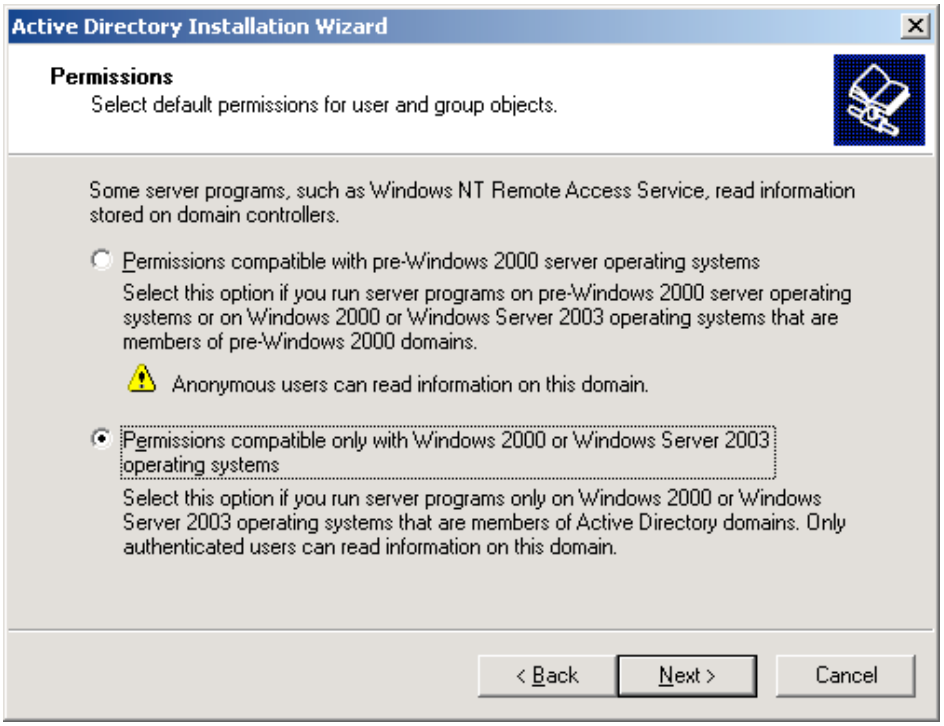
Accept the default Shared System Volume and press Next



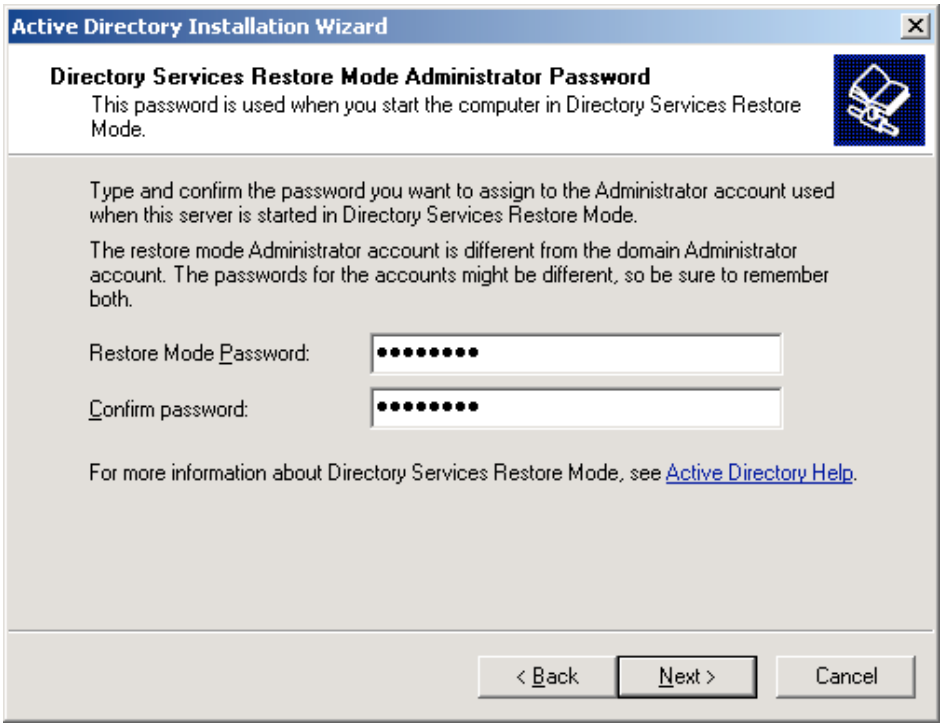
Check you have a successful DNS Registration Diagnostic and press Next



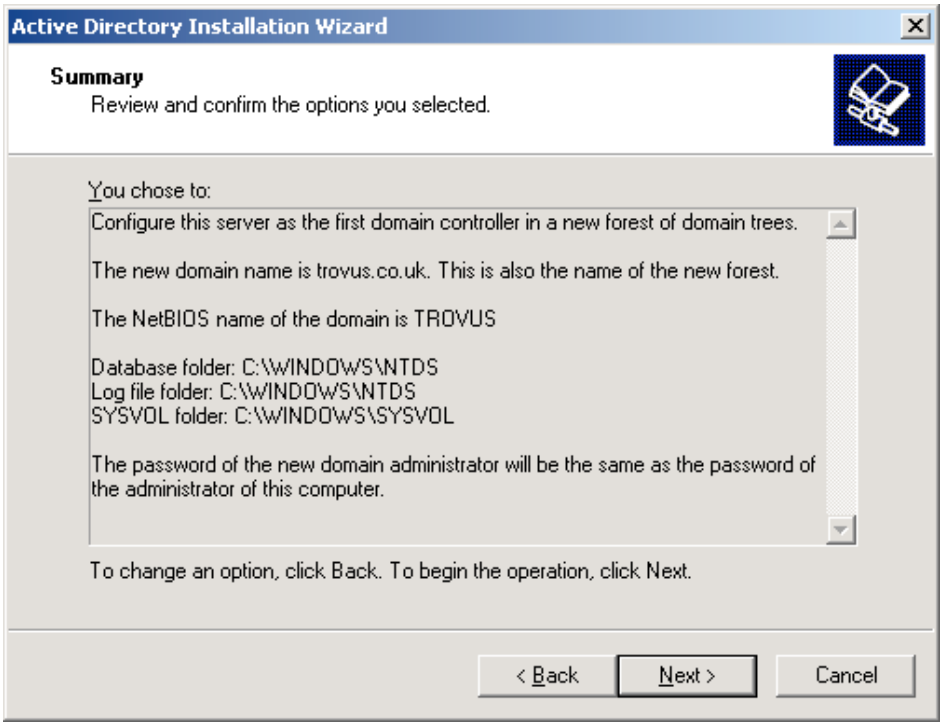
On the Permissions screen leave Permissions compatible only with Windows 2000 or Windows Server 2003 operating systems and press Next.



Enter a memorable restore password and press Next

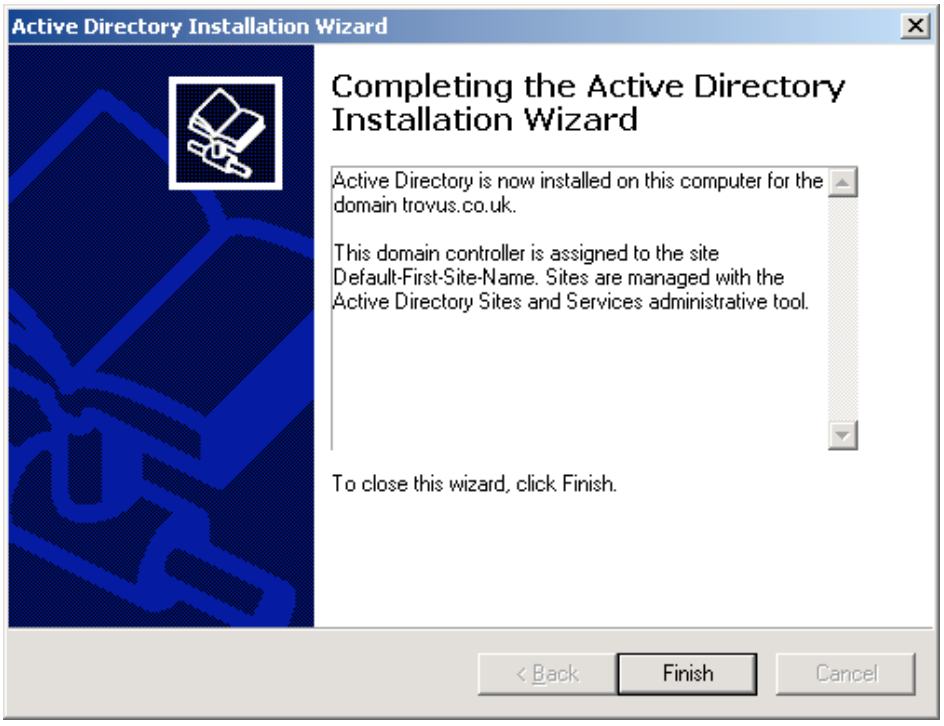


On the Summary screen click Next



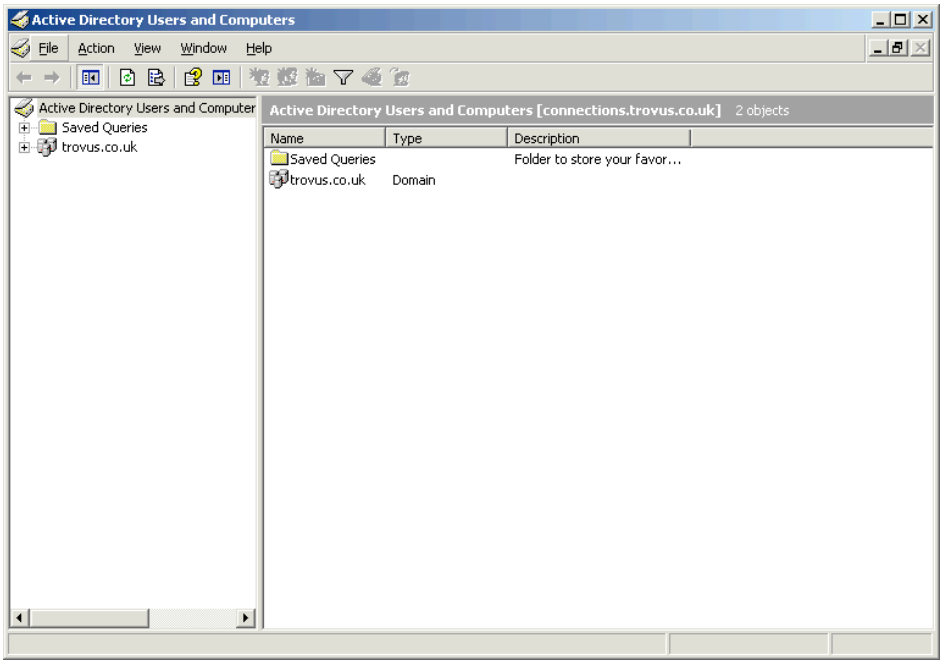
Active Directory configuration should start. This should only take a few minutes.

You should see a successful completion screen. Click Finish.

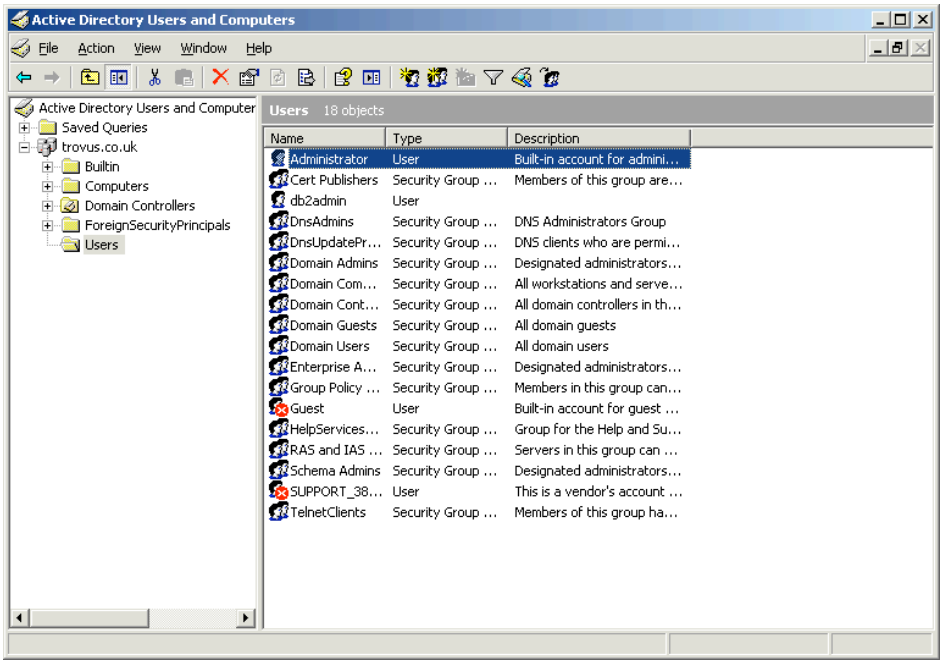


You will then be asked to restart your machine. **Note in future restarts you will have to change the Domain on the log in screen before entering your username and password!**

Log back in as the Administrator and go to Start -> Administrative Tools -> Active Directory Users and Computers

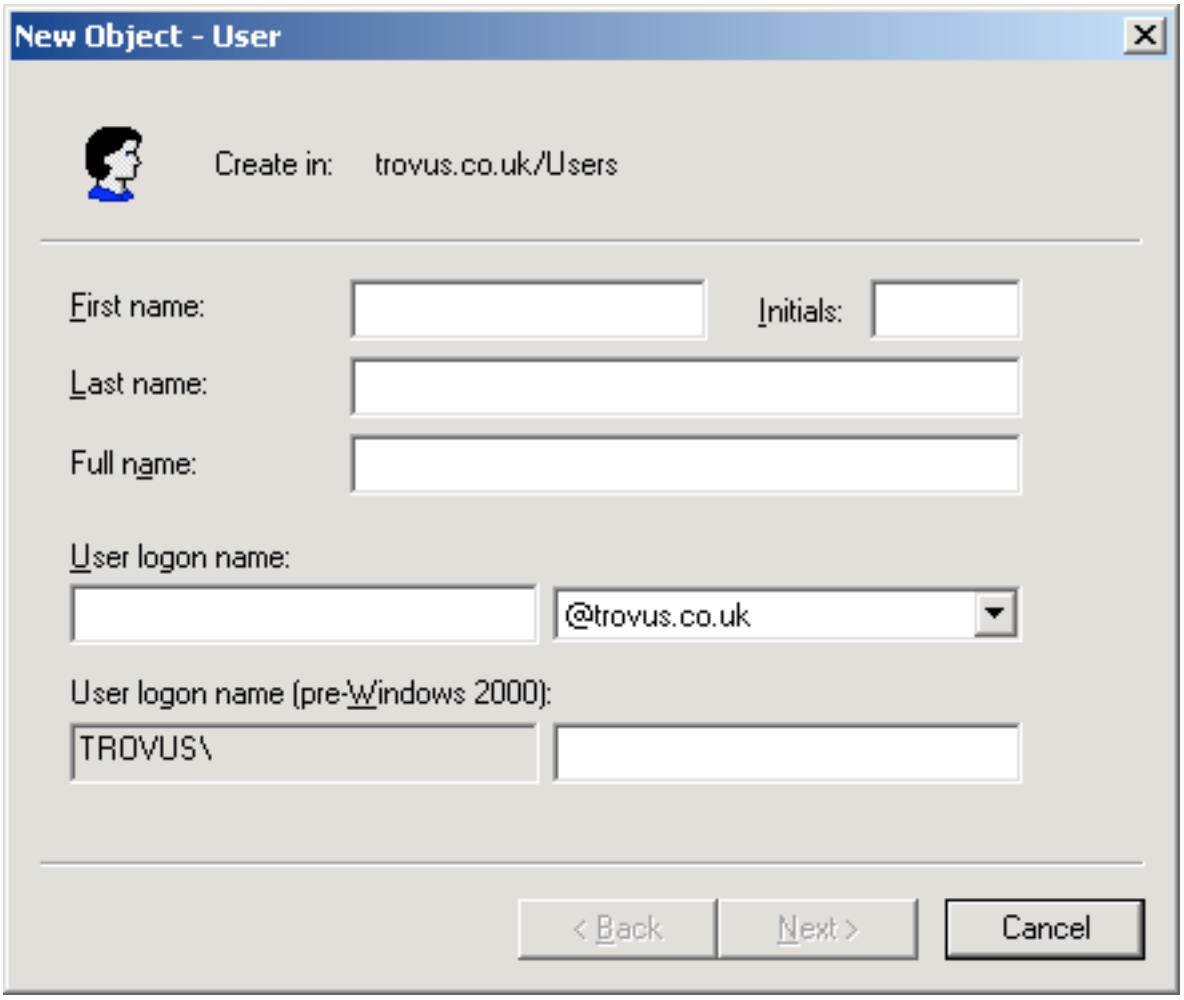


Exapnd your domain and click on Users to confirm that your *<winadminuser>* and *<db2user>* are present in the Active Directory

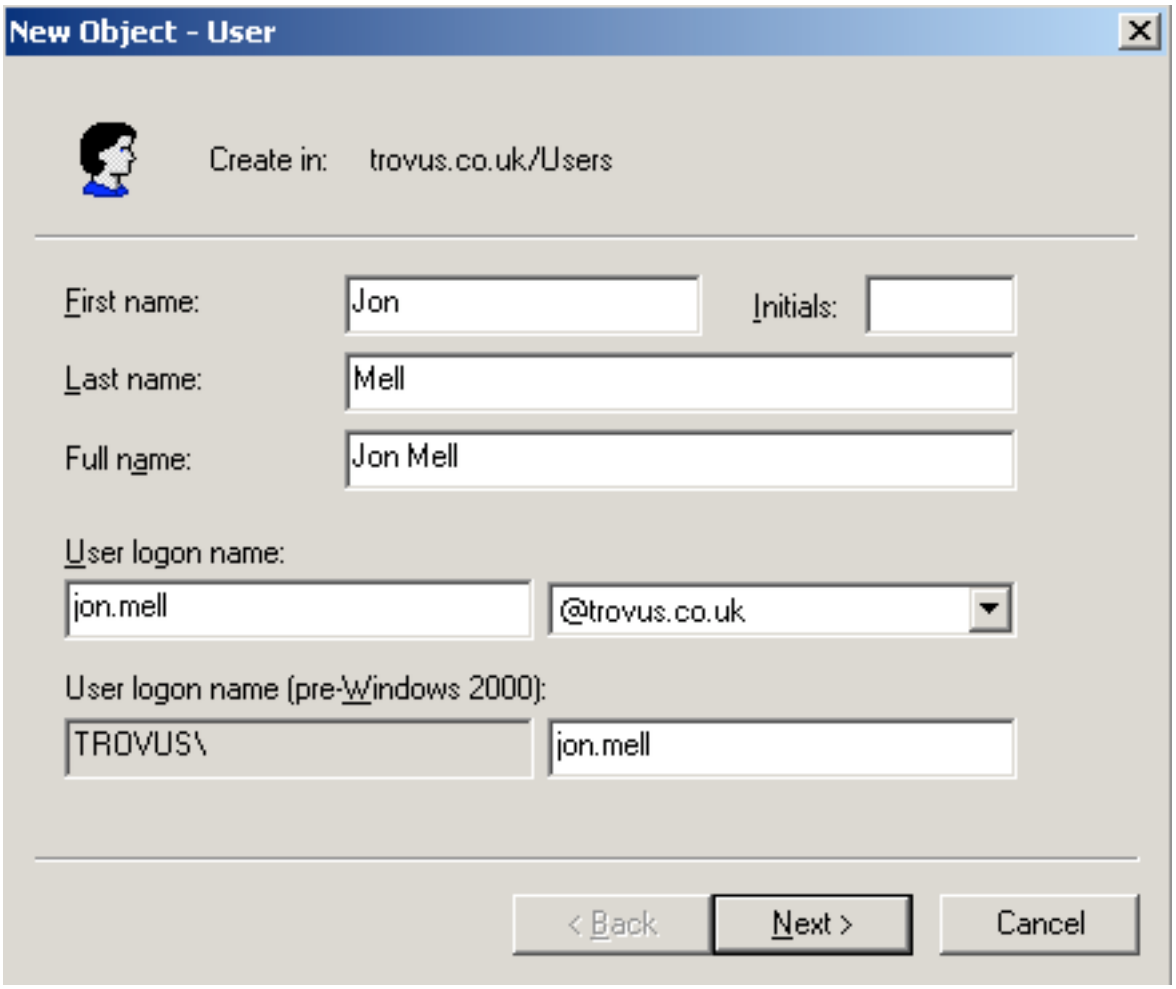


Create some users

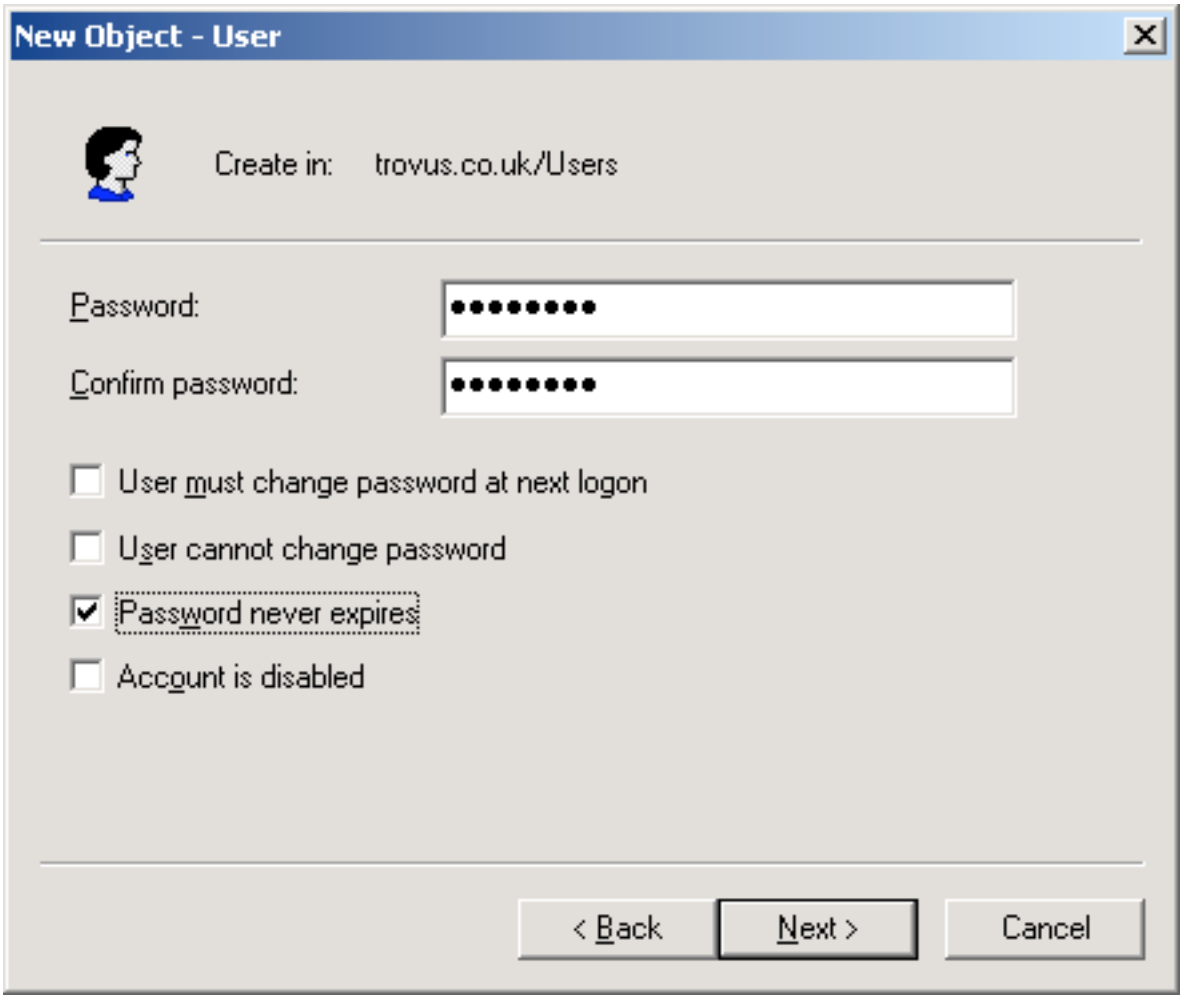
Right click on Users, click New and click User



Add some users so that we have some people to log in once Connections is installed. Note that their login will just be their User logon name, not with the email domain appended. So here the Lotus Connections login name is `jon.mell` – not `jon.mell@trovus.co.uk`. Click next.

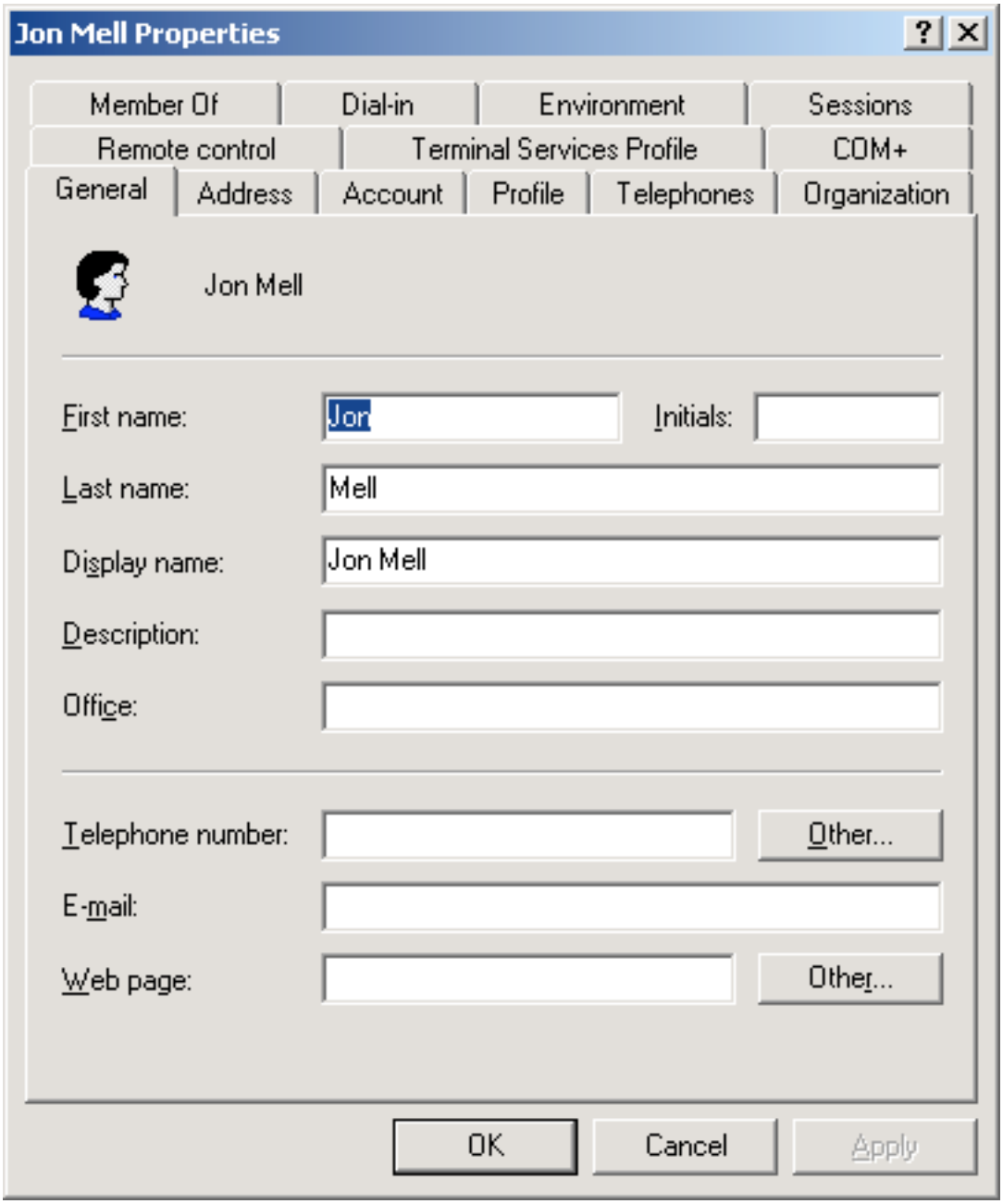


Enter a password and use the following settings. Note Active Directory requires 8 digit passwords with a number, a lowercase character and an uppercase character.

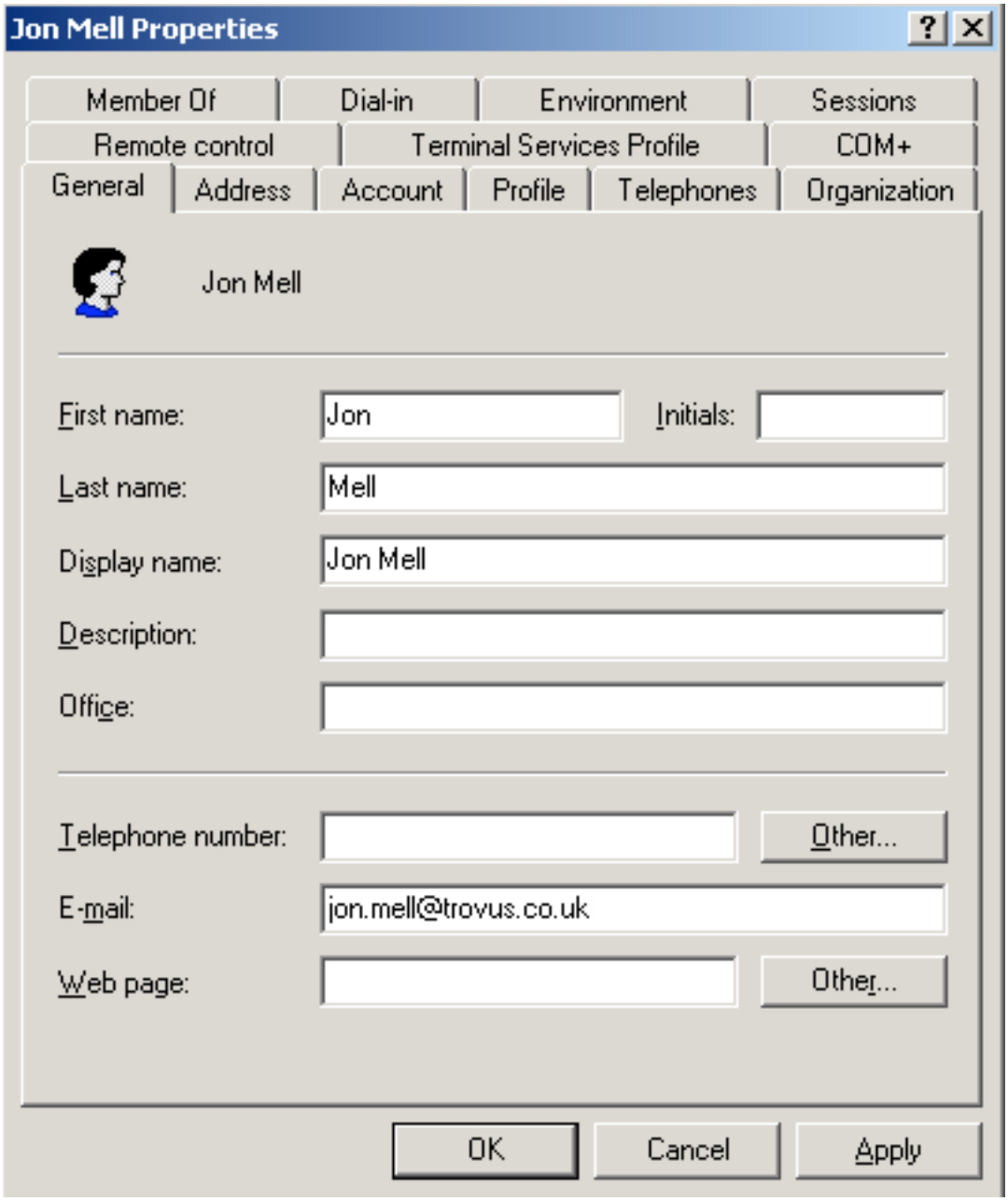


Click Next and then Finish.

Double click on your newly created user.



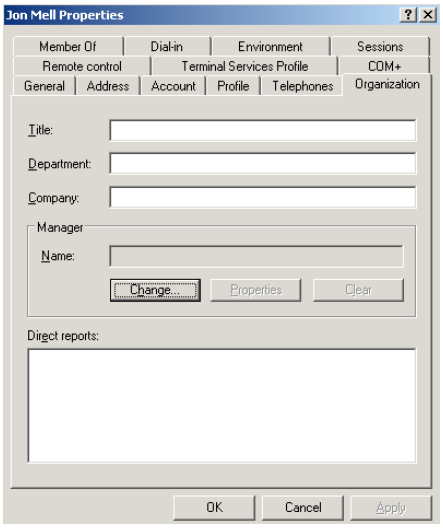
Add an email address (it does not have to be valid). Note that all Connections users **must** have an email address. They will not be able to log on without one.



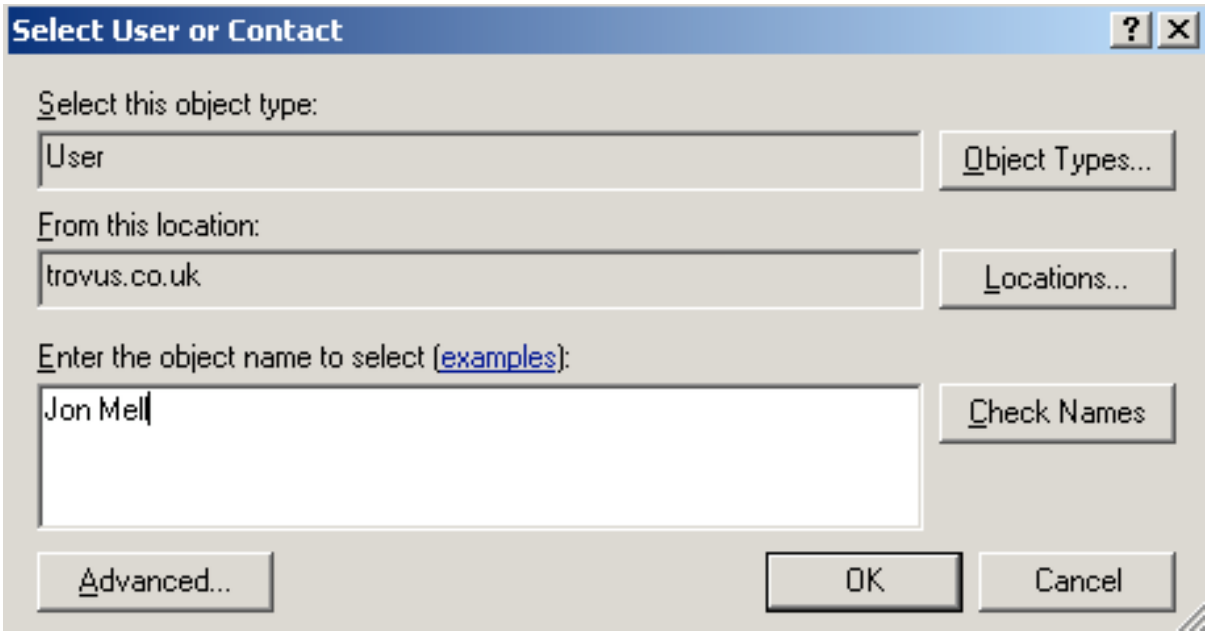
Click OK and create some more users if you wish, but remember to give them email addresses after you create them. The fact that the user login is in the form of an email address does not count!

If you wish to add organisation hierarchy information (for use in Profiles for example) then click the Organization tab and management information.

To do this click the Organizaiton tab



Click Change. Enter the name of the user's manager.



Click Check Names and click OK.

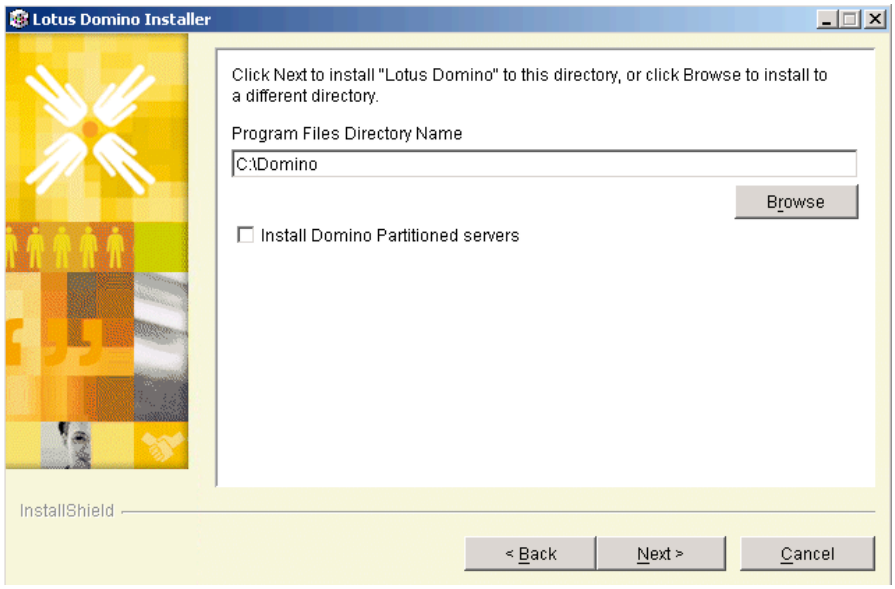
Install Domino

Note that Domino does not appear to be included in the Passport Advantage package for Connections 2.0 that suggests you are not licensed to use it as an LDAP unless purchased separately. Either obtain a license or use a different LDAP.

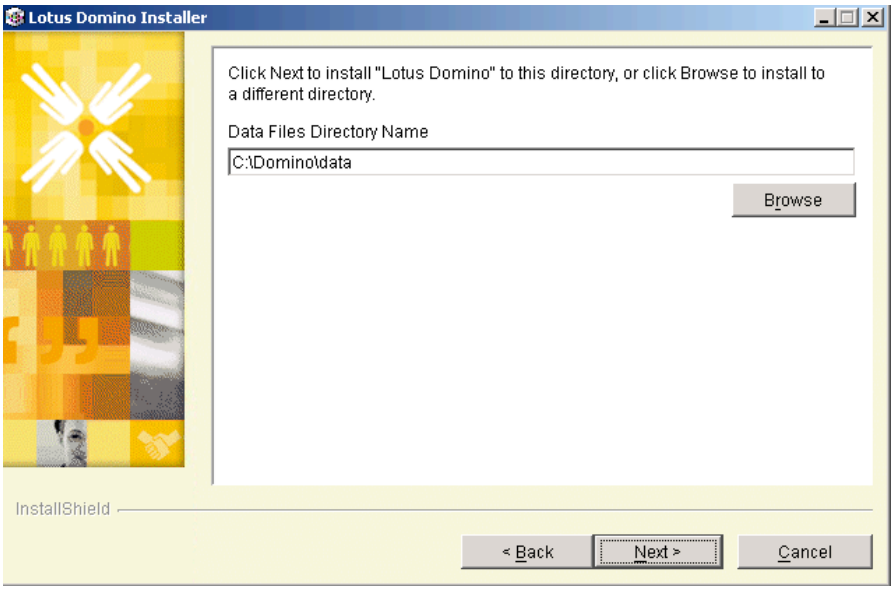
Install Domino Server

Run setup.exe from the Domino media. Click Next on the Welcome screen. Accept the license terms and click Next.

Enter an installation directory for Domino and ensure the Partitioned servers check box is not selected. This is *<dominoinstall>*

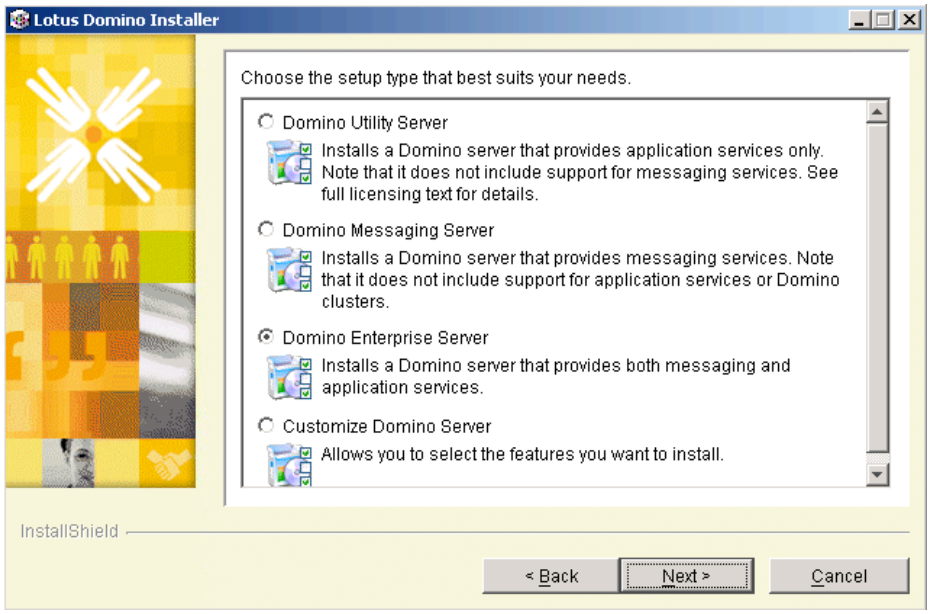


Click Next. The data files directory name is *<dominodata>*.

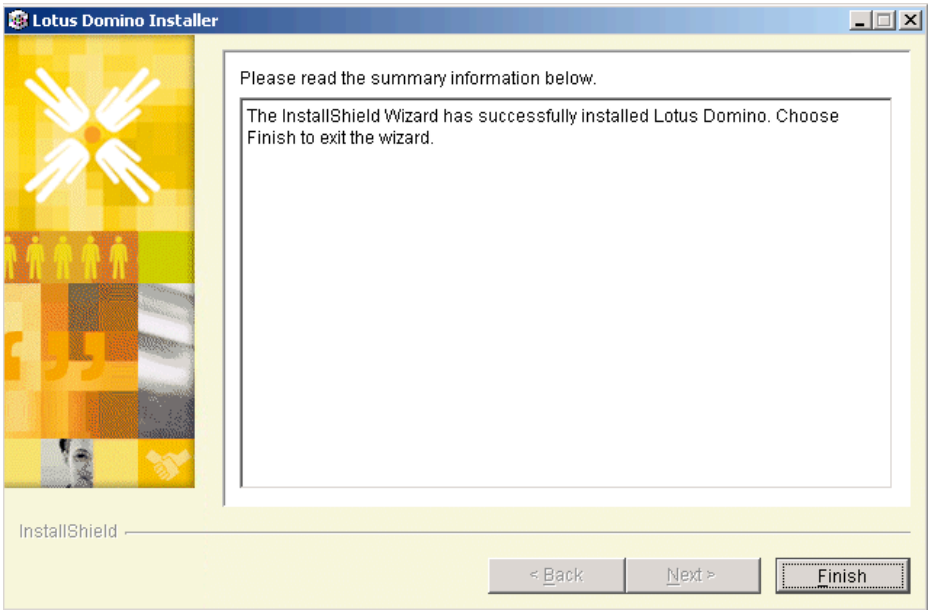


Click Next.

Select Domino Enterprise Server.



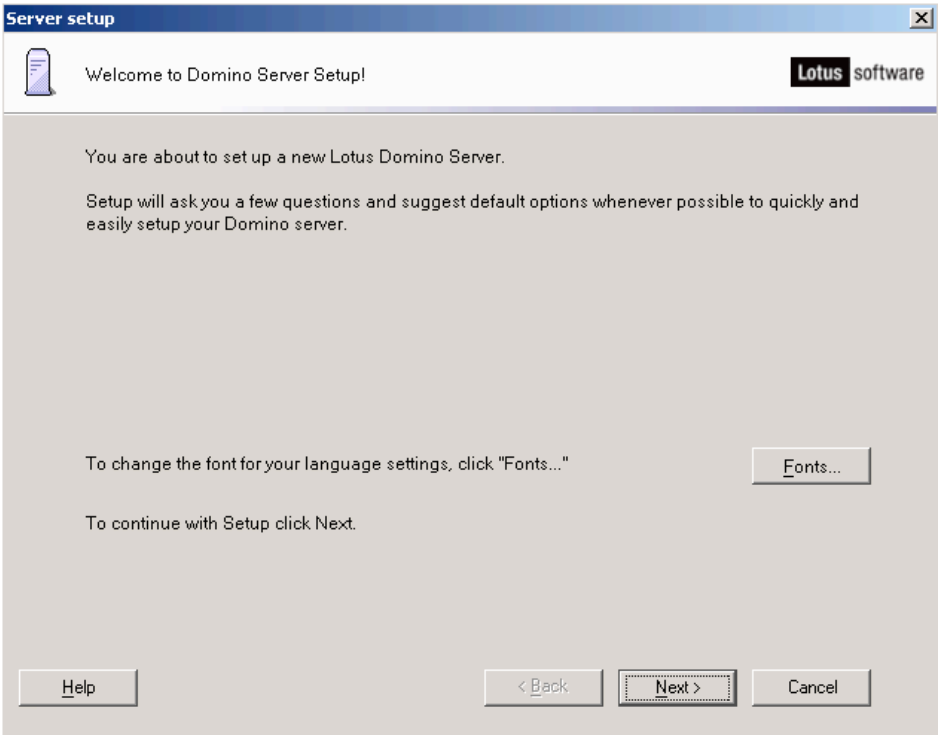
Click Next and click Next again on the confirmation screen to begin the installation. You should see this completion screen if successful.



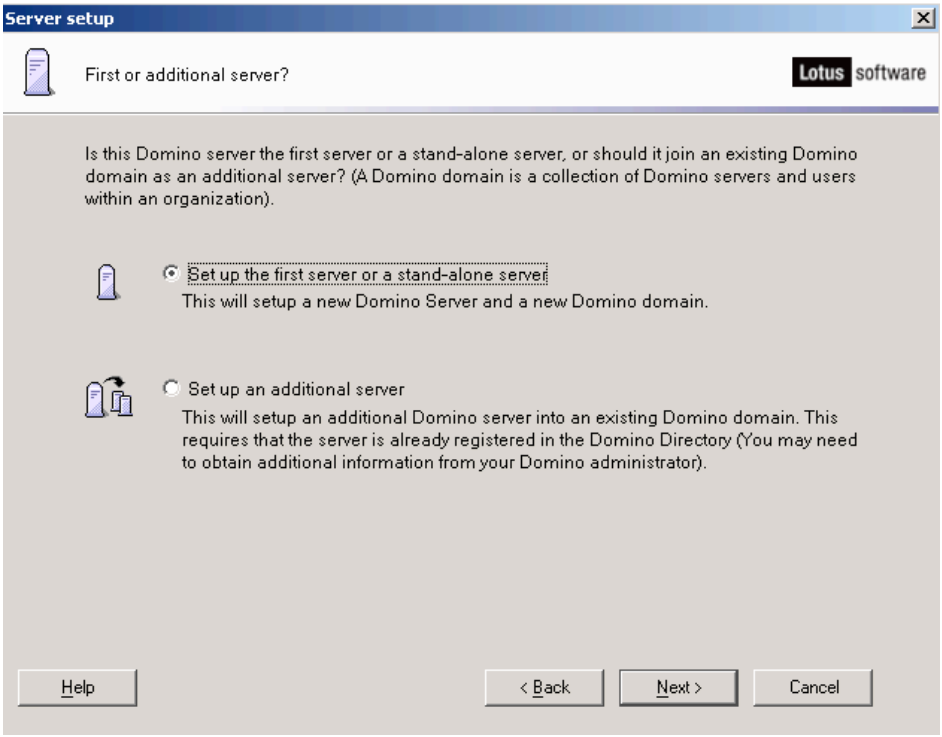
Click Finish

There should be an icon for Lotus Domino Server on your desktop. Double click this (if not, launch Domino by clicking Start -> All Programs -> Lotus Applications -> Lotus Domino Server)

You should see this screen.

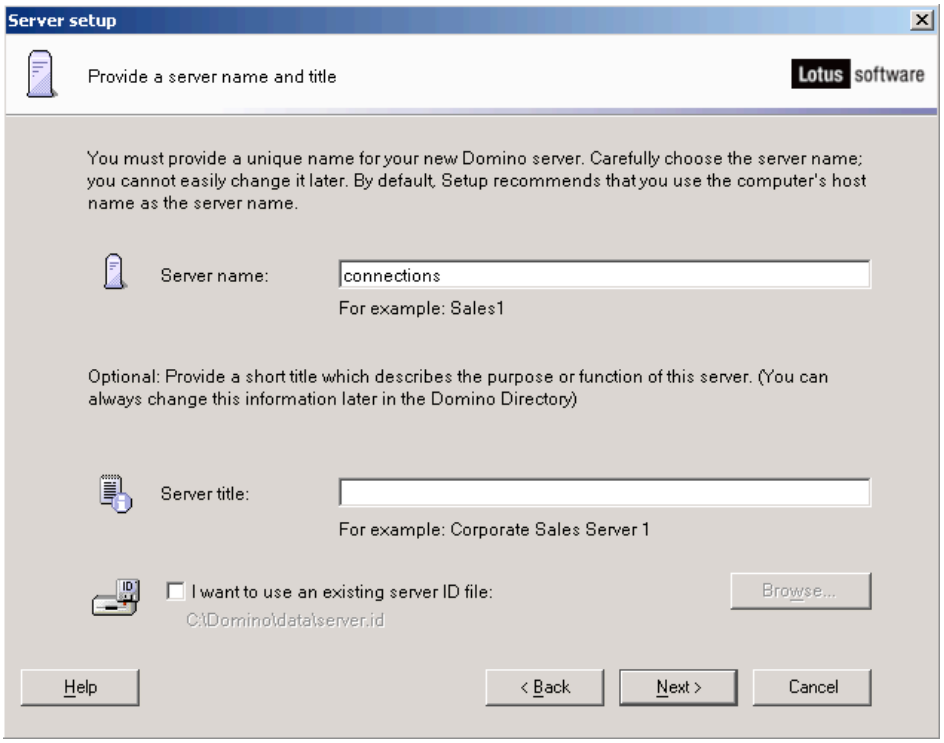


Click next and select Set up the first server or a stand-alone server.



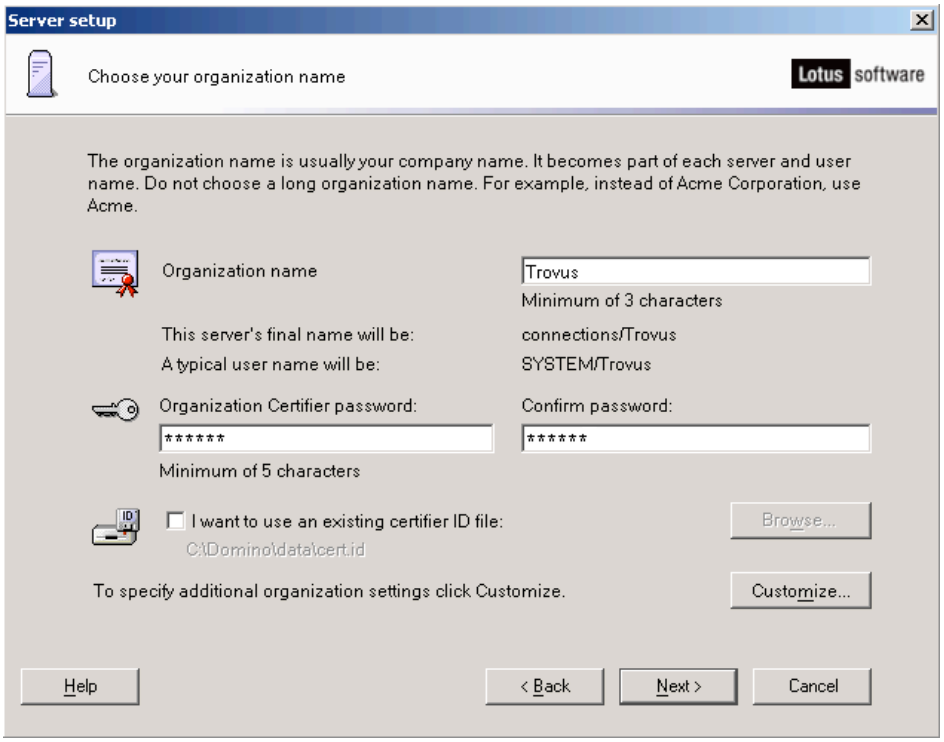
Click Next and enter a Server name. We suggest *<hostname>*. You can leave Server title blank and do not check I want to use an existing server ID file.

Advanced: if installing LDAP on a separate machine use the LDAP server's hostname

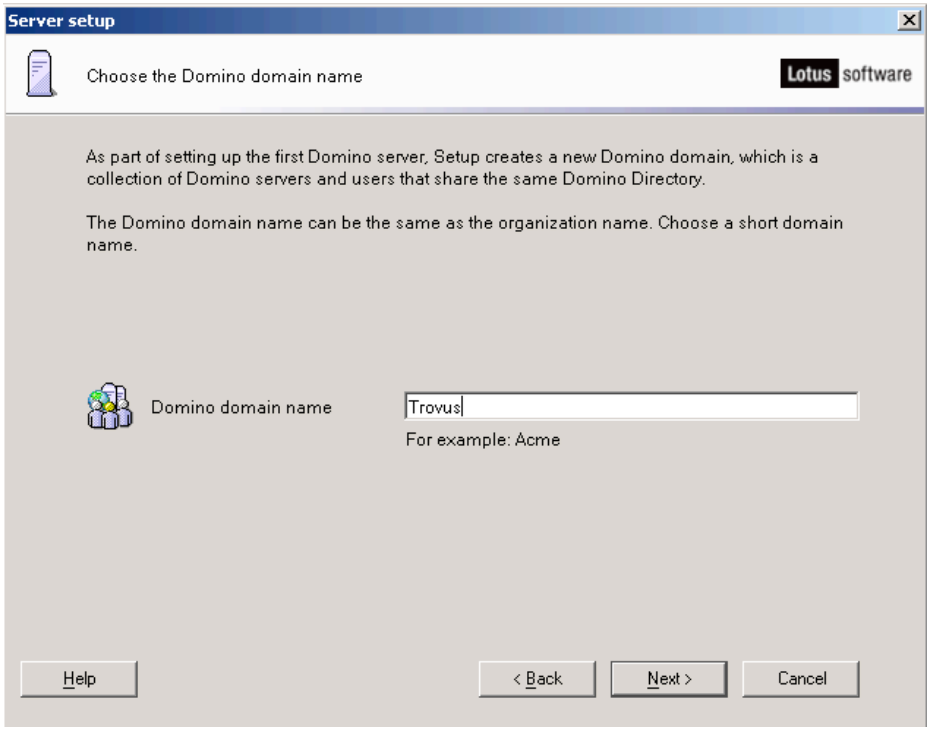


Click next, and enter an Organisation name. This can be the name of your company (eg Trovus) and does not have to correspond to any network or user on the system. We recommend, however, that it is between 5-8 characters long. This is *<orgname>*.

Enter *<orgpwd>* as your Organization Certifier password. Do not check I want to use an existing certifier ID file

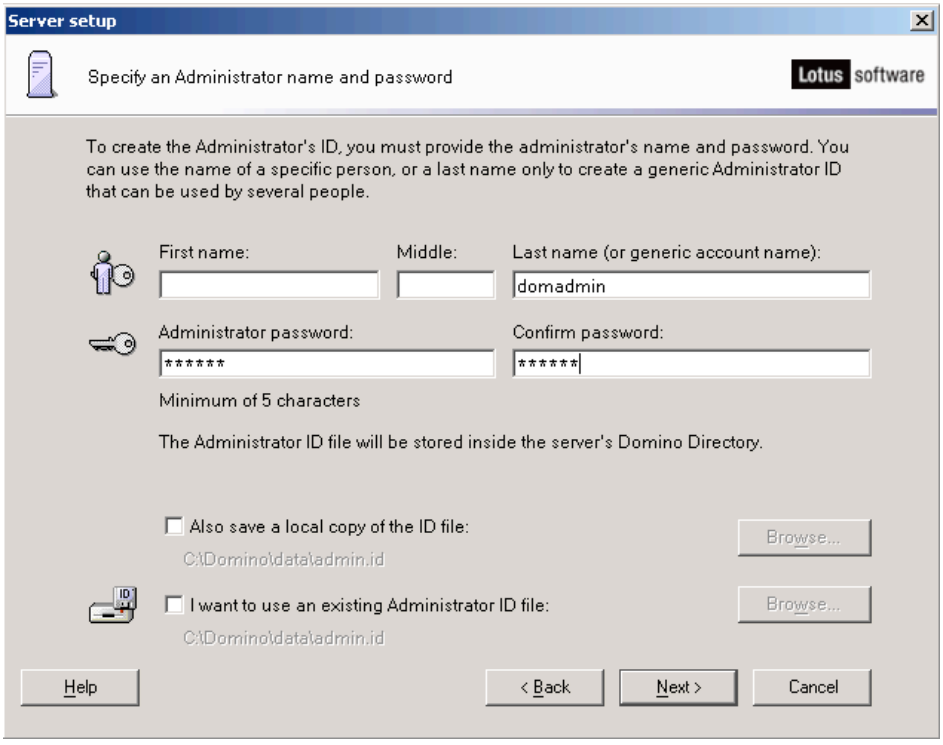


Click Next and enter a Domino domain name. Note that this is completely different from your network domain or <*domain*>. It can be your Organisation name you entered earlier, and unless you have any reason no to we recommend you keep these the same.

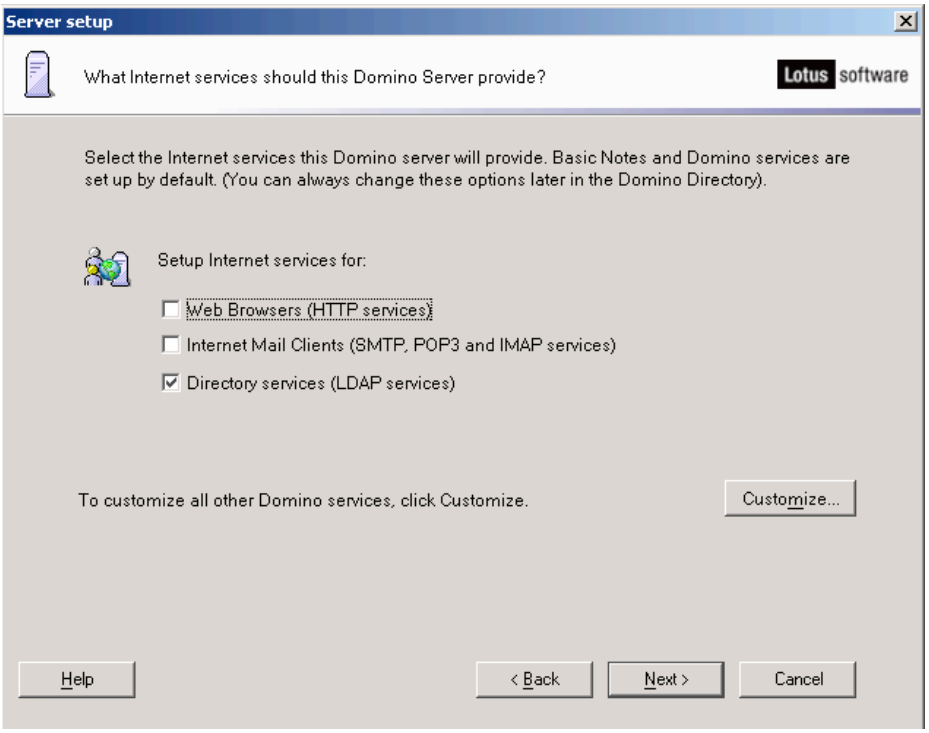


Click Next

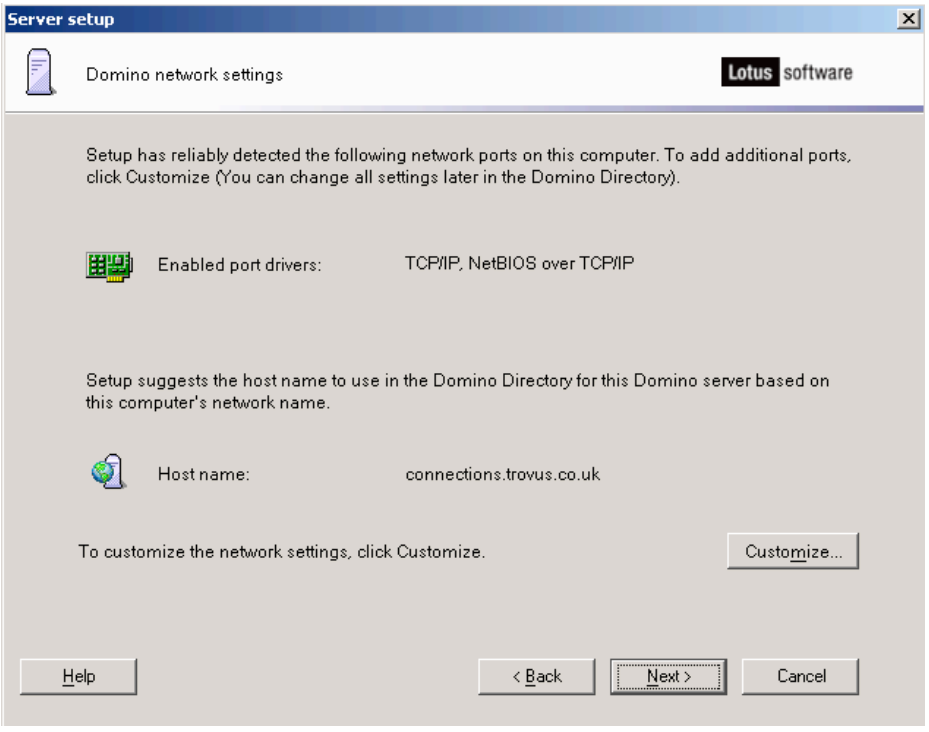
Enter <*dominoadmin*> as the Last name and <*dominopwd*> as the Administrator password. Leave all other fields blank and do not check any checkboxes.



Click next. Check Directory services and uncheck all the others.

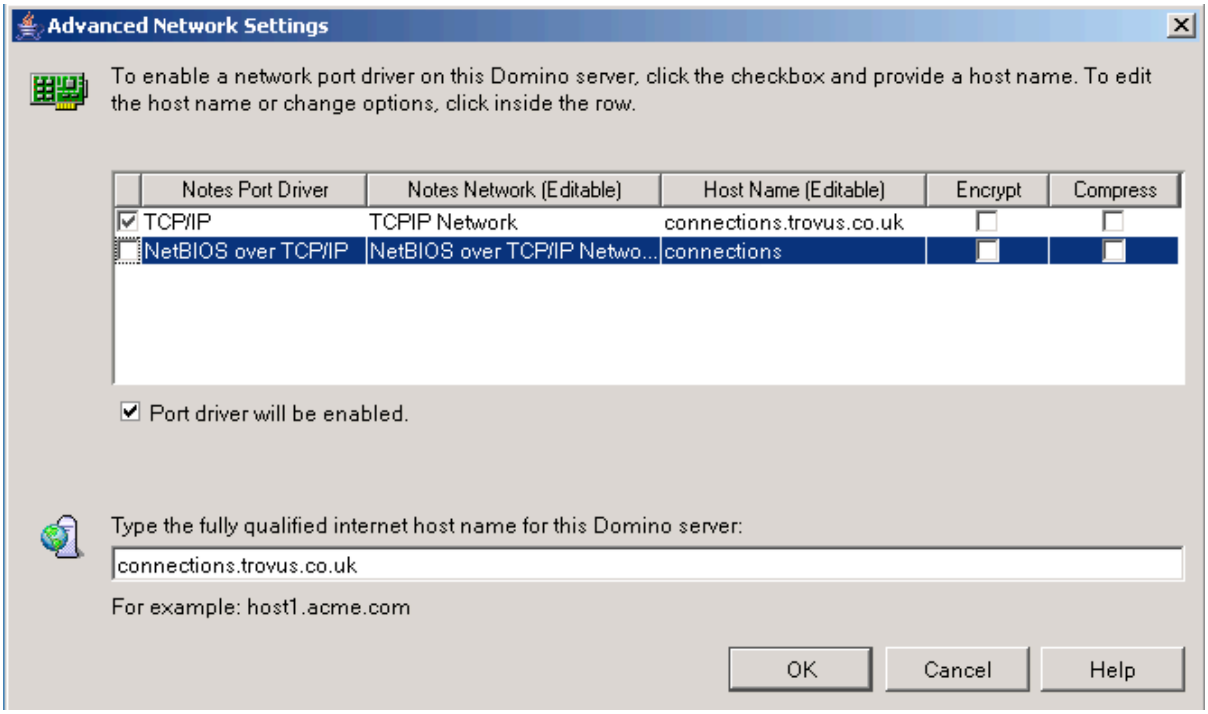


Click Next. Most people don't use NetBIOS so we recommend this is disabled.



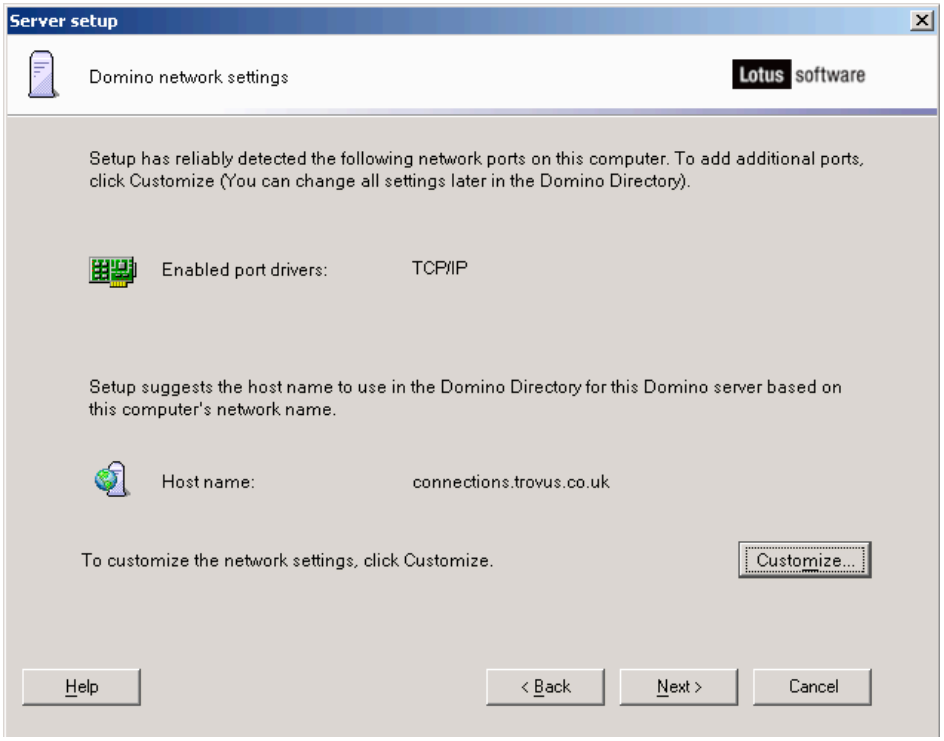
Click Customize…

Deselect NetBIOS over TCP/IP and ensure that TCP/IP remains selected.



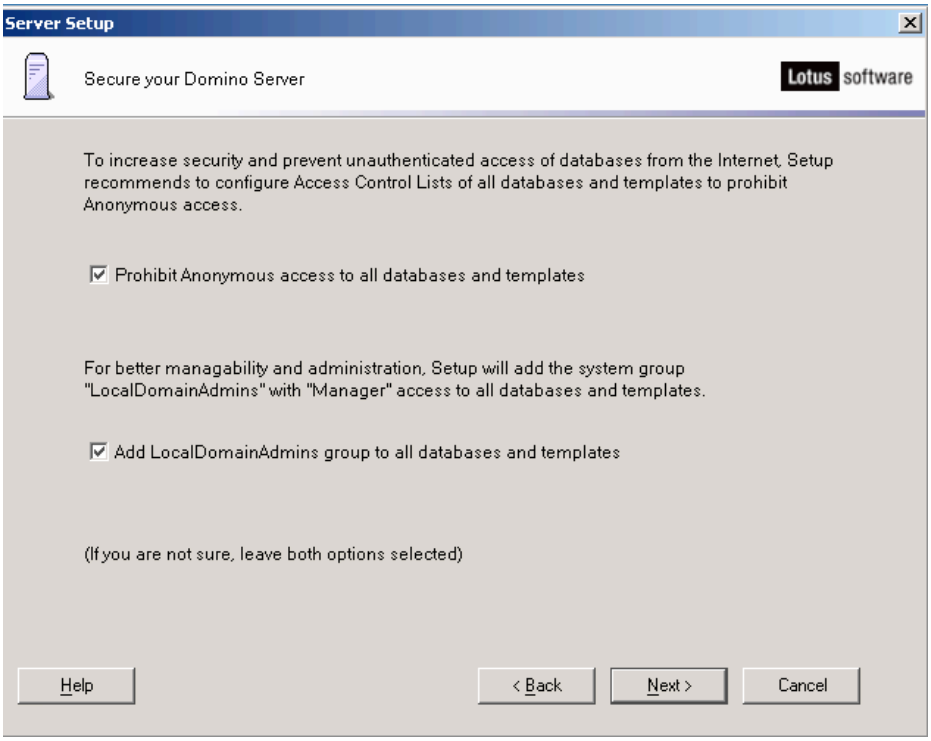
Click OK.

Check that NetBIOS over TCP/IP does not appear in the Enabled Port Drivers



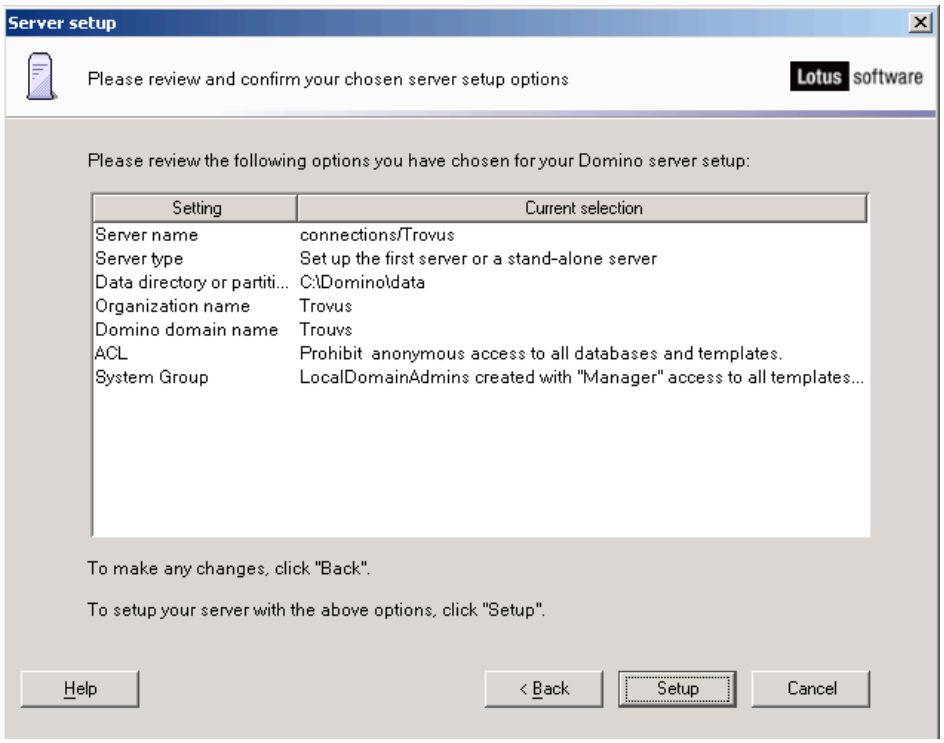
Click Next

Ensure that both check boxes are selected on this screen



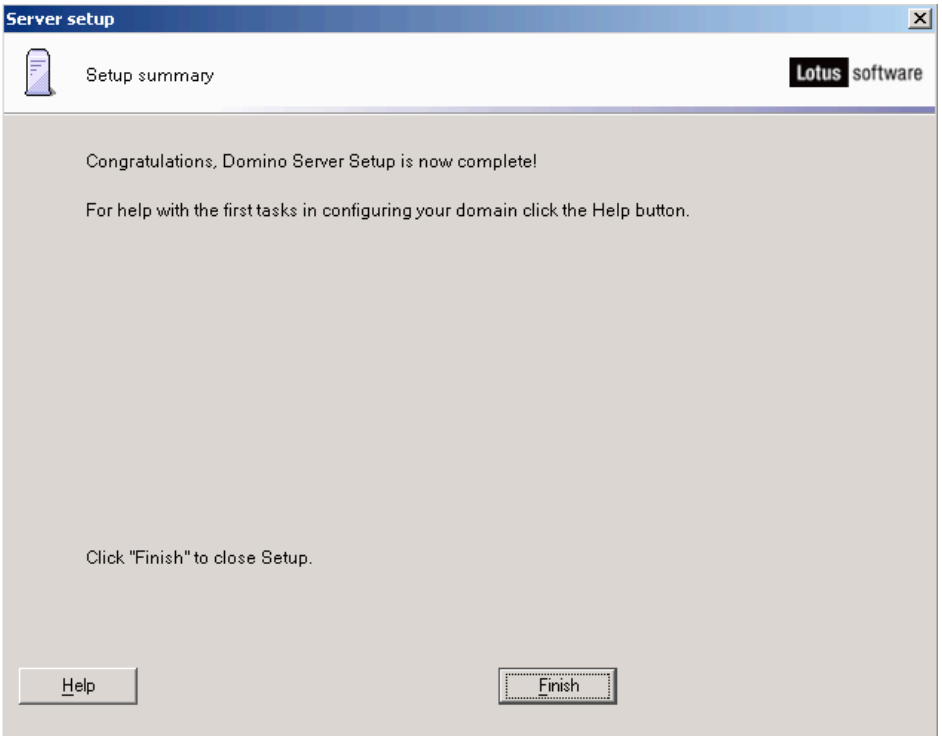
Click next.

Review the summary screen



Press Setup.

You should see this screen on completion.



Press Finish

Install Domino Client

Extract the Notes 8.0.1 media. Ensure your package contains the Domino Administrator as well as the Notes Client (see required software above). Run `setup.exe`

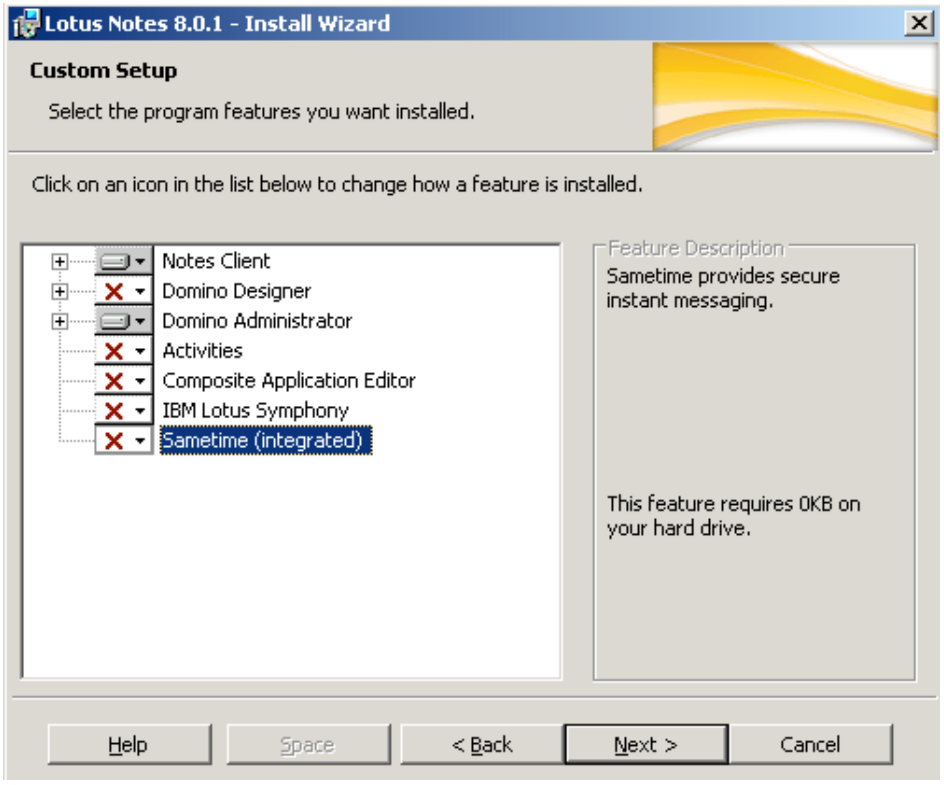
Click Next on the Welcome screen.

Agree to the license terms and click next.

Enter your name and the name of your organisation and click Next.

Accept the default installation and click Next.

Ensure that Sametime is deselected and Administrator is selcted



Click Next.

Deselect Make Notes my default email program

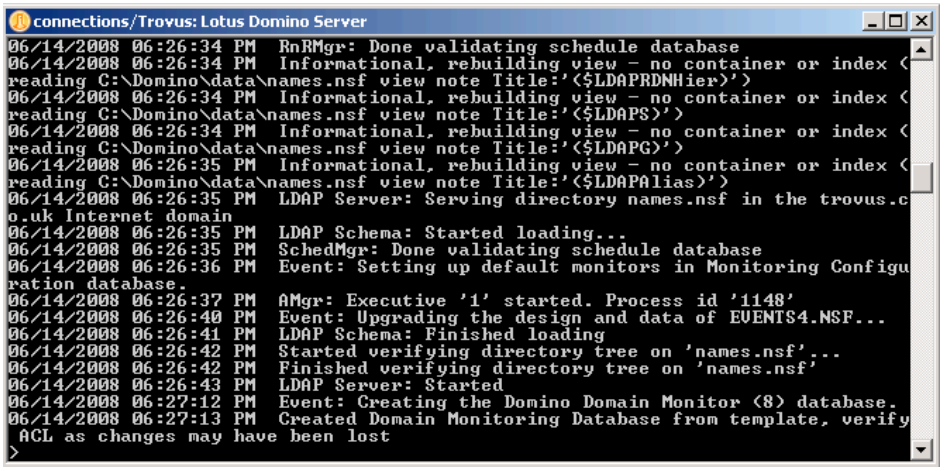
Click Install.

When completed click Finish.

Configure Domino

Start Domino server. There should be an icon for Lotus Domino Server on your desktop. Double click this (if not, launch Domino by clicking Start -> All Programs -> Lotus Applications -> Lotus Domino Server)

You should see something like this



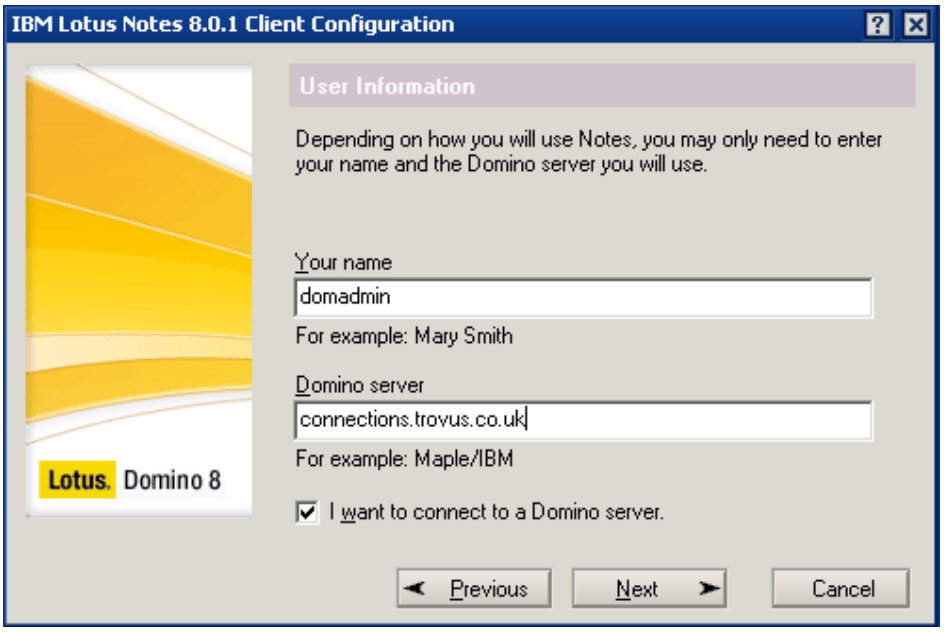
Start Domnio Admin. There should be an icon on the desktop – if not it's Start -> All Programs -> Lotus Applications -> Lotus Domino Administrator 8.

On the client configuration screen click Next

Enter <*dominoadmin*> for Your Name and <*fullyqualfiedname*> for the Server

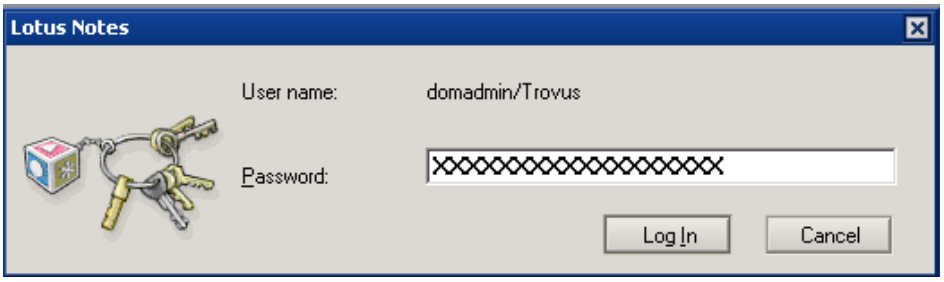
Advanced: if installing across multiple machines use the LDAP server's hostname

Ensure I want to connect to a Domino server is selected



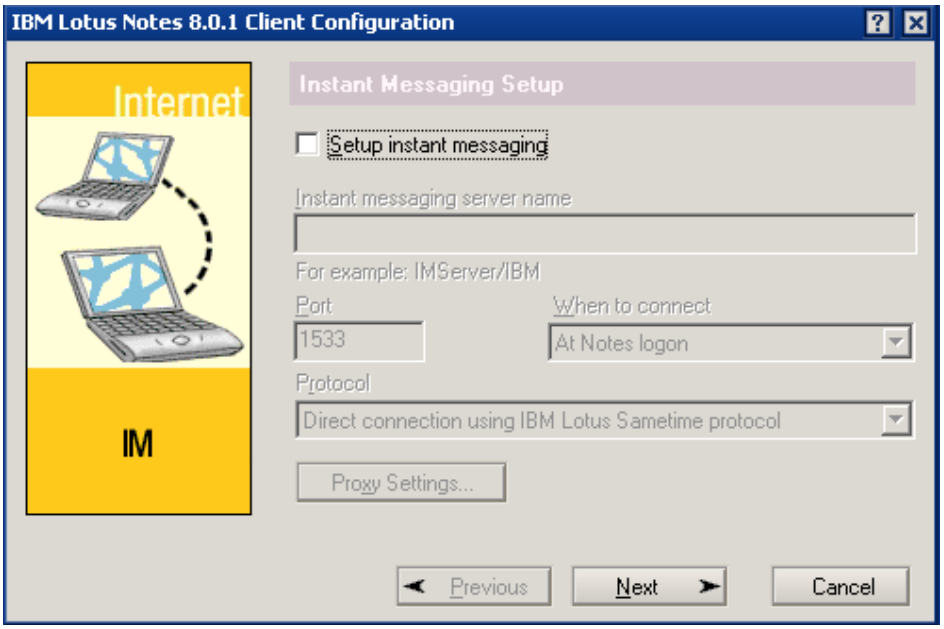
Click Next

Enter <*dominopwd*> when prompted



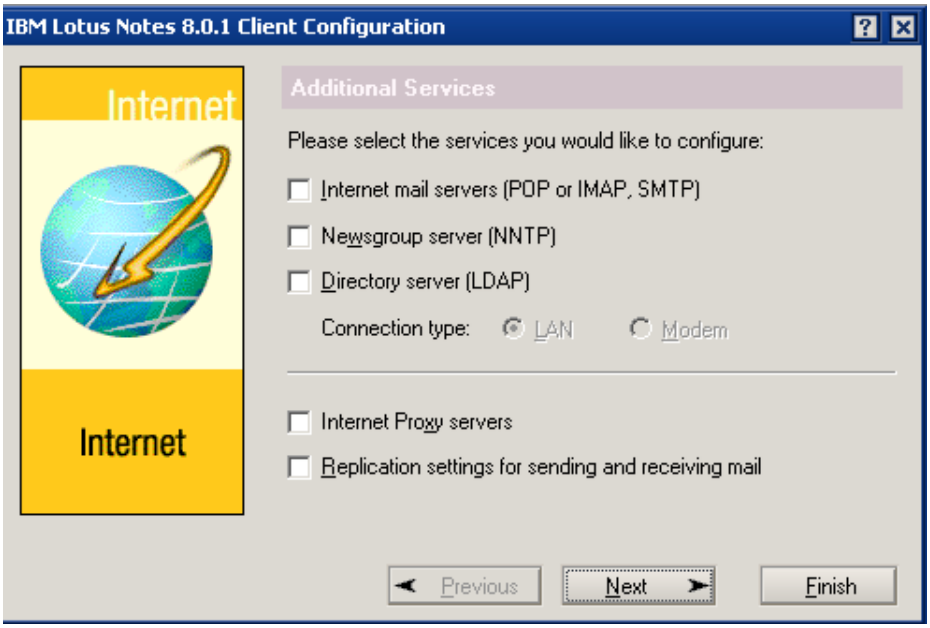
Click Log In

Deselect Setup instant messaging



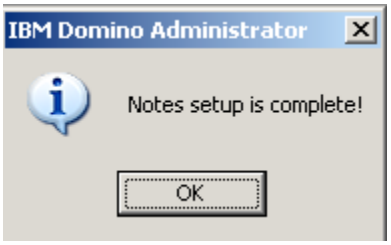
Click Next

Leave everything deselected.

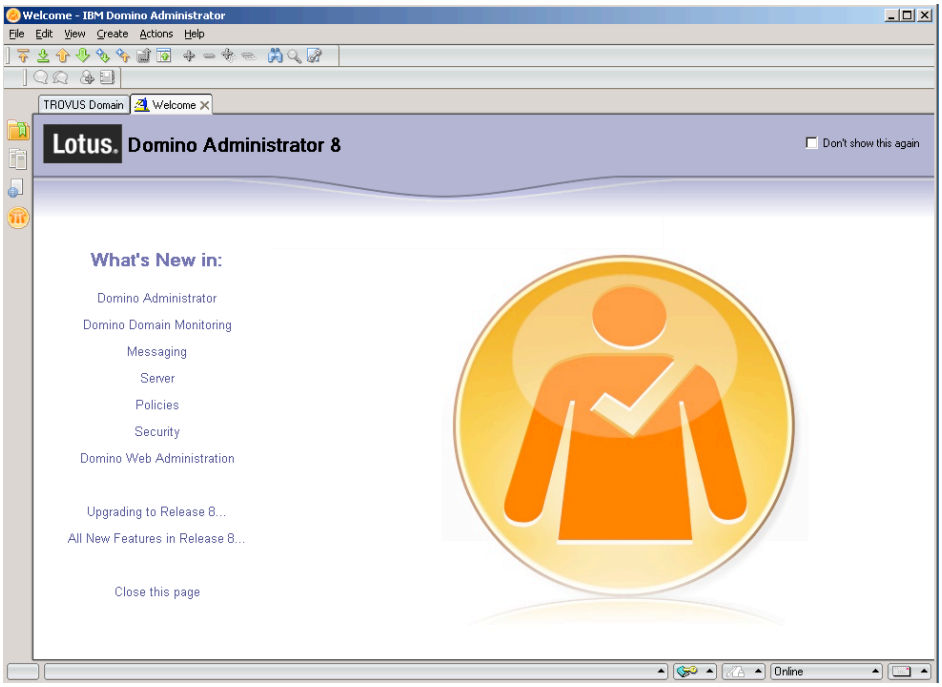


Click Next.

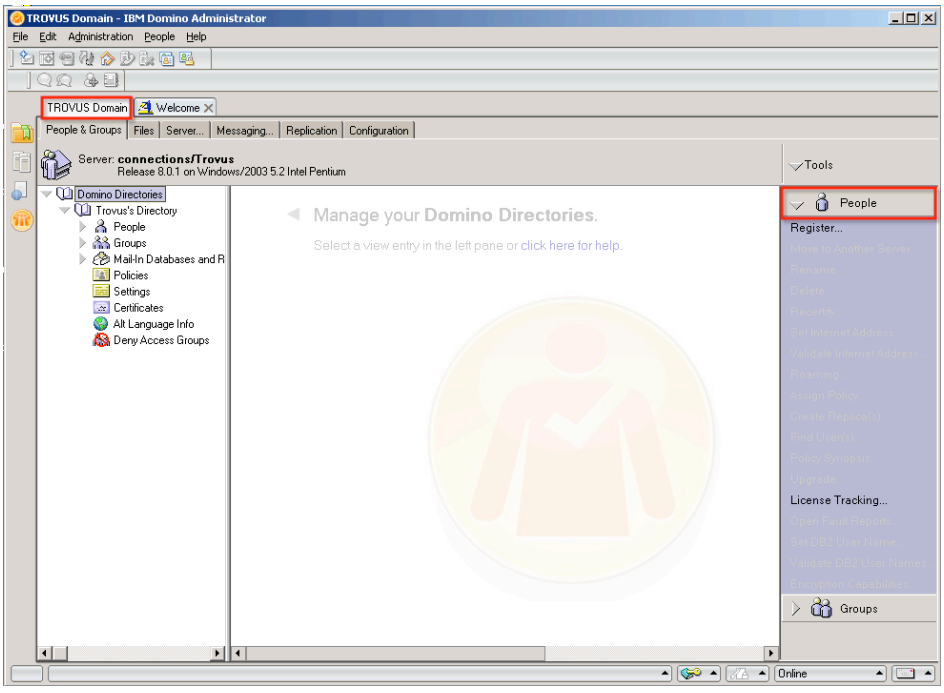
Click OK when setup is complete



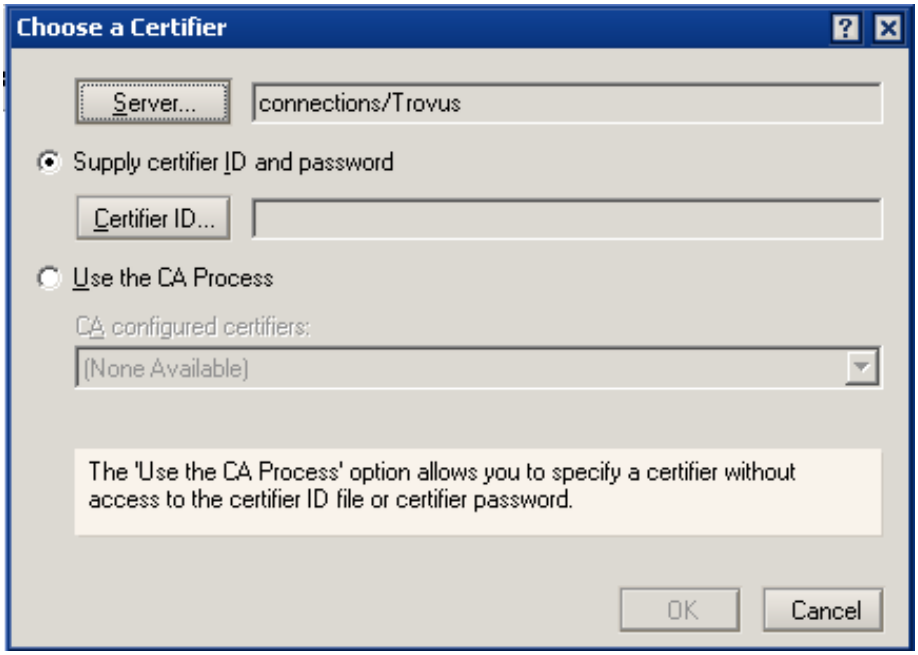
You will see this screen



Click the domain tab next to Welcome and click People on the right hand side.

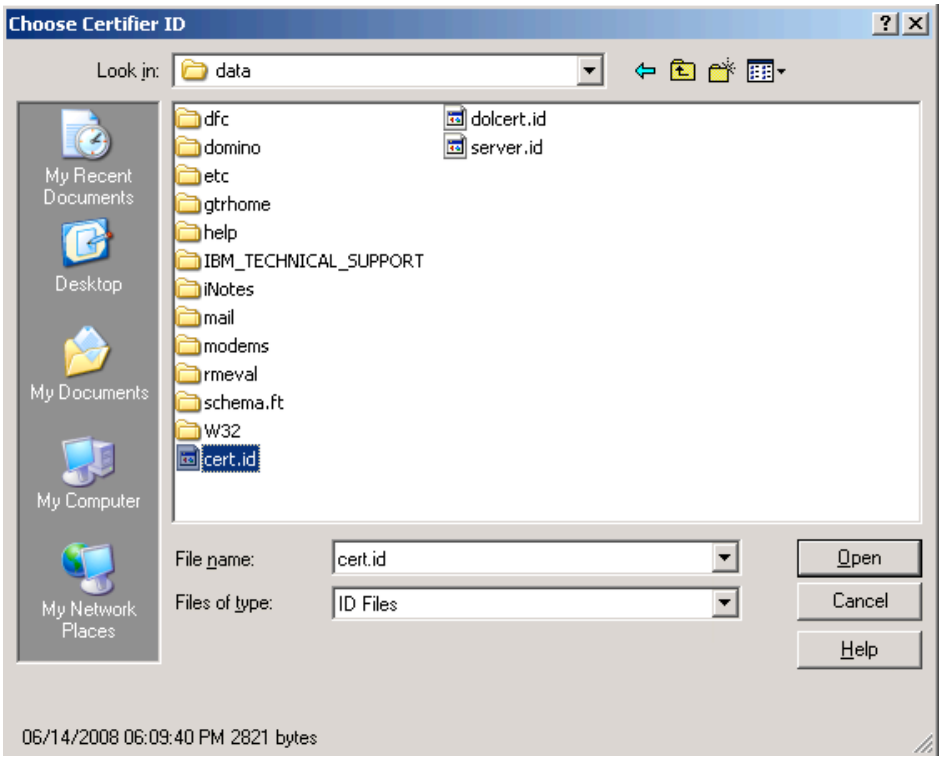


Click Register under People on the right hand side. You will see this popup:



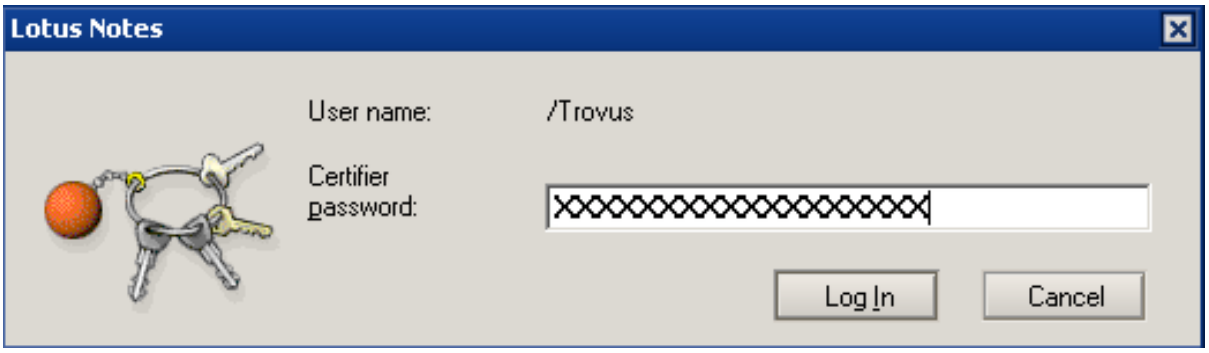
Press the Certifier ID… button

Navigate to <*dominodata*> and select `cert.id`



Click Open and click OK.

Enter <*orgpwd*> when prompted

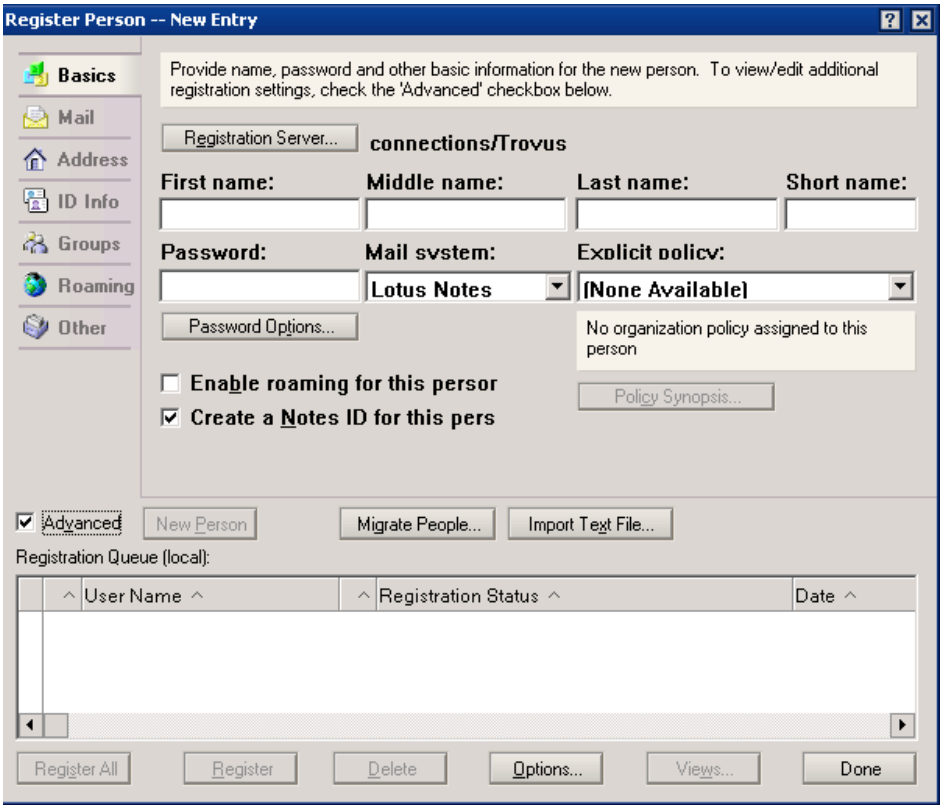


Click Log In

Select the check box Do not show this warning for this certifier ID in the future

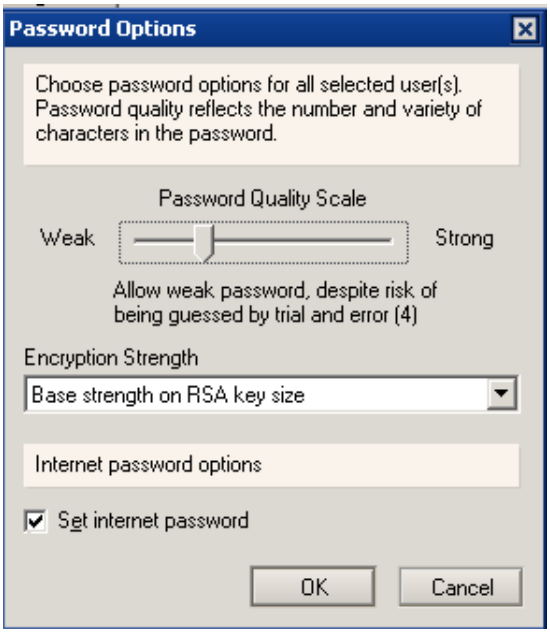
Click OK

Select Advanced (bottom left)



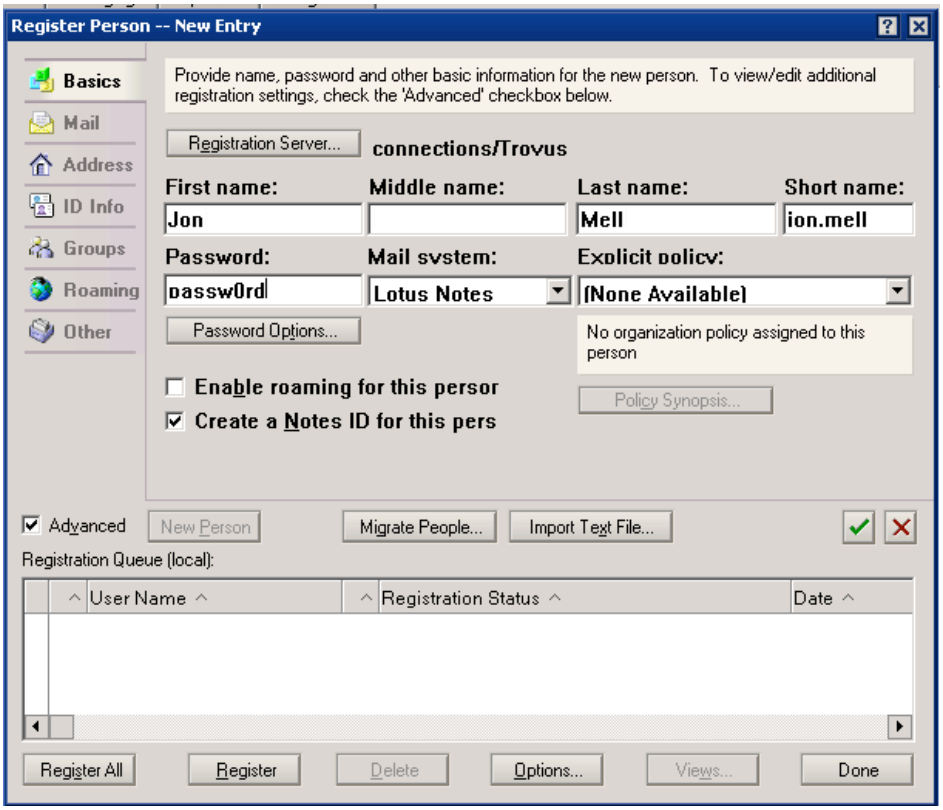
Click Password options

Set the Password Quality scale to something appropriate for your organisation and ensure that Set internet password is checked.

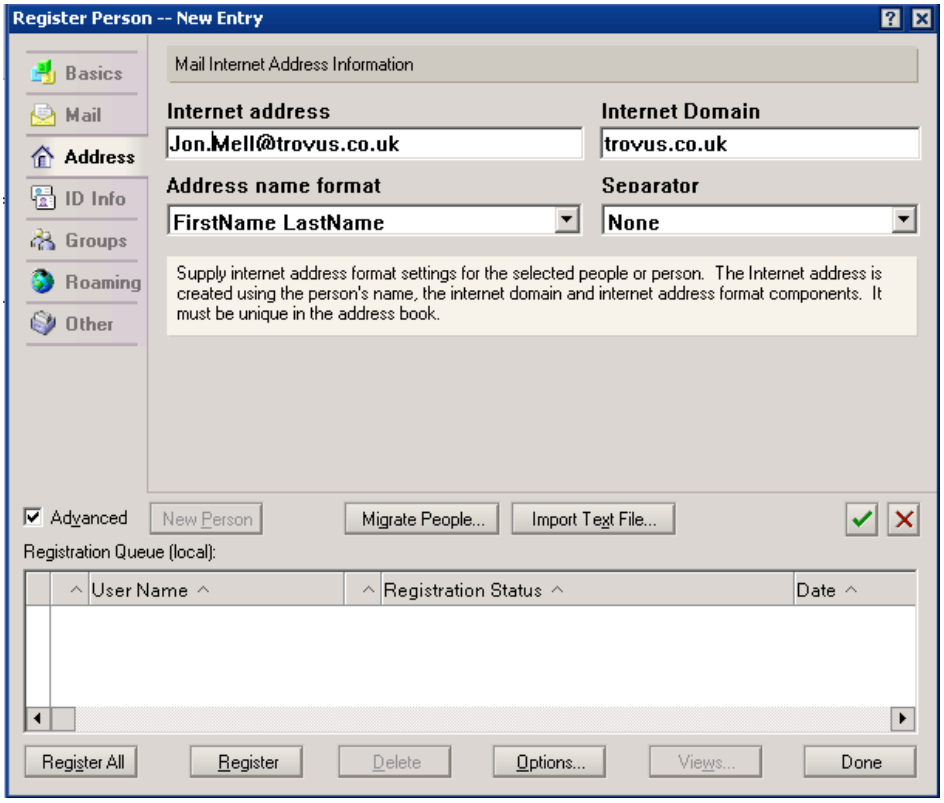


Click OK.

Enter the names of your users. Set your short name to the name you want people to use to log into Connections.

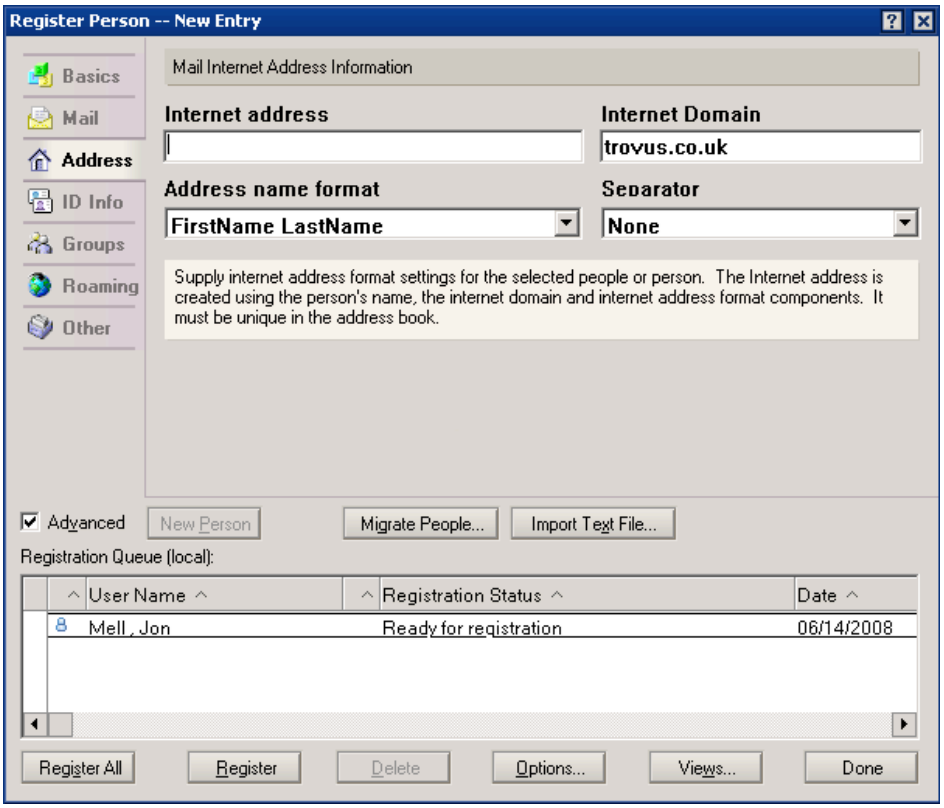


Click Address on the left hand side



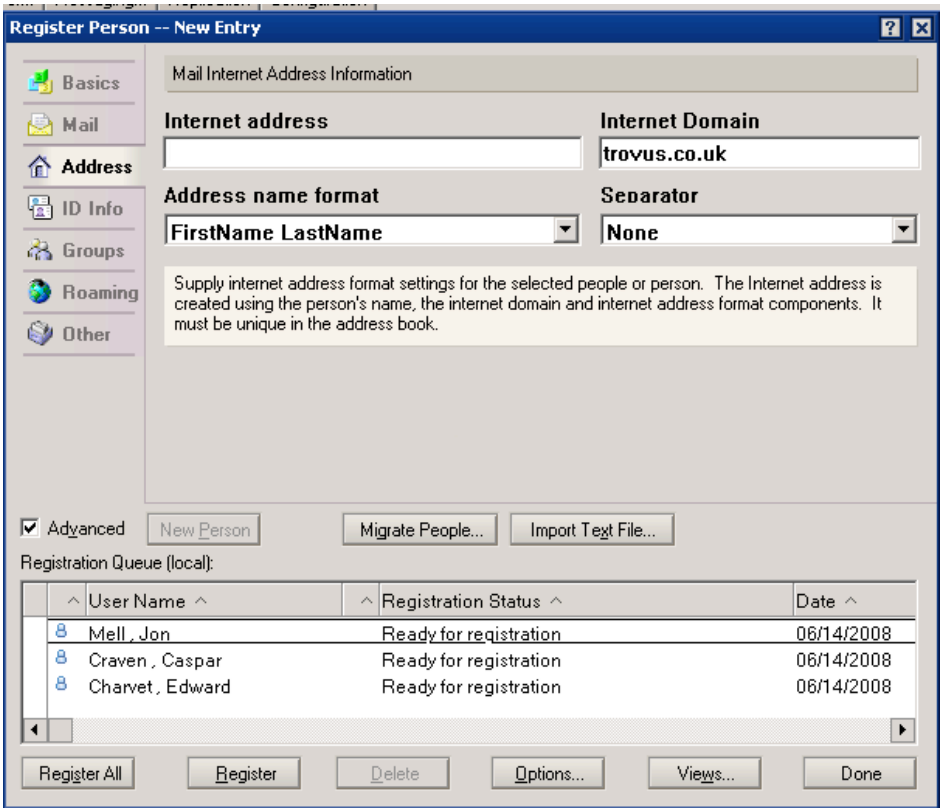
Ensure you have an entry for Internet Address (it does not have to be a valid email address). All users must have an Internet Address or they will not be able to log on.

Click the Green check button



Note this does not add your user to the directory. It adds it to the queue to be added.

Repeat adding until you have your users.

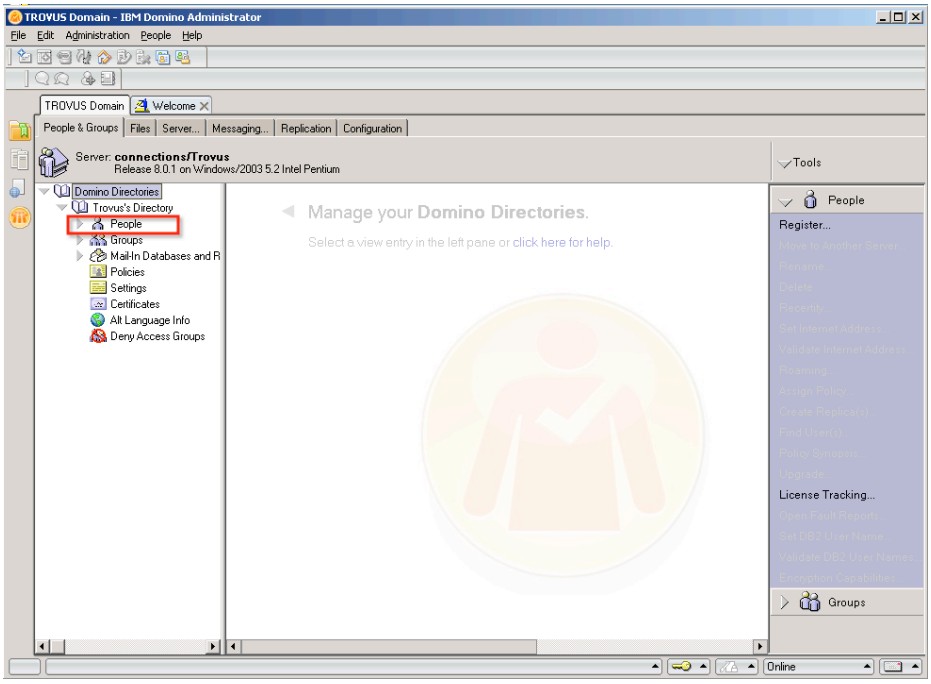


Click Register All

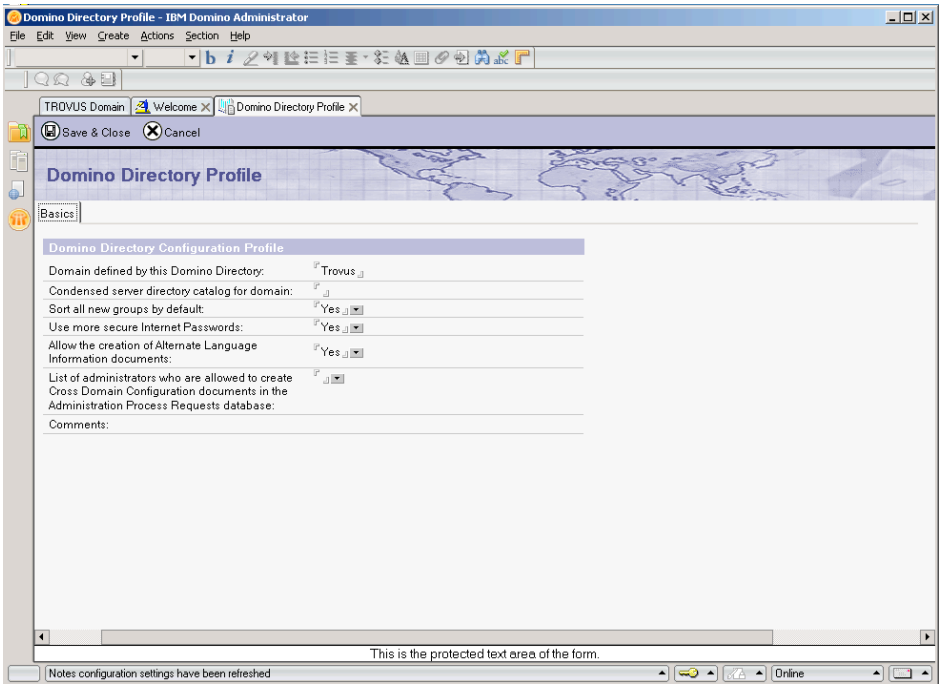
Click OK when notified the process is complete.

Click Done.

Click People on the Left Hand side underneath your Directory

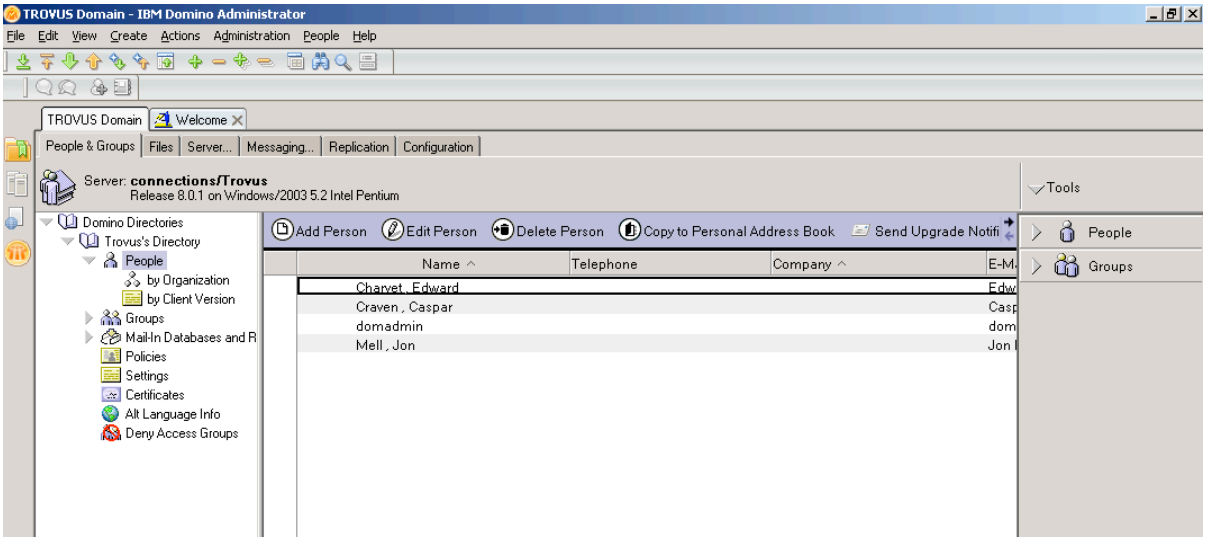


You may see a screen like this.



If so press Cancel.

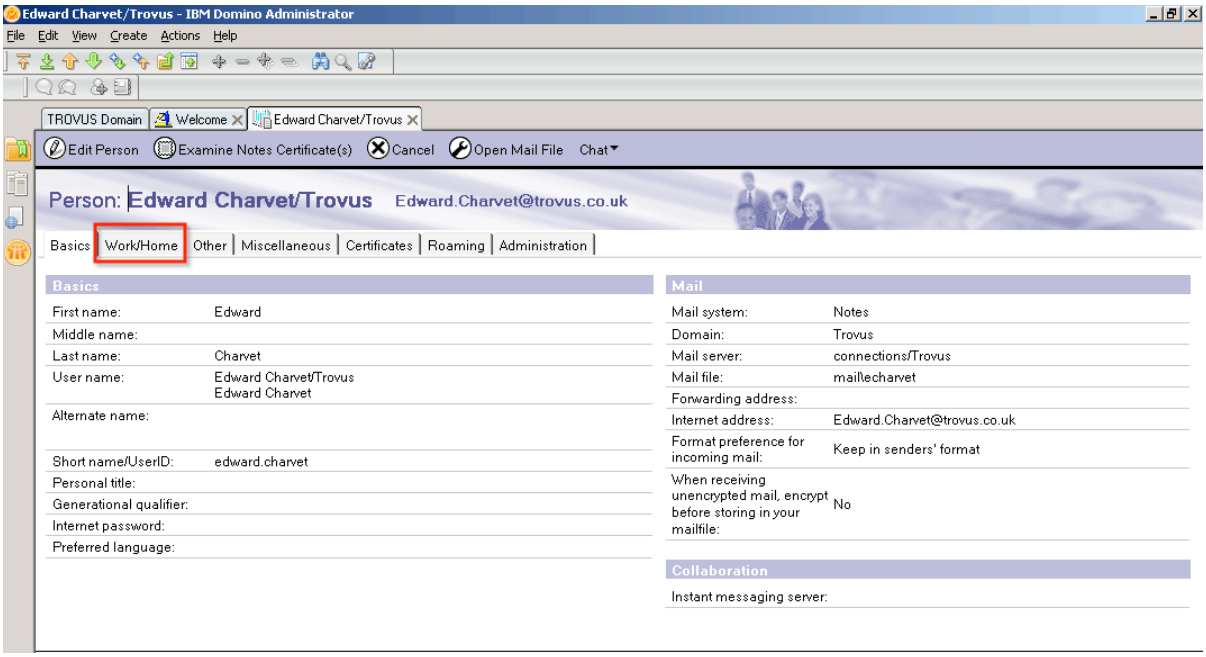
You should see <*dominoadmin*> and the people you registered in the client.



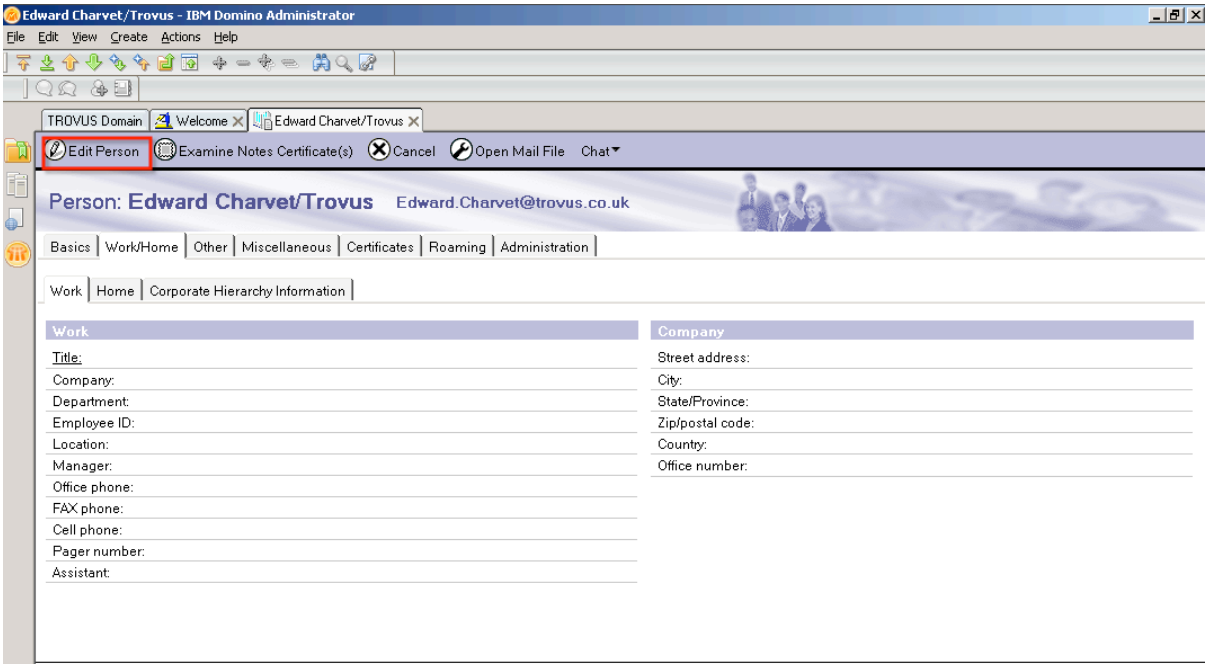
If do you not want to add organisation hierarchy you can close the client but leave the server running.

Add Organisation Hierarchy

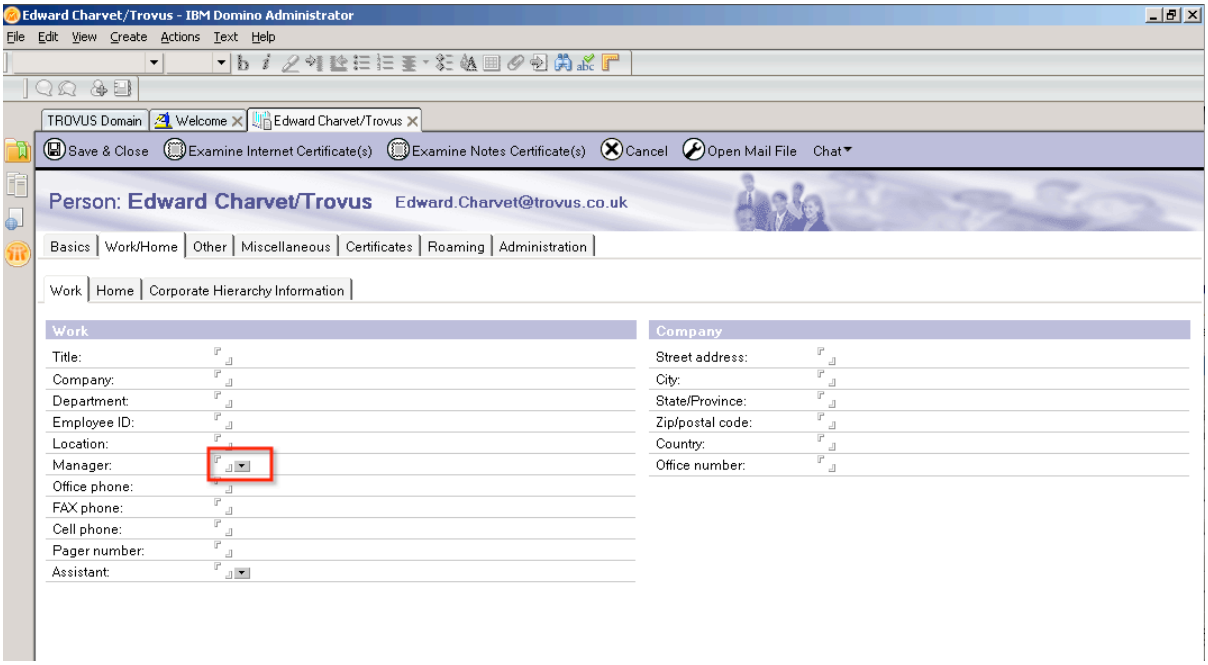
If you wish to add organisation hierarchy information (for use in Profiles for example) then double click a user



Click work/home

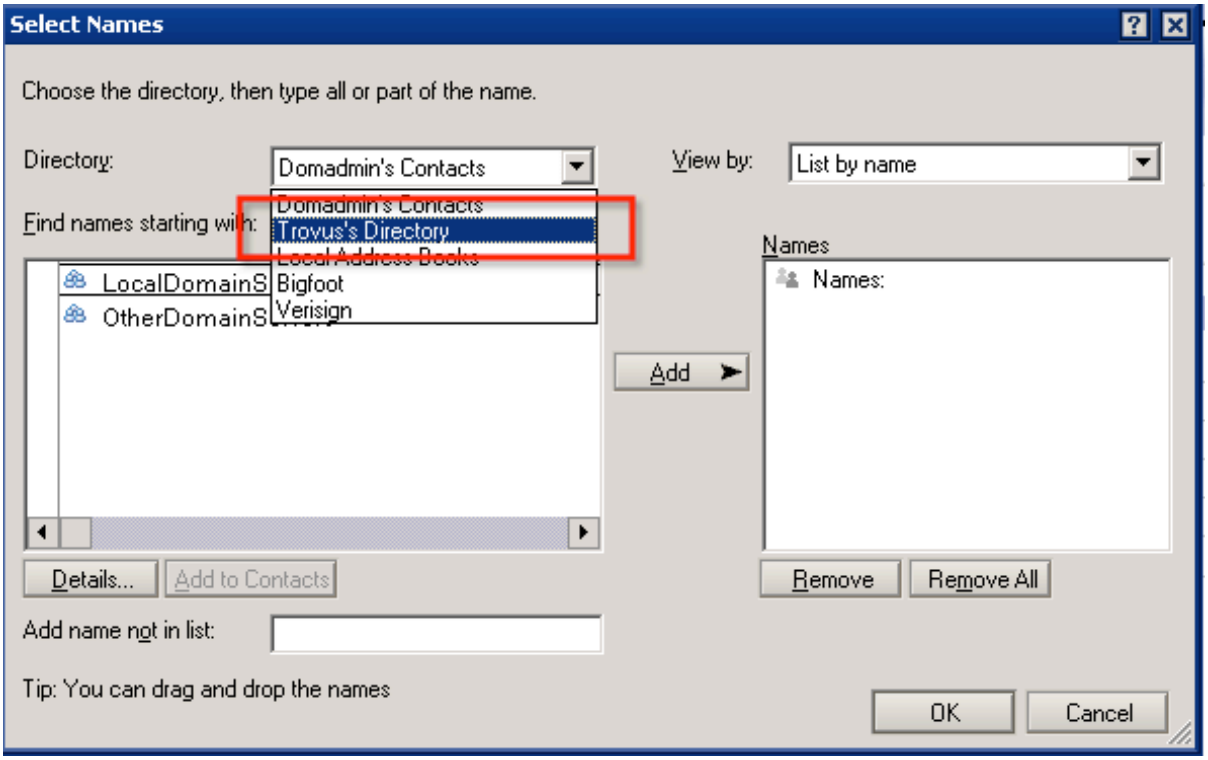


Click Edit Person

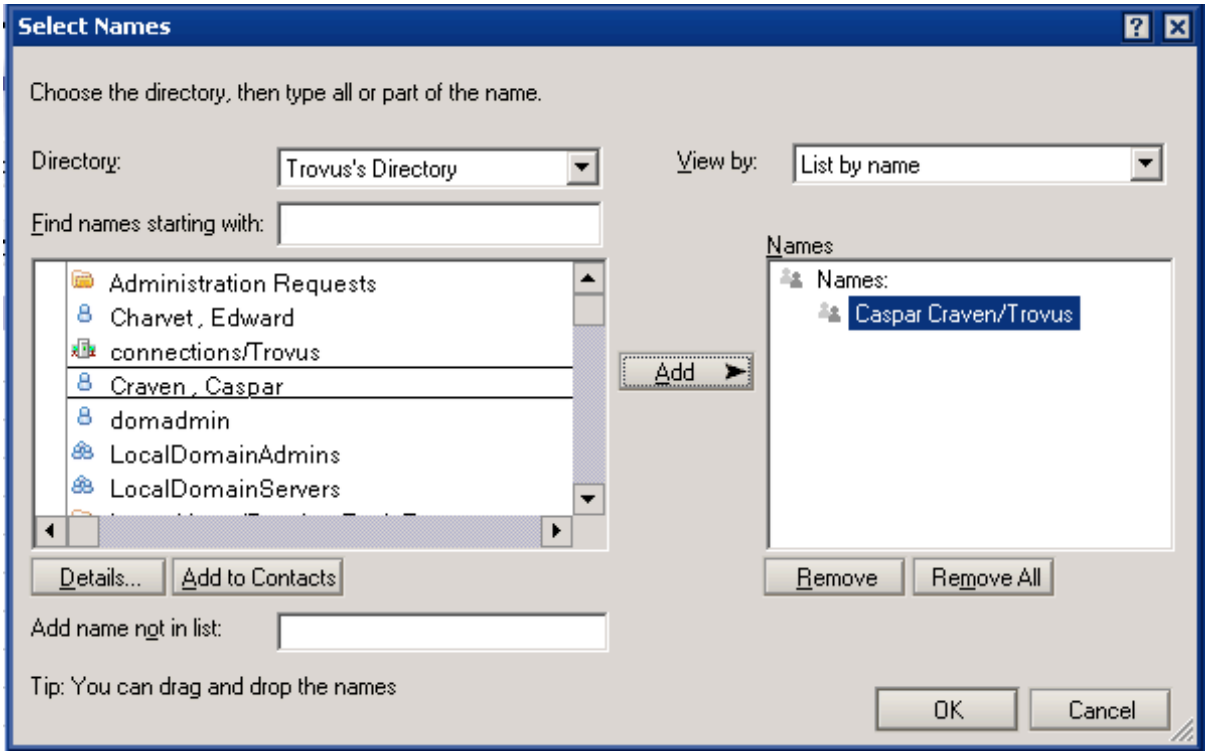


Click the arrow next to manager

In the pop-up change the Directory from <*dominoadmin*>'s contacts to <*orgname*>'s Directory



Select the manager of this user and click Add



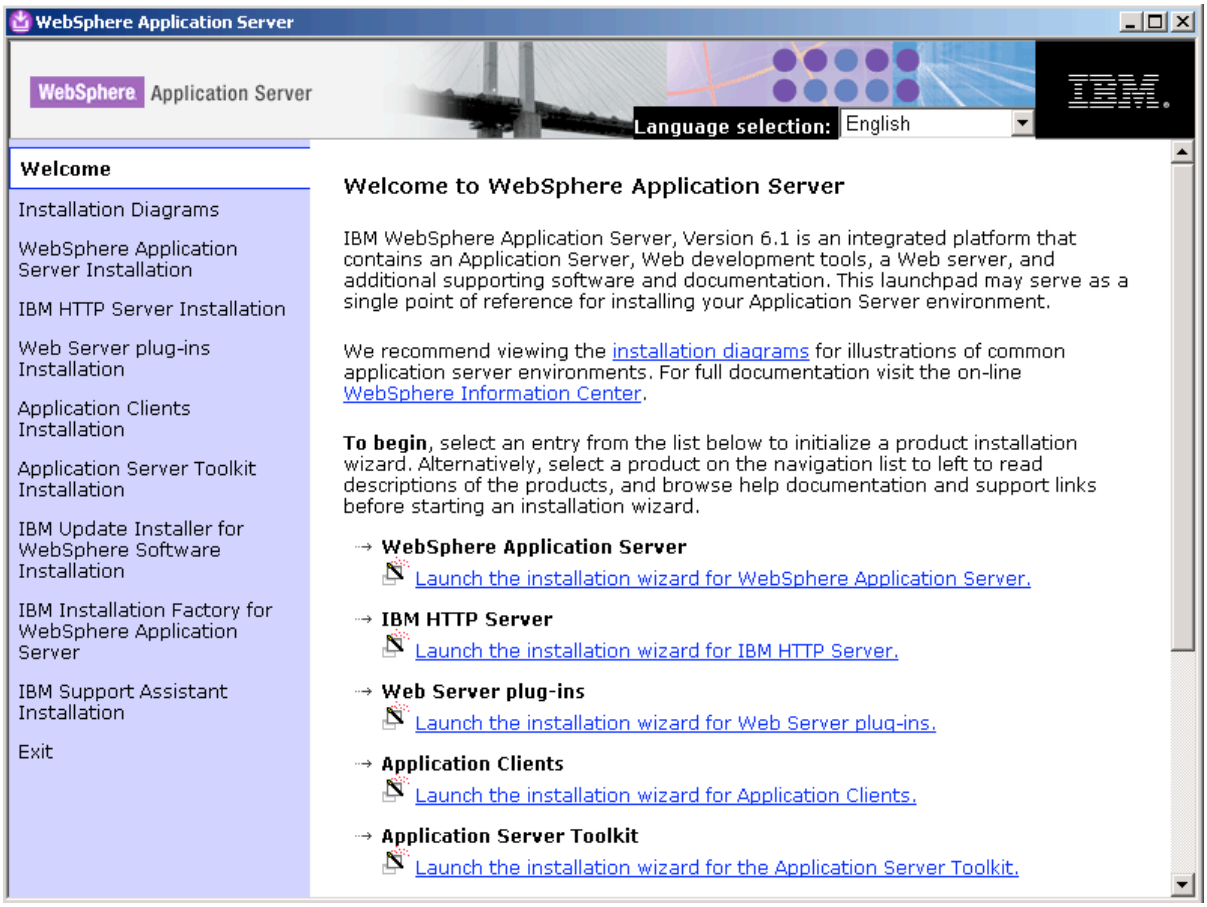
Click OK

Click Save & Close

Close the Domino Client but leave the server running.

Install WebSphere Application Server

Run Launchpad.exe from the WebSphere Application Server 6.1 media

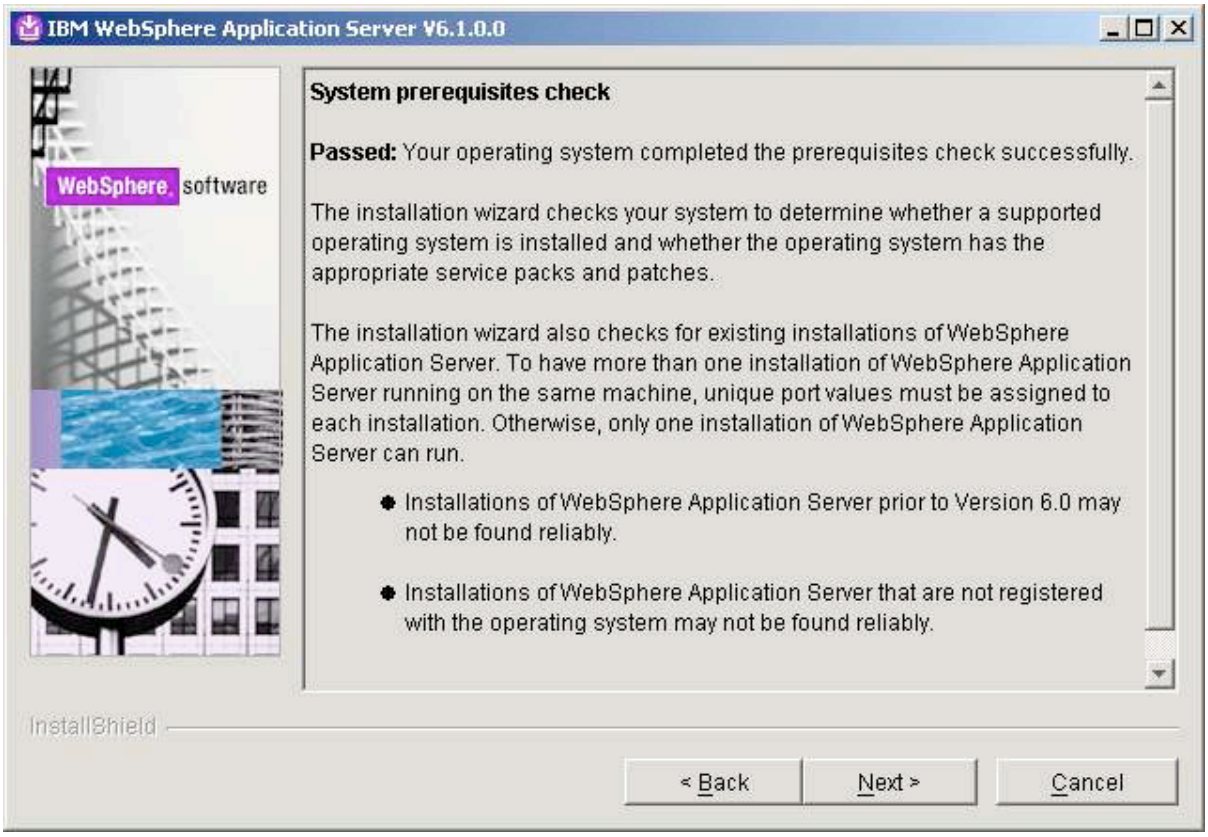


Click Launch the installation wizard for WebSphere Application Server

When the wizard launches click Next on the welcome screen.

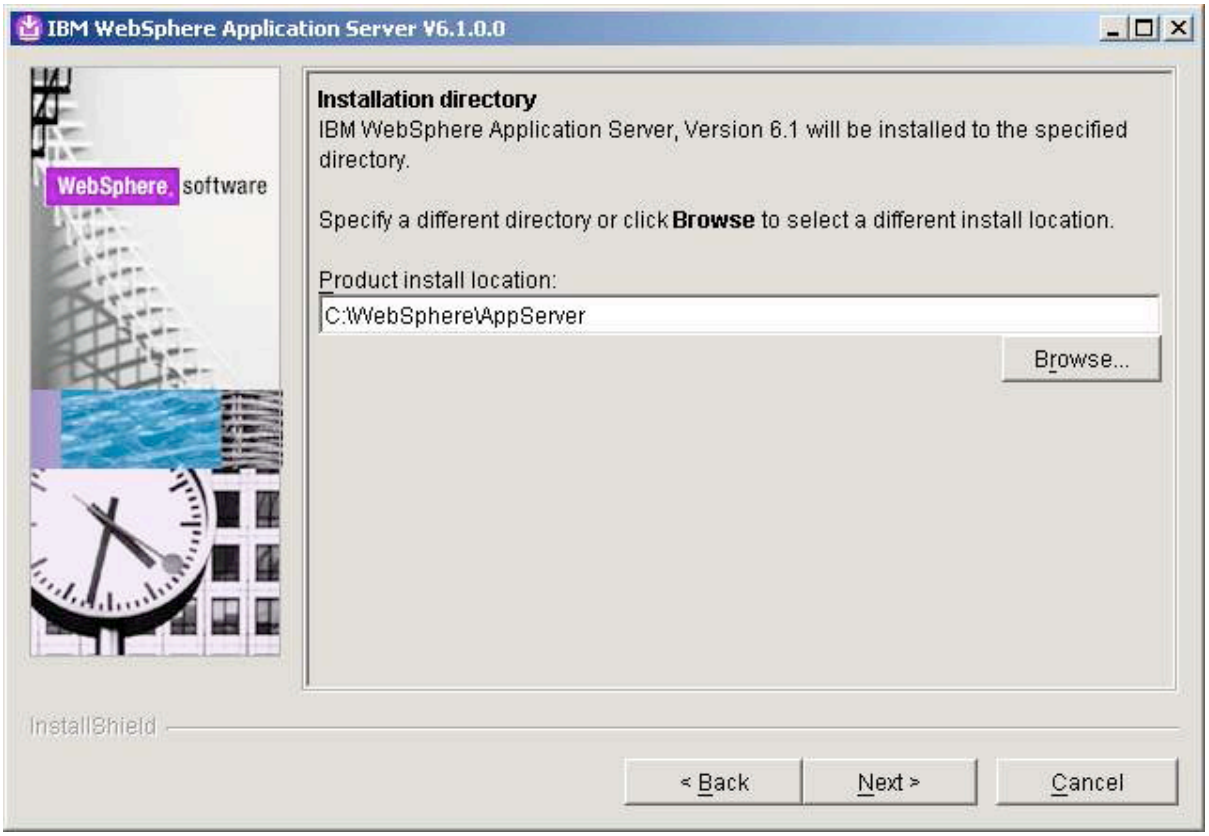
Accept the license terms and click Next

Your system should then pass a Systems Prerequisites check – click Next



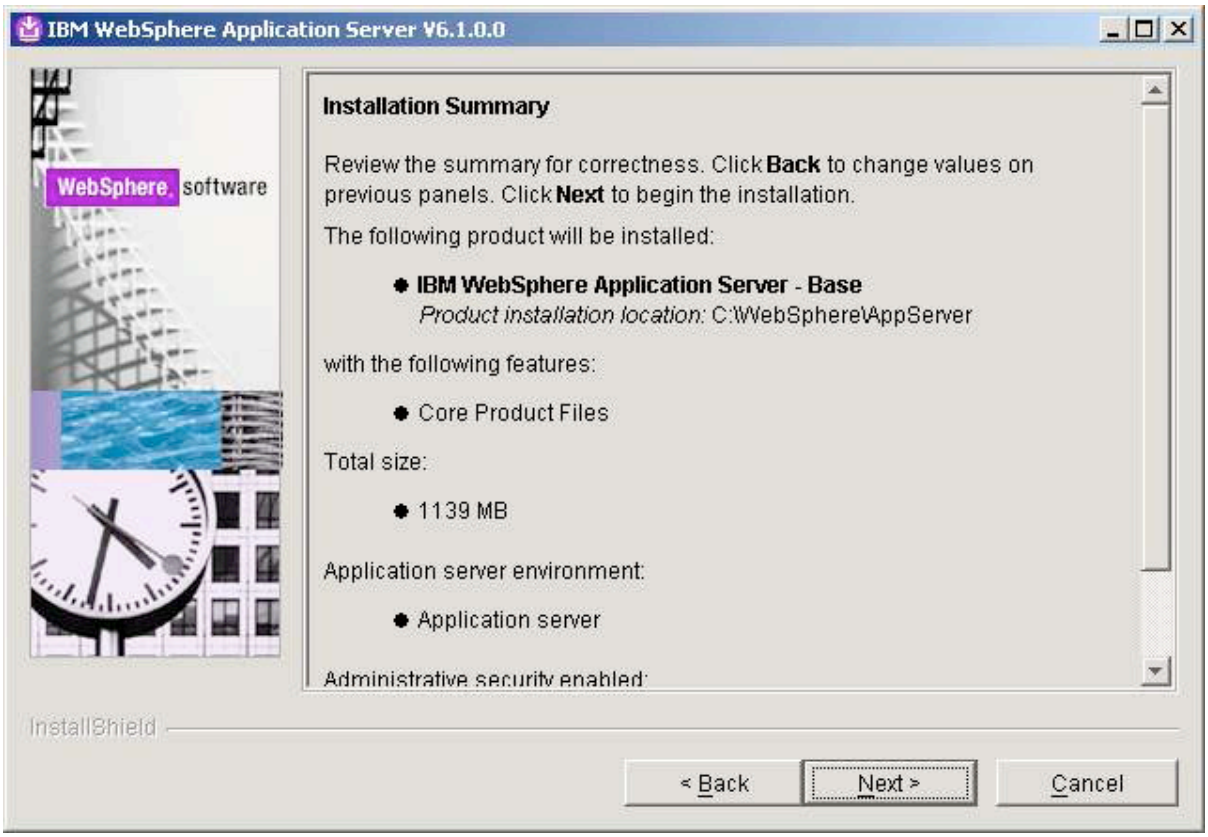
Do not choose to install the sample applications and click Next

In the installation directory, you can choose something more friendly. This is <*wasinstall*>.

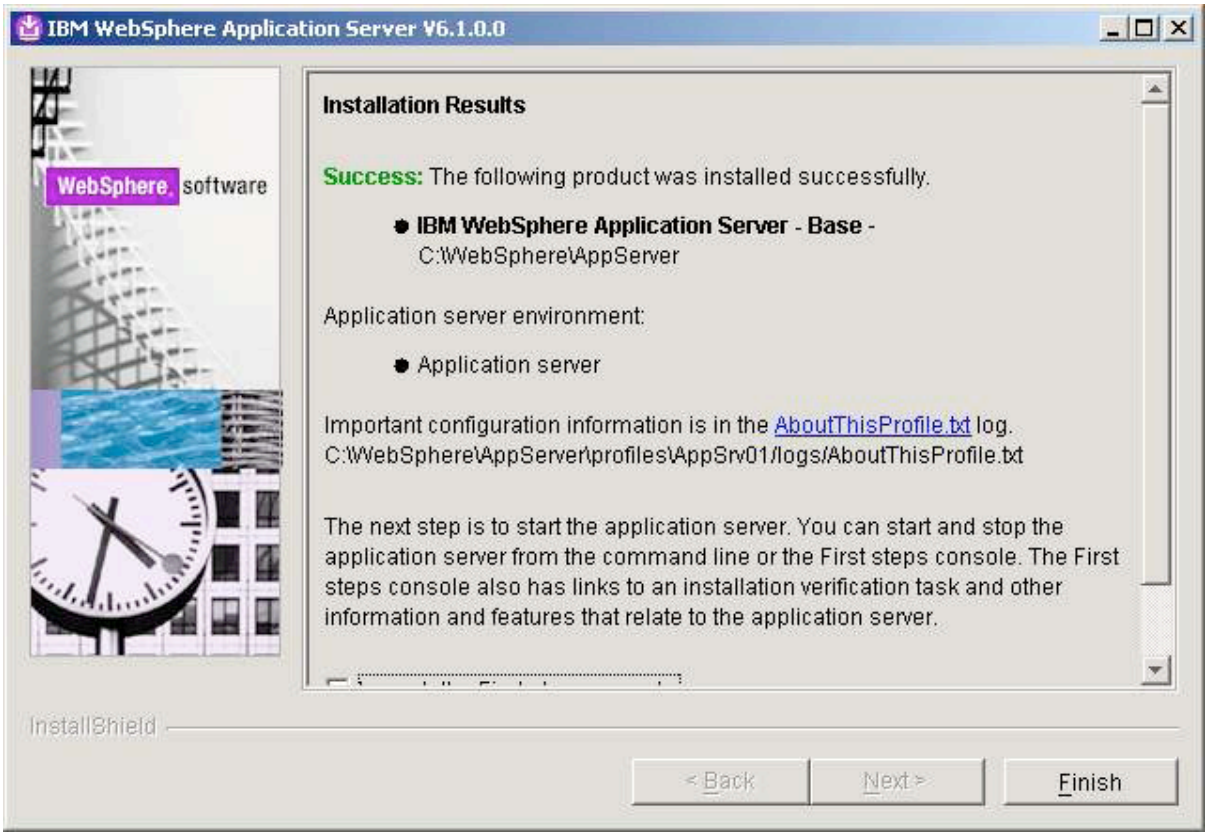


Ensure that Enable administrative security is **not** selected and click Next

Review the installation summary and click Next



Your should see the following after a successful install. Press Finish.



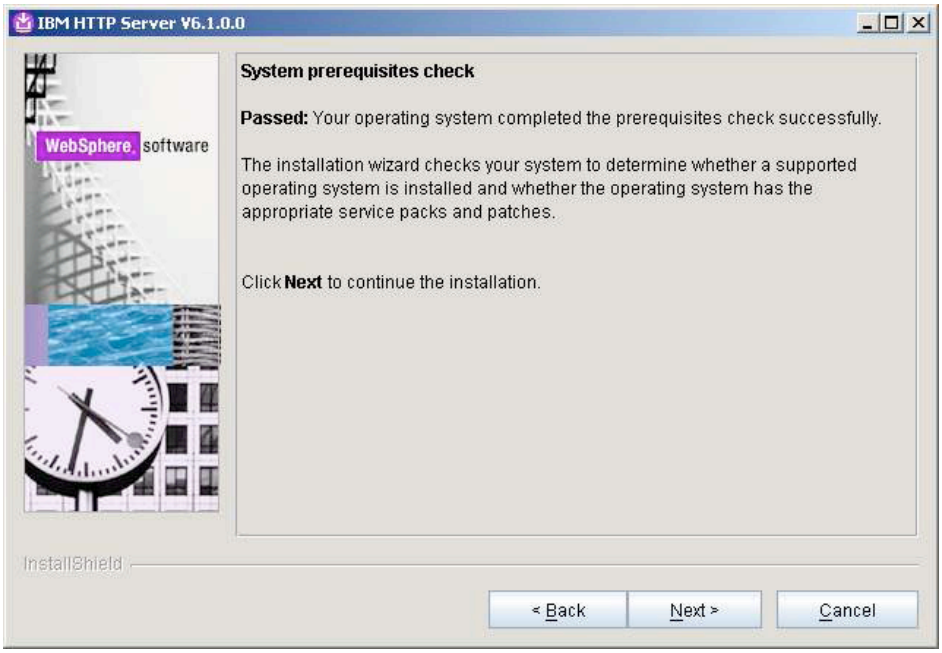
Install HTTP Server

Now on the Launchpad click Launch the installation wizard for IBM HTTP Server. This will ask you for the location of the WebSphere Supplemental disk you should have downloaded or received with your Lotus Connections media.

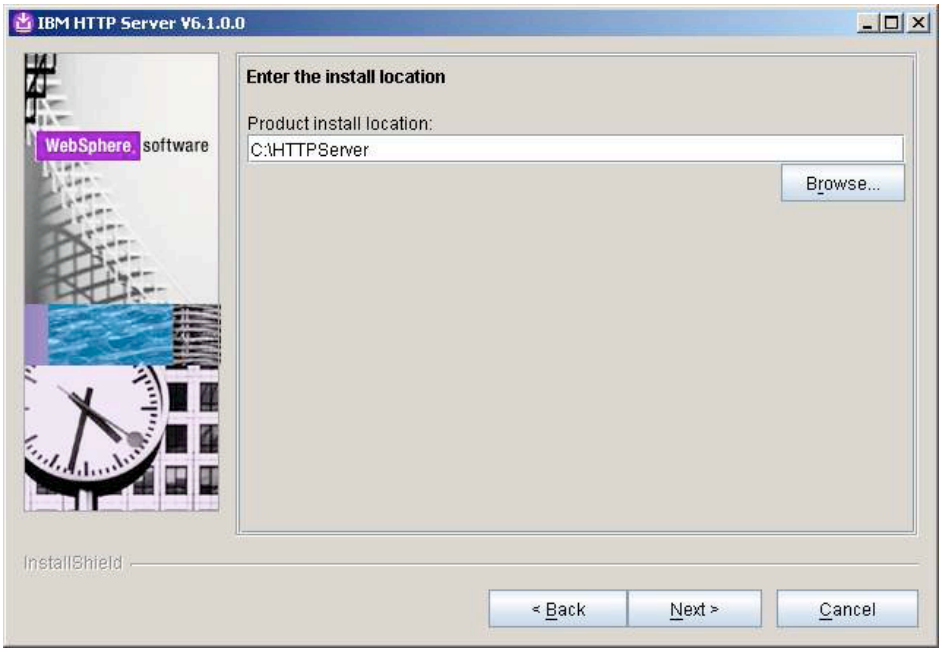
Once the wizard launches click Next on the Welcome screen.

Accept the license terms and click next.

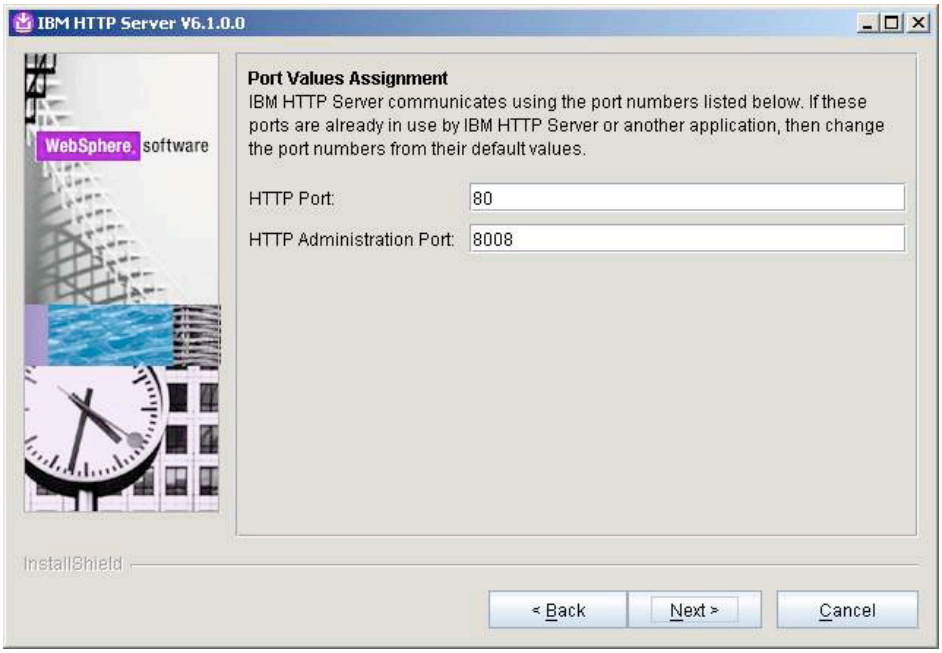
Your system should then pass a System Prerequisites check - click Next



Accept the default installation or change it to something easier. This is *<httpinstall>*. Press Next.

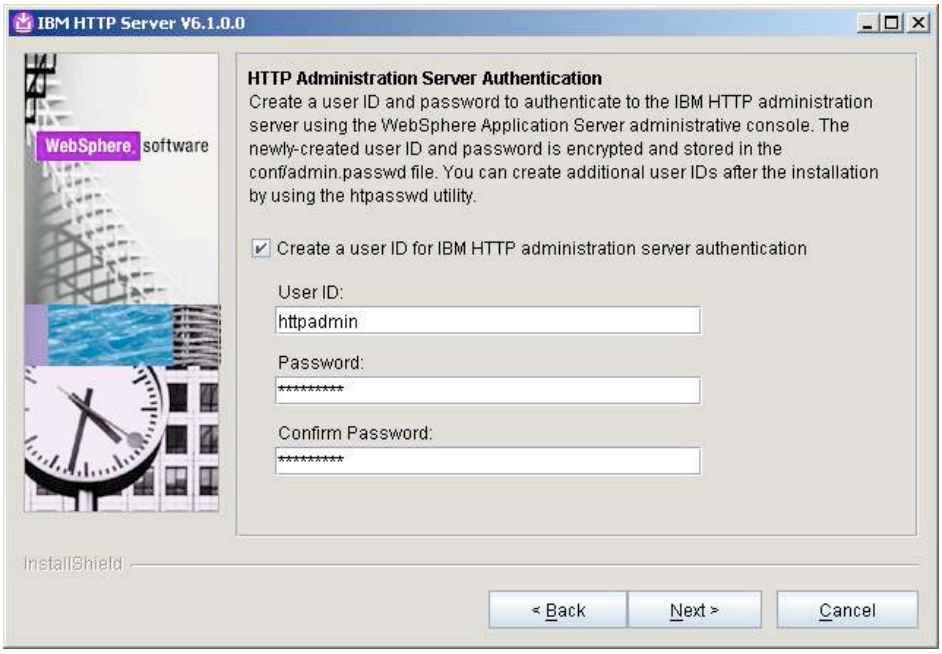


Leave the default port settings and press next.



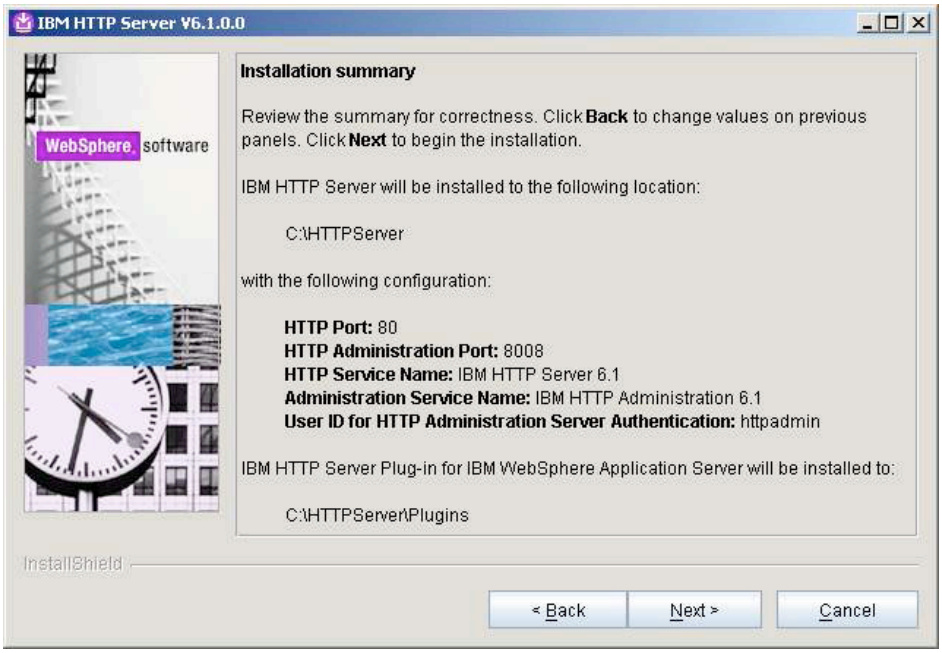
Set the service to log on as a local system account and press next

Enter values for <*httpuser*> and <*httppwd*> as userid and password for HTTP Administration (eg httpadmin). This does not have to be an existing user. Click Next.

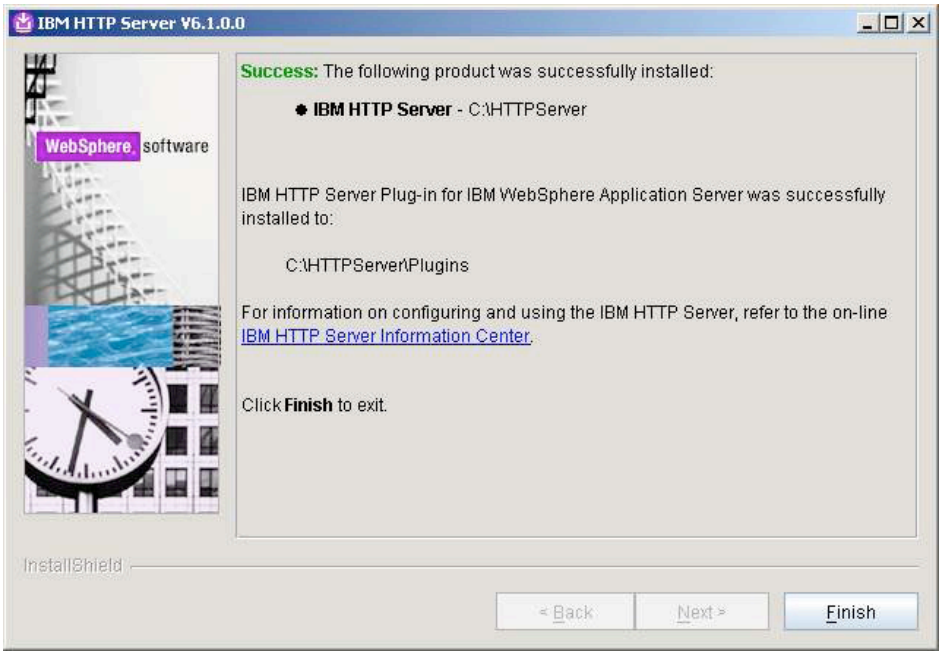


Leave the settings enabled to install the HTTP Server plug-in and press Next

Review the installation summary and press Next



Check you get a successful install message like the one below and press Finish.



Close the WebSphere Application Server launchpad.

Updating WebSphere Application Server

We need to update to 6.0.13 and apply some fixes.

Unzip the WebSphere Update Installer you downloaded (eg `download.updii.61017.windows.ia32.zip`). This will create an `UpdateInstaller` directory.

Run `install.exe` in the `UpdateInstaller` directory.

Accept the license terms and click Next throughout the wizard to install the tool, accepting all defaults.

You should have downloaded the following files. Their current location is in the required software table at the start of the document.

6.1.0-WS-WAS-WinX32-FP0000013.pak

6.1.0-WS-PLG-WinX32-FP0000013.pak

6.1.0-WS-IHS-WinX32-FP0000013.pak

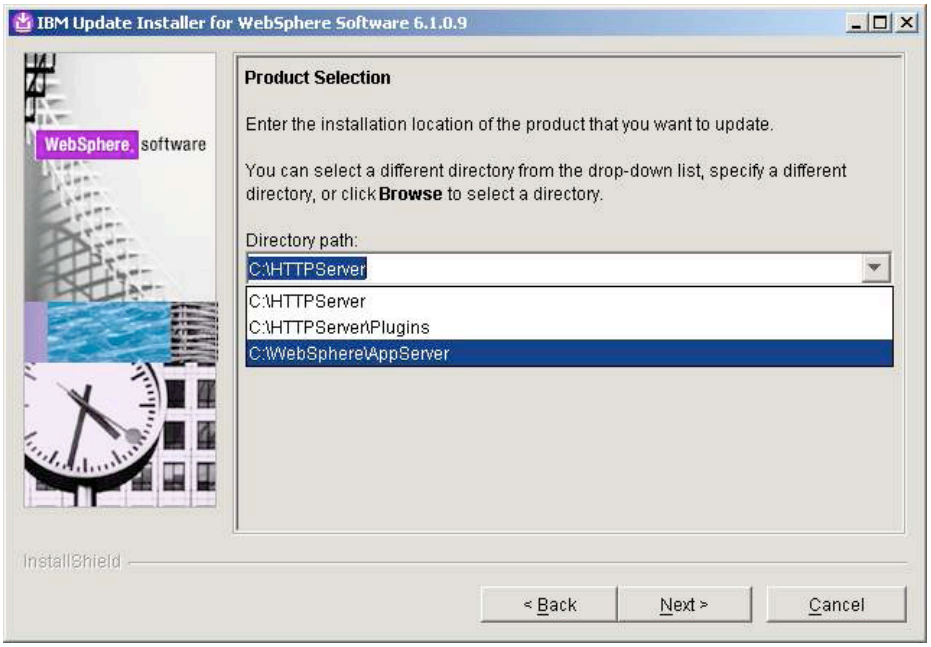
6.1.0.11-WS-WAS-IFPK60528.pak

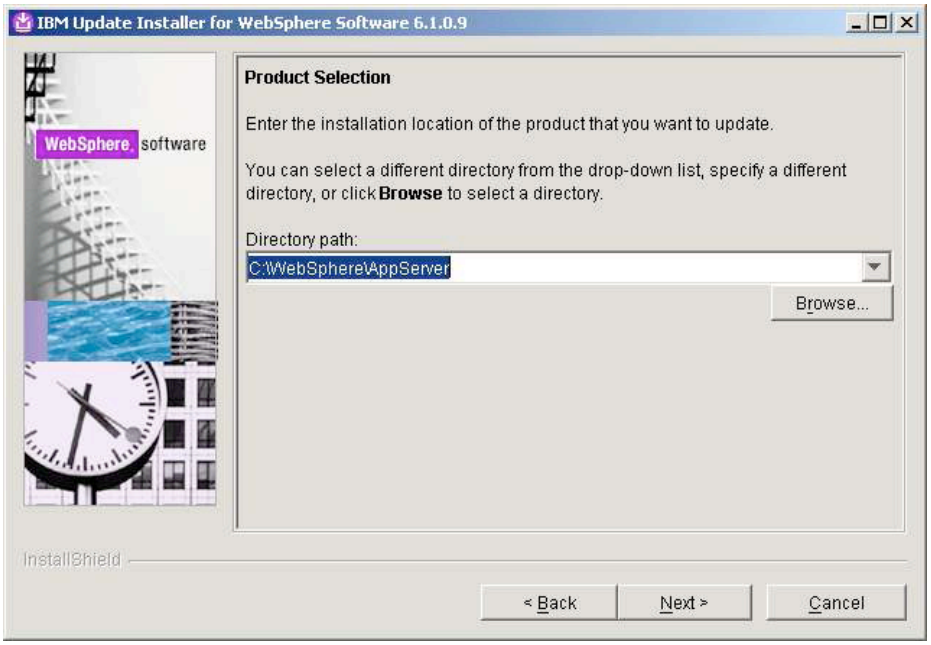
Move these files to the `maintenance` directory of the update installer – eg `C:\Program Files\IBM\WebSphere\UpdateInstaller\Maintenance`

If the Update Installer did not start after installation start it by clicking Start -> IBM WebSphere -> Update Installer for WebSphere 6.1 Software -> Update Installer

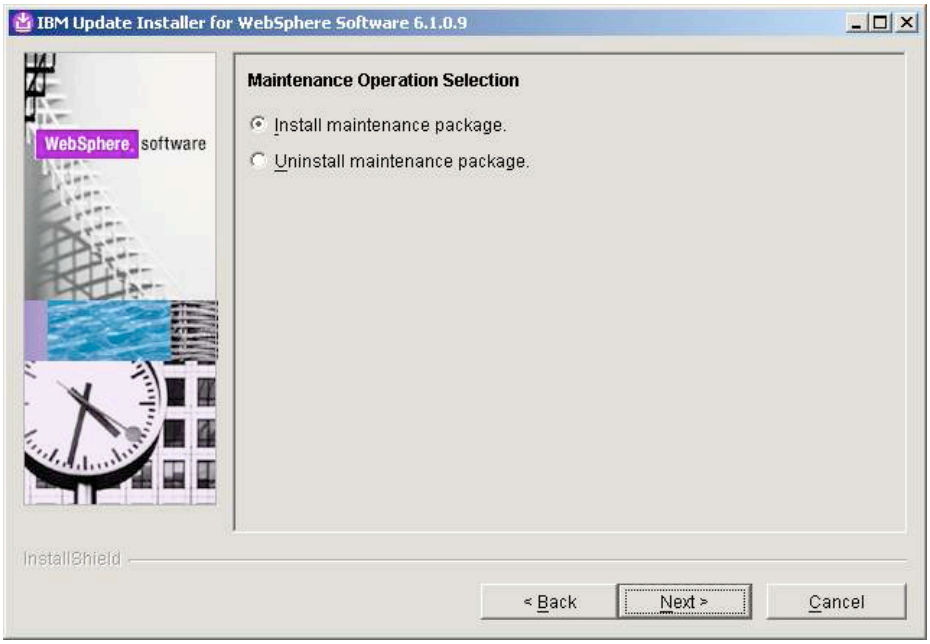
Click Next on the Welcome Screen of the wizard

Select <*wasinstall*> on the Product Selection screen as the Directory path and click next

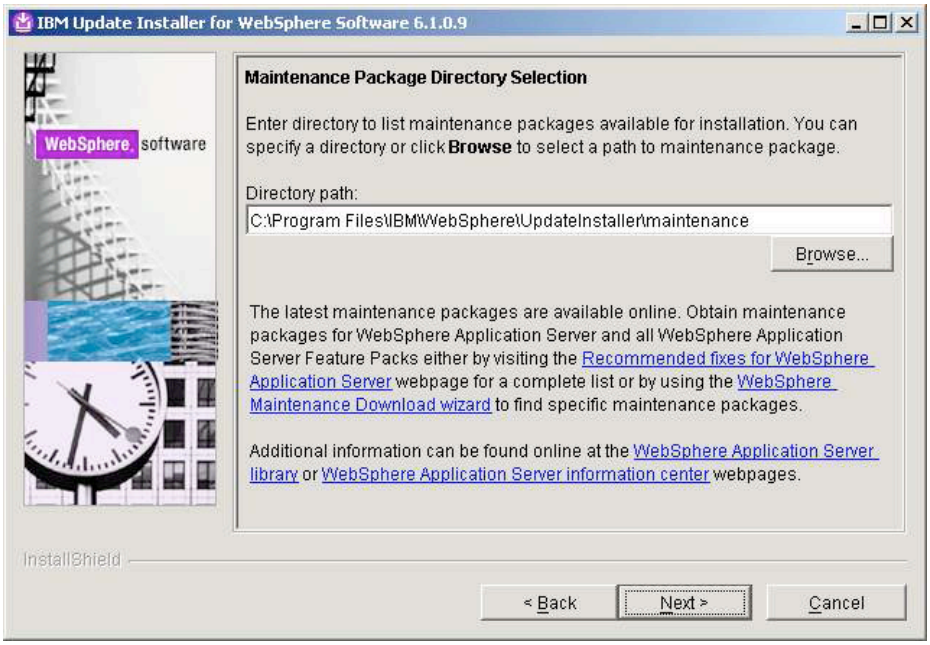




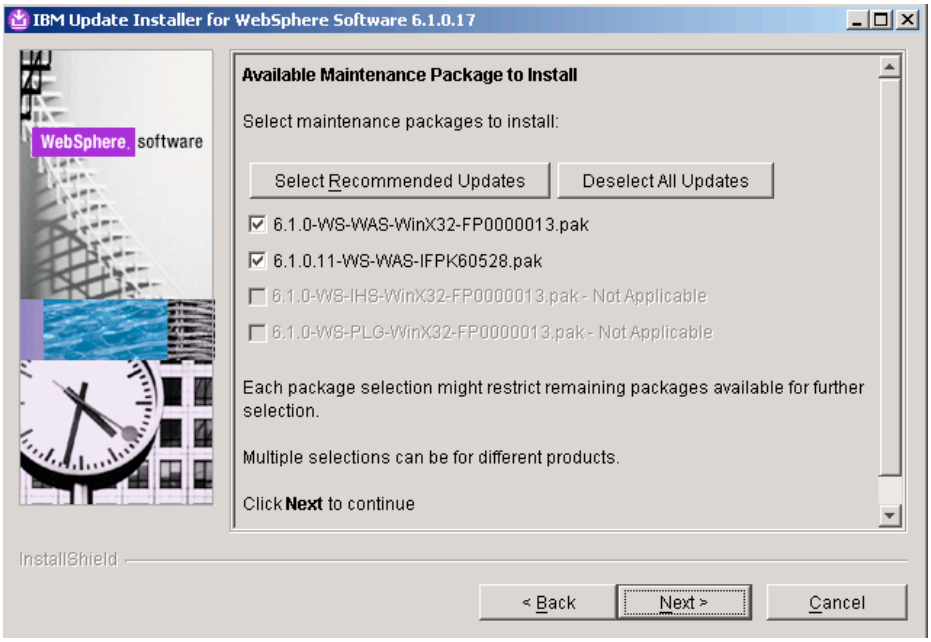
Select Install maintenance package and click Next



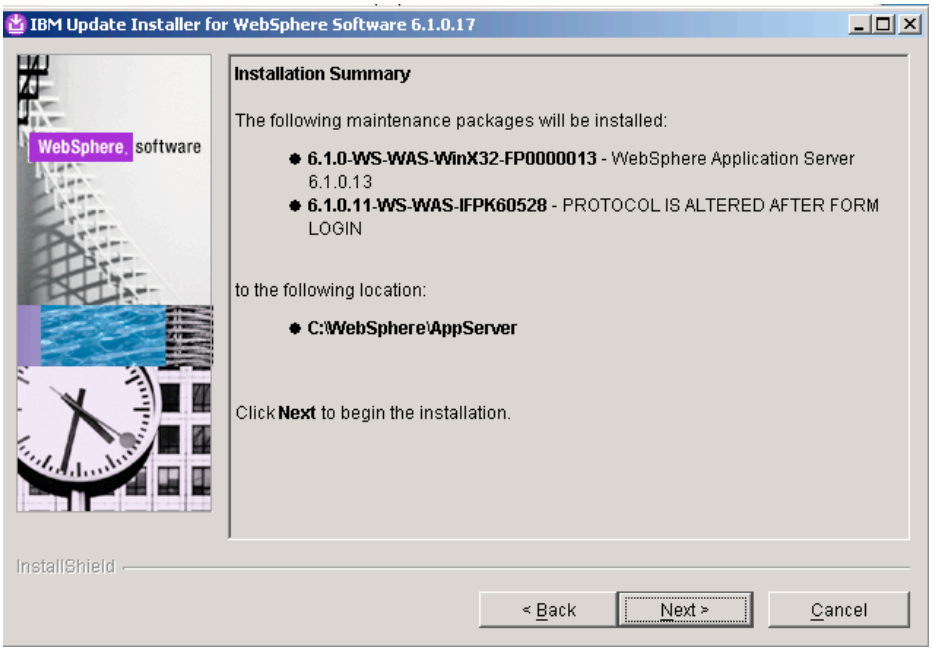
Browse to the directory you copied the `.pak` files to and click Next



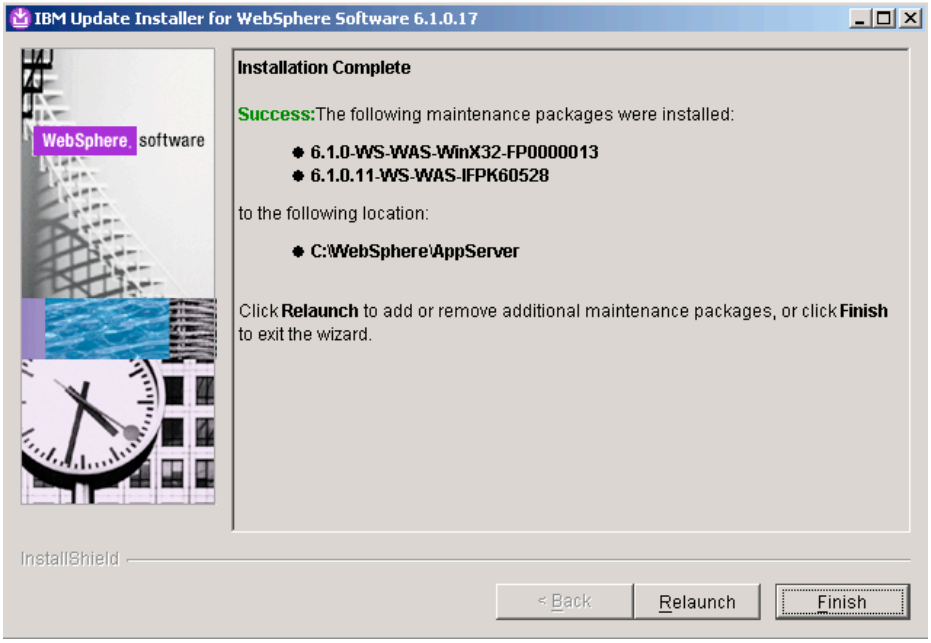
Ensure that the fixes listed below are selected and press Next



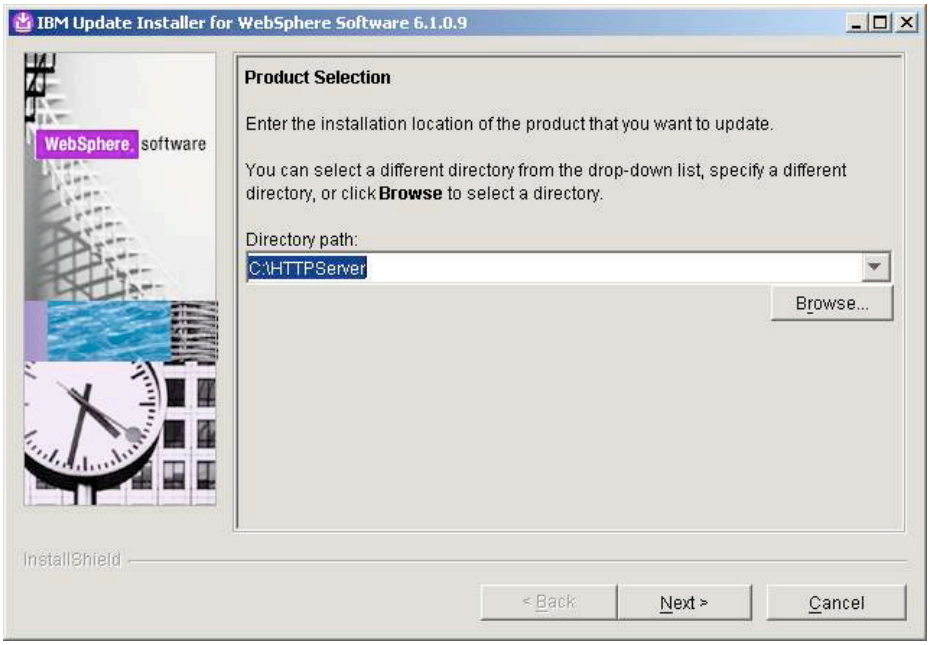
Check the installation summary and press next



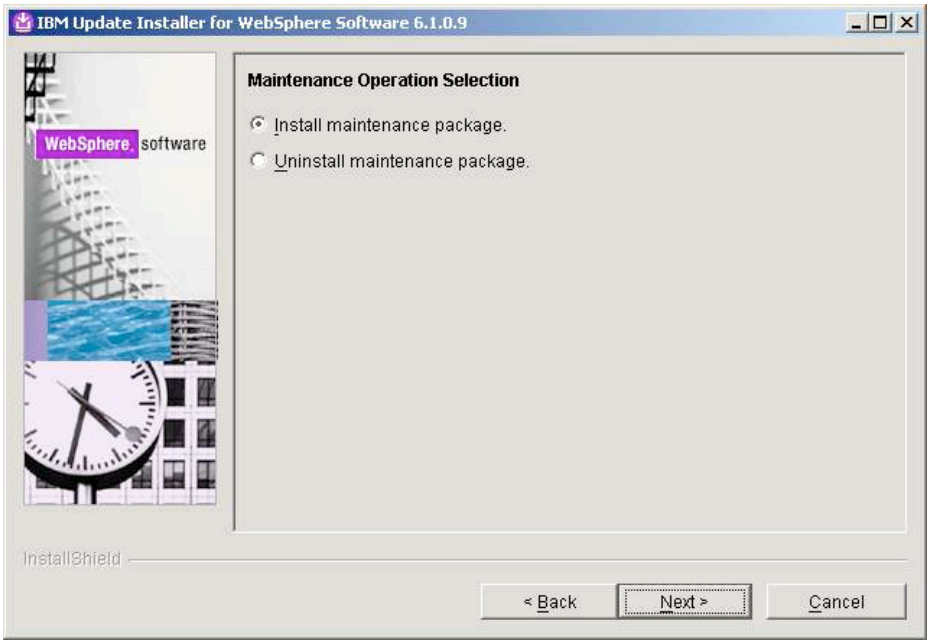
You should see the following screen. Click Relaunch



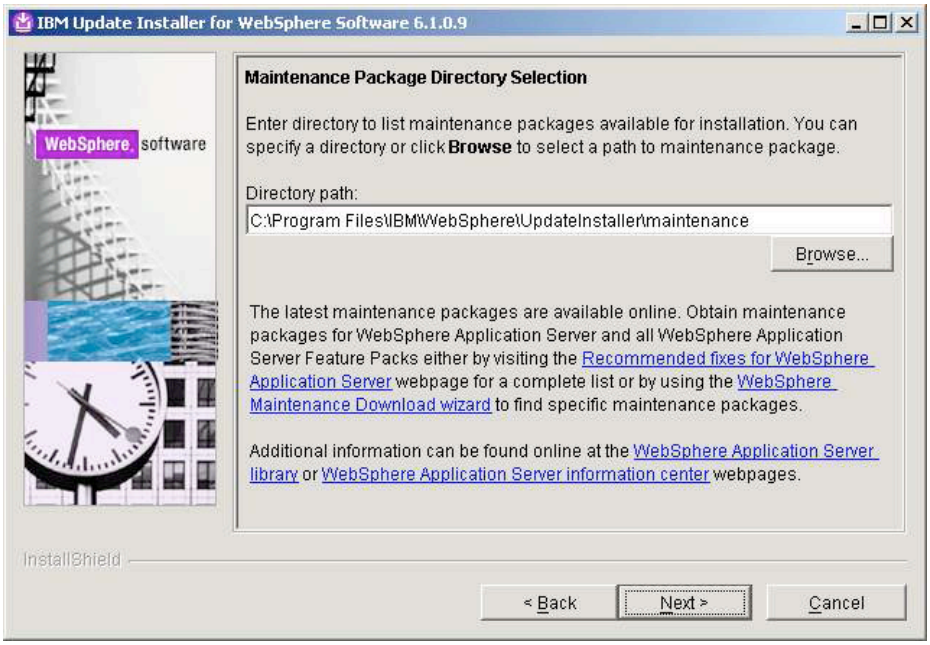
This time, select *<httpinstall>*. Click Next



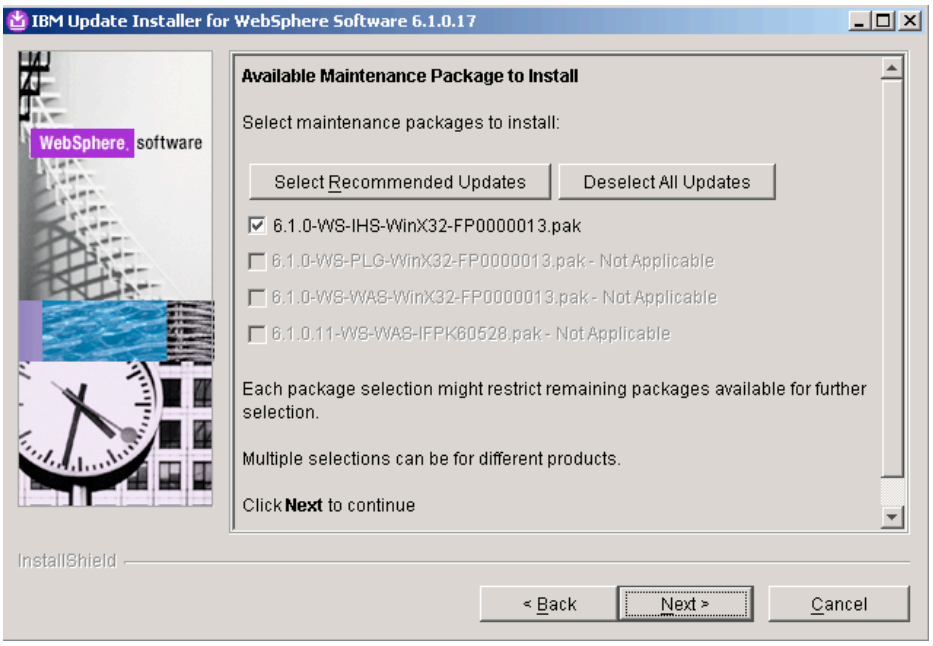
Select Install maintenance package and click next.



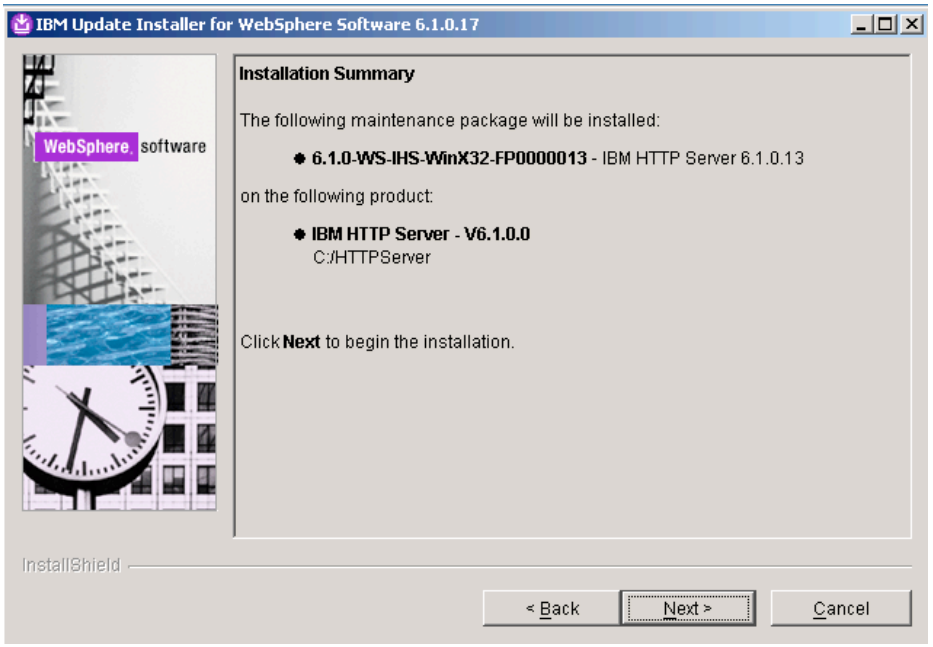
Browse to the directory you copied the `.pak` files to and click Next



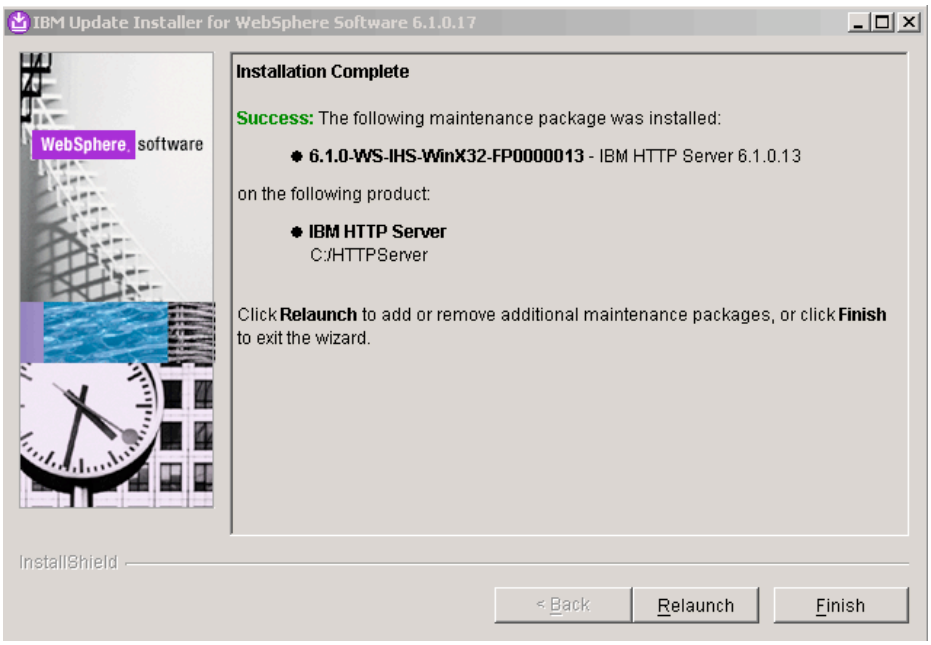
Ensure the fix pack selected n the screen shot below is selected and click Next



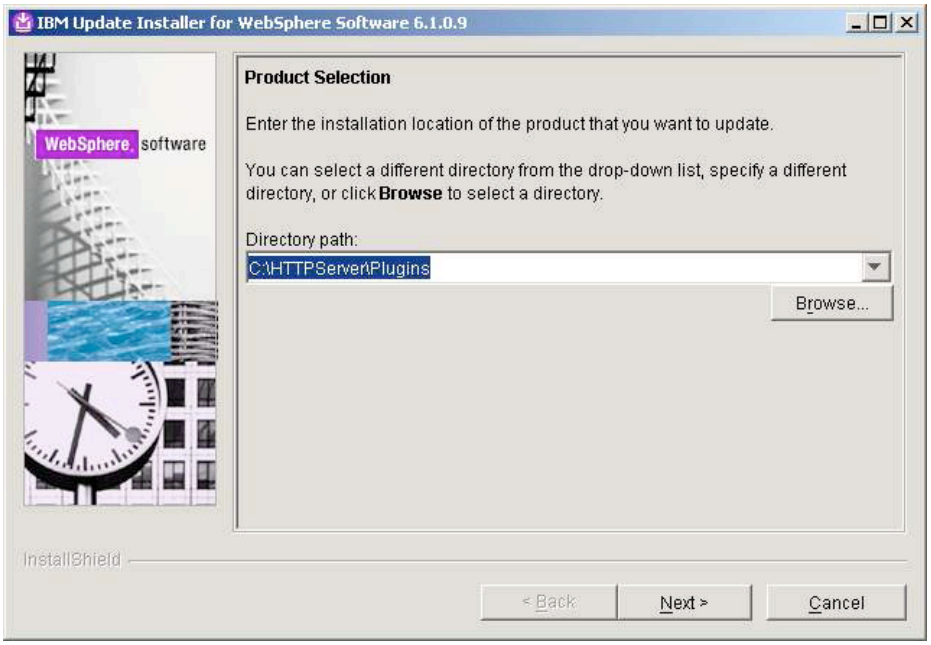
On the summary screen click Next



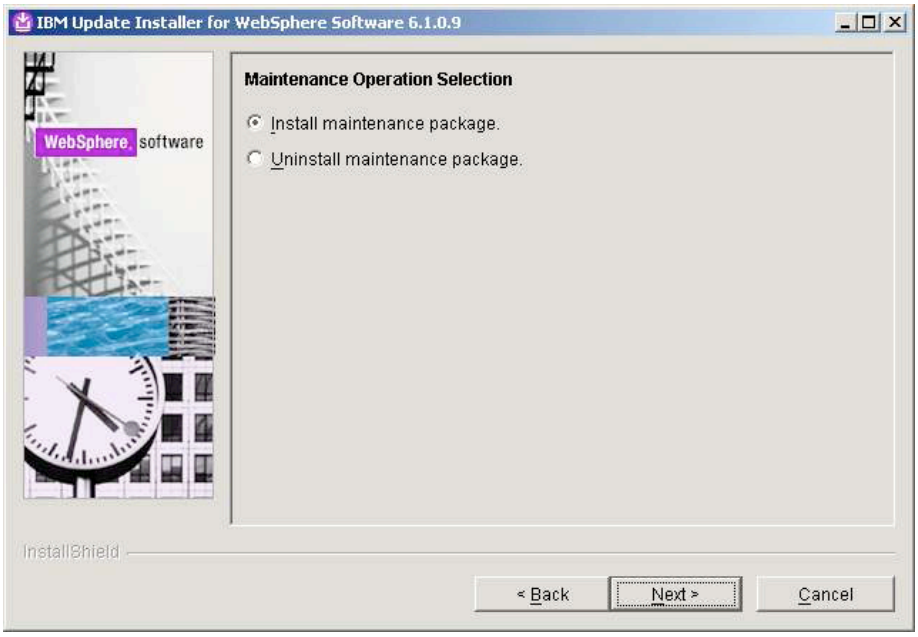
You should seen another success screen. Click relaunch.



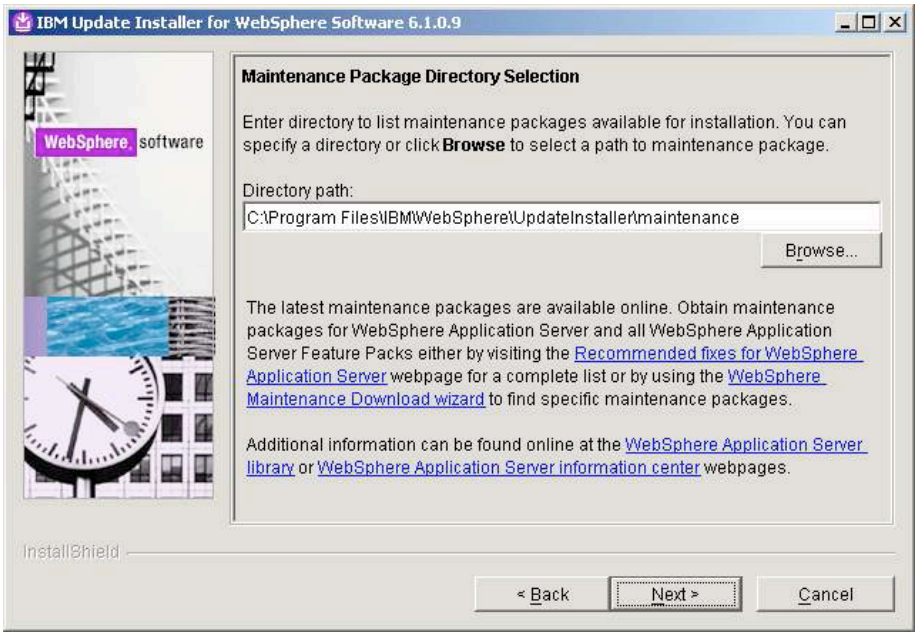
Select `<httpinstall>\plugins` and click Next.



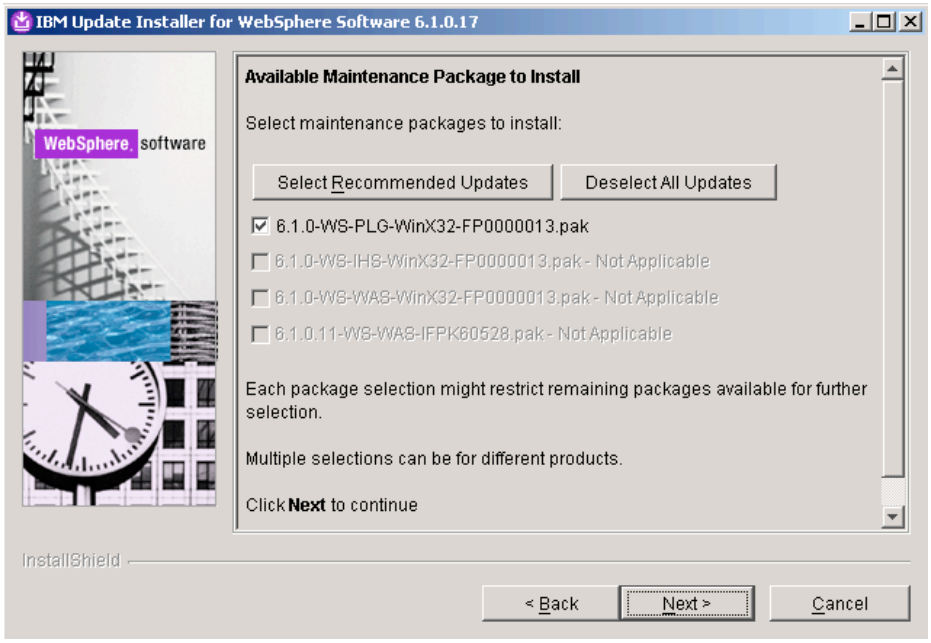
Select Install maintenance and click next



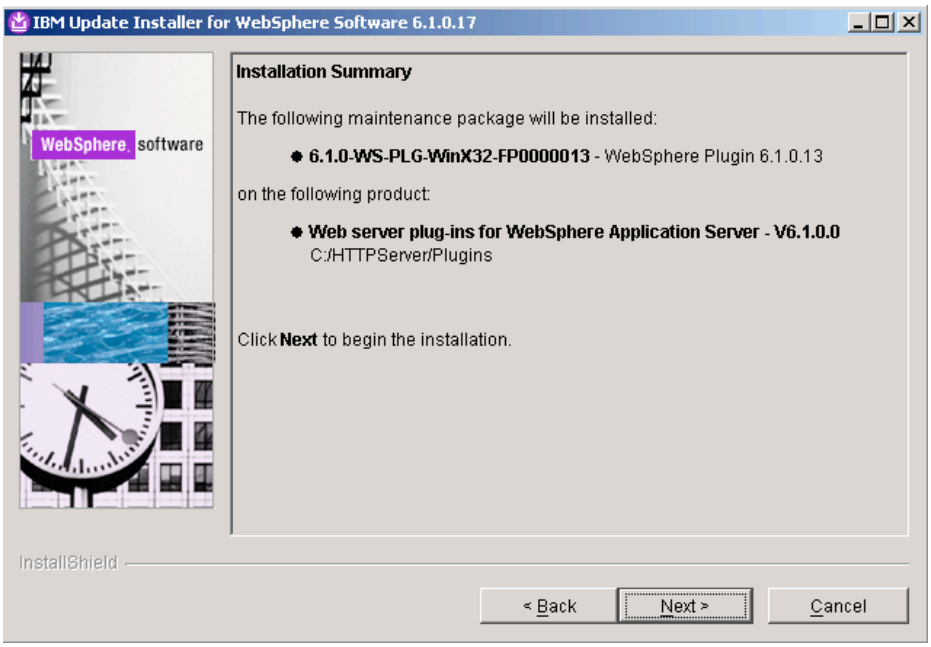
Browse to the directory where you copied the `.pak` files and click Next



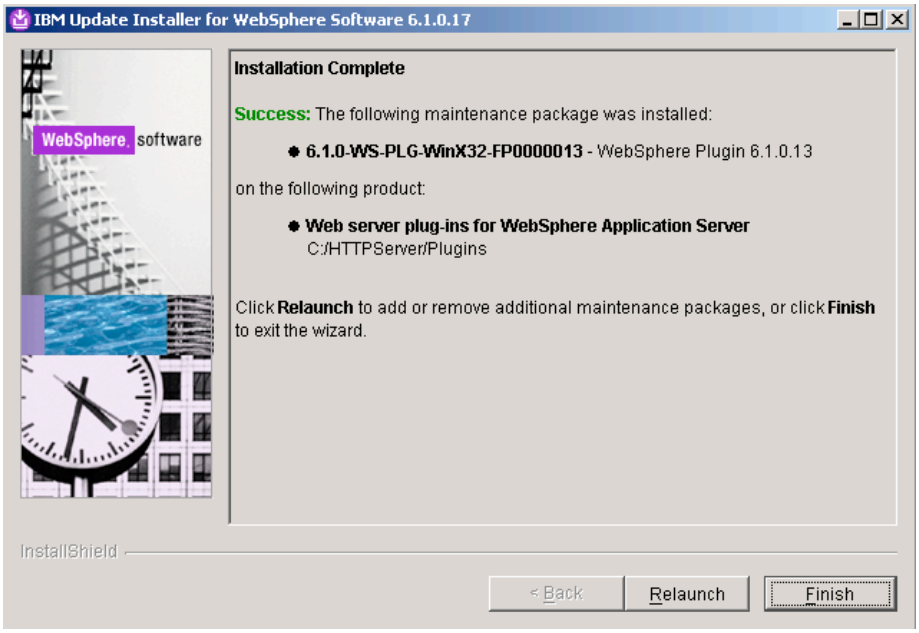
Ensure the fix pack shown below is selected and click Next.



Check the installation summary and click next



On the success screen click Finish.

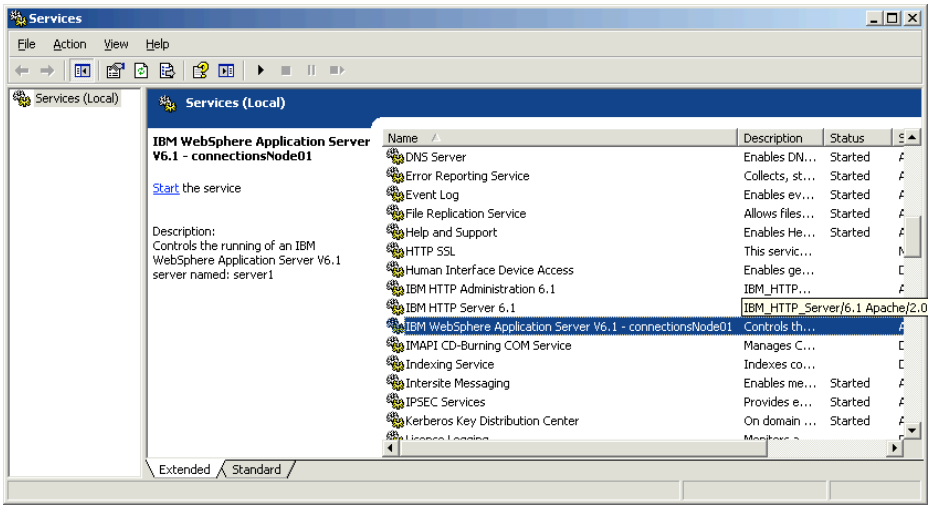


Start WebSphere

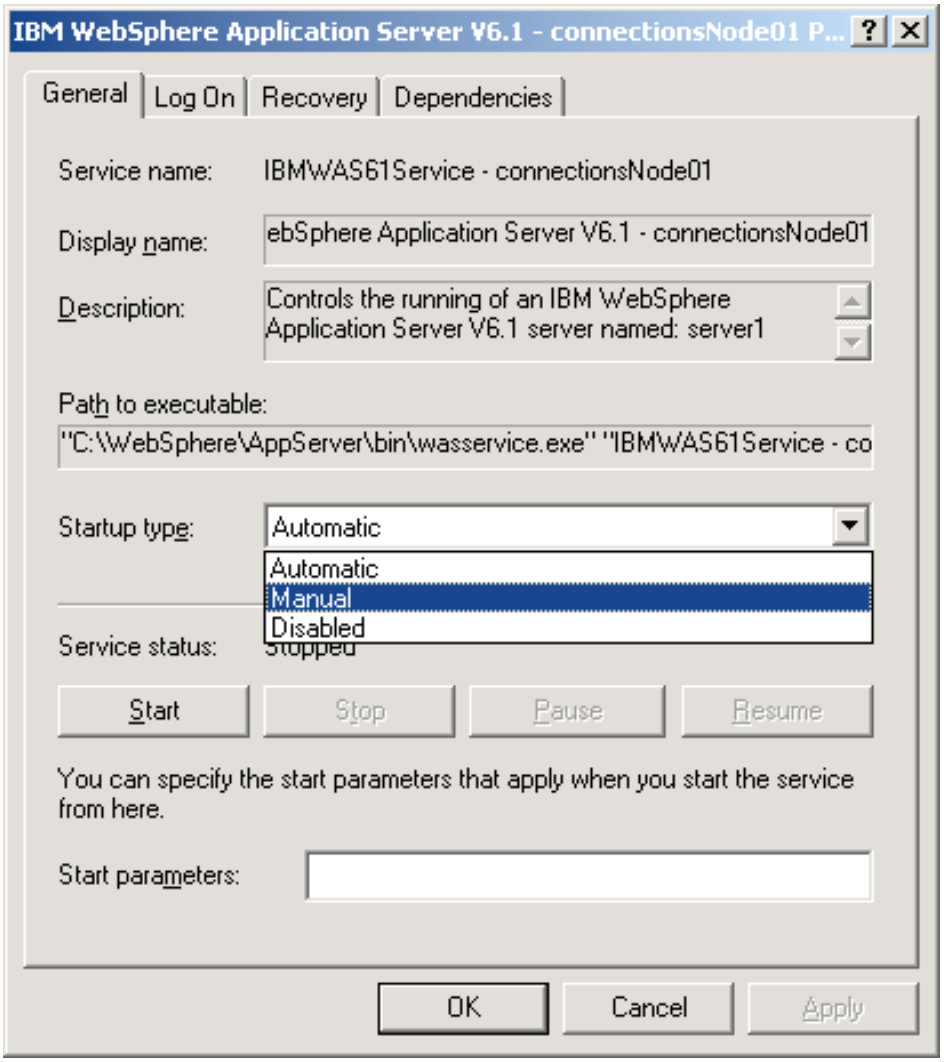
Set WebSphere server1 startup to manual.

Click Start -> Control Panel -> Administrative Tools -> Services

Scroll down to IBM WebSphere Application Server 6.1 – `<hostname>Node01`



Right click on this service, click properties and set the Startup type to Manual.



Click OK.

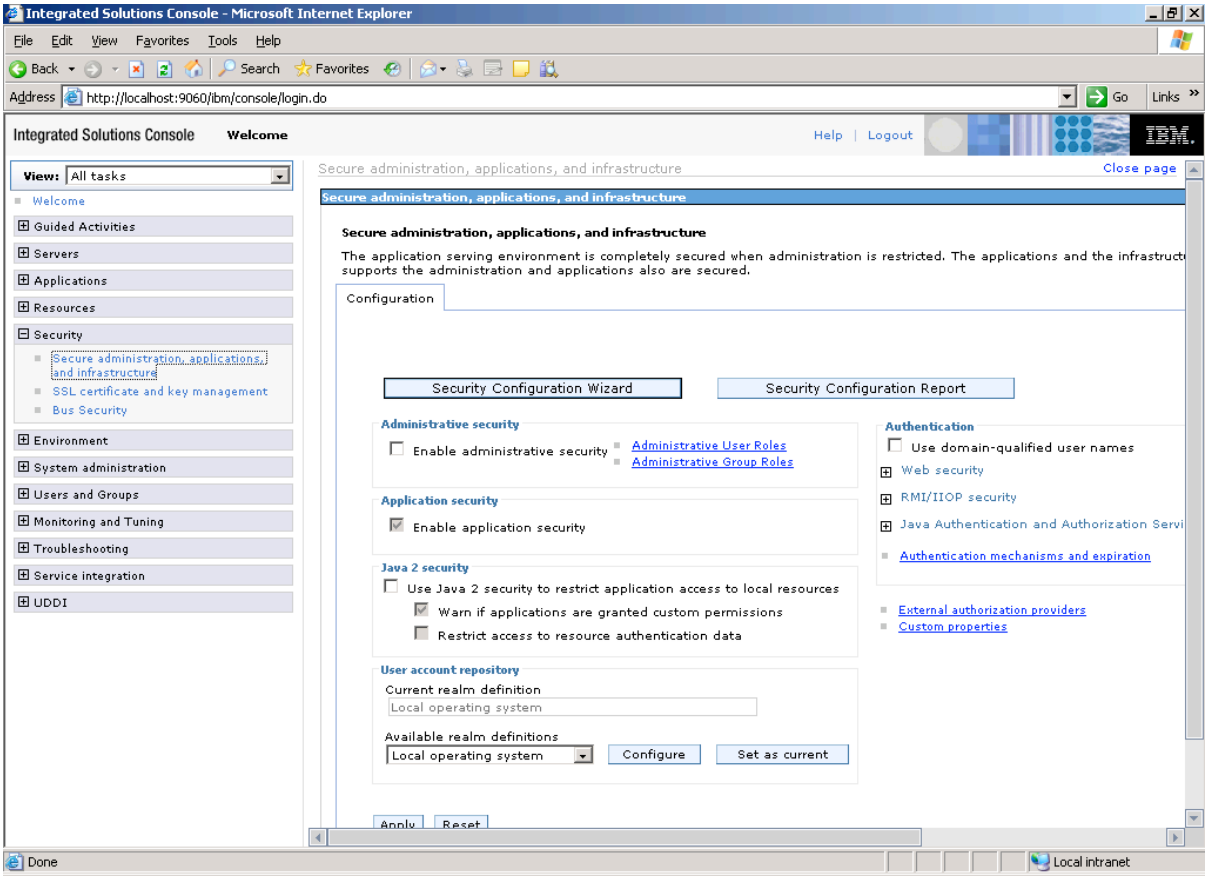
Right click the service again and click Start.

Configure WebSphere for Federated Repositories

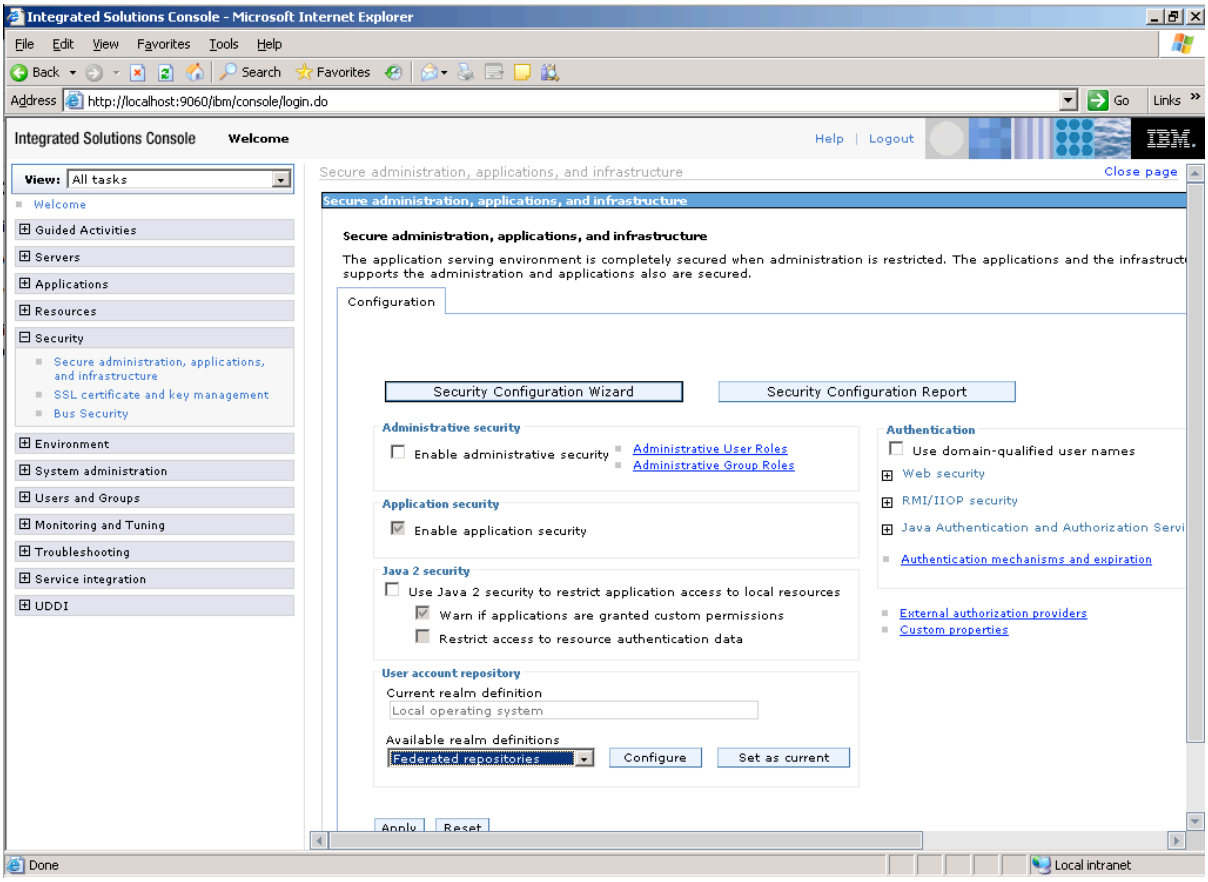
Once the service is started click Start -> All Programs -> IBM WebSphere -> Application Server 6.1 -> Profiles -> AppSrv1 -> Administrative Console.

Do not enter a user ID - just click Log In

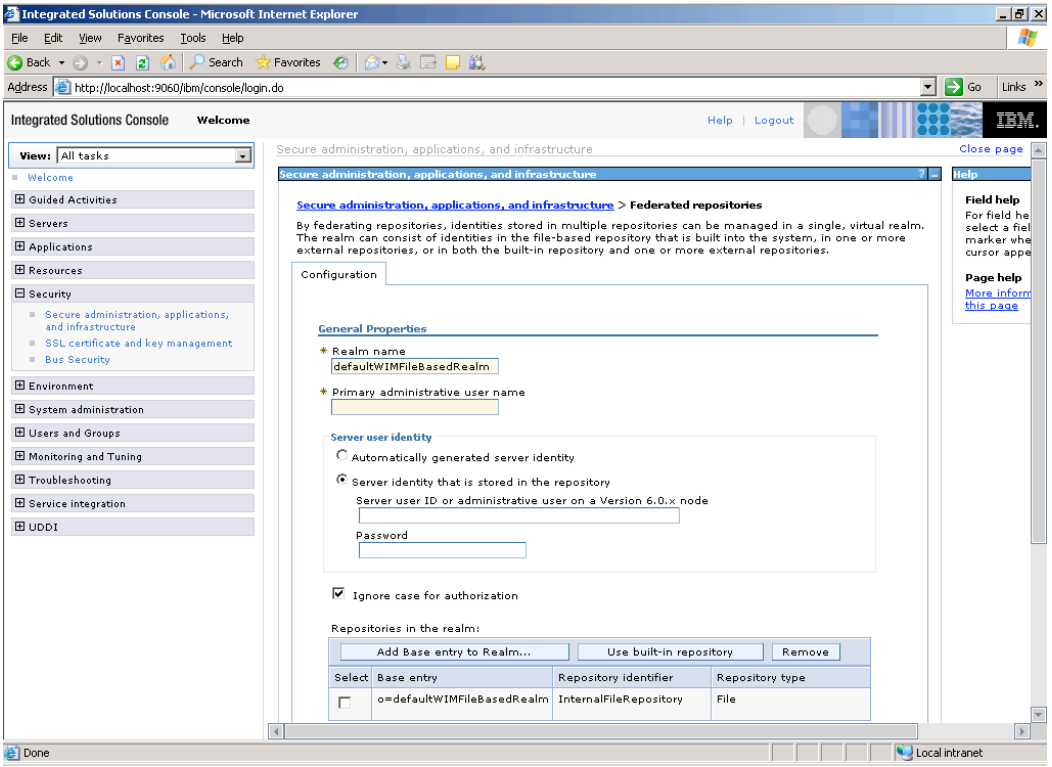
On the left hand side click Security -> Secure administration, applications and infrastructure



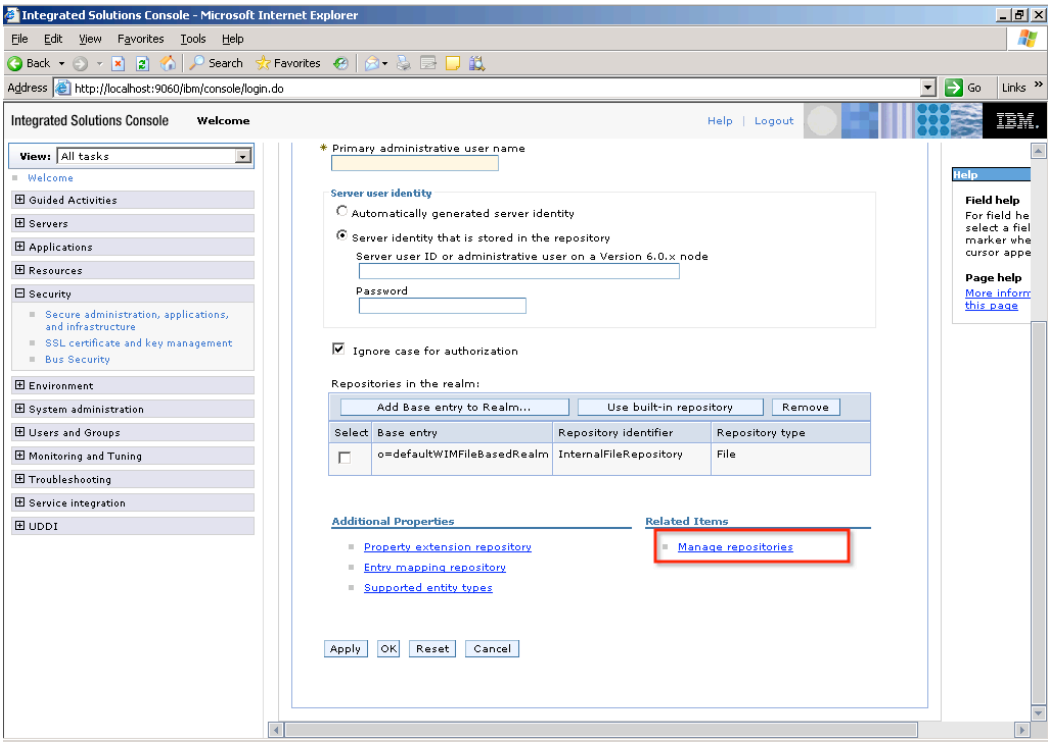
In available realm definitions change from Local Operating System to Federated Repositories

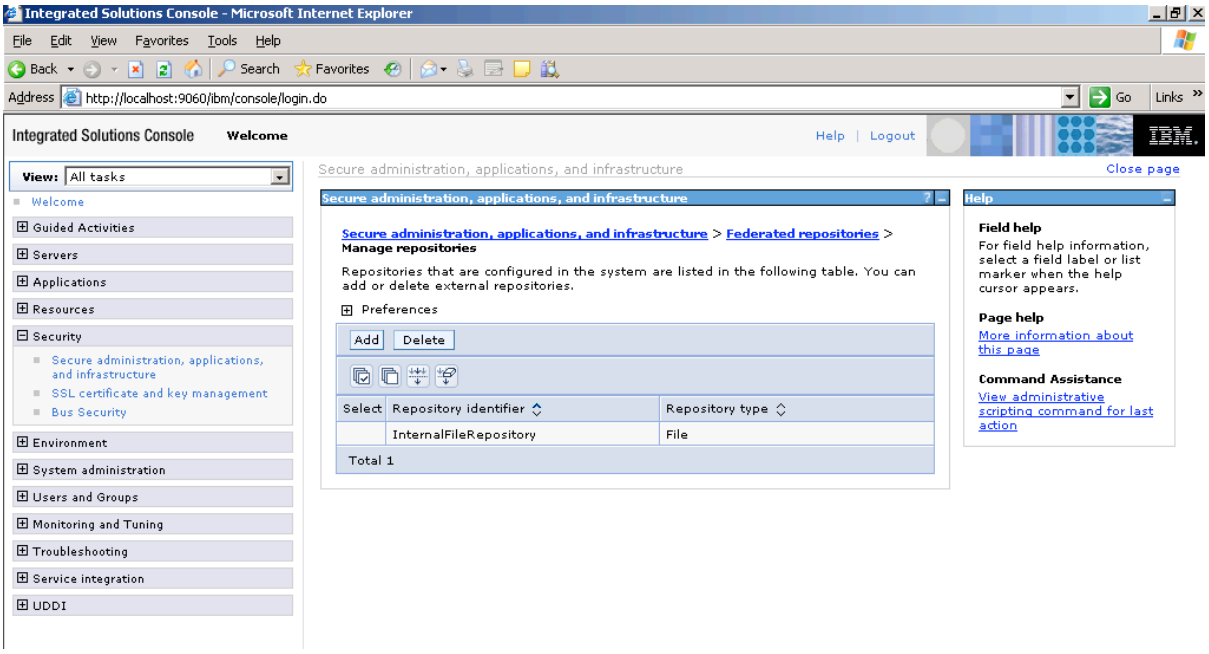


Click Configure next to Federated Repositories



Click Manage Repositories at the bottom right of the screen (you may need to scroll down)





Click Add

Enter LDAP as Repository identifier

Enter `localhost` as the Primary host name.

Advanced: if installing across multiple systems use the LDAP server's hostname, not localhost

For Domino

Select IBM Lotus Domino version 6.5 as the Directory type (even though it is version 8!)

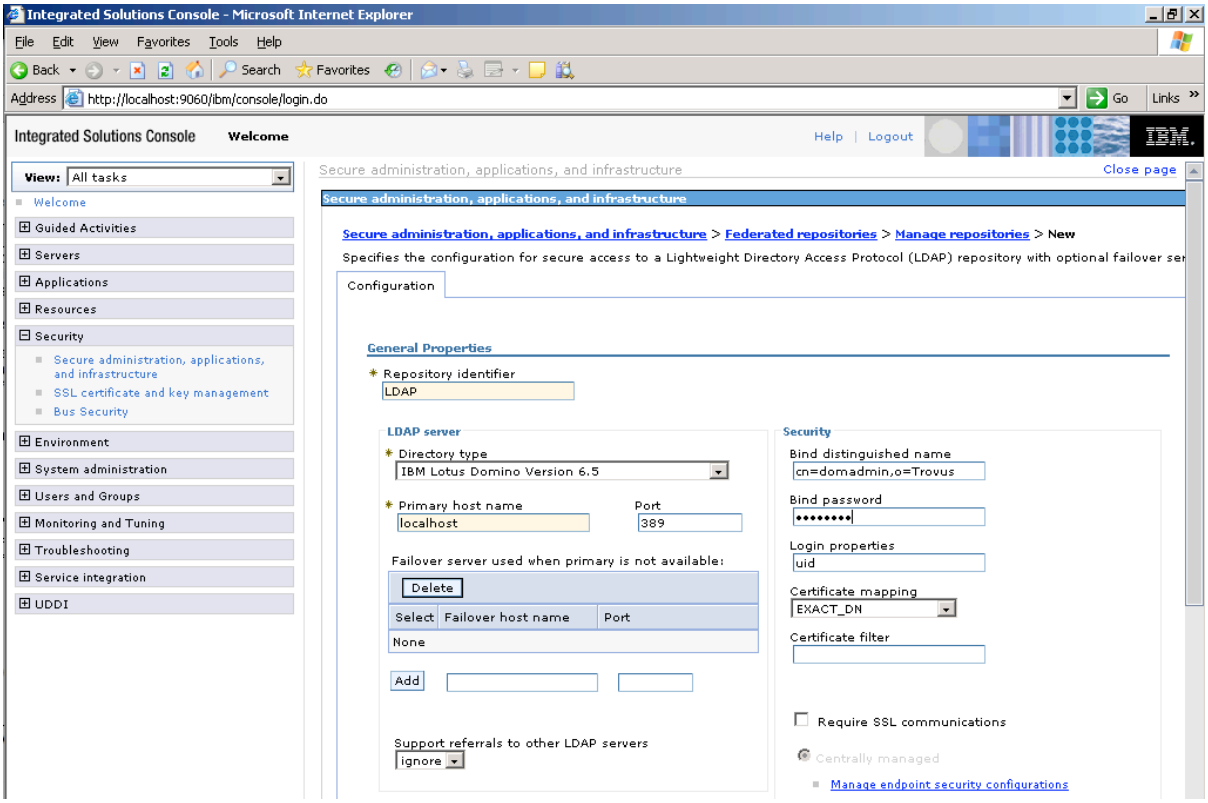
Bind distinguished name is cn=<*dominoadmin*>,o=<*orgname*>

Note that <*orgname*> is **case sensitive**.

For example, my setting is `cn=domadmin,o=Trovus`

The bind password is <*orgpwd*>

Here is a screen shot for Domino settings



For Active Directory:

Select Microsoft Windows Server 2003 Active Directory as the Directory type

Bind distinguished name is the format

`cn=<winadminuser>,cn=Users,dc=<domain1>,dc=<domain2>,...`

Where <domain1> = the first part of <*domain*> (eg trovus)

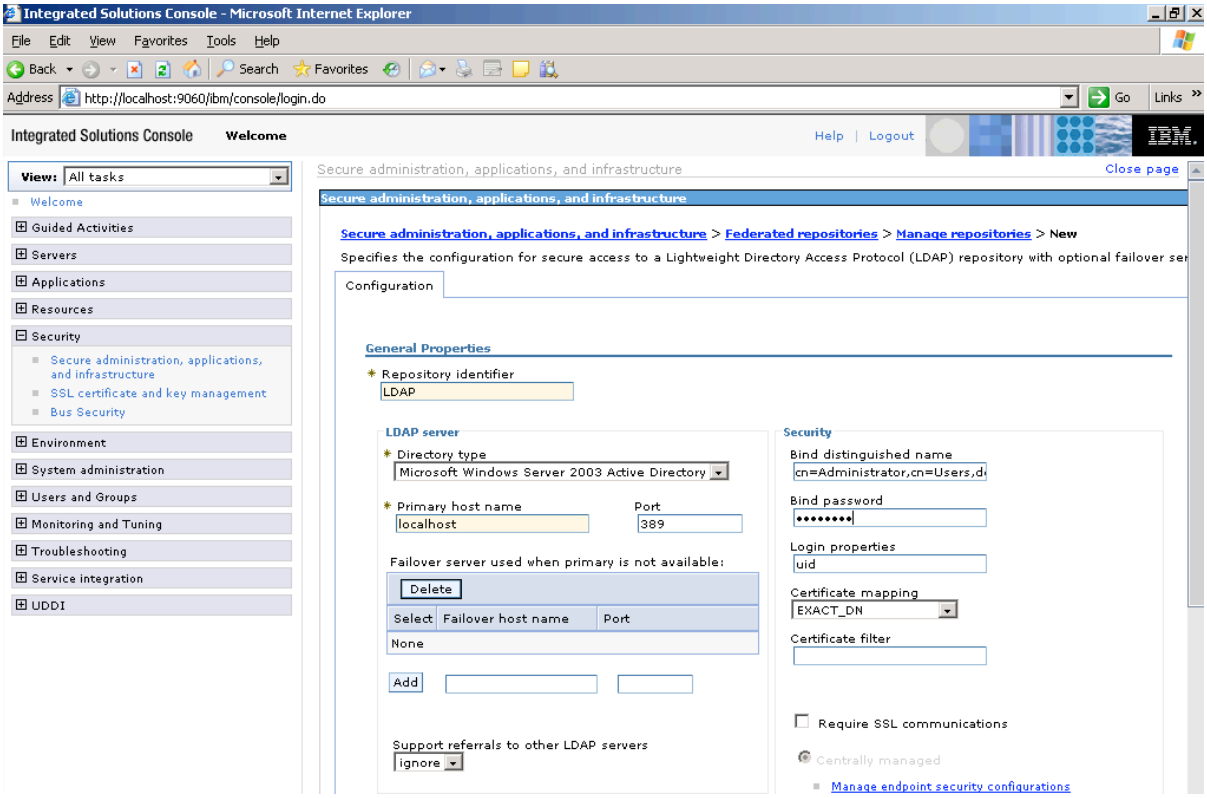
Where <domain2> = the second part of <*domain*> (eg co)

Where this continues until you have all *of* <*domain*> broken down.

For example, my setting is `cn=Administrator,cn=Users,dc=trovus,dc=co,dc=uk`

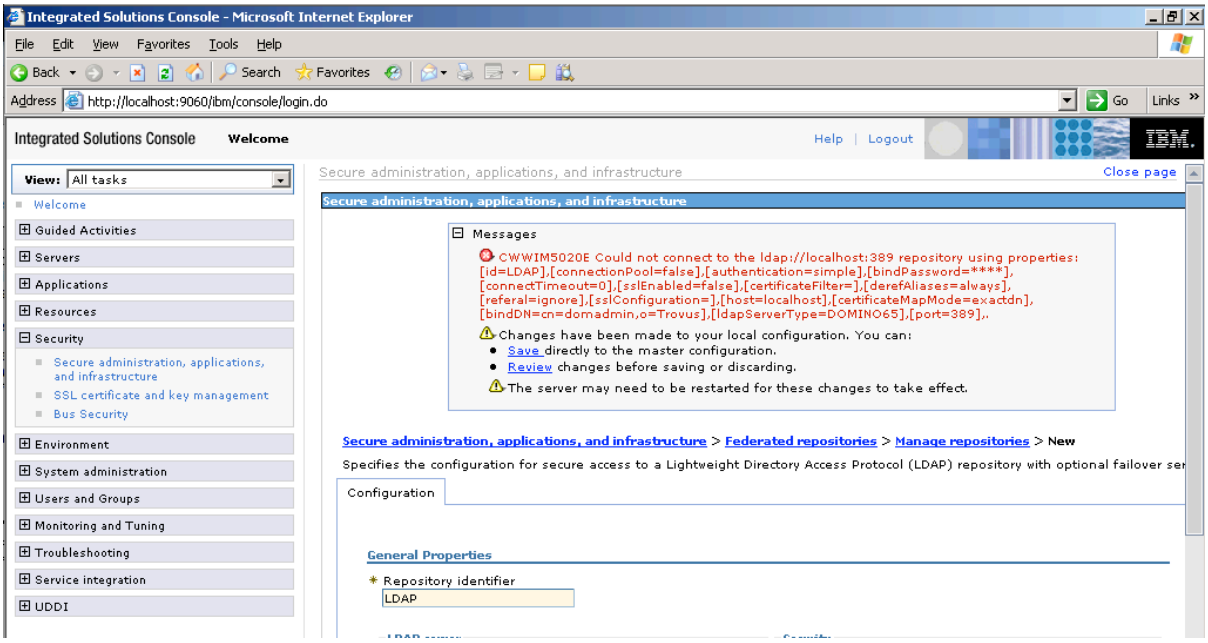
The Bind password is <*winadminpwd*>

Here is a screen shot for Active Directory settings

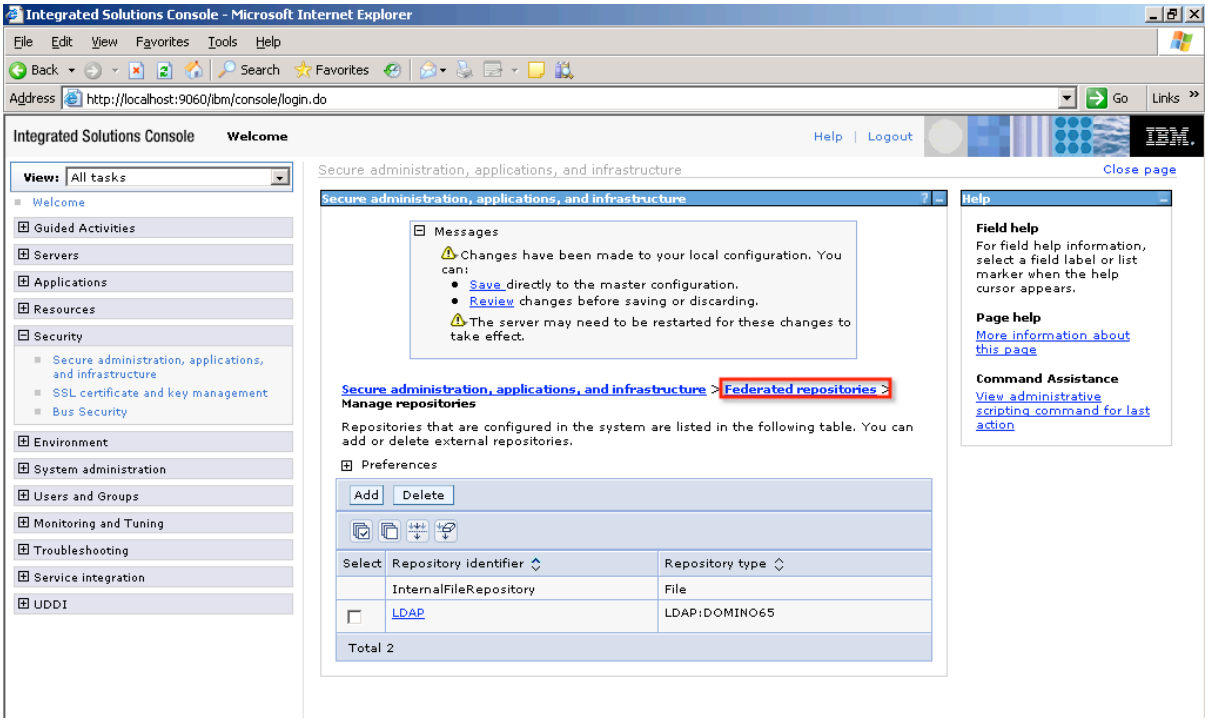


For both Active Directory and Domino

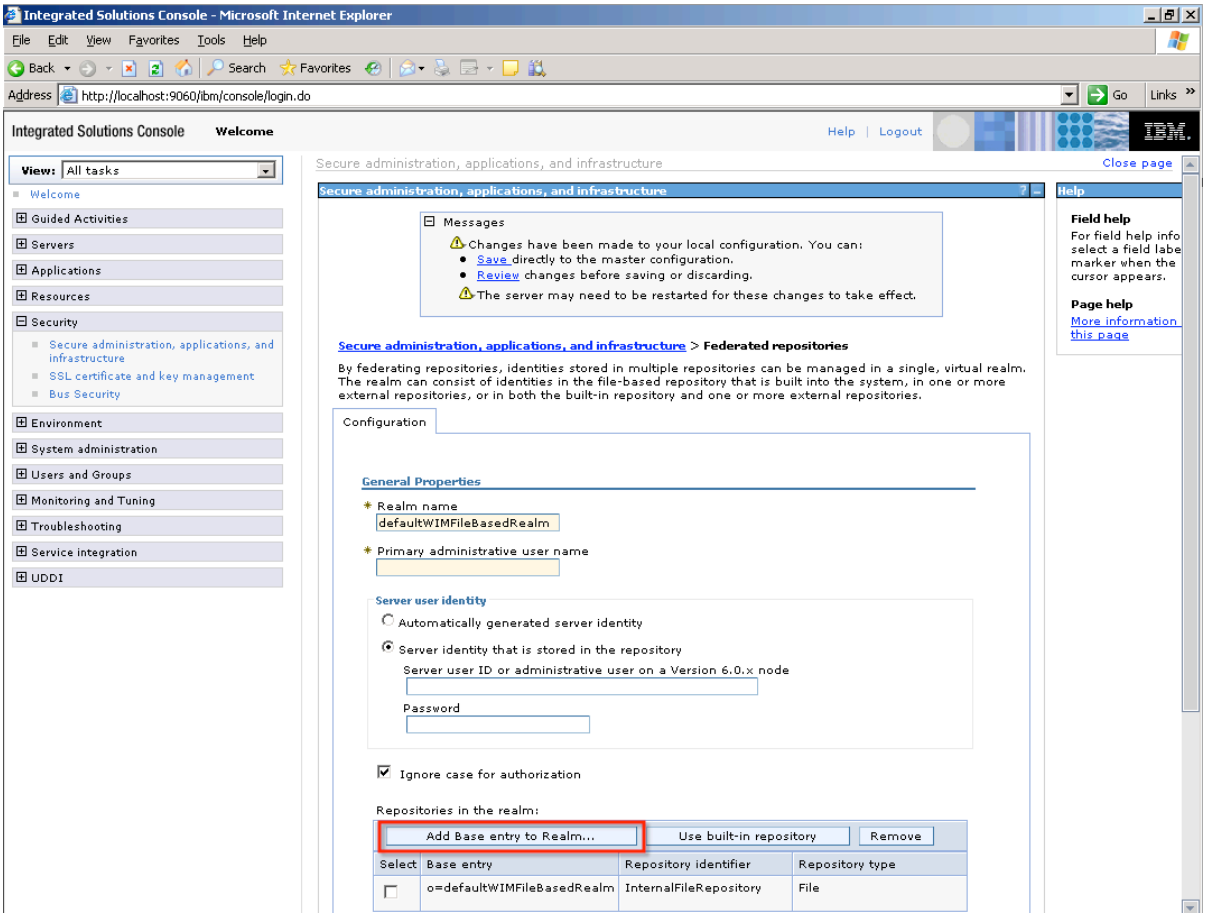
Click Apply. If there are no errors click OK. If there is a problem you will see a message like this. If you see this double check your entries (most likely cause is an invalid form of the Bind distinguished name) and try again.



When you have no red text after pressing Apply, press OK you will see this screen (note if using Active Directory it will not say LDAP:DOMINO65)



Click Federated Repositories on the breadcrumb trail



Click the button Add Base entry to Realm…

In the drop down ensure the LDAP repository is selected.

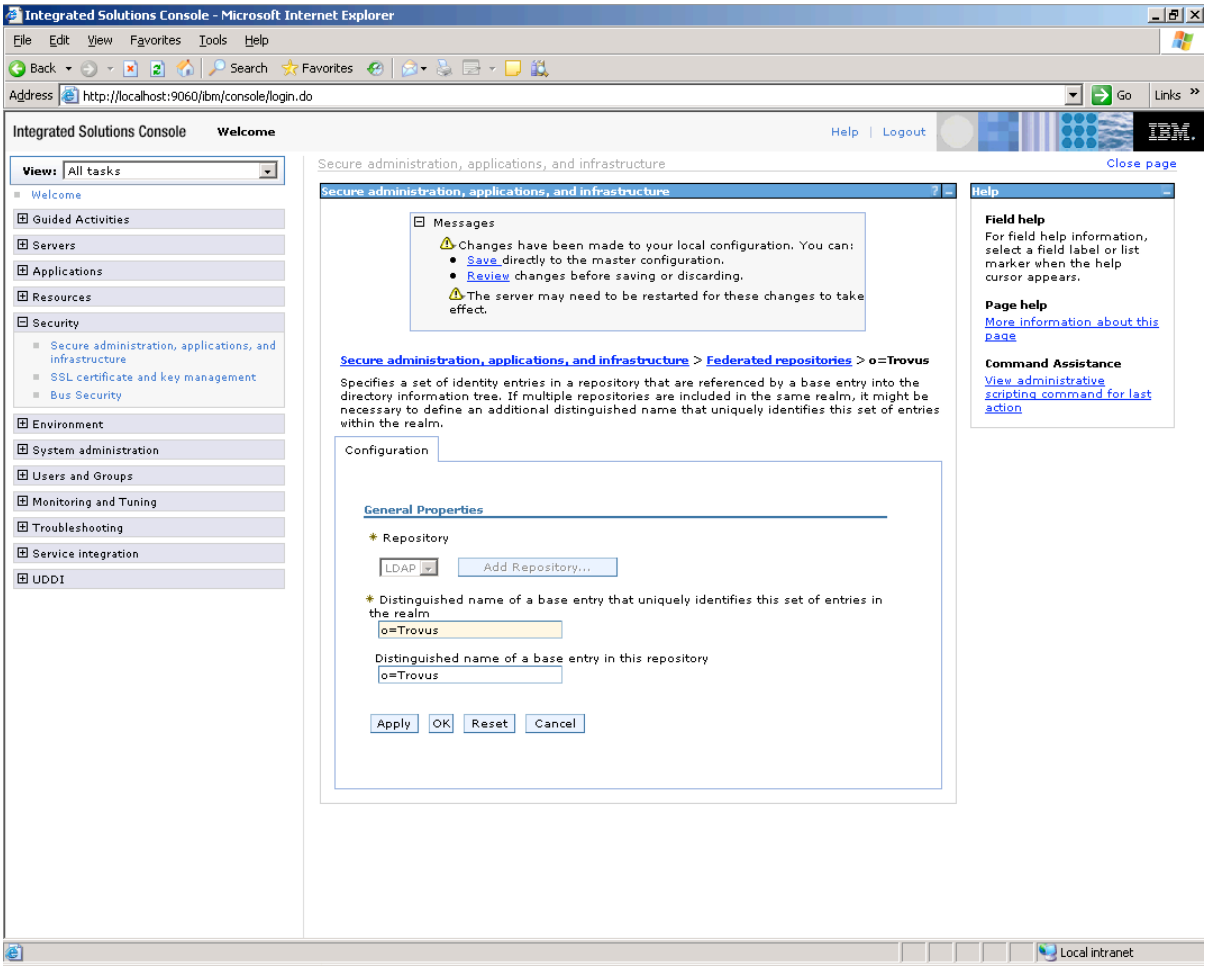
For Domino

Distinguished name of a base entry that uniquely identifies this set of entries in the realm is `o=<orgname>` eg `o=Trovus.`

Distinguished name of a base entry in this repository is the same.

Remember that <*orgname*> is case sensitive.

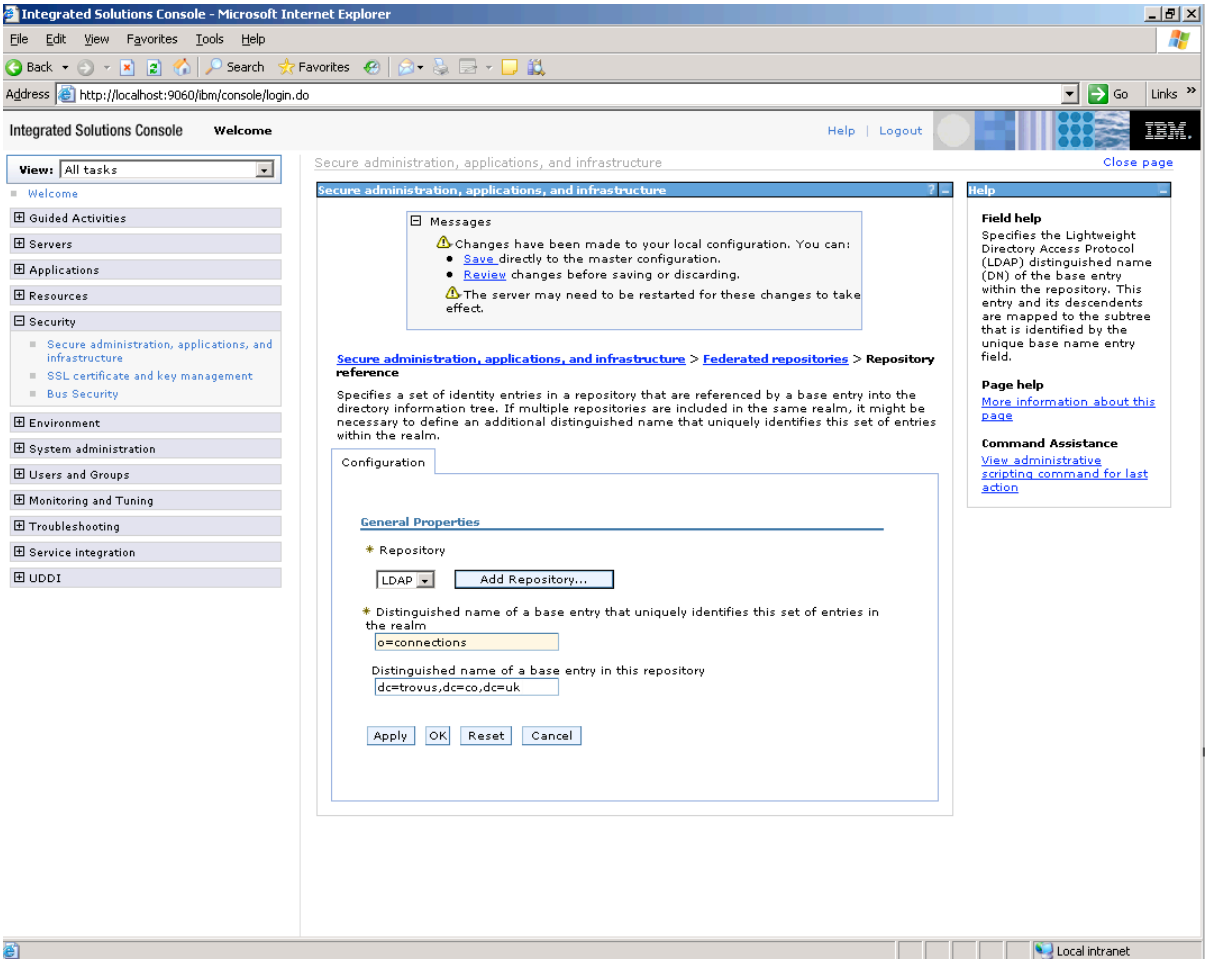
Here is a screenshot for Domino



For Active Directory

Distinguished name of a base entry that uniquely identifies this set of entries in the realm is `o=<hostname>` eg `o=connections.`

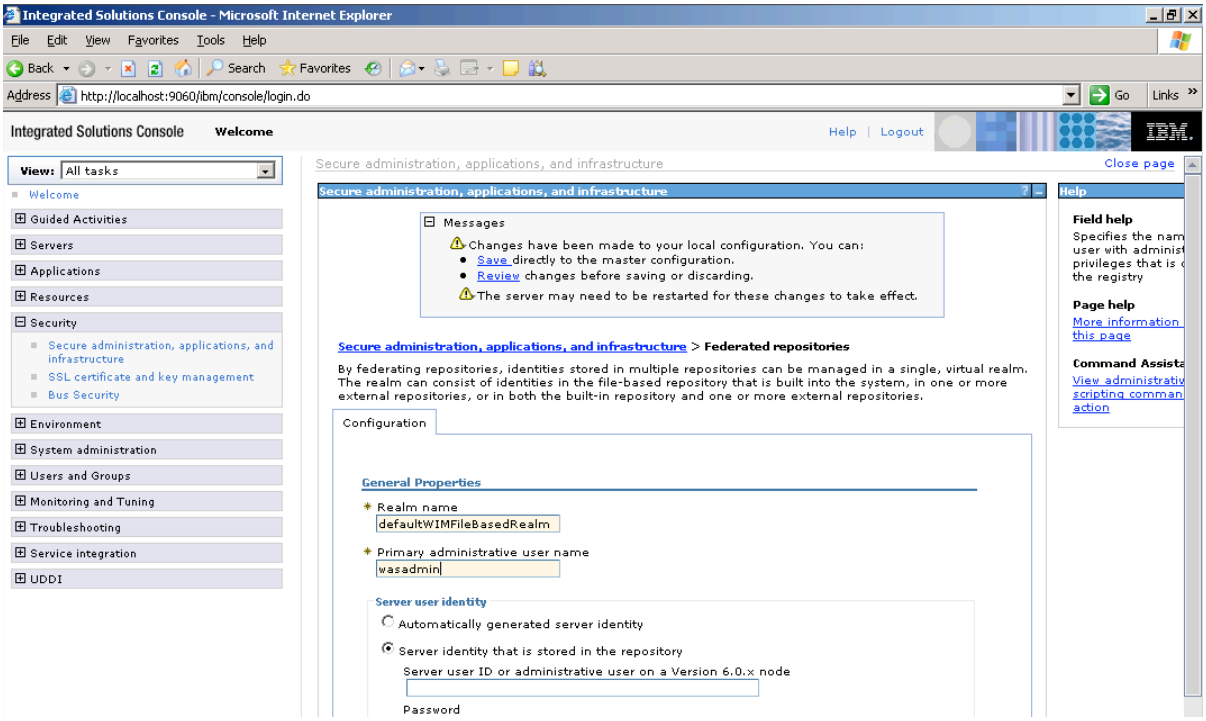
Distinguished name of a base entry in this repository is *<domain>* broken out into 'dc=' again. Eg `dc=trovus,dc=co,dc=uk.`



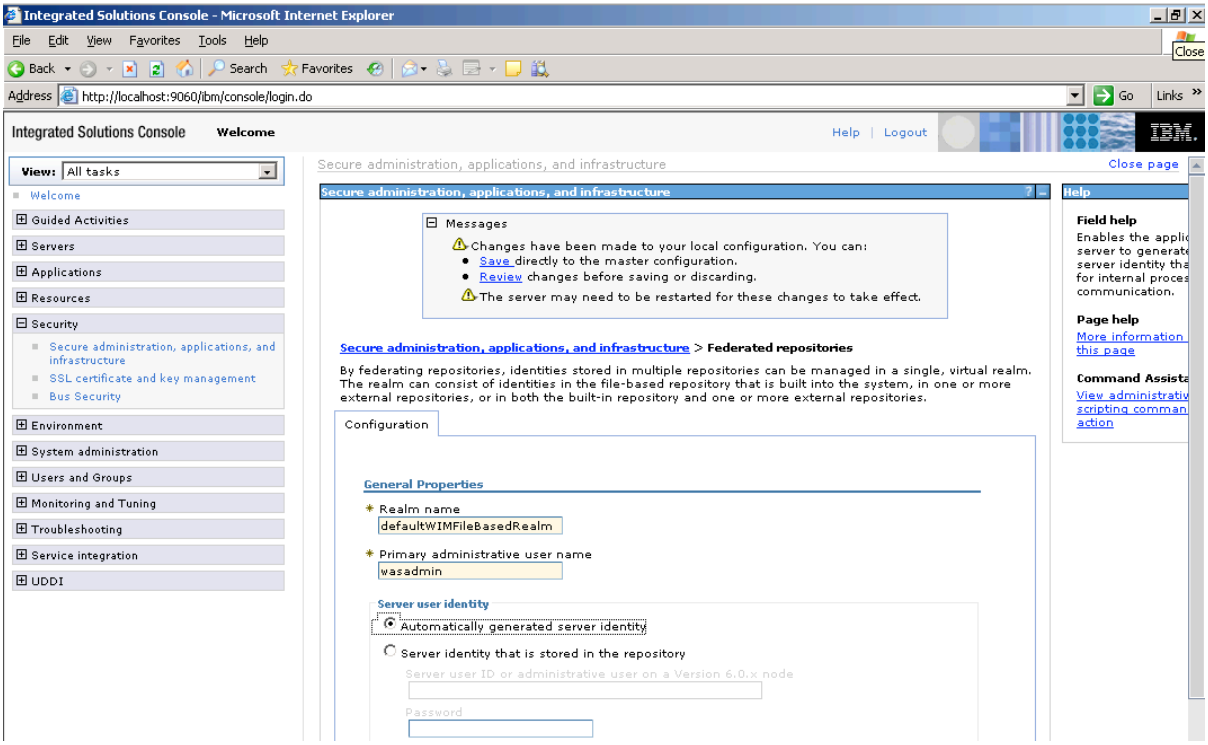
For both Active Directory and Domino

Click OK

Enter *<wasadminuser>* as the Primary administrative name. This name must **not** exist in Active Directory or Domino directory or be an existing name in the operating system user registry.



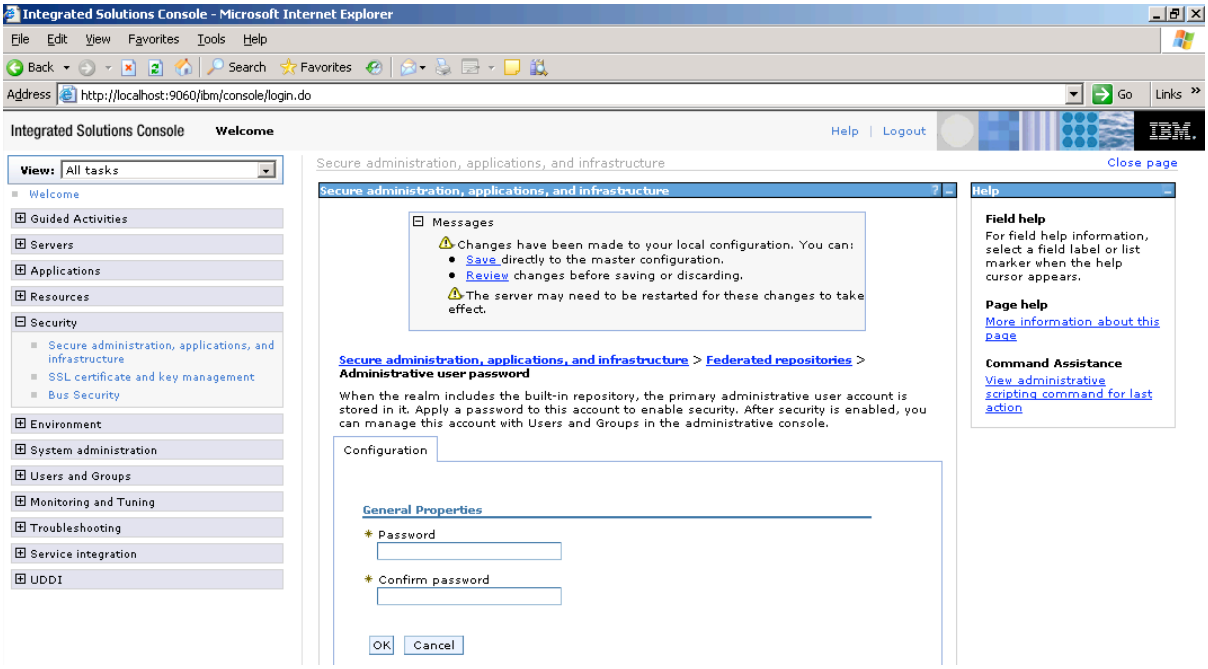
Select Automatically generated server identity



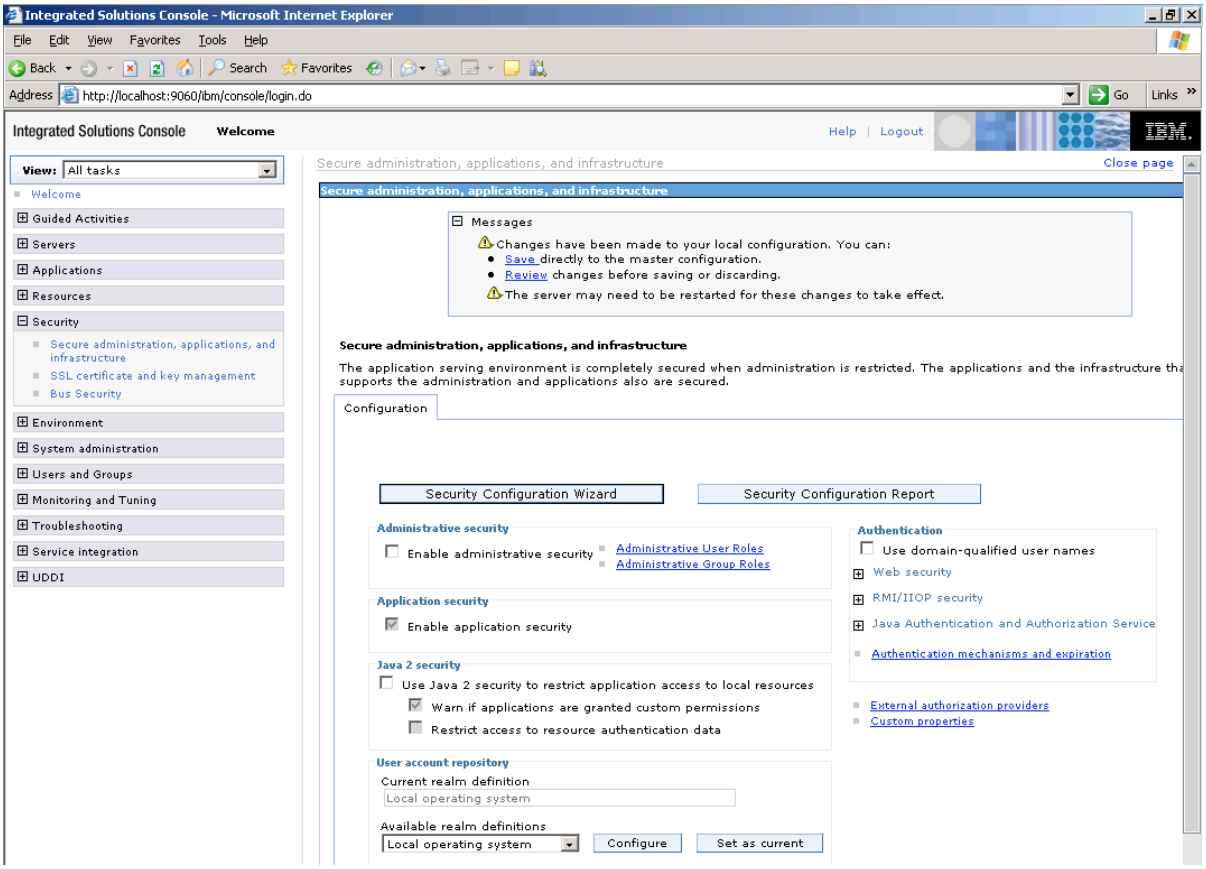
Click OK

Enter <*wasadminpwd*> for the password.

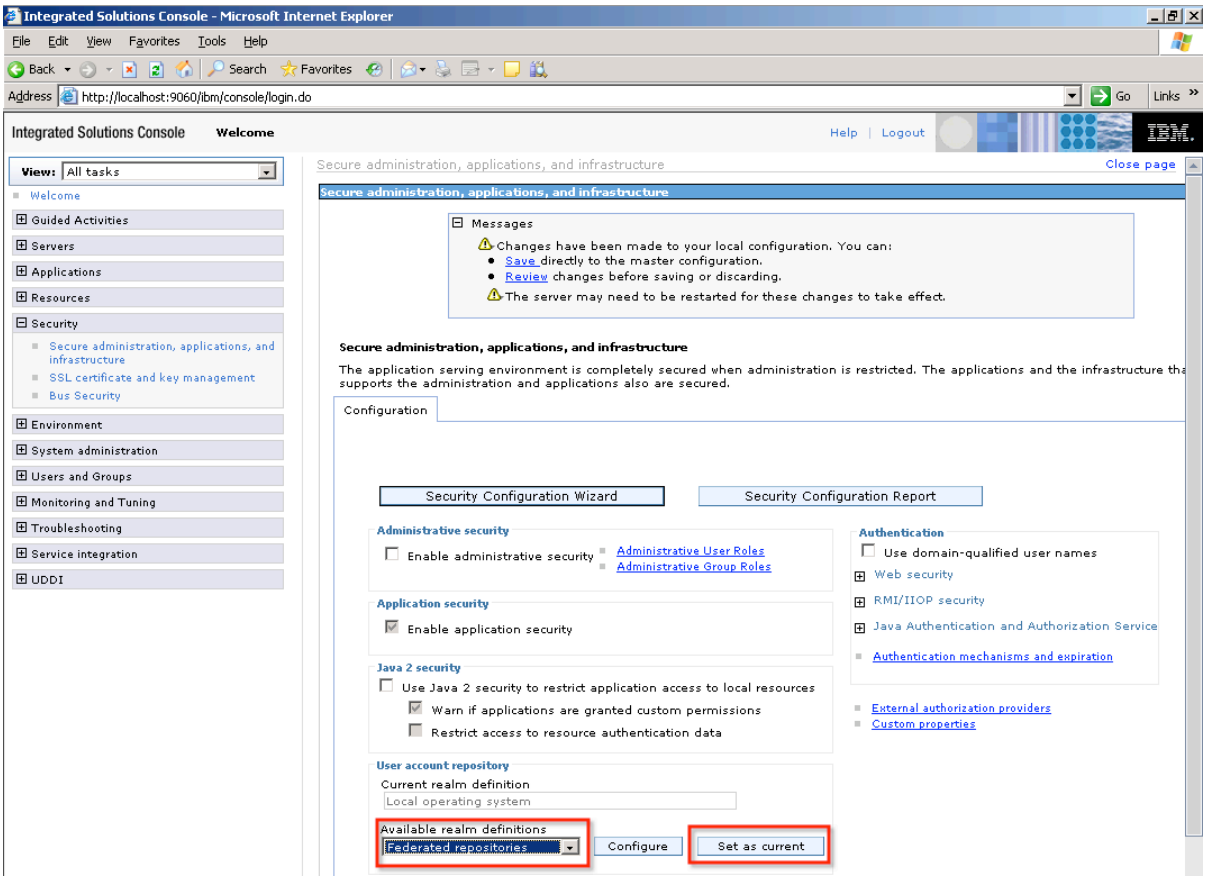
Note - <*wasadminuser*> and <*wasadminpwd*> must be used when stopping the server from the command line.



Click OK. You will return to this screen.

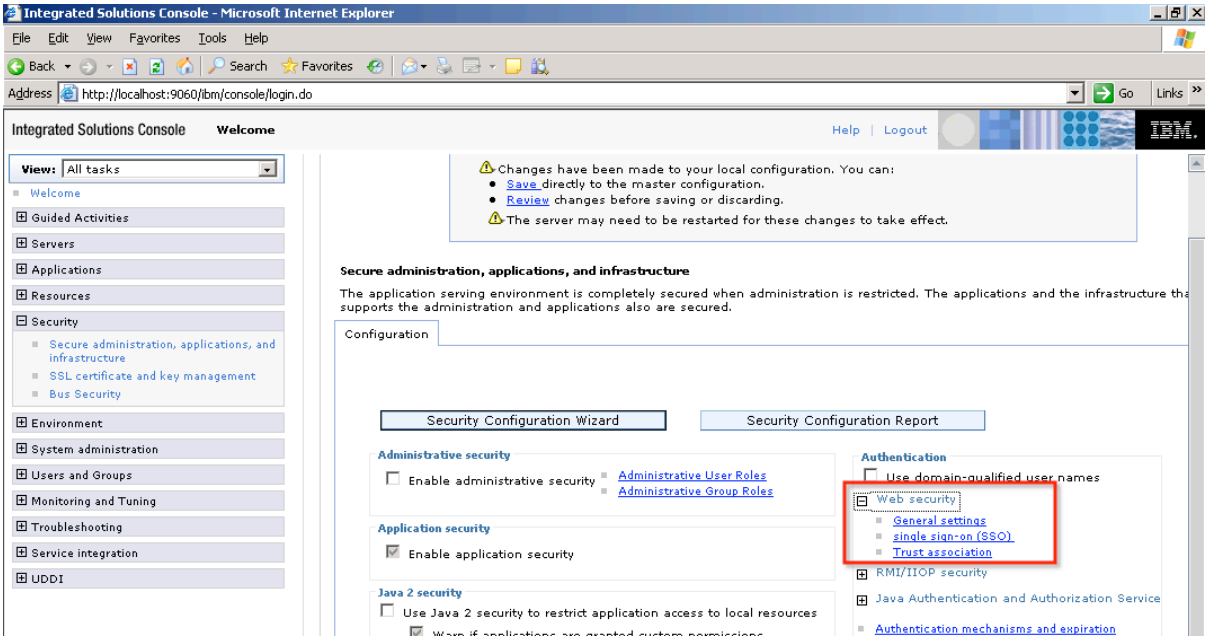


Change Available realm definitions back to Federated Repositories.



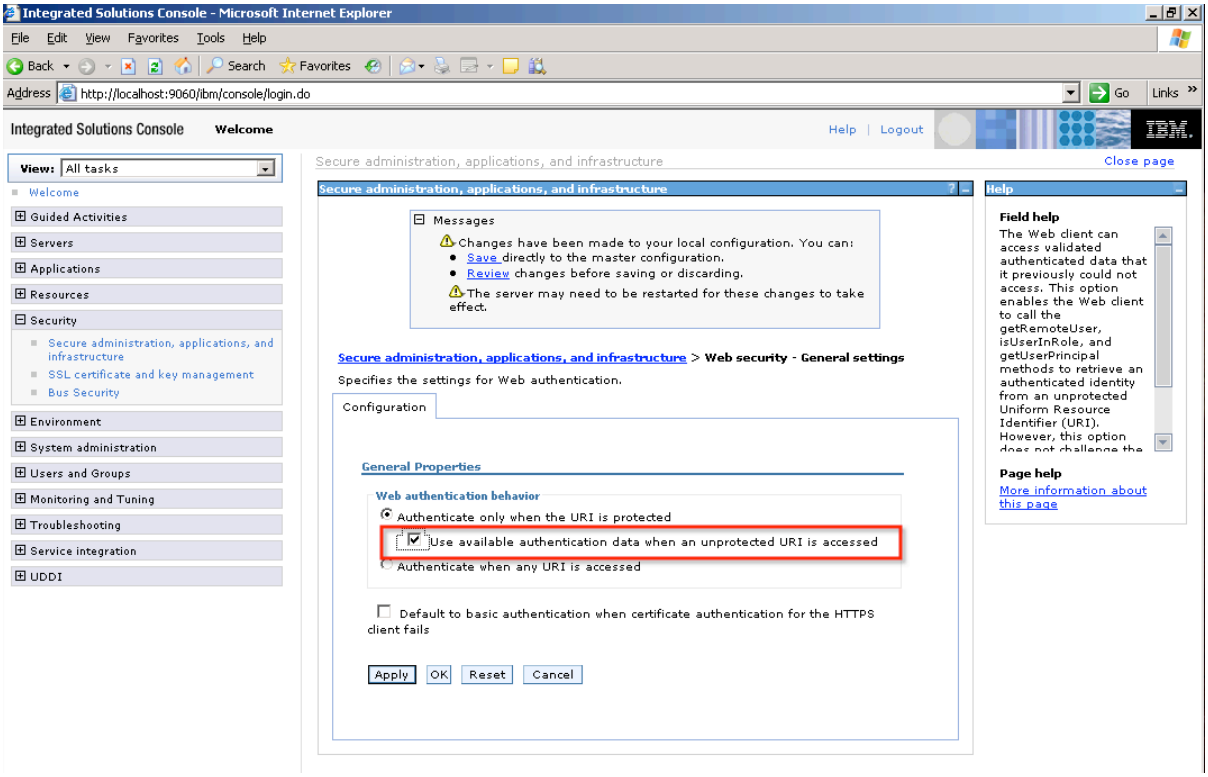
Click Set as current. The page will refresh with Federated repositories as the Current realm definiton.

Expand Web Security on the right hand side.



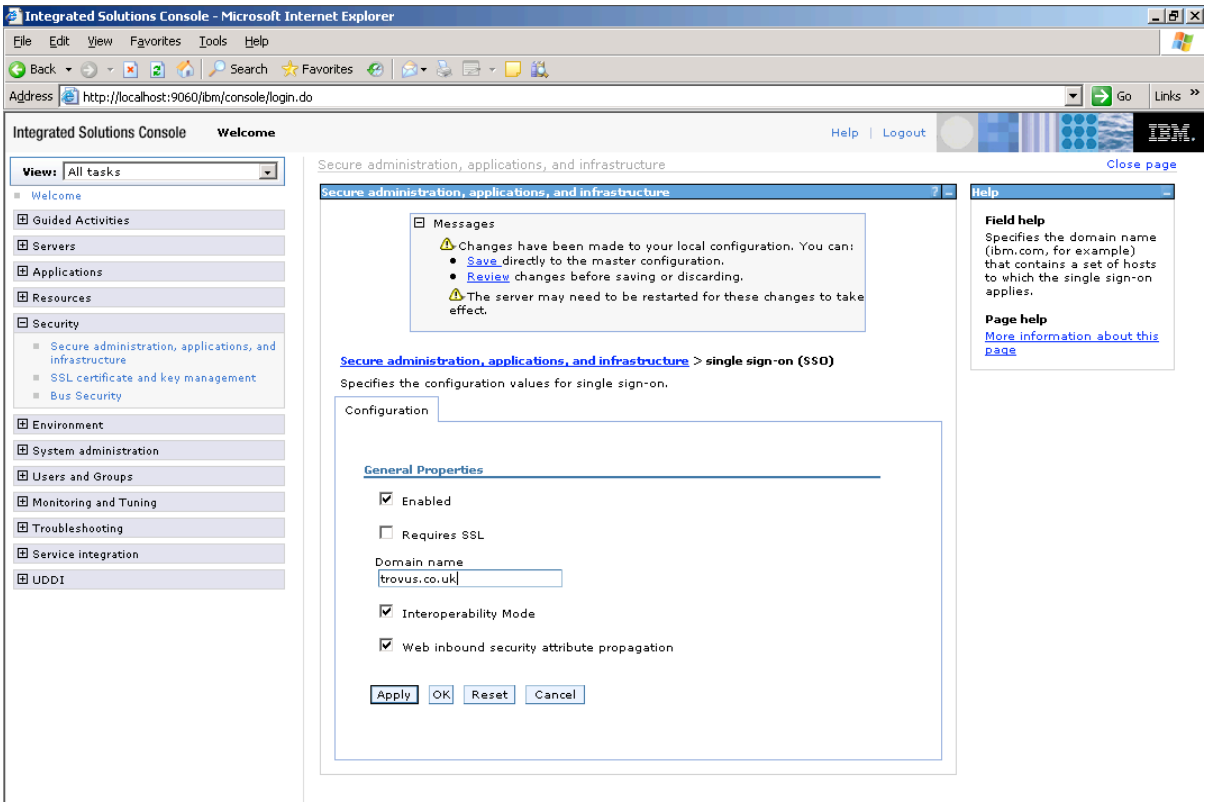
trovus
Rewarding dialogue

Click General Settings. Check Use available authentication data when an unprotected URI as accessed



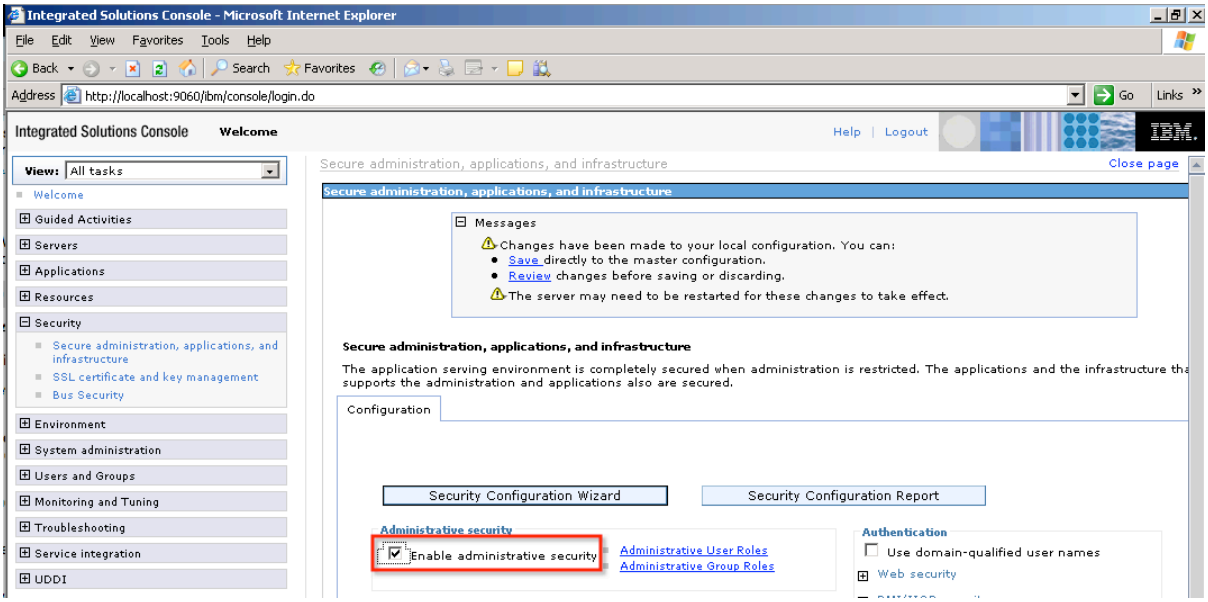
Click OK

Click Web Security again and click single sign-on (SSO). Enter <*domain*> for Domain name

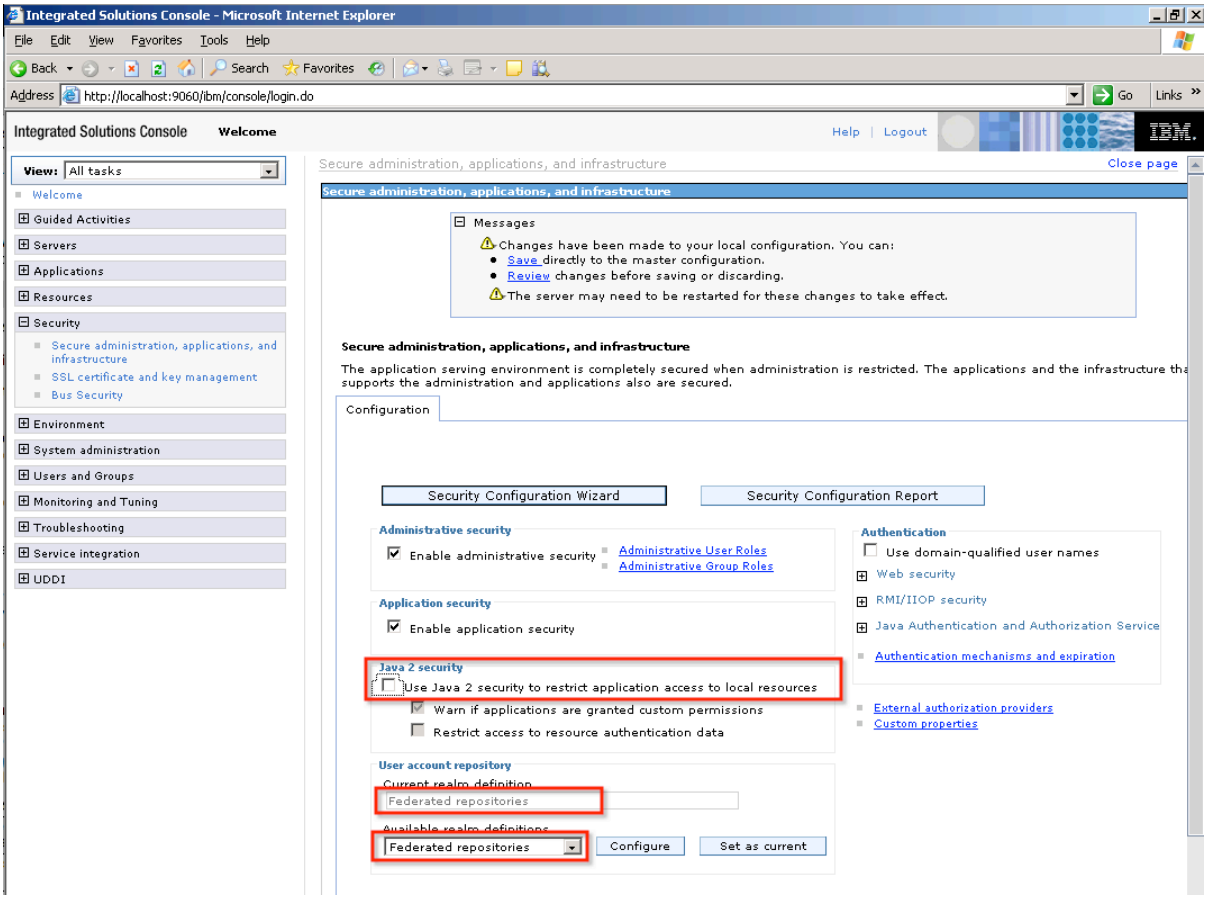


Click OK

Click Enable administrative security

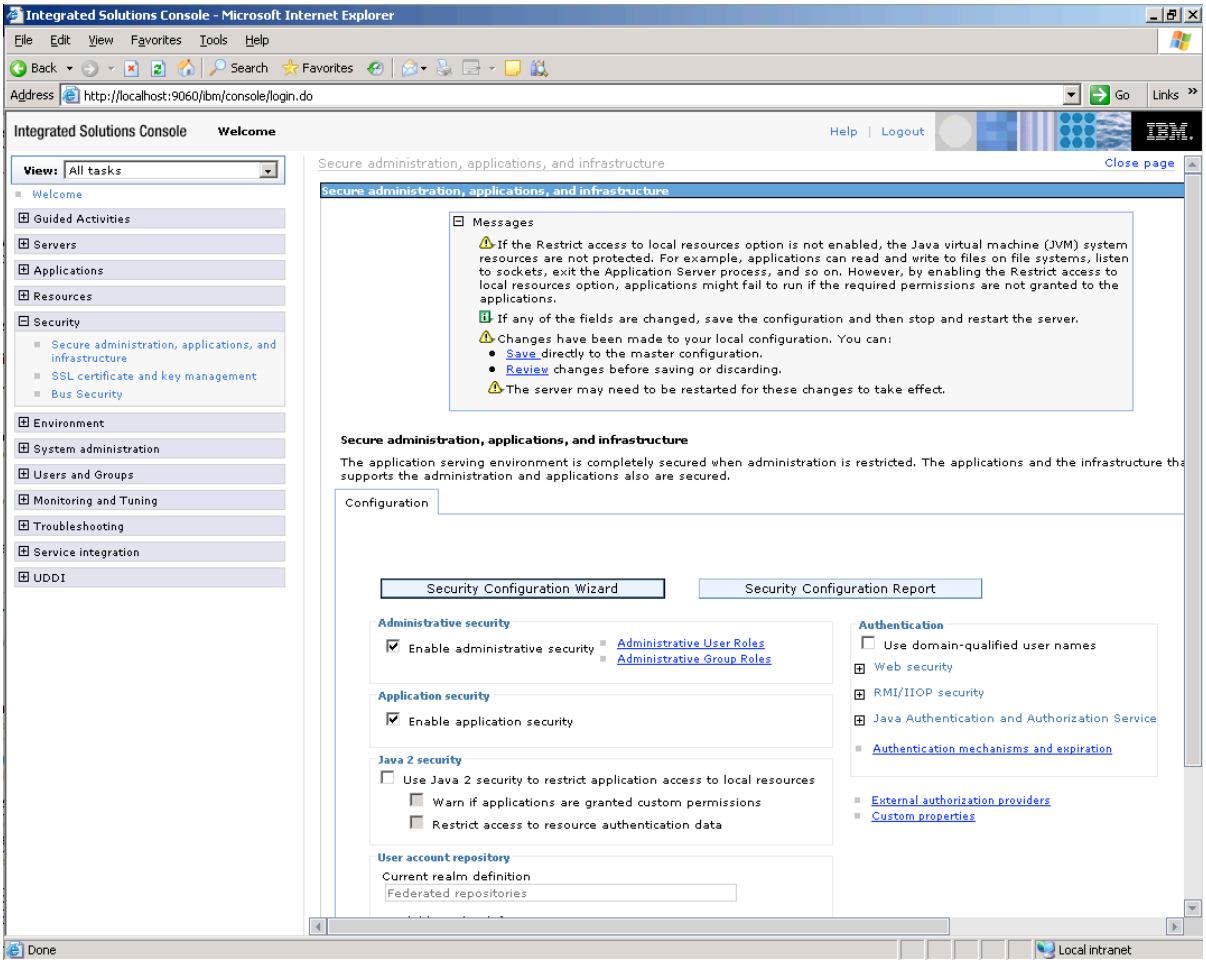


Deselect Use Java 2 security to restrict application access to local resources. Ensure your screen looks like the screen below (especially that Federated Repositories is selected under Current Realm definition and well as Available realm definitions).

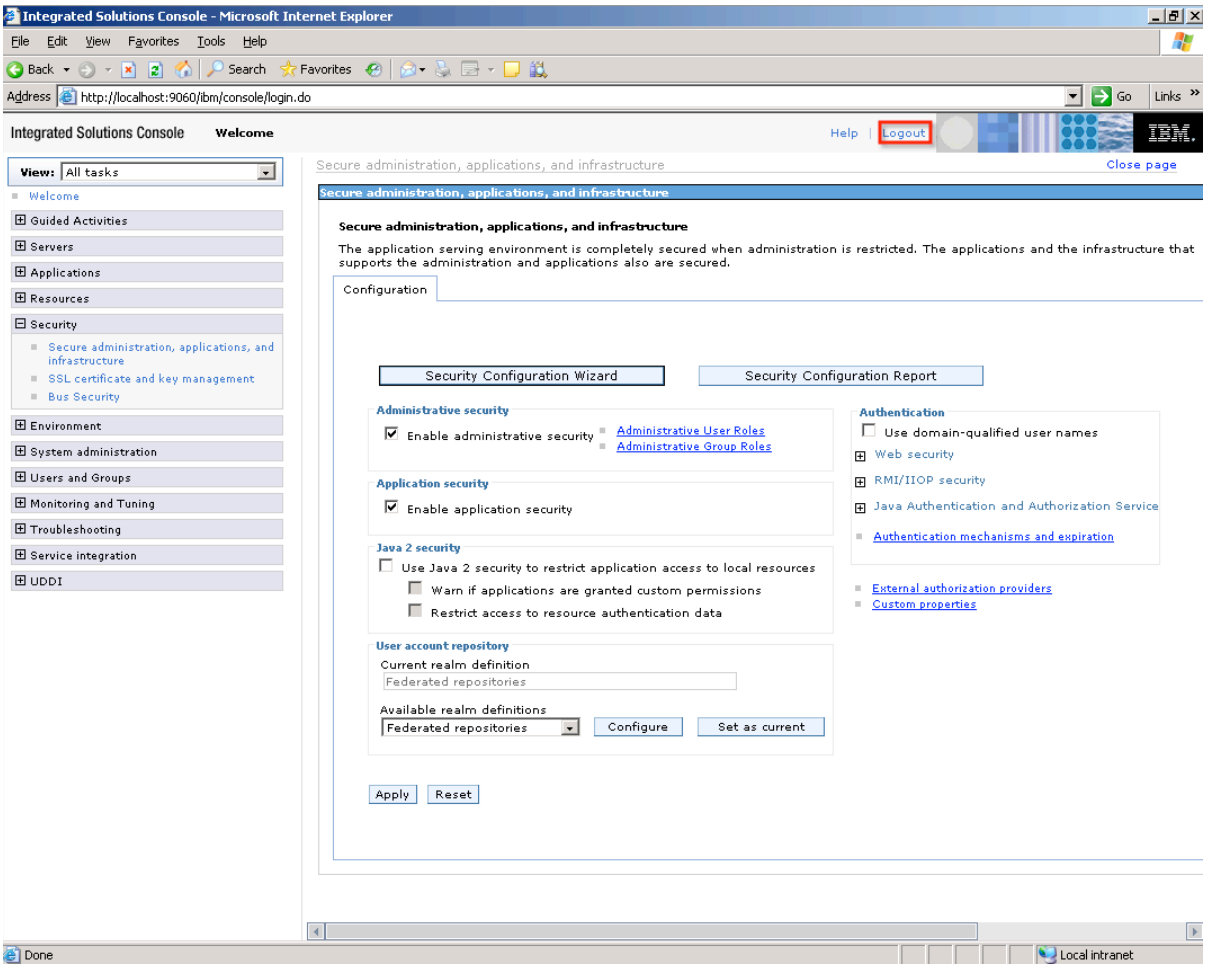


Press Apply

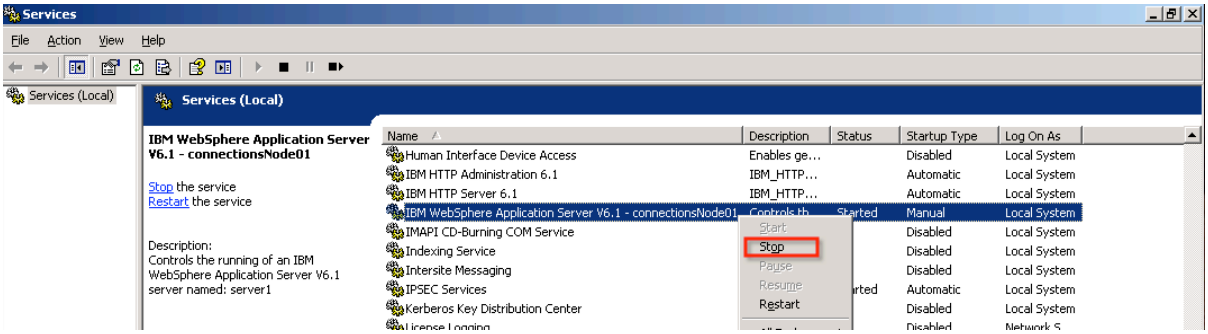
Your screen should look like this



Click Save at the top of the screen. You will see this screen. Click Logout and close the browser.



From the services screen right click WebSphere Application Server 6.1 - *<hostname>*Node01 and select stop.



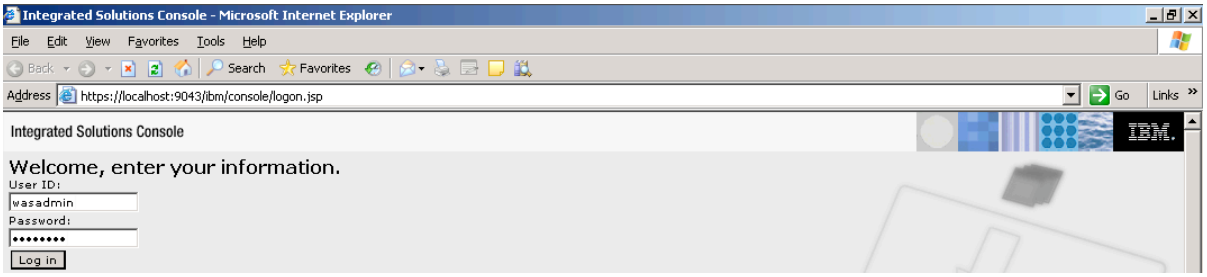
Note - this is the last time you will stop WebSphere from the services screen. It now needs a password – therefore you will run the following from *<wasinstall>*\bin

`stopserver server1 –username <wasadminuser> –password <wasadminpwd>`

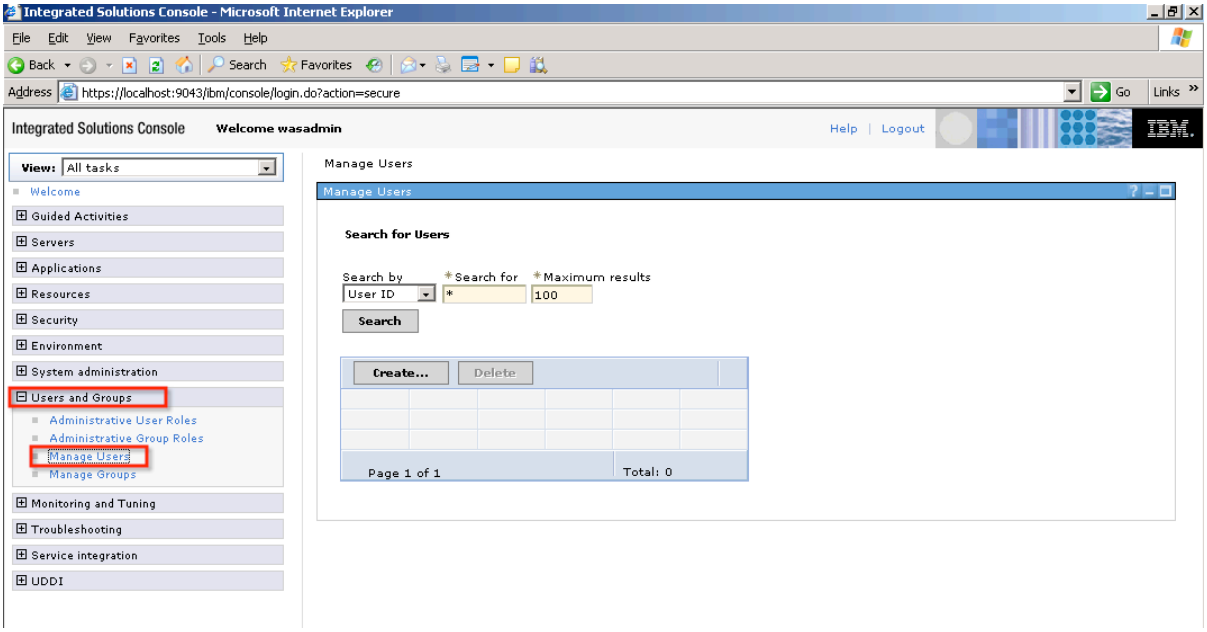
From the Services screen right click IBM WebSphere Application Server 6.1- <hostname>Node01 and select start

Relauch the Administrative console from the Start menu. You may receive warnings about viewing a page over a secure connections - accept these

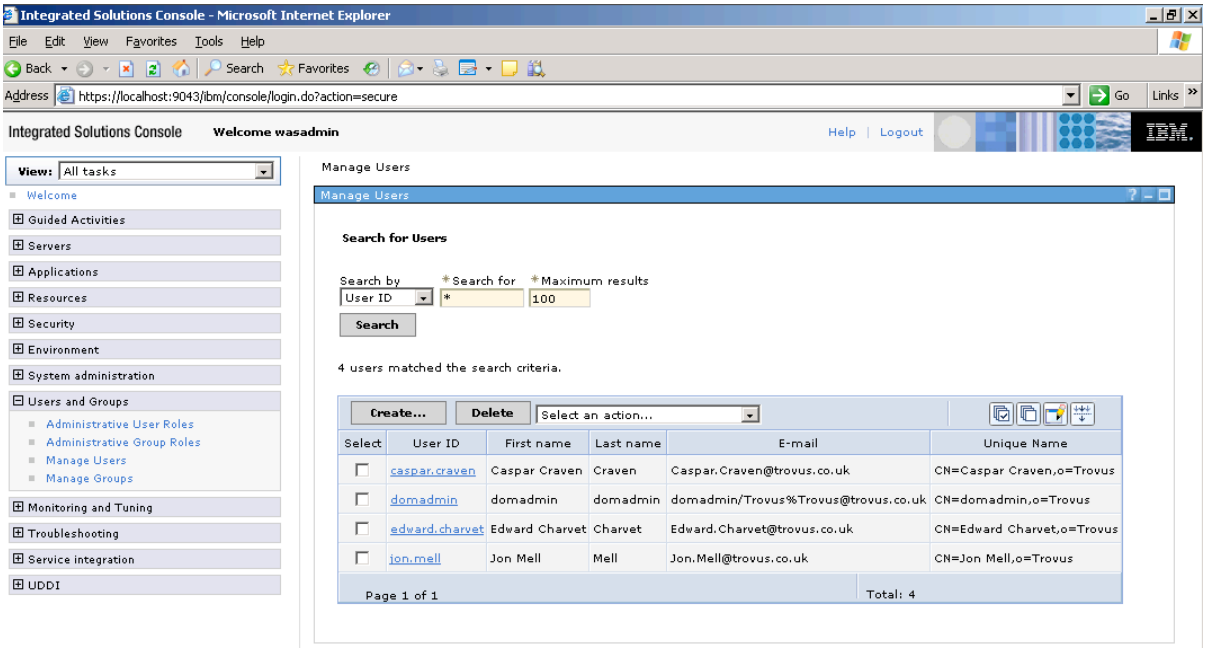
Now you will need to enter *<wasadminuser>* and *<wasadminpwd>* to log in



Click Users and Groups then Manage Users

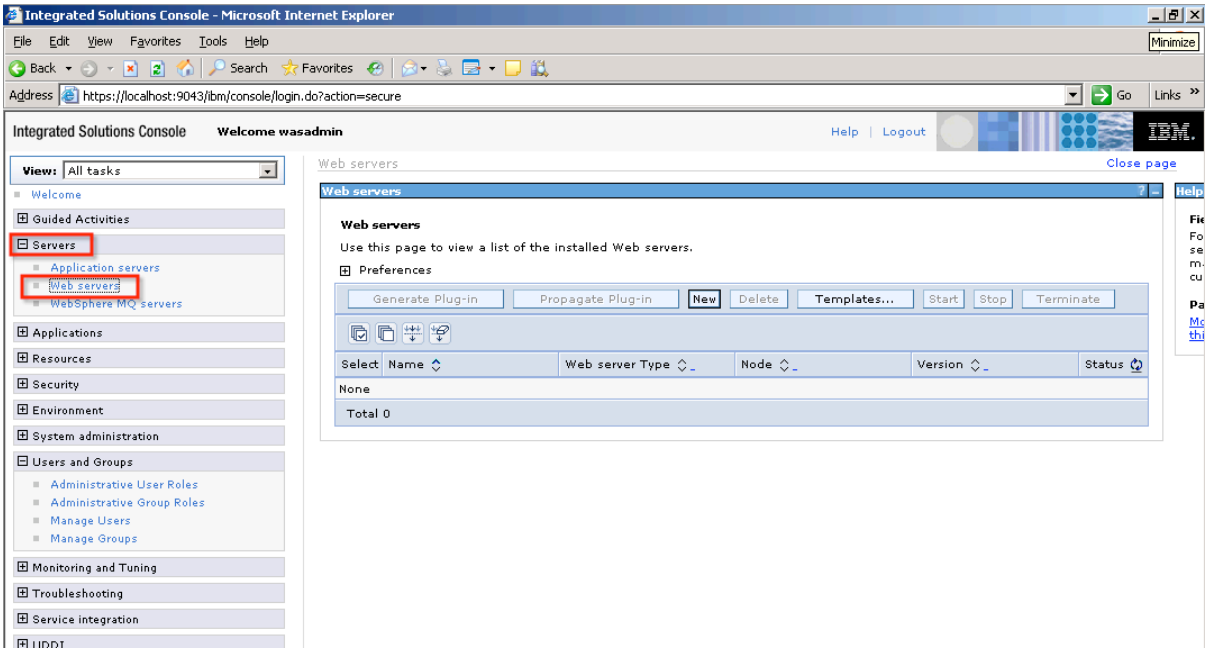


Click Search. If the setup has been successful you should see your LDAP users in either Active Directory or Domino. This confirms Federated Repositories setup has been successful.



Configure WebSphere to manage HTTP Server

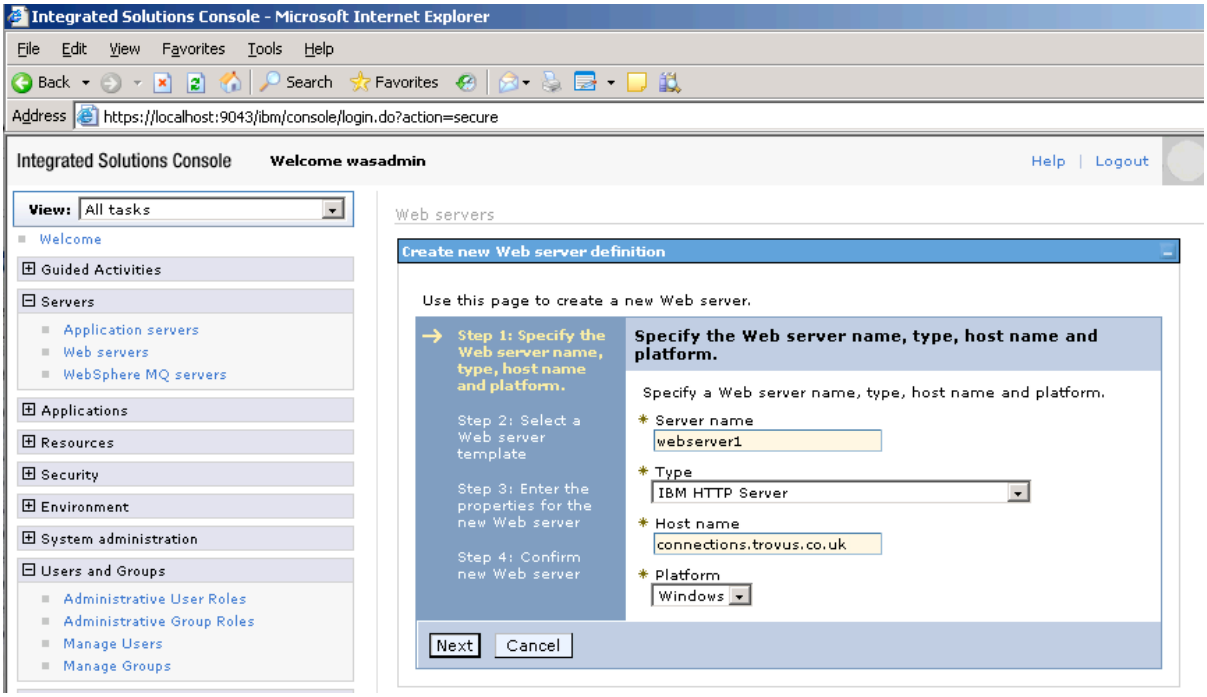
On the left hand side click Servers and Web servers



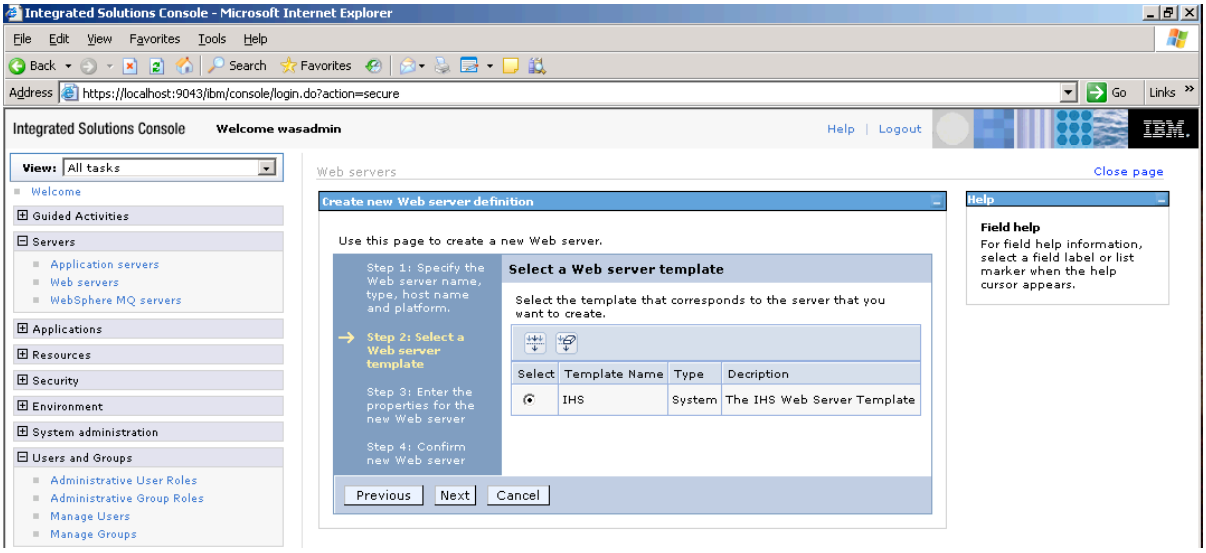
Click New.

Enter webserver1 for Server name and *<fullyqualifiedname>* for host name.

Advanced: if the web server is on a separate machine use the hostname of the web server.

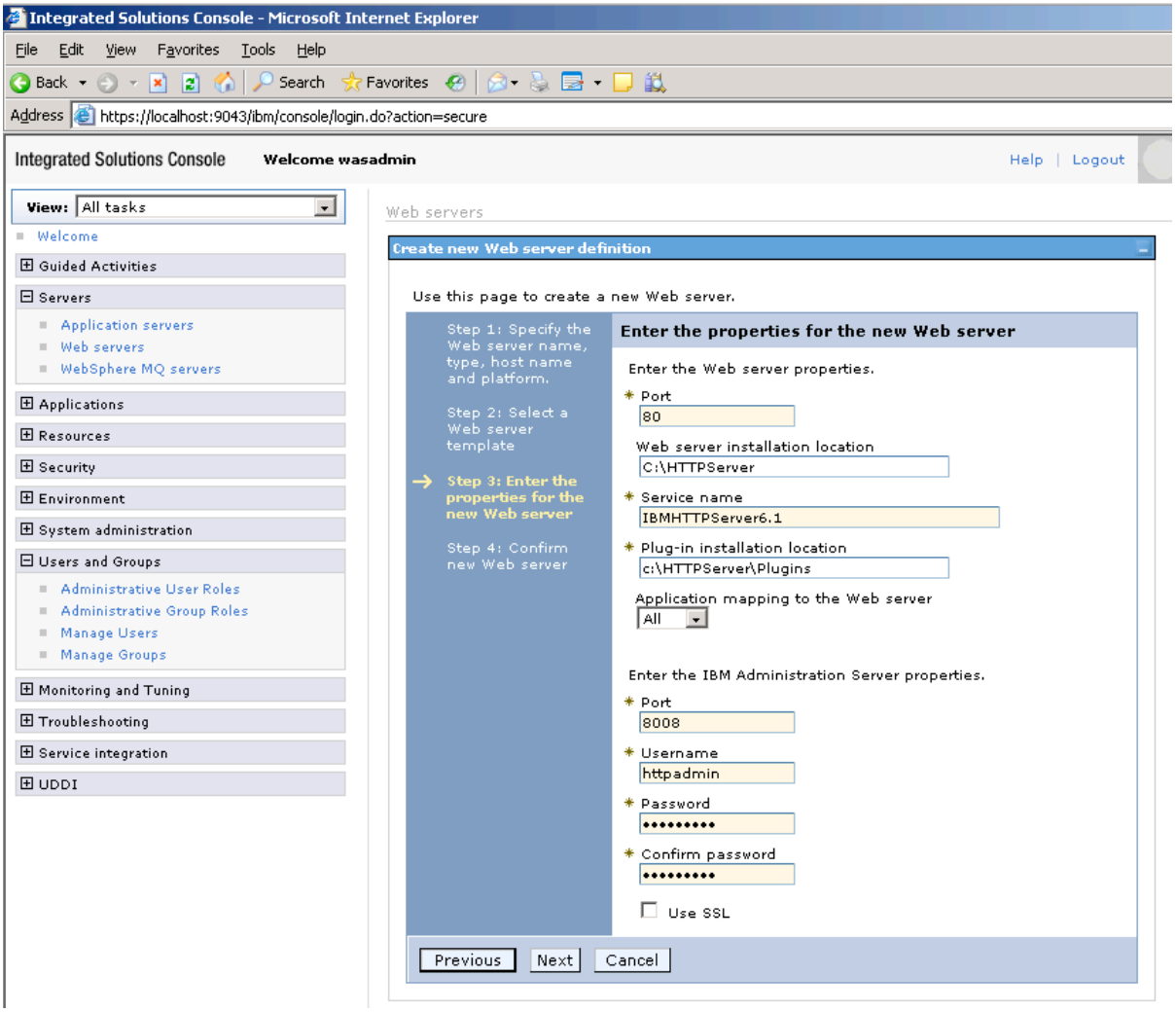


Click Next

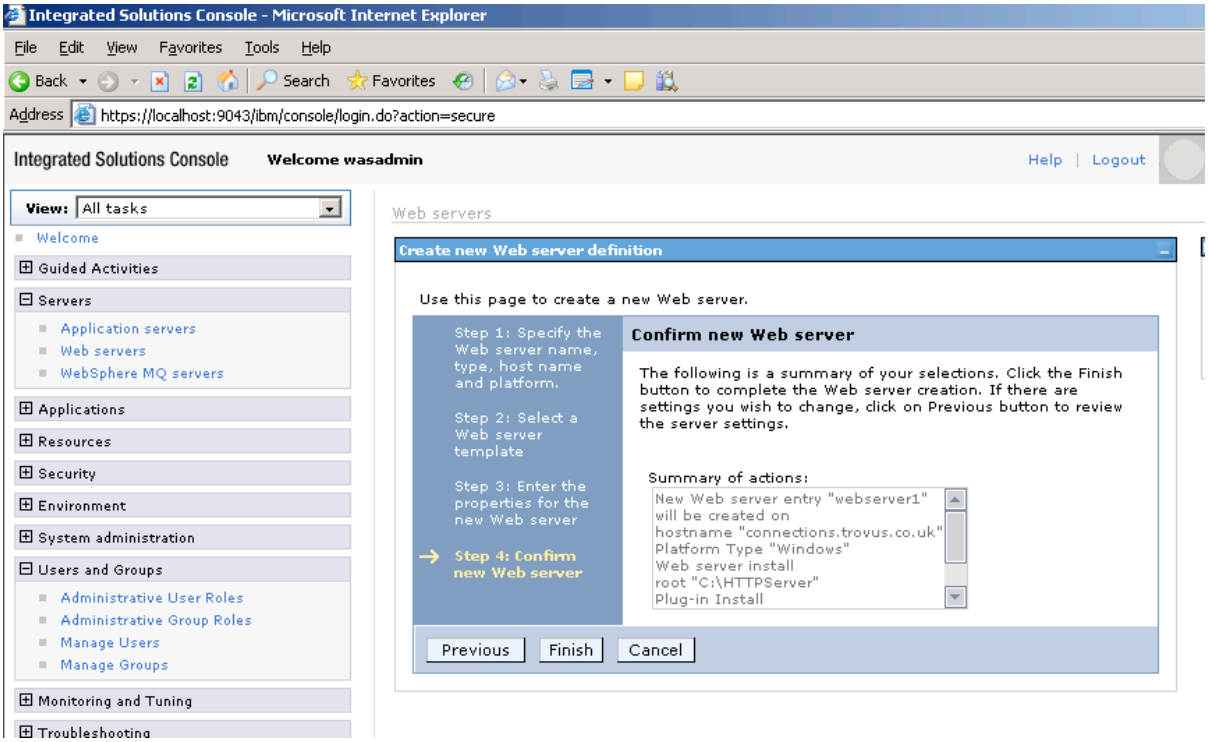


Accept the default template and click Next.

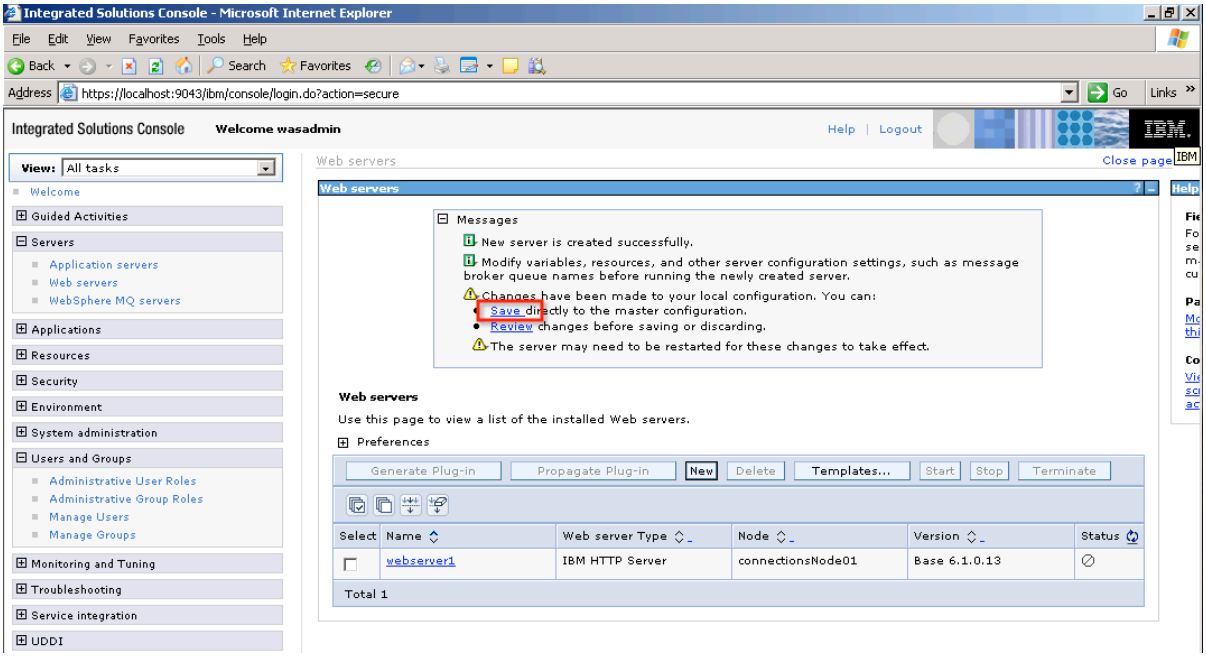
Enter the *<httpduser>* and *<httppwd>* as username and password and ensure the Web server installation location and Plugin installation point to *<httpinstall>* and *<`httpinstall`>*`\plugins` respectively.



Click Next. Review the screen below.



Click Finish

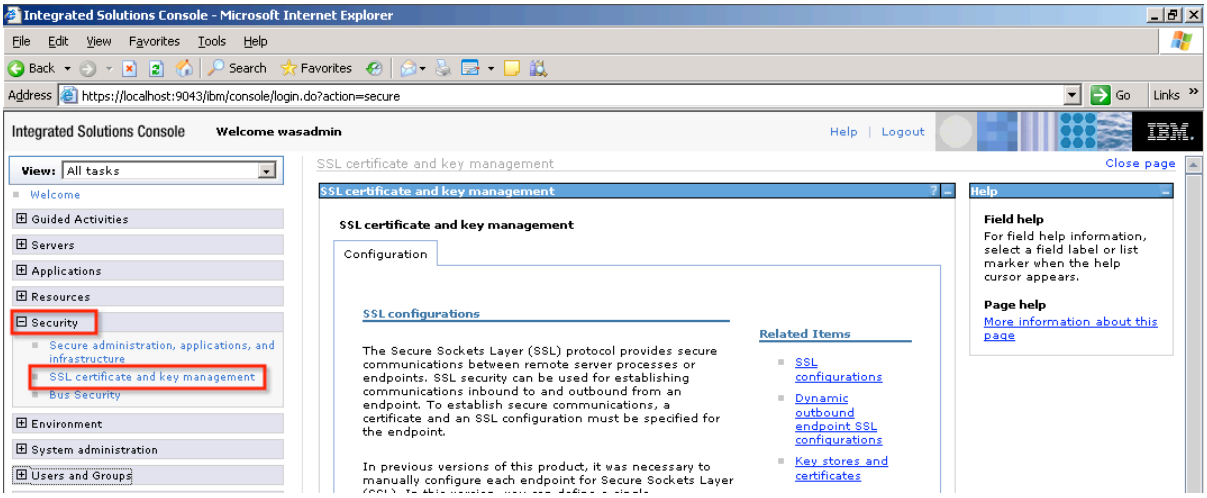


Click Save

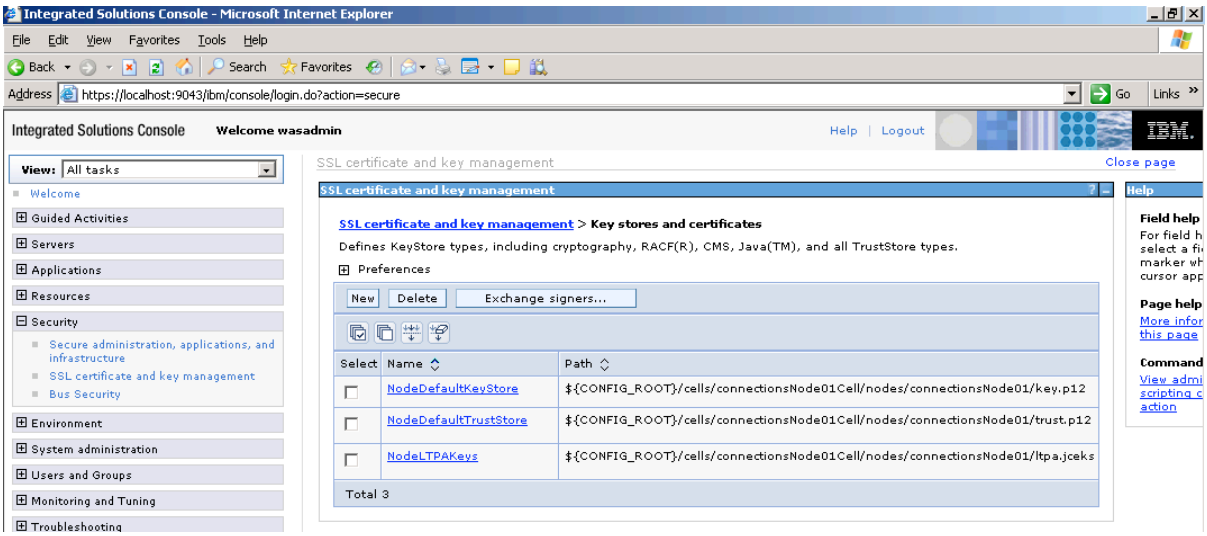
Configure IBM HTTP Server for SSL

Advanced: for a production install (especially if public facing) do not use the default certificates. You should use third party certificates provided to you by your network administrator.

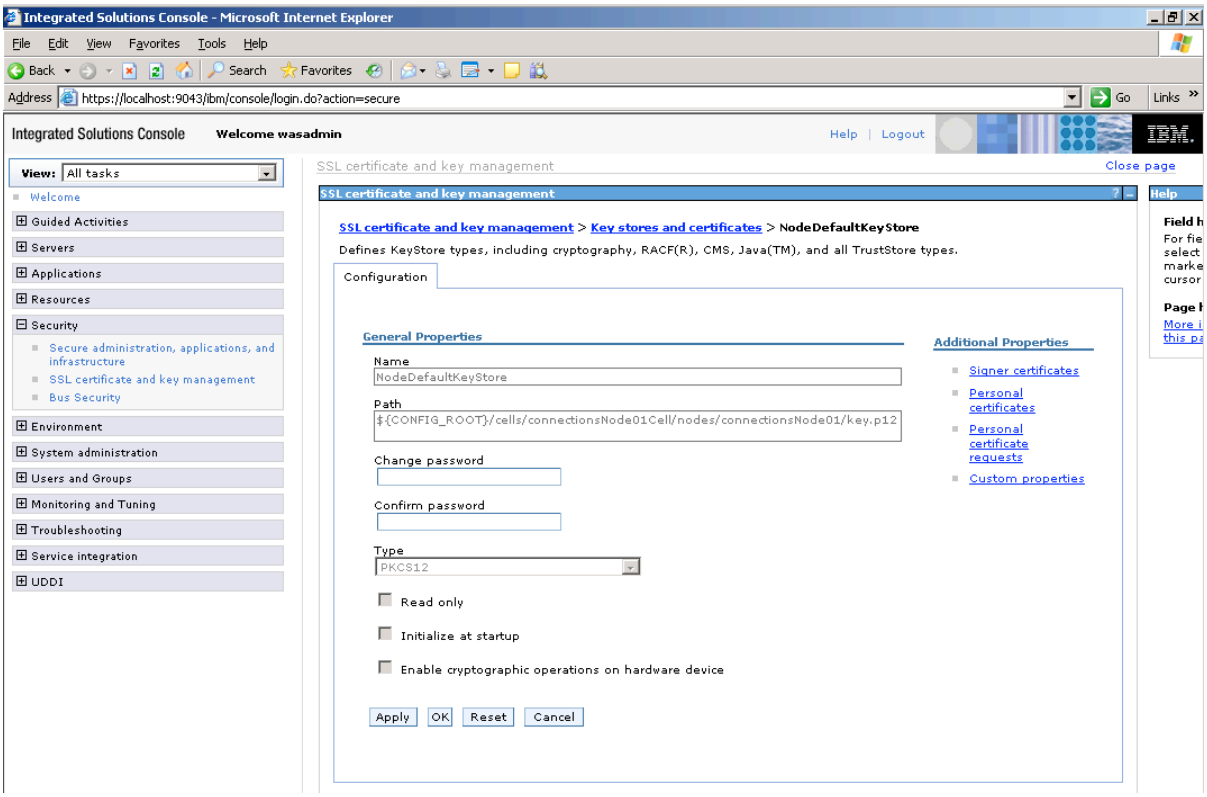
On the left hand side, click Security and SSL Certificate and Key Management



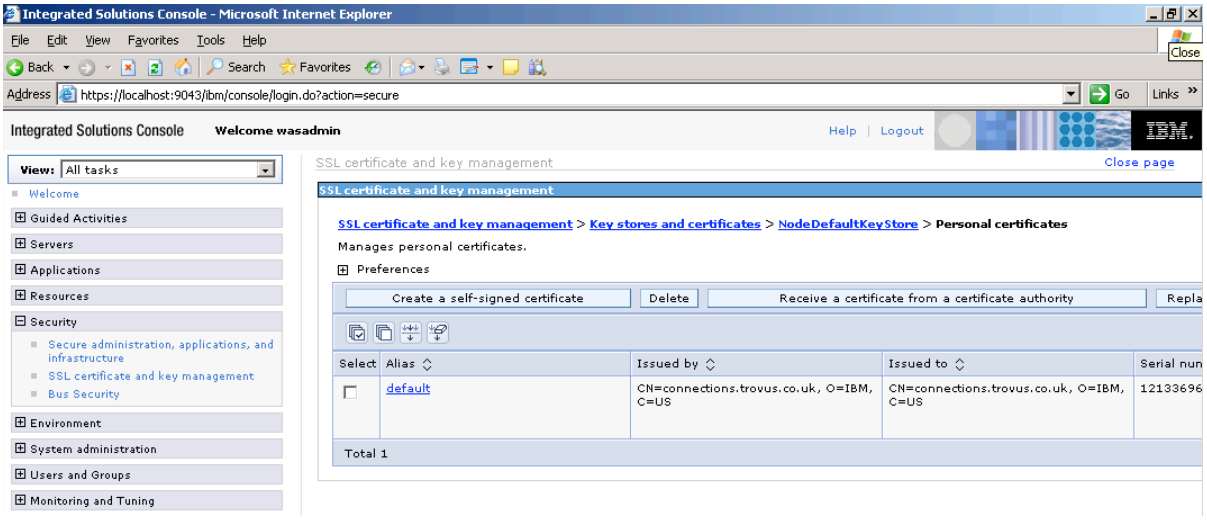
Click Key stores and certificates.



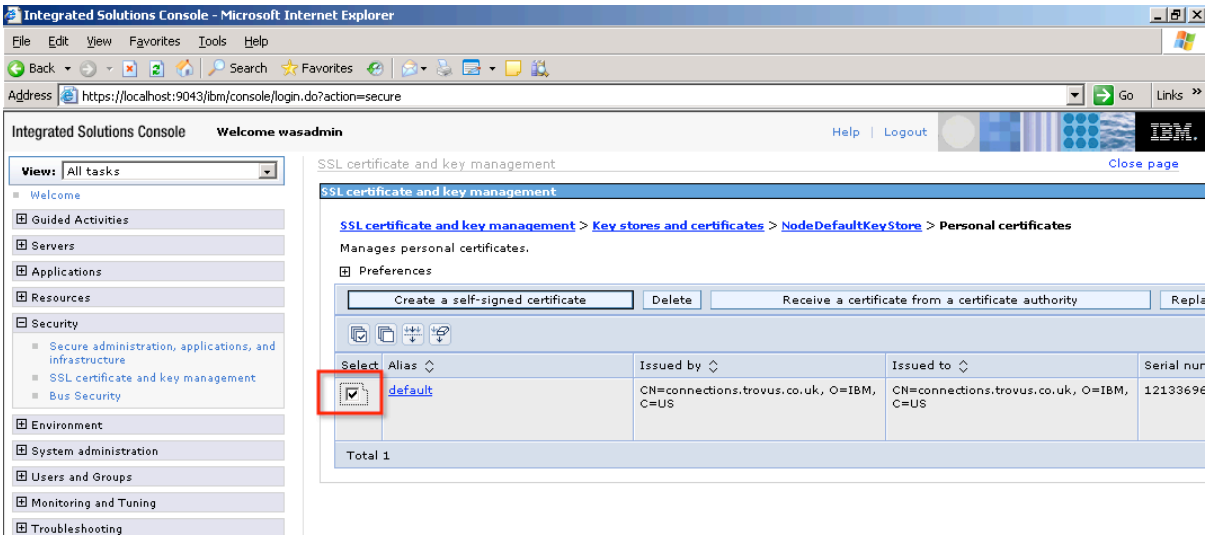
Click NodeDefaultKeyStore

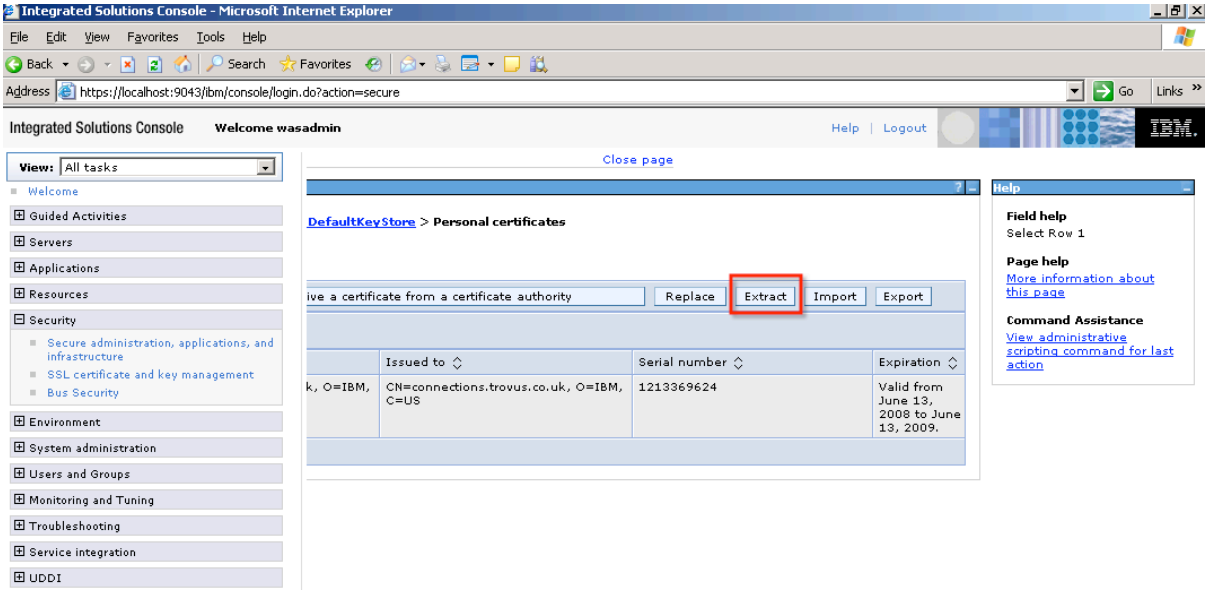


Click Personal certificates



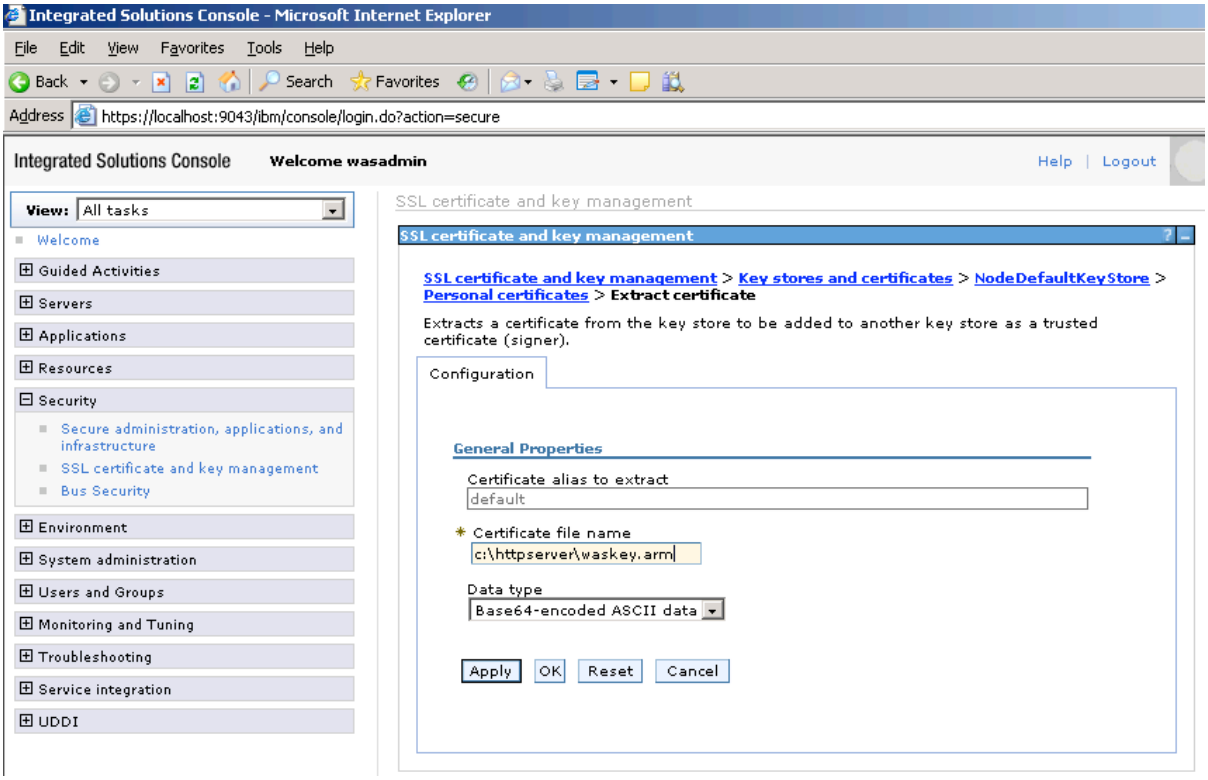
Select the check box next to default and press Extract (you may need to scroll along to see the Extract button)





.

For certificate file name use `waskey.arm` and place in *<httpinstall>*

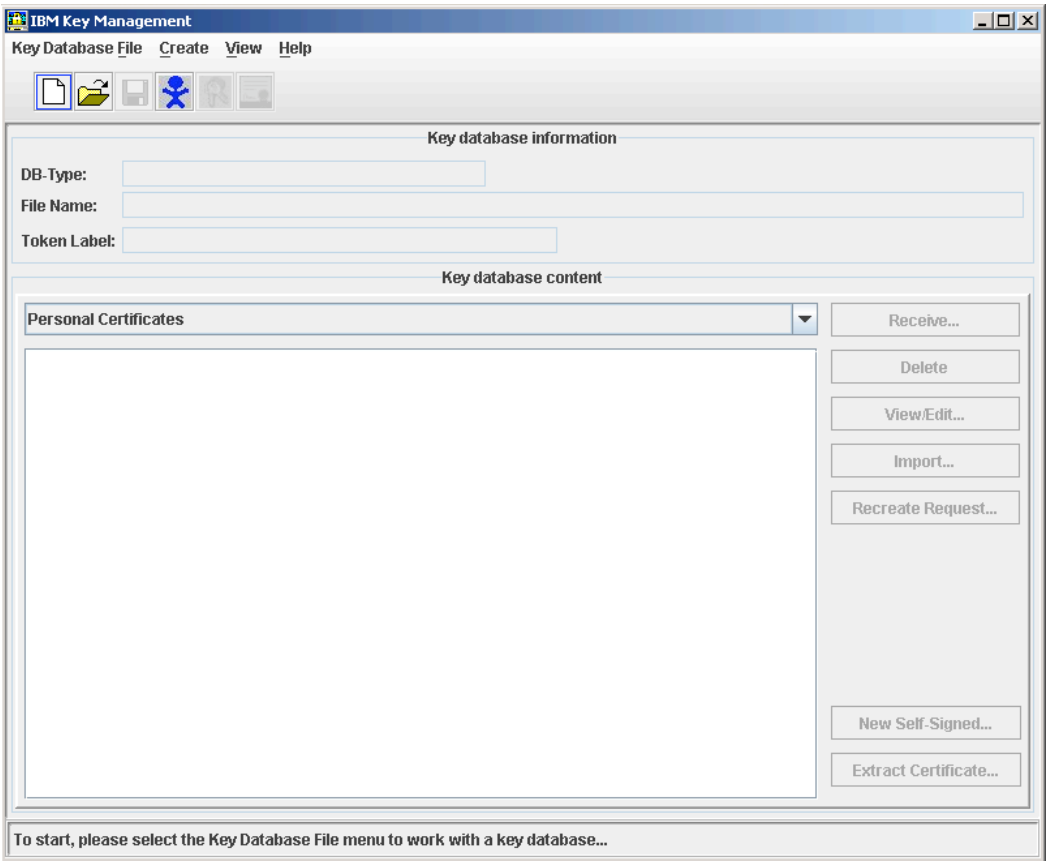


Click OK.

Click Logout and close the browser.

From a command line navigate to *<wasinstall>*\bin

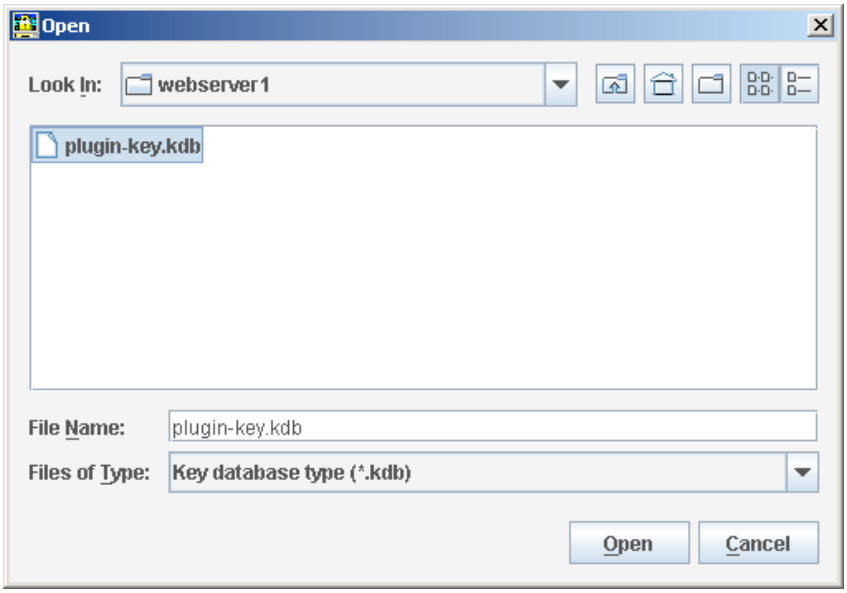
Run ikeyman.bat



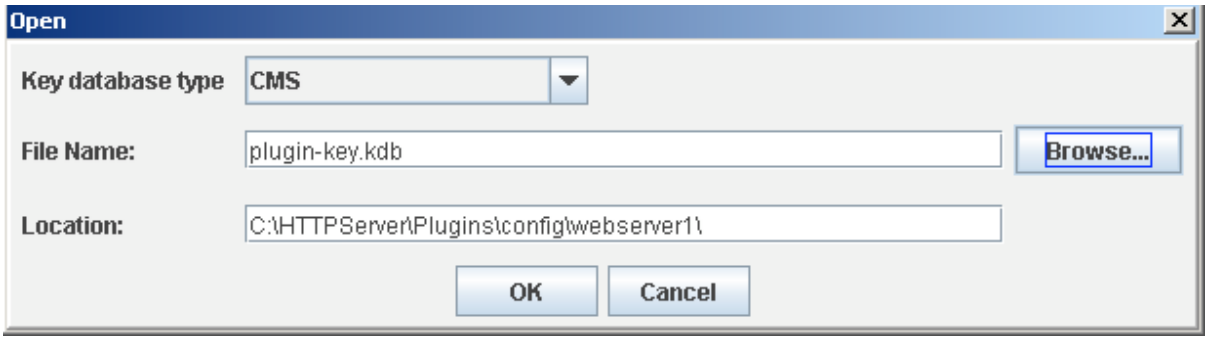
From the menu select Key Database File and Open.

Change the Key database type to CMS.

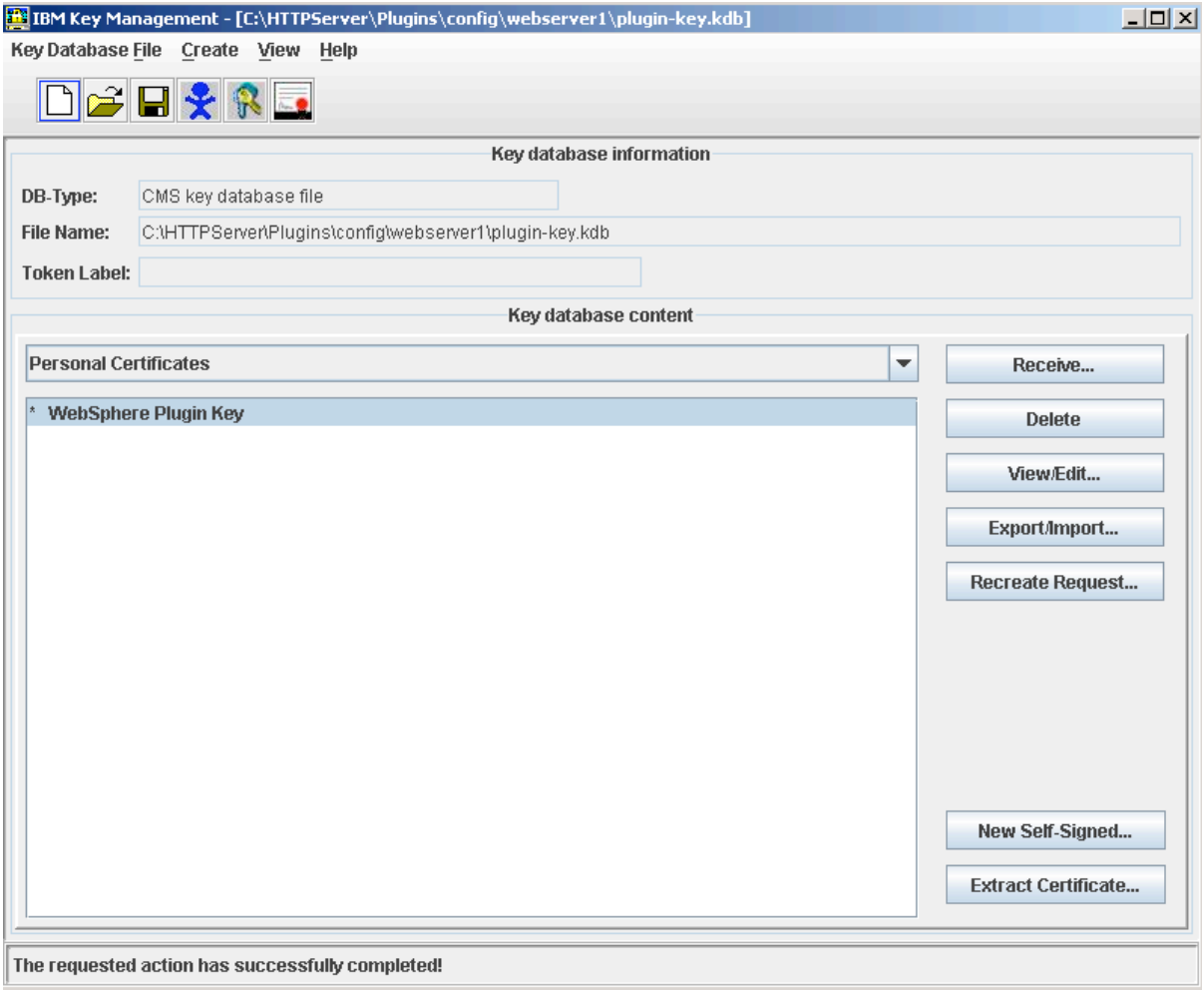
Browse to *<httpinstall>*\Plugins\config\webserver1 and select plugin-key.kdb (eg c:\httpserver\plugins\config\webserver1\plugin-key.kdb)



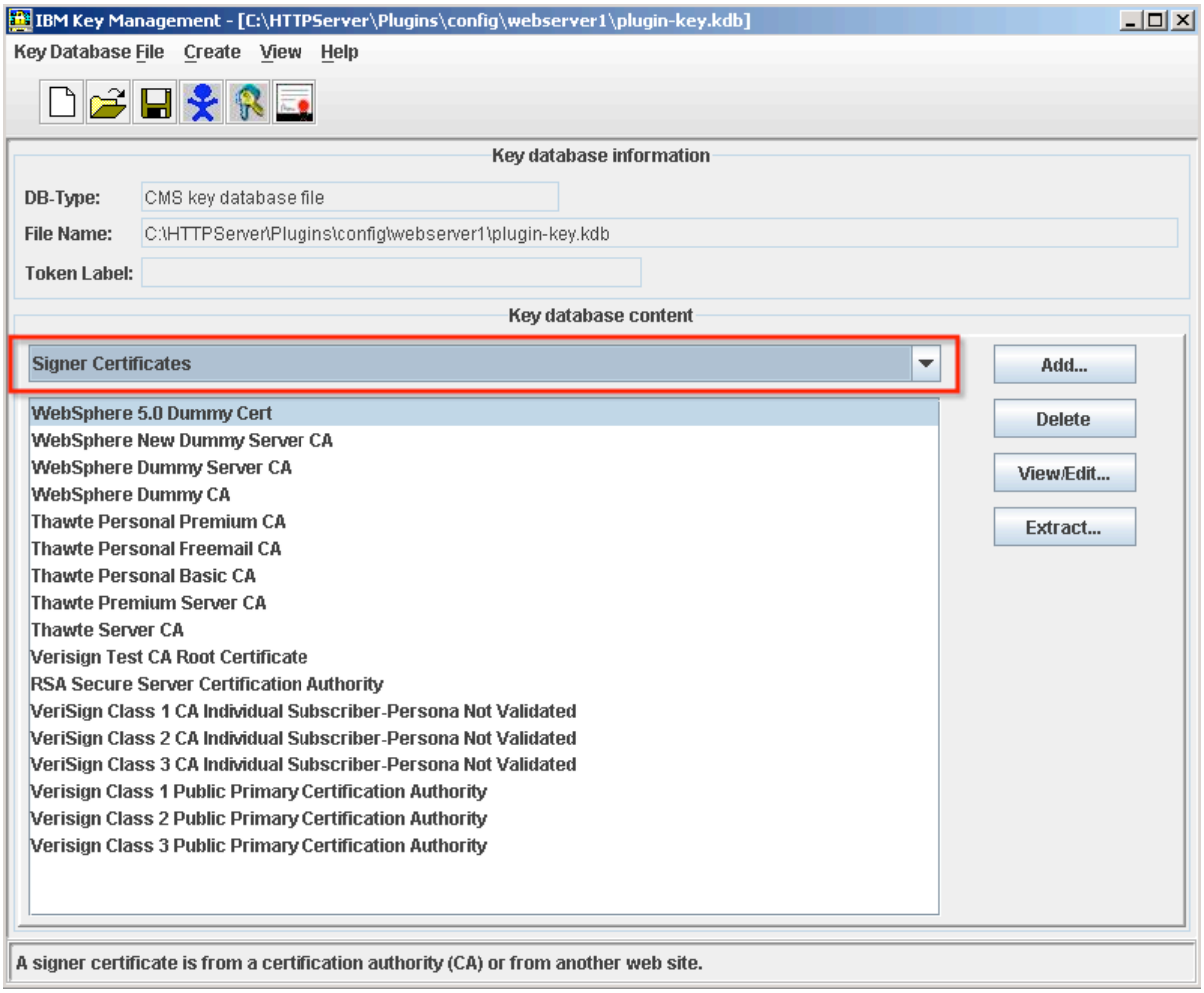
Click Open



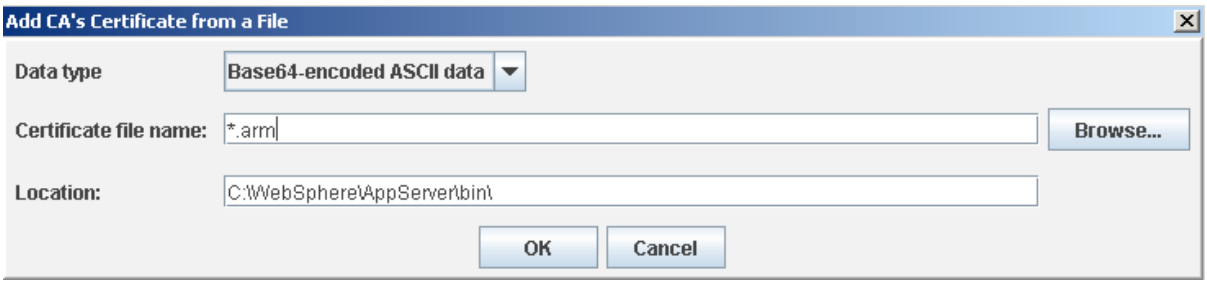
Clcik OK. When prompted for a password use `WebAS` (case sensitive). You should see the following screen



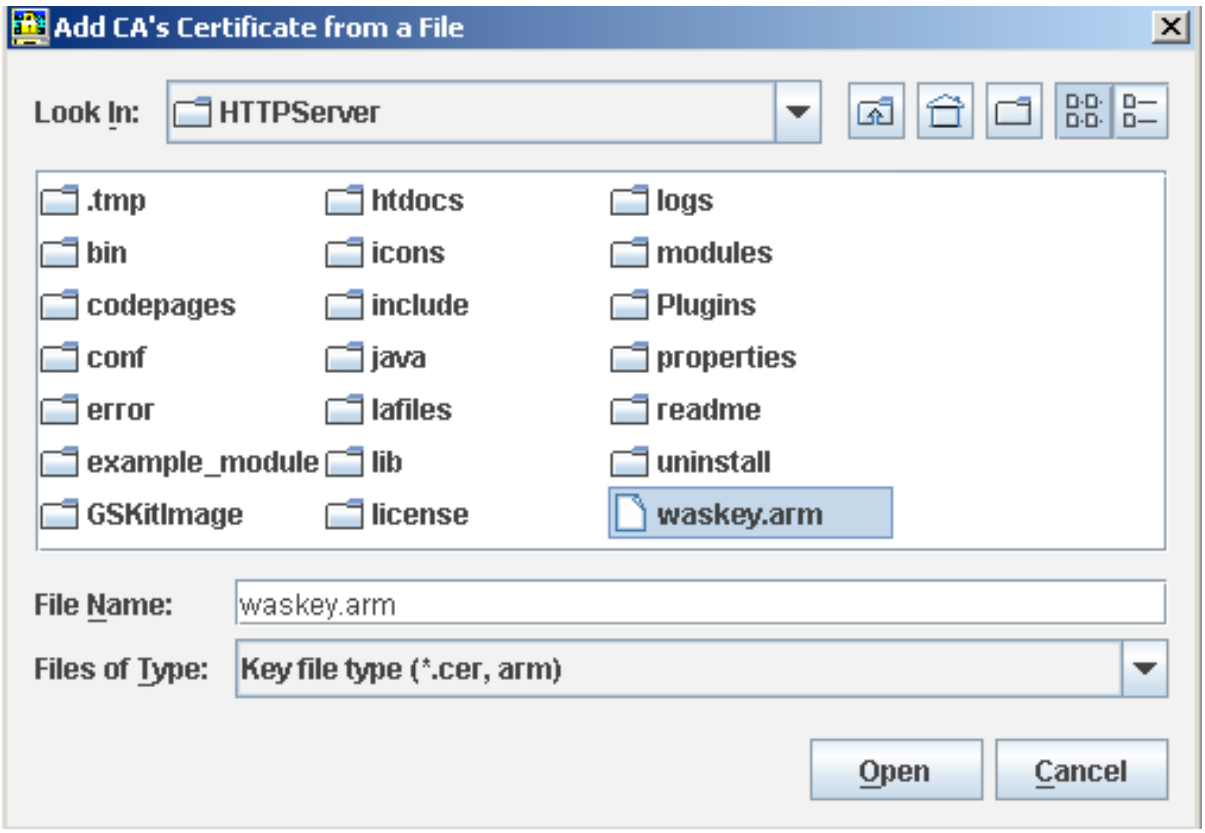
Change the drop down from Personal Certificates to Signer Certificates



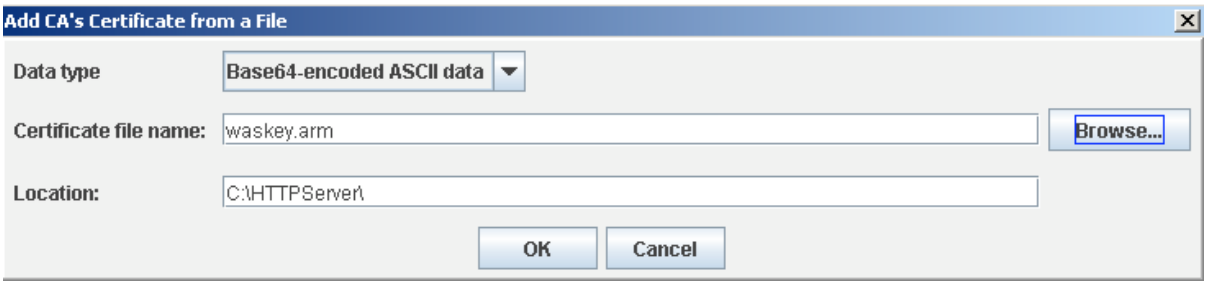
Click Add



Click Browse and select the key you exported from WebSphere in <*httpinstall*> (eg `waskey.arm`)



Click Open

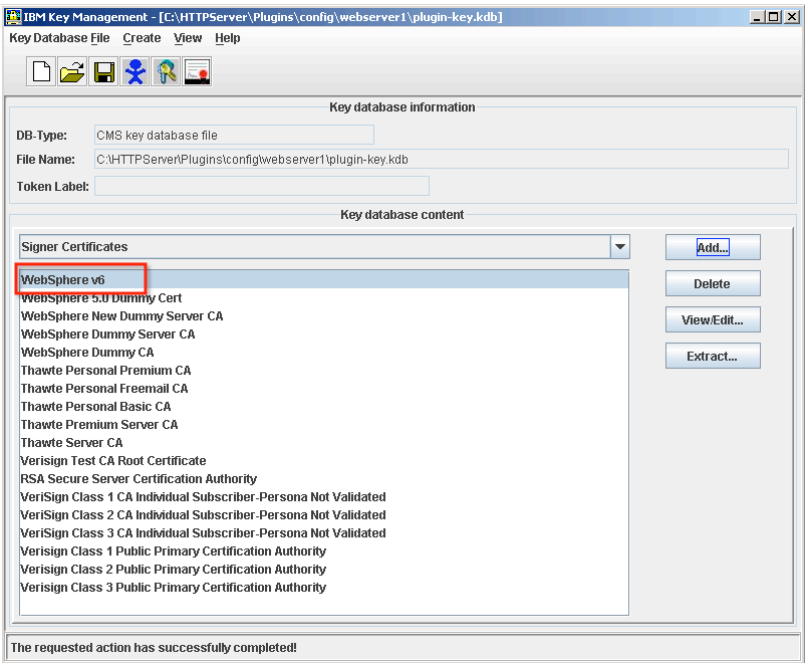


Click OK

Enter a label (eg WebSphere v6)

Click OK

You should see the new key added



Close the utility (you do not need to save these key files).

Open the `httpd.conf` file in *<httpinstall>*`\conf`

Search for the line
`#LoadModule headers_module modules/mod_headers.so`

and delete the # to enable headers

Search for the line
`#LoadModule rewrite_module modules/mod_rewrite.so`

and delete the # to enable rewriting

At the end of the file - add the following:

```
RewriteEngine on
LoadModule ibm_ssl_module modules/mod_ibm_ssl.so
Listen 0.0.0.0:443
<VirtualHost *:443>
RewriteEngine on
SSLEnable
SSLProxyEngine on
ServerName <fullyqualifiedname>
</VirtualHost>
SSLDisable
Keyfile "<httpinstall>\plugins\config\webserver1\plugin-key.kdb"
SSLStashFile "<httpinstall>\plugins\config\webserver1\plugin-key.sth"
```

Remember that <*fullyqualifiedname*> needs to be substituted with your fully qualified hostname.
Eg:

```
ServerName connections.trovus.co.uk
Keyfile "c:\httpserver\plugins\config\webserver1\plugin-key.kdb"
SSLStashFile "c:\httpserver\plugins\config\webserver1\plugin-key.sth"
```

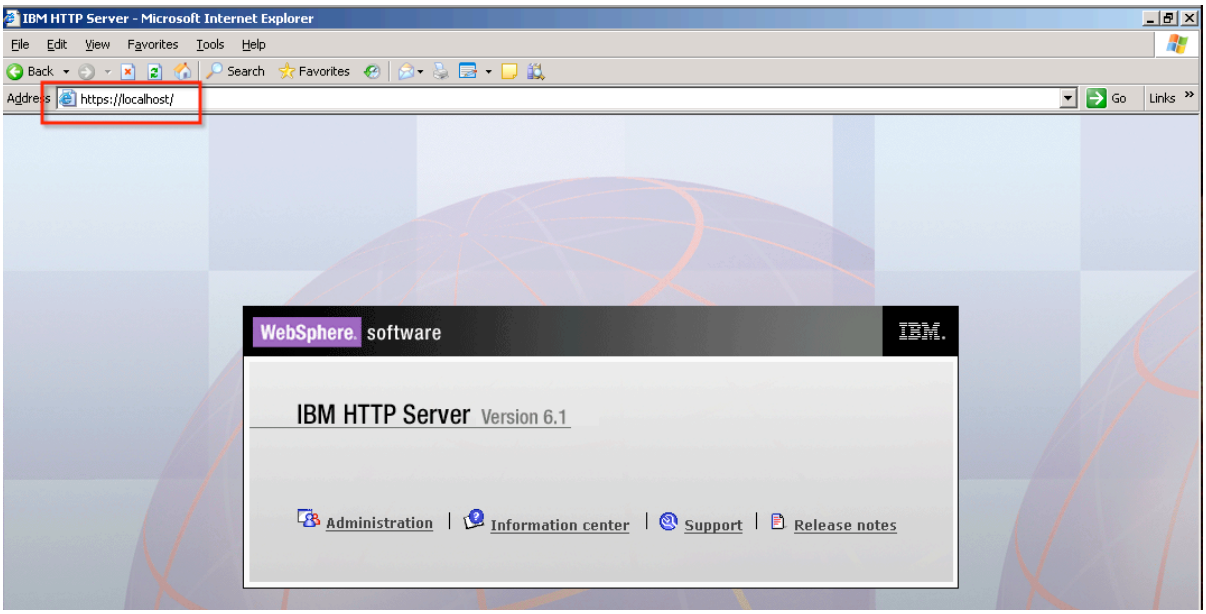
Save the httpd.conf file.

Click Start -> All Programs -> IBM HTTP Server 6.1 -> Stop HTTP Server

Click Start -> All Programs -> IBM HTTP Server 6.1 -> Start HTTP Server

Note I often have problems starting and restarting HTTP Server with the process hanging. If this happens launch the task manager (press CTRL-ALT-DEL and select Task Manager) and end all the Apache.exe processes then try starting the HTTP server again.

Check you can access your HTTP Server from http://localhost and https://localhost



Create databases

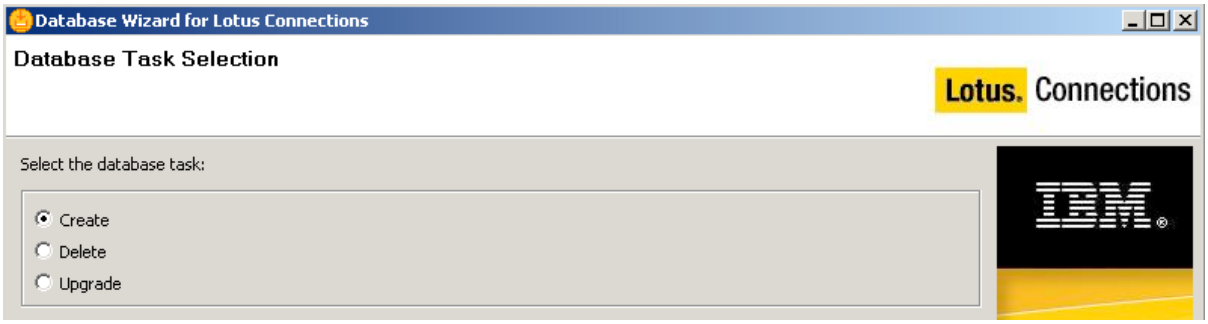
Extract the Connections Database Wizards media.

Run `dbWizard.bat`

Advanced: if using a separate database server run this on the database server machine

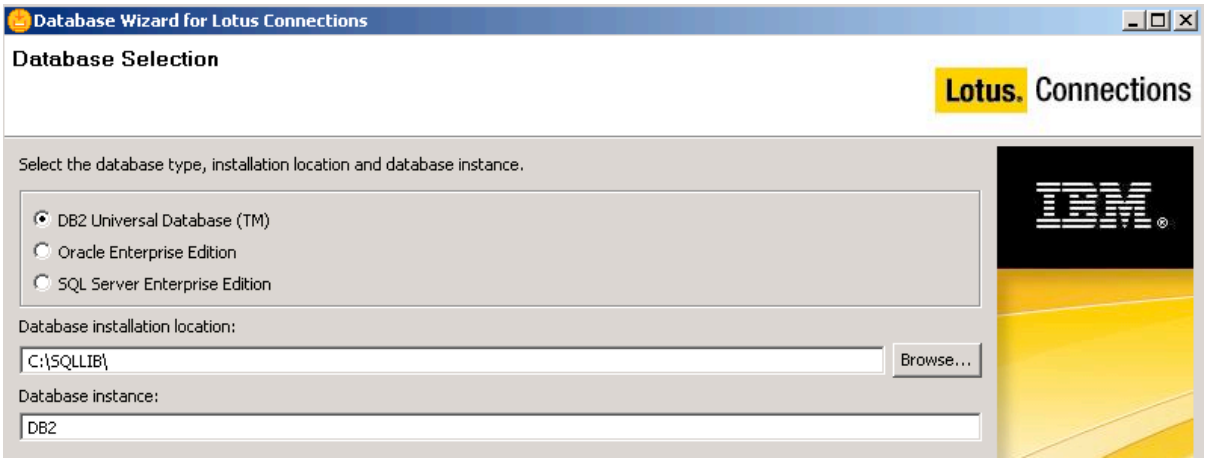
Click Next on the Welcome screen

Select Create



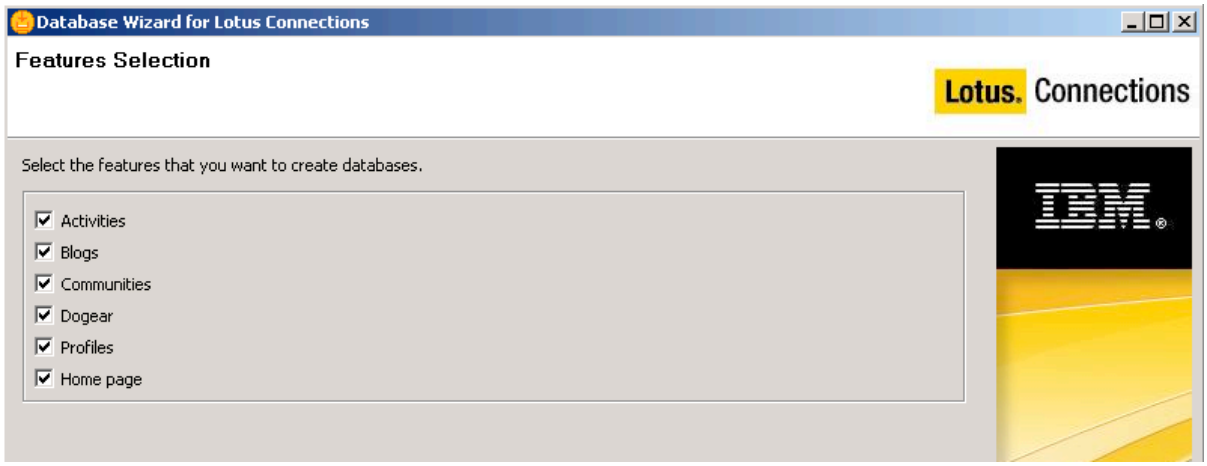
Click Next

Ensure DB2 is selected and that *<db2install>* is in the Database installation location field



Click Next

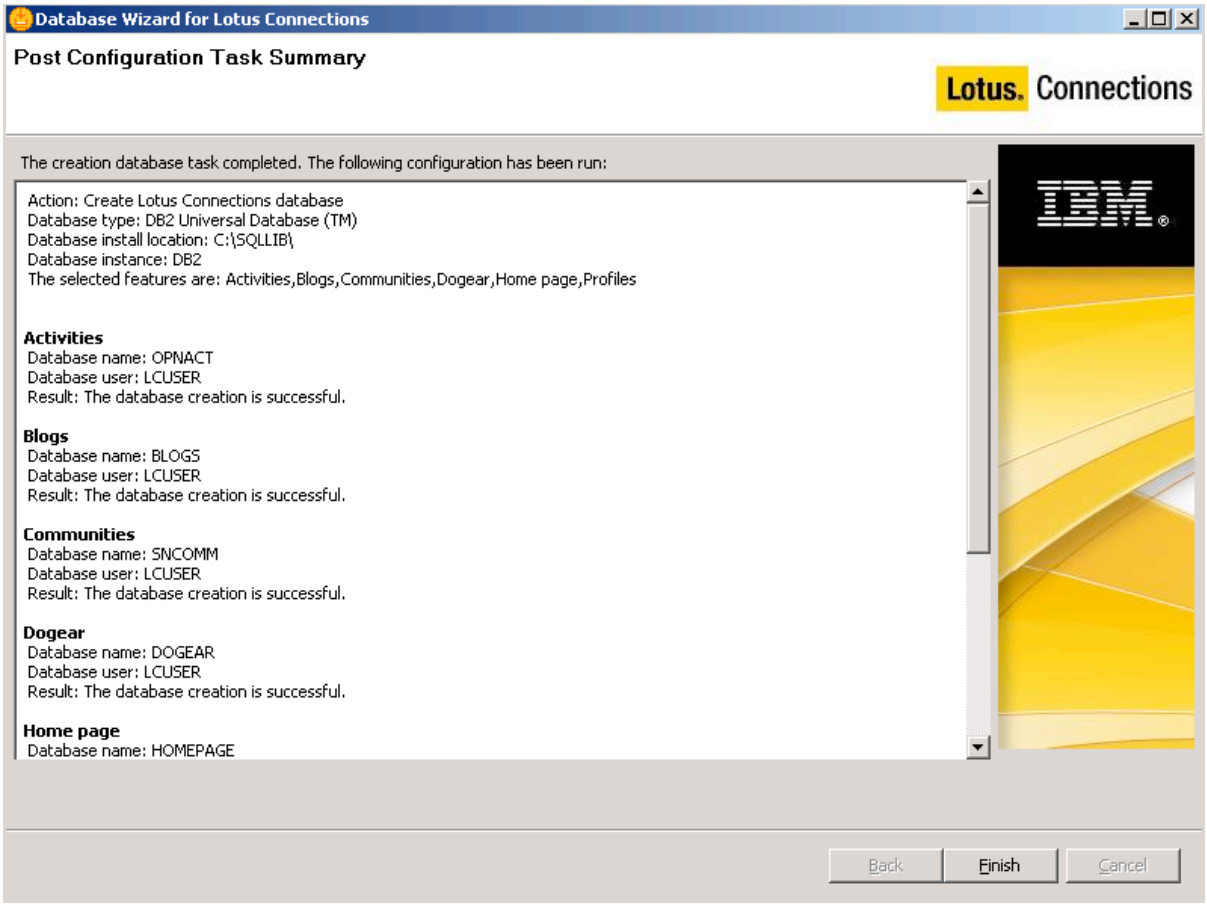
Ensure all databases are selected



Click Next

Click Create

You should see the following screen when completed.



Click Finish.

Install Tivoli Directory Integrator

This step is only required if installing Profiles.

From the Tivoli Directory Integrator install image run Launchpad.

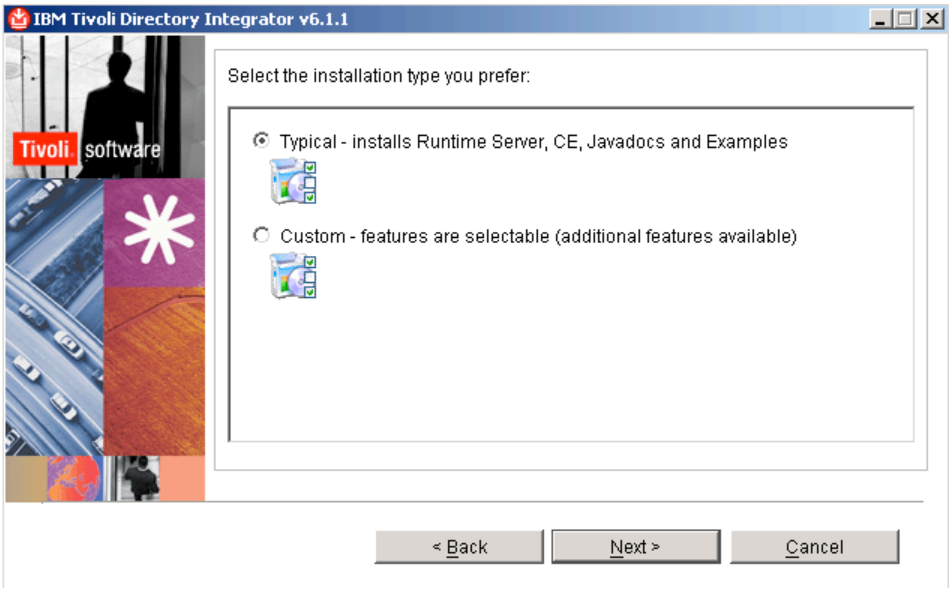
Click Install IBM Tivoli Directory Integrator on the left hand panel.

Click IBM Tivoli Directory Integrator 6.1.1 installer

Click Next on the Welcome screen.

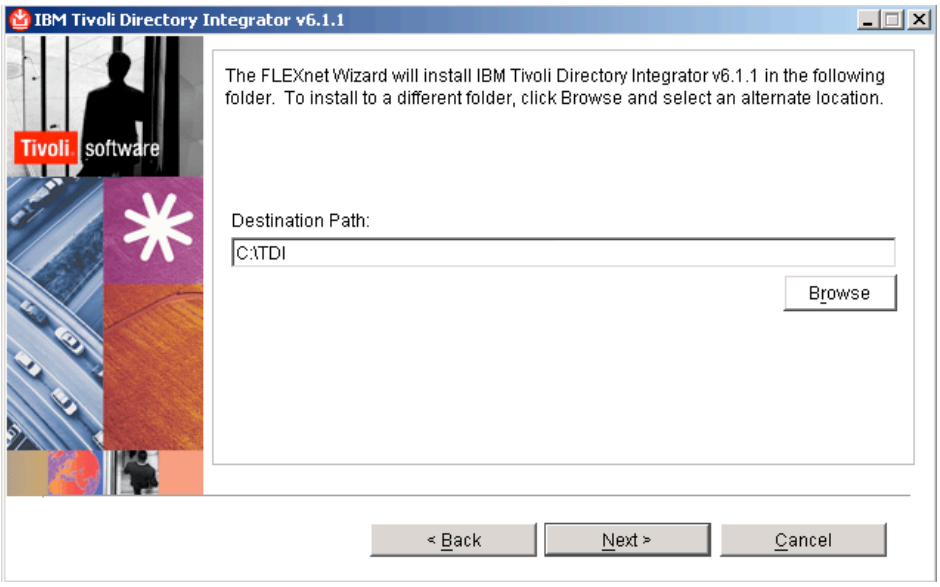
Accept the license terms and click Next

Select Typical.



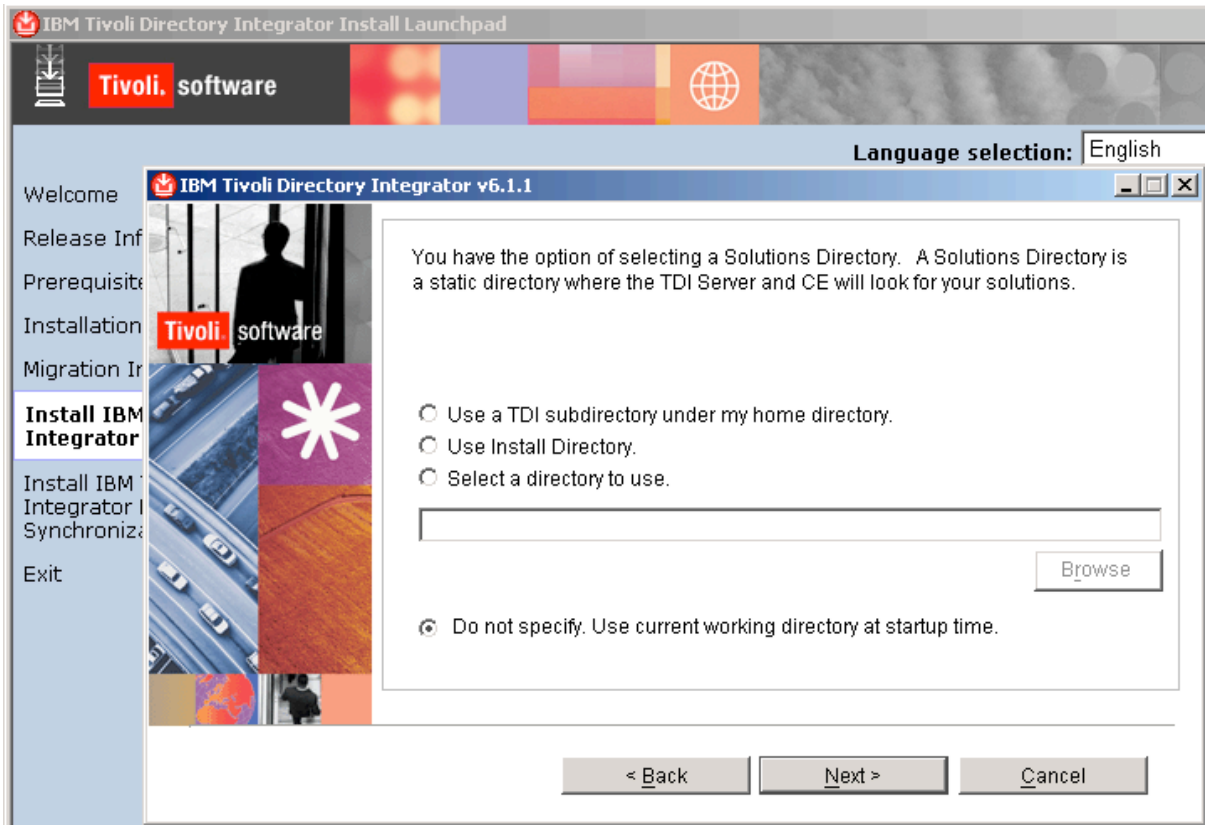
Press Next

Enter an installation path. This is *<tdiinstall>*.



Click next.

Click Do not specify. Use current working directory at startup time.



Click Next

Click Install

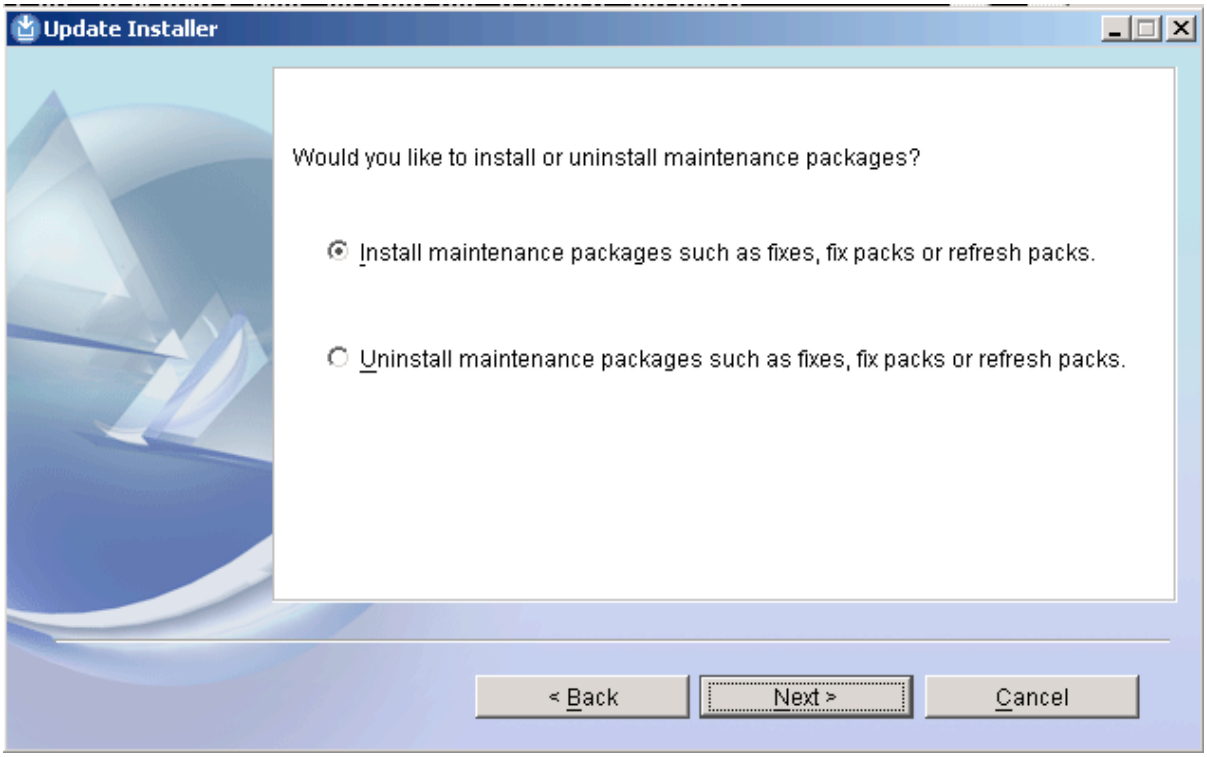
When the install completes with a successful message click Finish.

Unzip the Tivoii Directory Server 6.1.1 Fix pack 3 (see required software for location)

Run `C:\Program Files\IBM\Common\ci\gmi\bin\gmi.cmd`

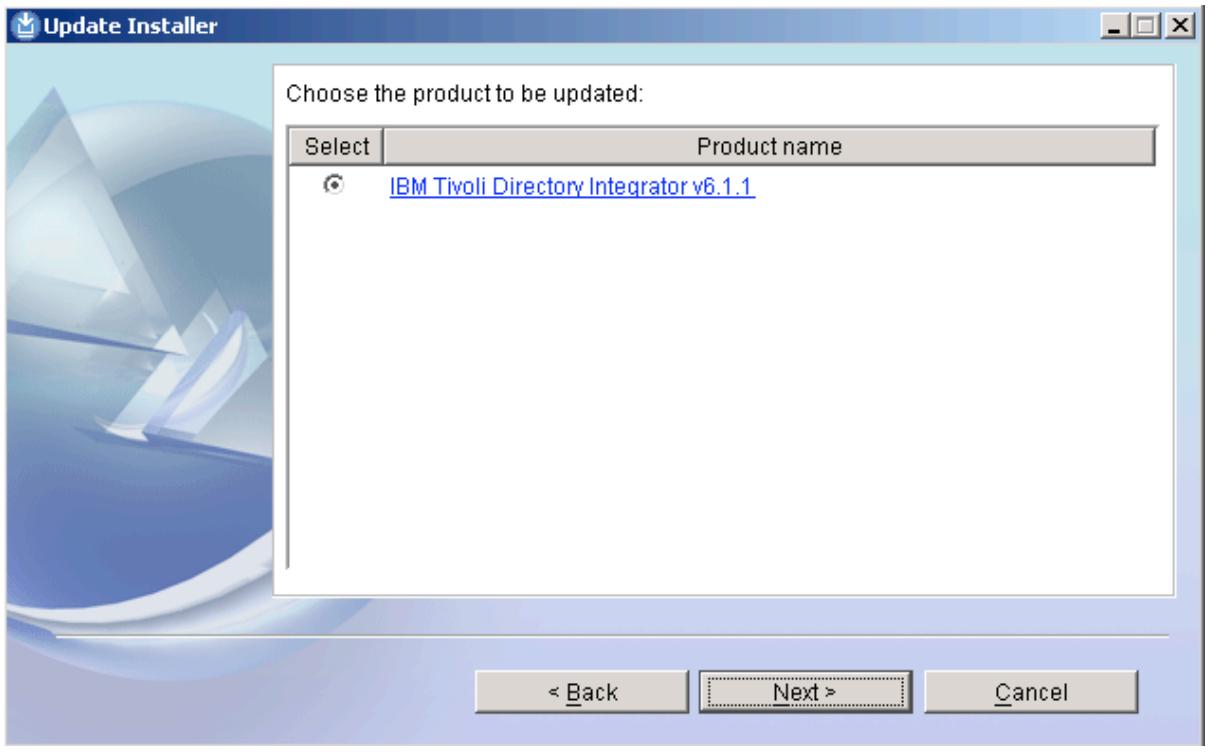
Click Next on the Welcome wizard.

Select Install maintenance packages

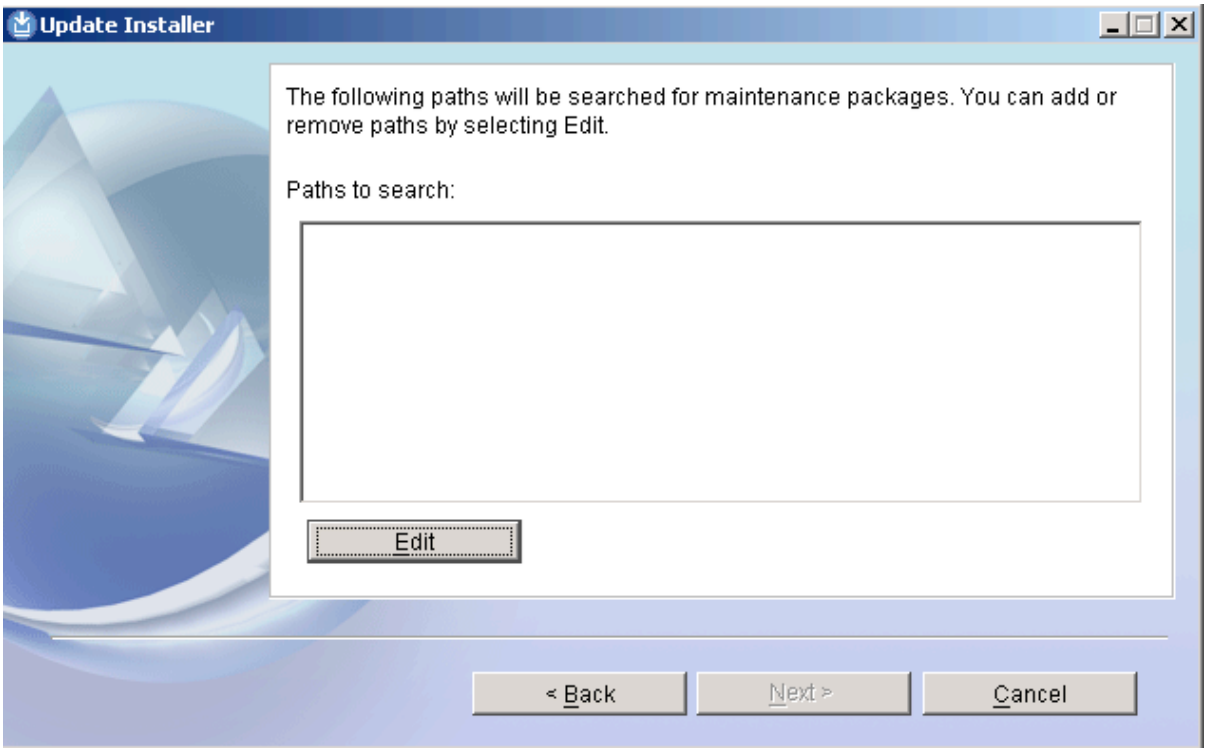


Click Next

Ensure Tivoli Directory Integrator 6.1.1 is selected

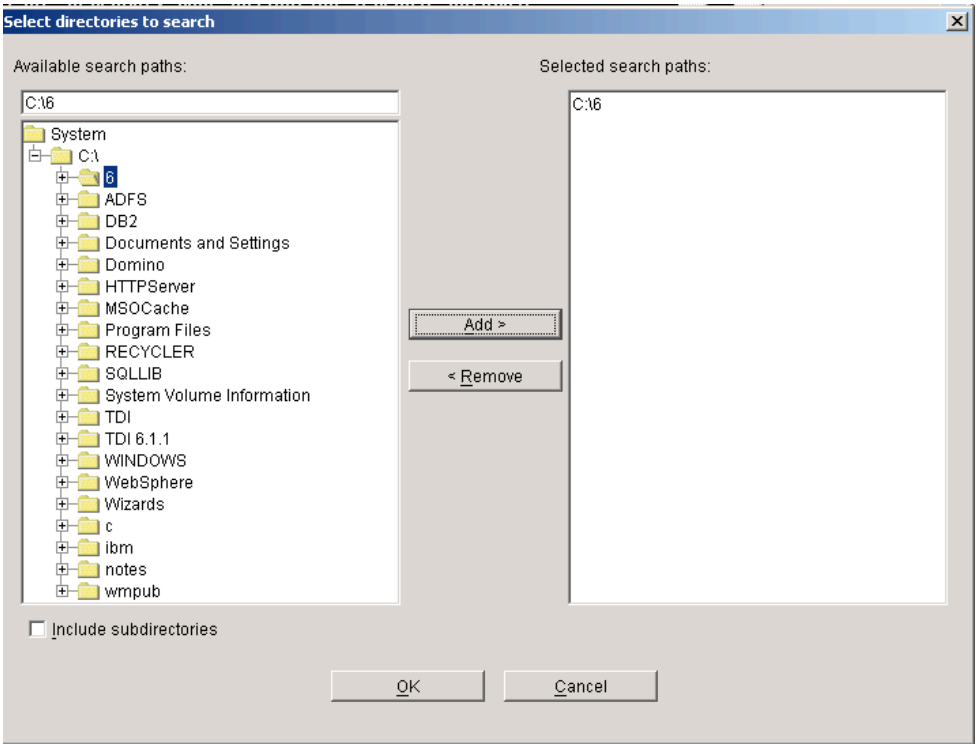


Click Next

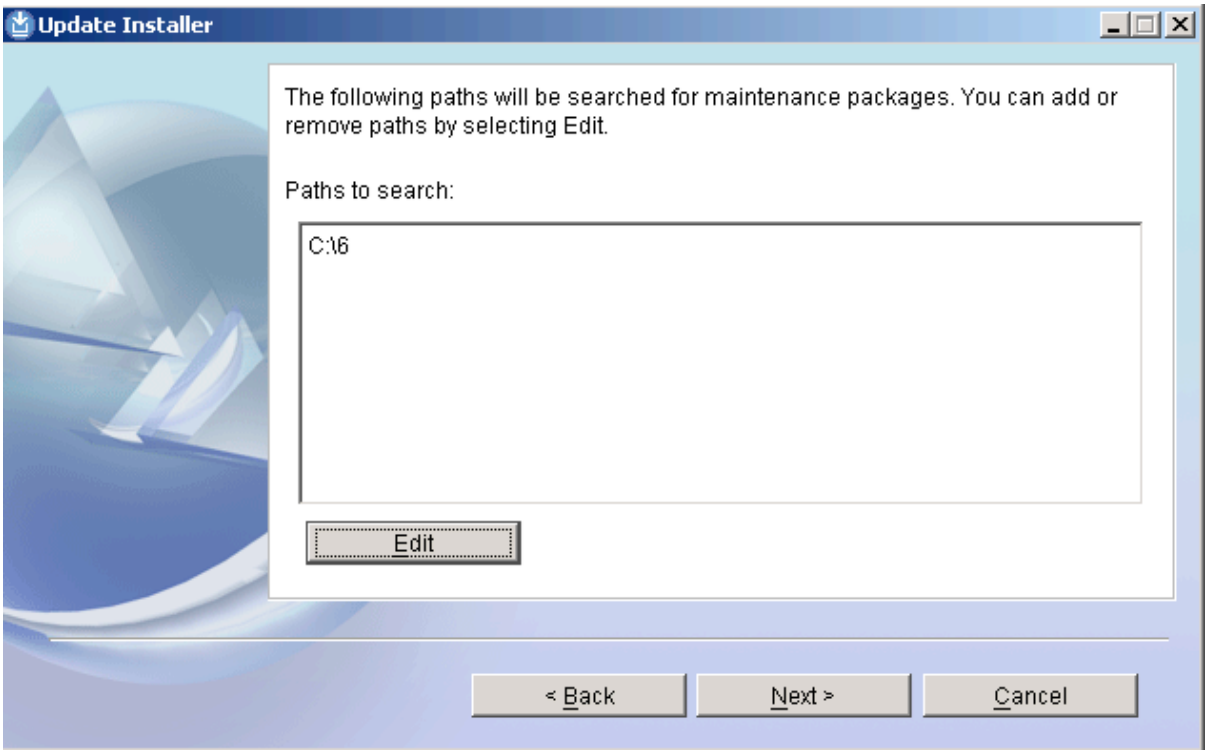


Click Edit

Select the directory where you unzipped the fix pack and click Add

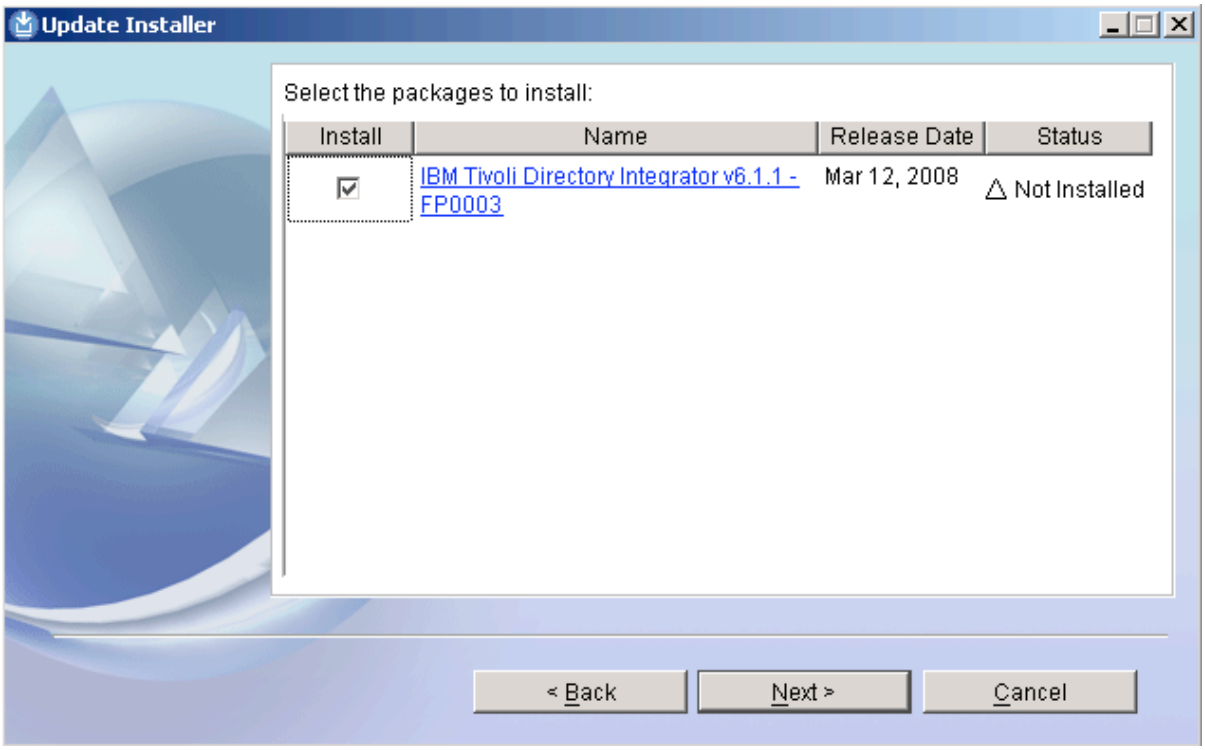


Click OK



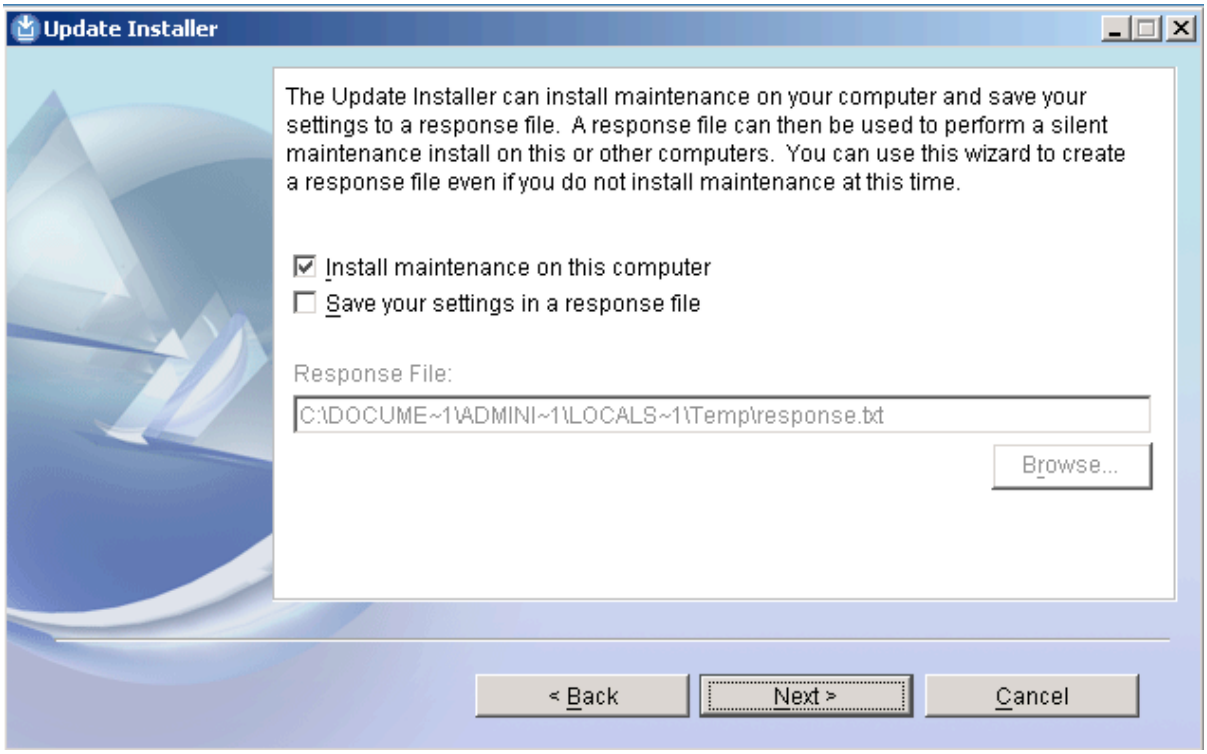
Click Next.

Select the check box next to the fix pack.

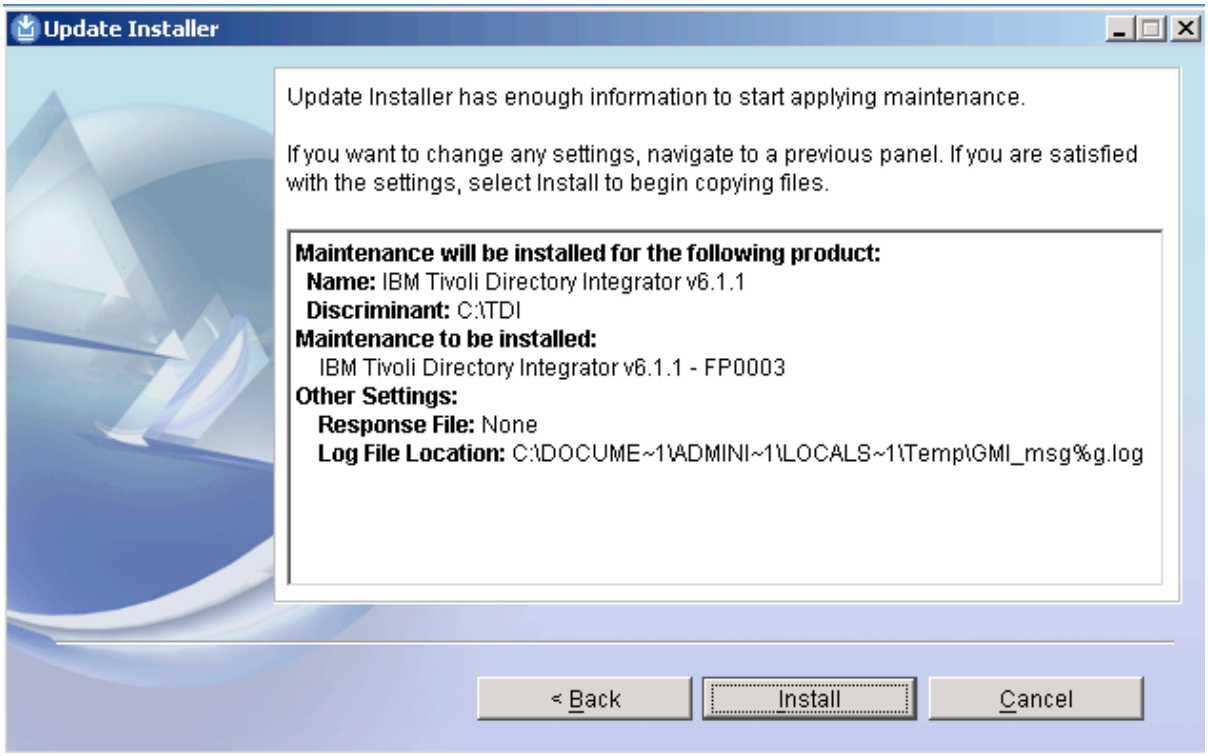


Click Next

Leave the defaults on this screen.



Click Next.



Click Install.

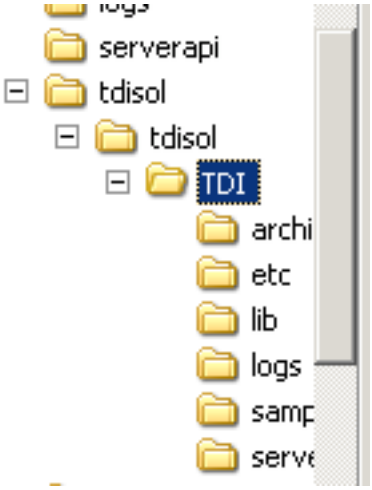
On a successful install click Finish.

Create subdirectory <*tdisol*> under <*tdiinstall*>

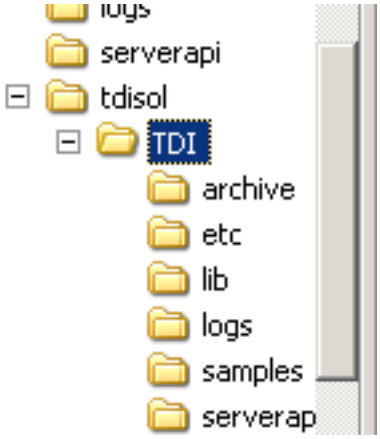
Extract the `Lotus_Connections_Insatll\TDISOL\tdisol.zip` from the Lotus Connections install media to *<tdisol>*.

Ensure that your directory structure looks like *<tdisol>*`\tdi` rather than *<tdisol>*`\tdisol\tdi`

For example, this is **incorrect**



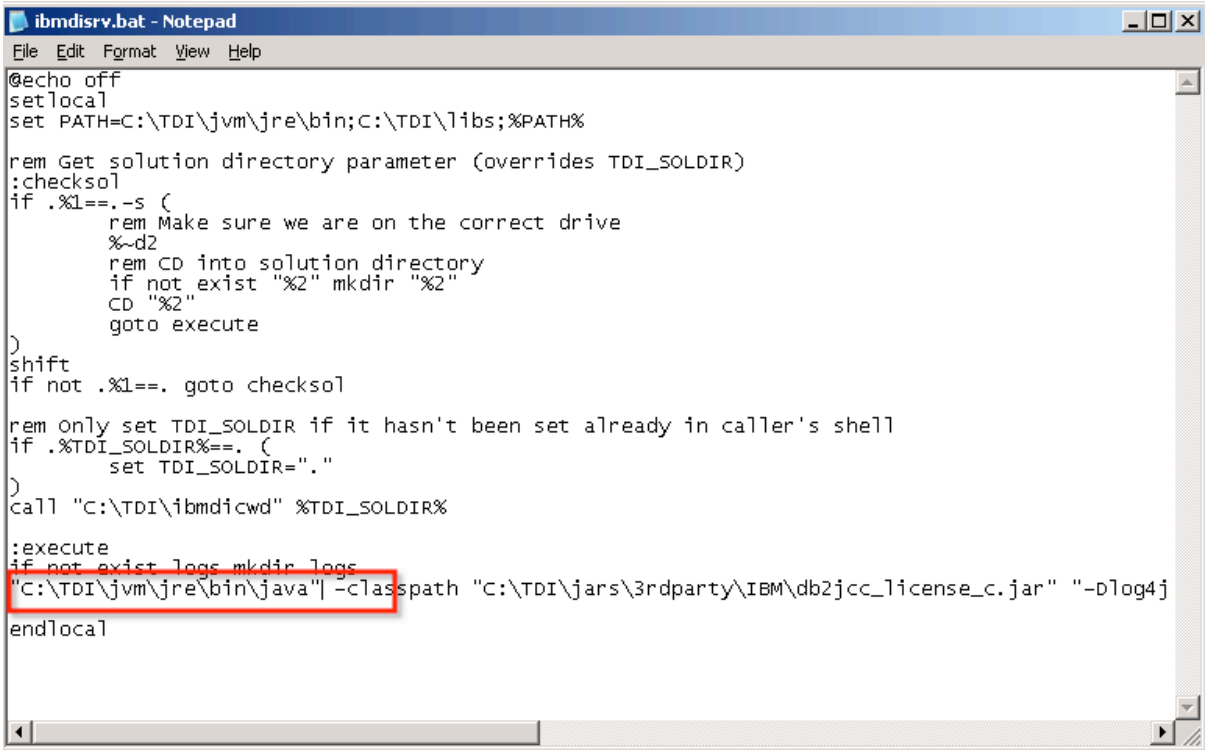
This is **correct**



Copy *<db2install>*\java\db2jcc_license_cu.jar to *<tdiinstall>*/jvm/jre/lib/ext

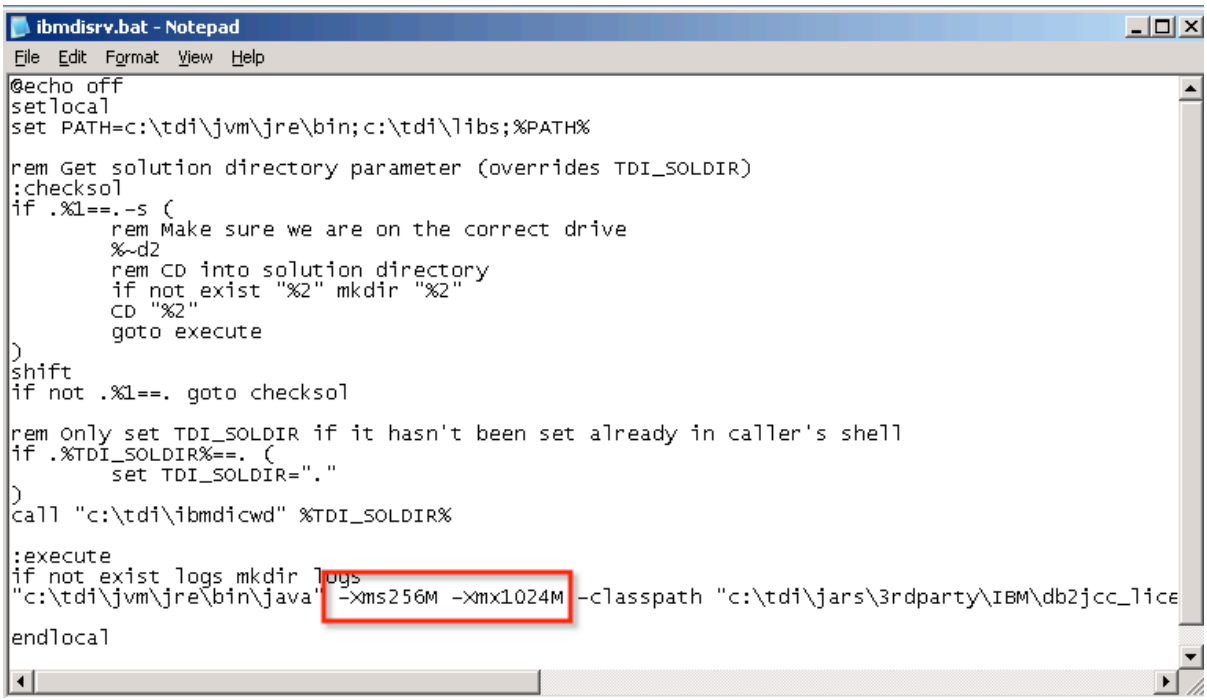
Edit *<tdiinstall>*\ibmdisrv.bat

At the end of the file, locate the command which execute java – eg



Just before –classpath add –Xms256M –Xmx1024M

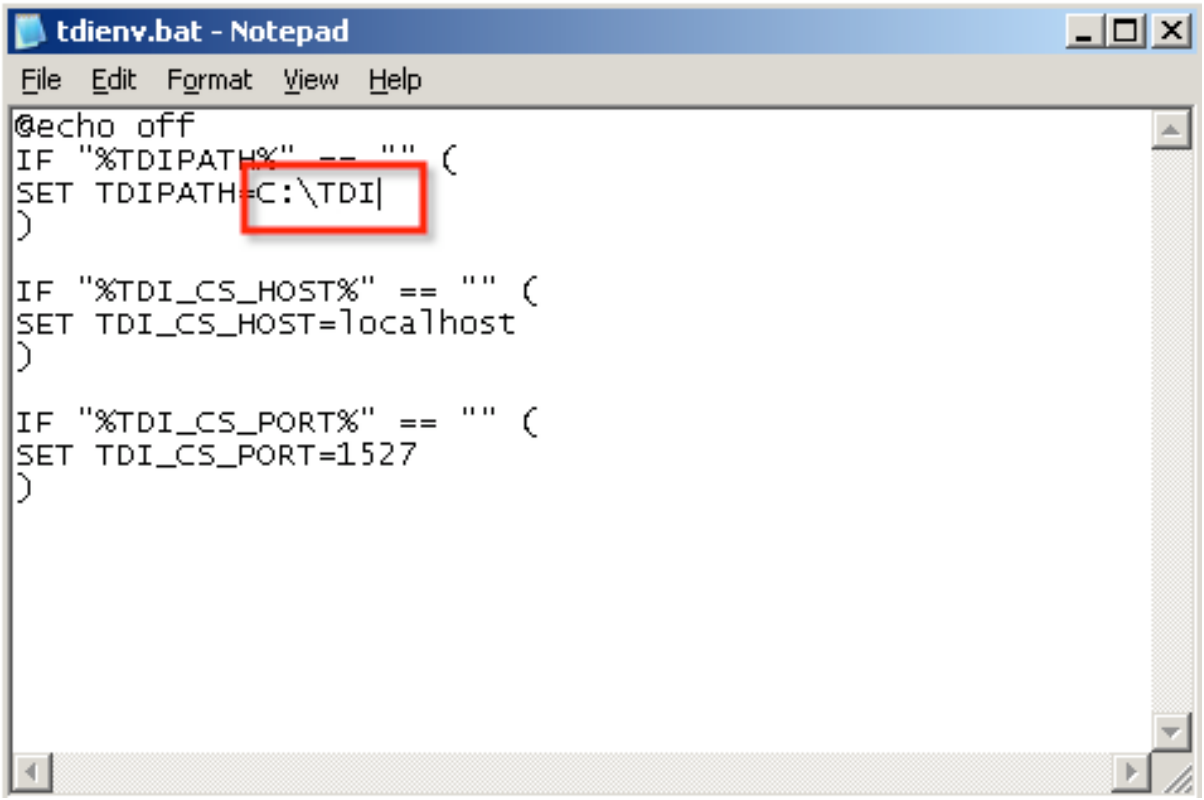
The command should now look like



Save and close the file.

Edit <*tdisol*>\TDI\tdienv.bat

Change the TDIPATH variable to <*tdiinstall*>



Save and close the file

Lotus Connections v2 includes a wizard to populate the Profiles database. However, I had problems with this wizard and getting the management information to populate correctly, as well as syncing future changes. Therefore I did this step manually.

Edit <*tdisol*>\TDI\map_dbrepos_from_source.properties

For Domino:
set PROF_GUID= dominoUNID
set PROF_UID= {func_map_to_db_UID}

For Active Directory:
set PROF_GUID={function_map_from_objectGUID}
set PROF_UID=sAMAccountName

You can also update other fields. For example:
PROF_TELEPHONE_NUMBER=telephoneNumber

Repeat this for other properties you wish to show.

Save and close this file.

For both Active Directory and Domino:
Edit <tdisol>\profiles_tdi.properties
Set the following values

```
source_ldap_url=ldap://<fullyqualifiedname>:389
dbrepos_username=<db2user>
{protect}-dbrepos_password=<db2pwd>
```

For Domino
```
source_ldap_user_login=cn=<domadmin>,o=<orgname>
source_ldap_search_base=o=<orgname>
source_ldap_search_filter= (&(uid=*)(objectclass=inetOrgPerson))
```

For Active Directroy:
```
source_ldap_user_login=cn=<winadminuser>,cn=Users,dc=<domain1>,dc=<domain2>,...
{protect}source_ldap_user_password=<winadminpwd>
source_ldap_search_base=cn=Users,dc=<domain1>,dc=<domain2>,...
source_ldap_search_filter=(objectClass=User)
```

eg:
```
source_ldap_user_login=uid=Administrator,cn=Users,dc=trovus,dc=co,dc=uk
source_ldap_search_base=cn=Users,dc=trovus,dc=co,dc=uk
```

For both Active Directory and Domino:

Save and close this file

Change directory to <*tdisol*>. Run the following commands:

```
collect_dns.bat
populate_from_dn_file.bat (ensure you get a message showing successful import of records)
mark_managers.bat
```

Note that this performs a one-time migration from LDAP to the Profiles database. Updates to a users profile are not propagated to the LDAP or vice versa. To enable this requires complex setup of your LDAP server and should only be performed by an experienced LDAP administrator. See the Lotus Connections InfoCenter for more details.

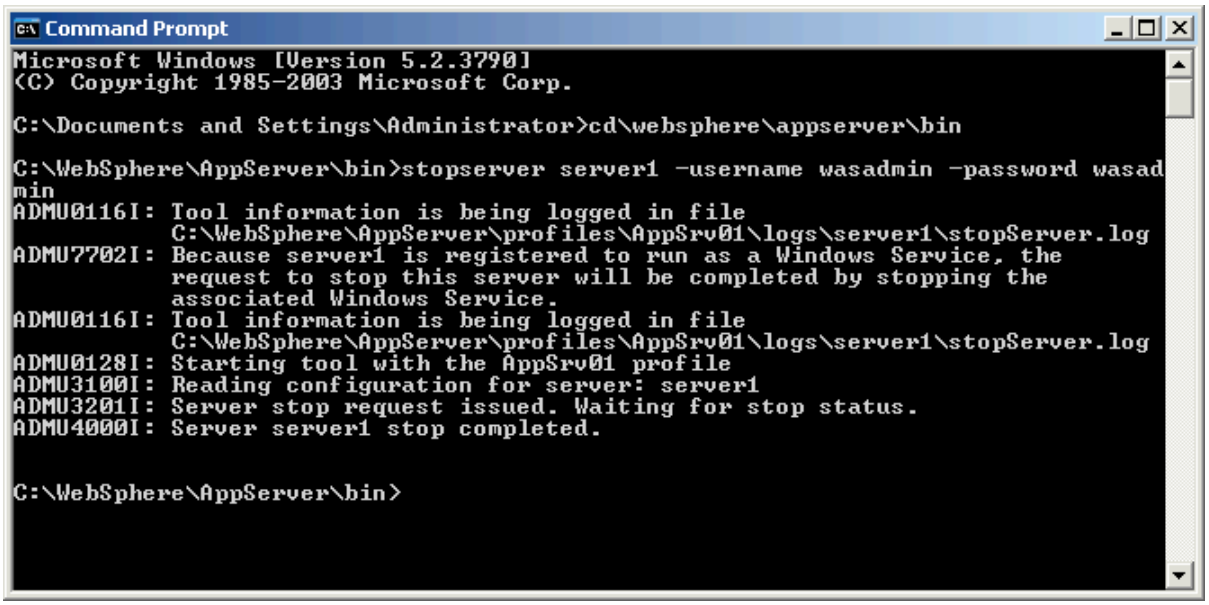
Install Lotus Connections

Ensure WebSphere Application Server is stopped
To stop WebSphere, do not use the services panel but rather go to the command line and navigate to

`<wasinstall>\bin` (eg `C:\WebSphere\AppServer\bin`) and run

```
stopserver server1 -username <wasadminuser> -password <wasadminpwd>
```

eg `stopserver server1 -username wasadmin -password -wasadmin`



Run `Lotus_Connections_Install\install.bat` from the Lotus Connections installation media.

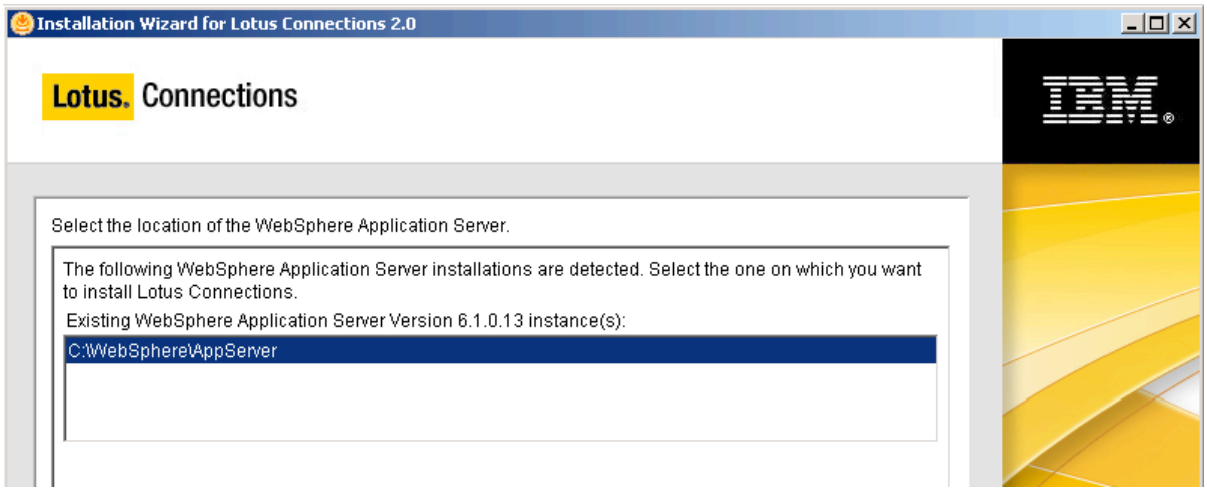
Select English as the language and press OK.

Click Next on the Welcome Screen

Accept the license terms and click Next

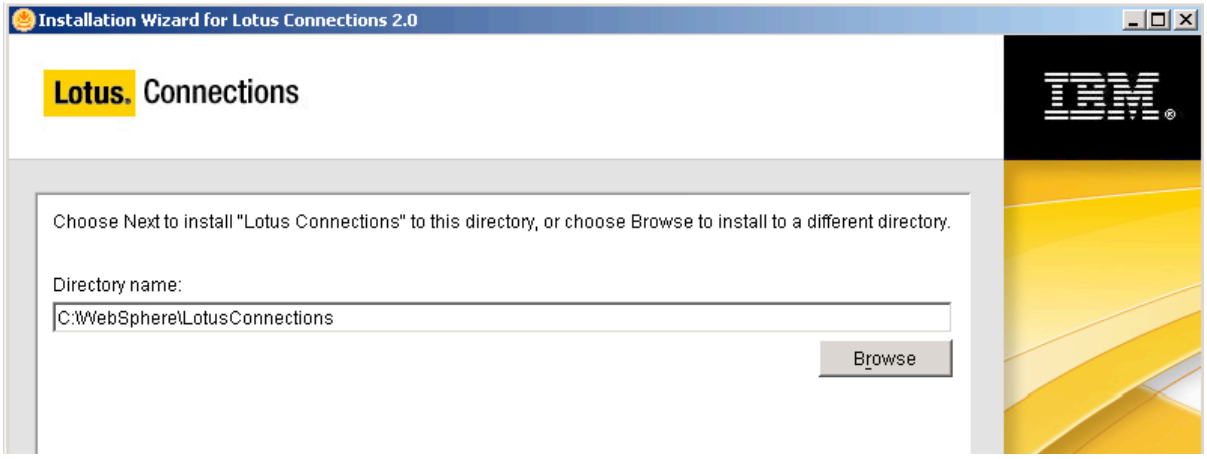
Select Install Lotus Connections only and click Next

Select you instance of WebSphere Application Server



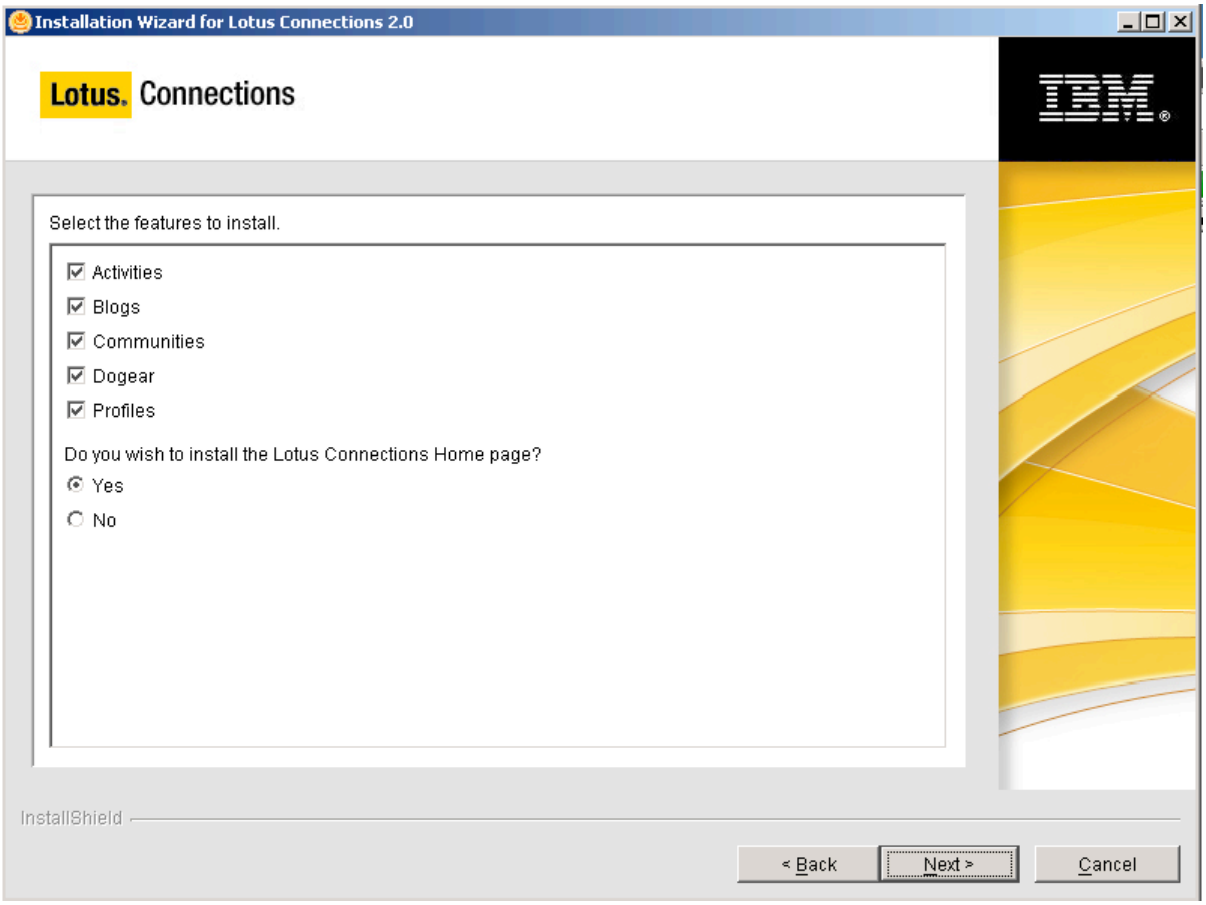
Click Next

Enter an installation location for Lotus Connections



Click Next

Select the features you wish to install (you must have completed the TDI steps above to install Profiles



Press Next

Choose Compact, Typical or Custom depending on your desired WebSphere infrastructure.

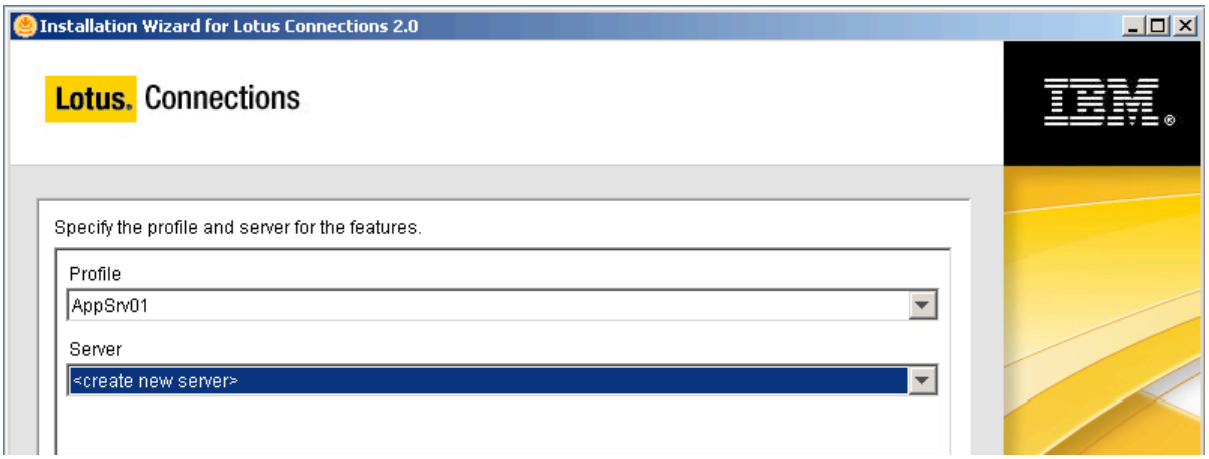
If you select Compact, you simply use the default profile, and choose whether to use the existing server1 or create a new server.

With typical, you choose one Profile, but can create multiple new servers for the different connections features.

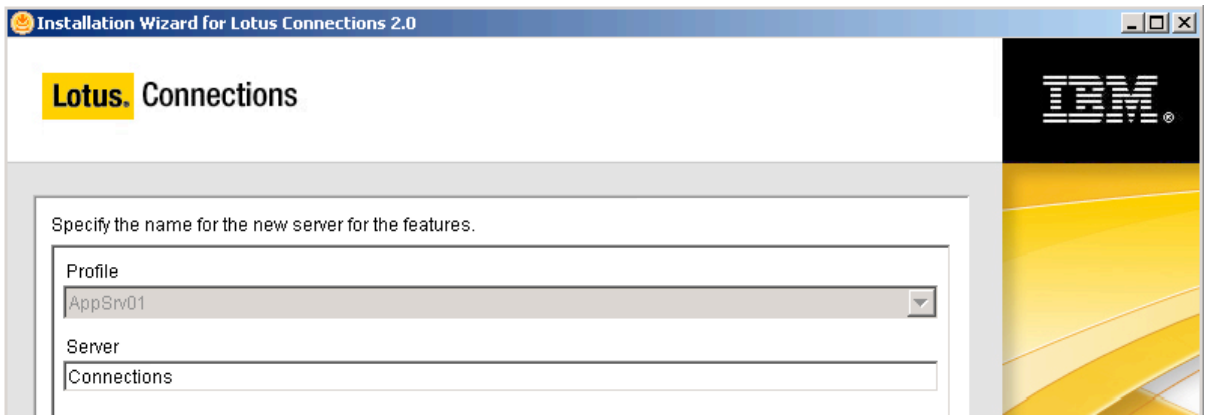
With custom, you can install to different profiles and different servers.

If you know what you are doing, go ahead and map the features to the profiles and servers of your choice. You do not have to create the servers in advance, you can create new ones with this wizard, however if you want to use a profile other than the default (AppSrv01) you **must** have created these Profiles already.

If in doubt – use Compact and select create a new server under Server

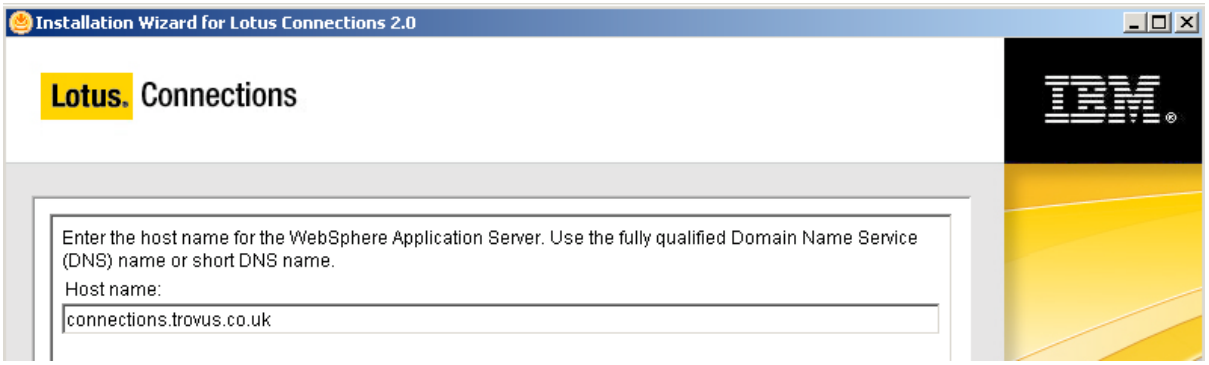


Give this server a name – eg Connections. This is *<connectionsserver>*.



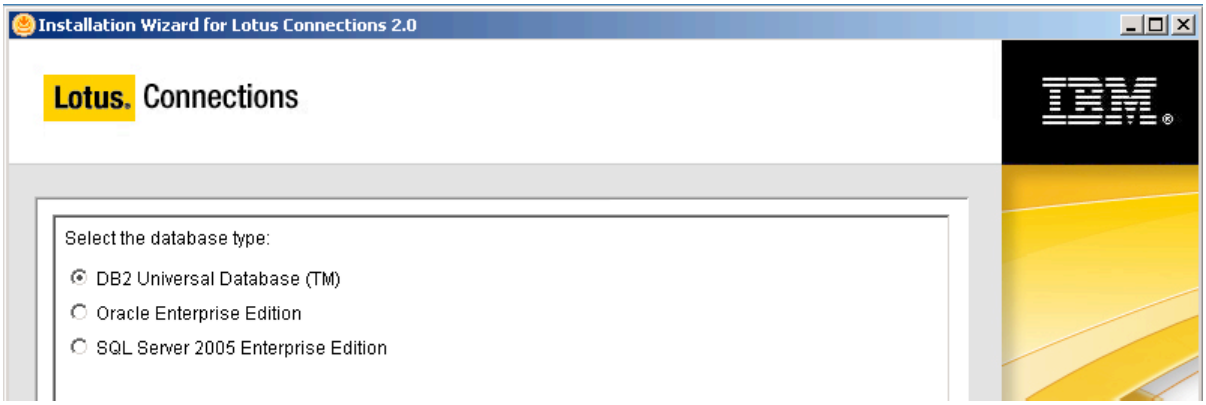
Click Next

Ensure *<fullyqualifiedname>* is entered as the Host name



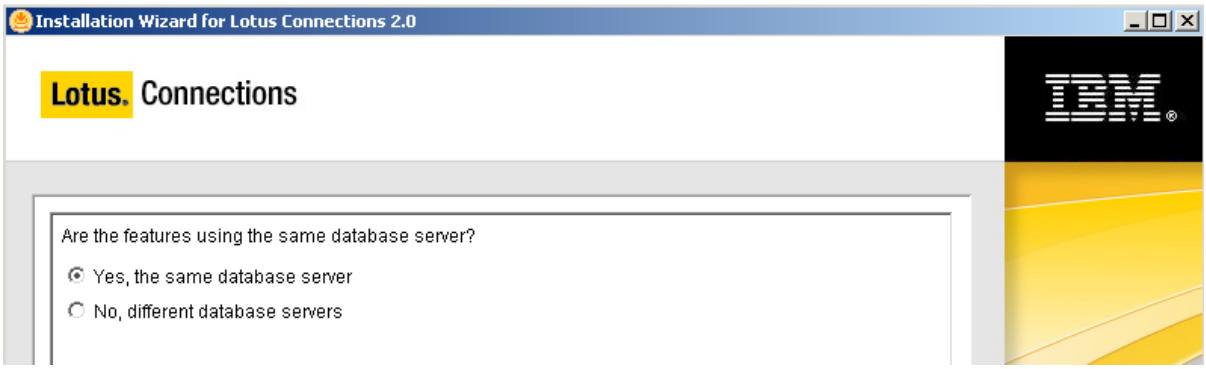
Click next.

Select DB2 as the database type



Click Next

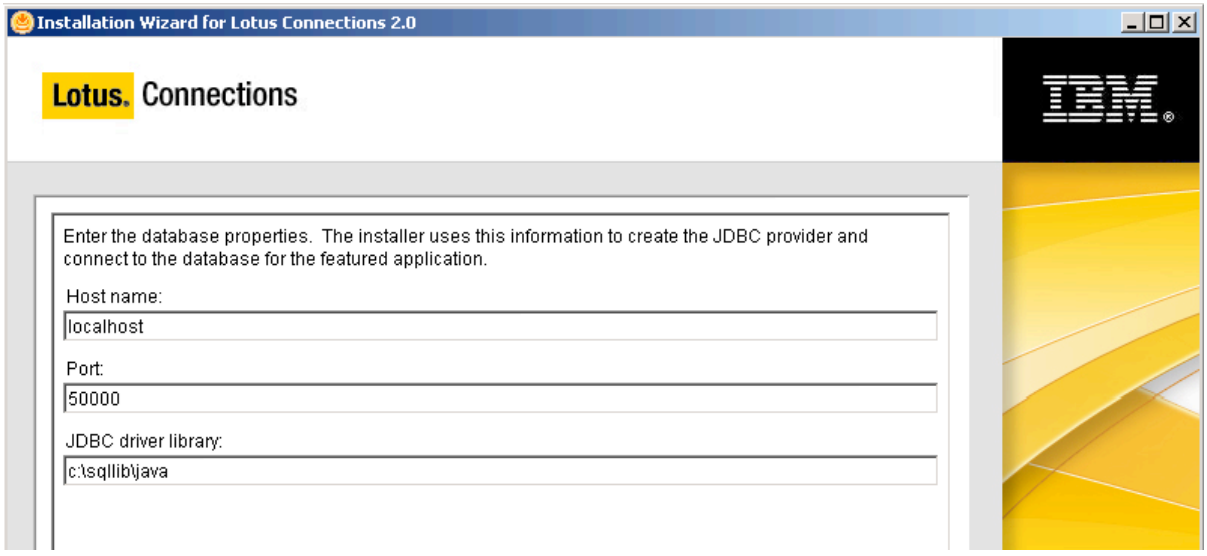
Select all features to use the same database server



Click Next

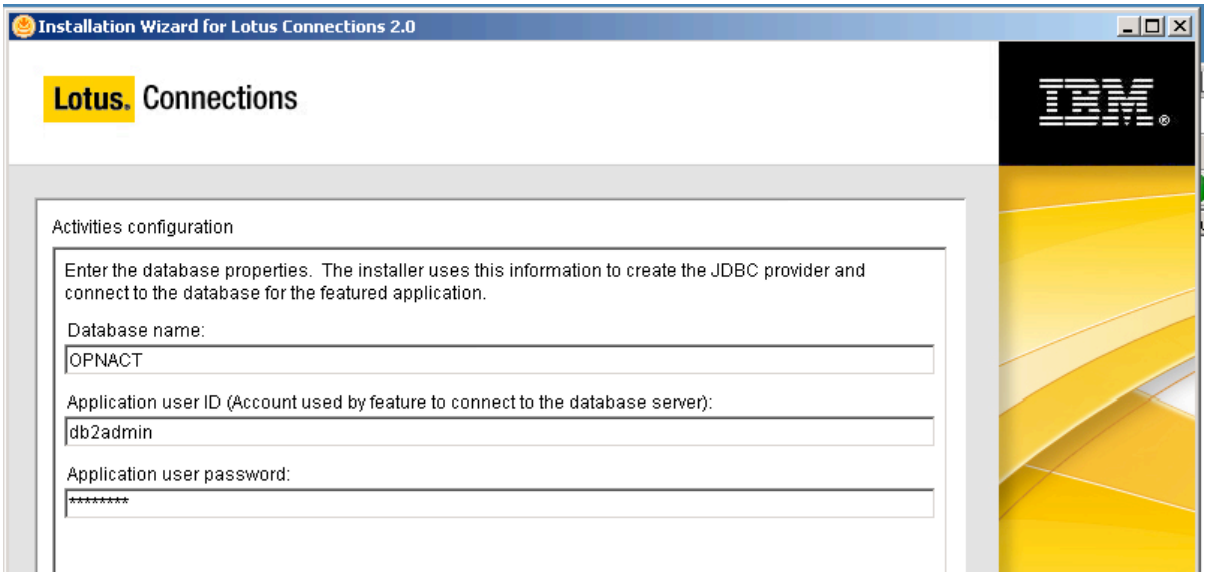
Check Host name is `localhost` and that the JDBC driver library is *<db2install>*`\java`

Advanced: if installing across multiple machines enter the hostname of the database server, not localhost



Click Next

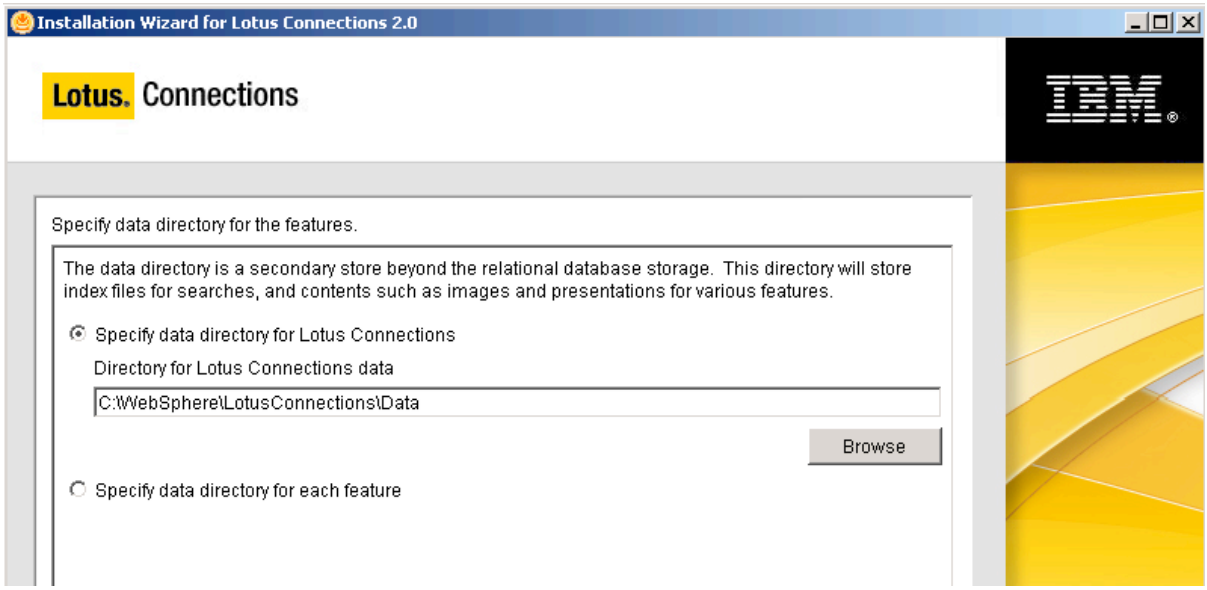
On the following database configuration screens enter <*db2user*> and <*db2pwd*> for Application user ID and Application user password



Click Next.

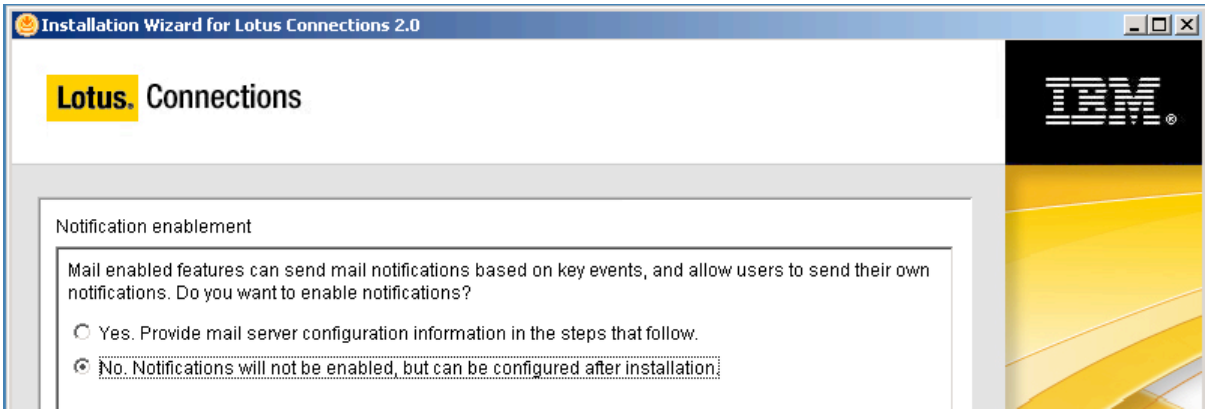
Repeat this for each feature.

You will eventually get to this screen. Leave the default selected to use a single directory for all features



Click Next

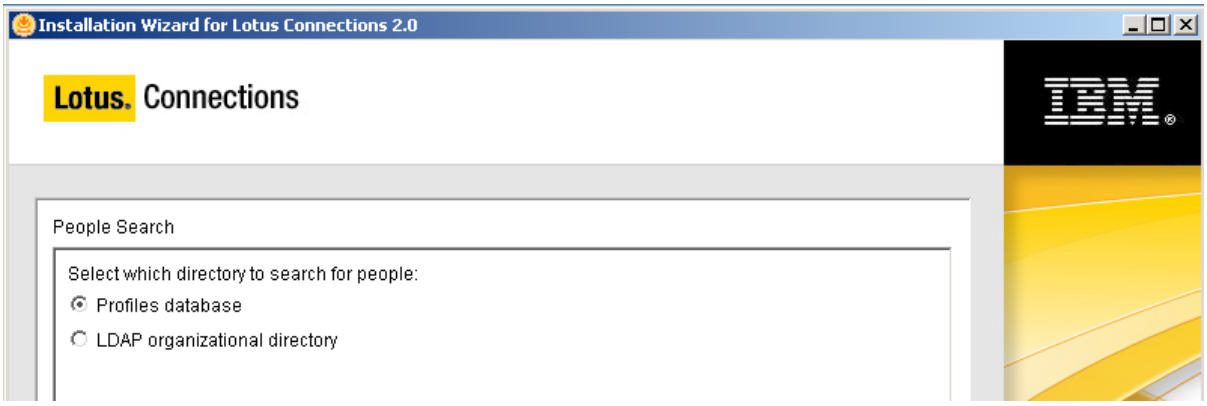
If you have a mail server configured leave Yes selected on this screen. You will then have to enter your mail server configuration. If not press No.



Click Next

If you selected Yes in the previous screen you will now have to enter your mail server information. Consult your mail server administrator for details.

Leave Profiles database selected as the directory to use to search for people



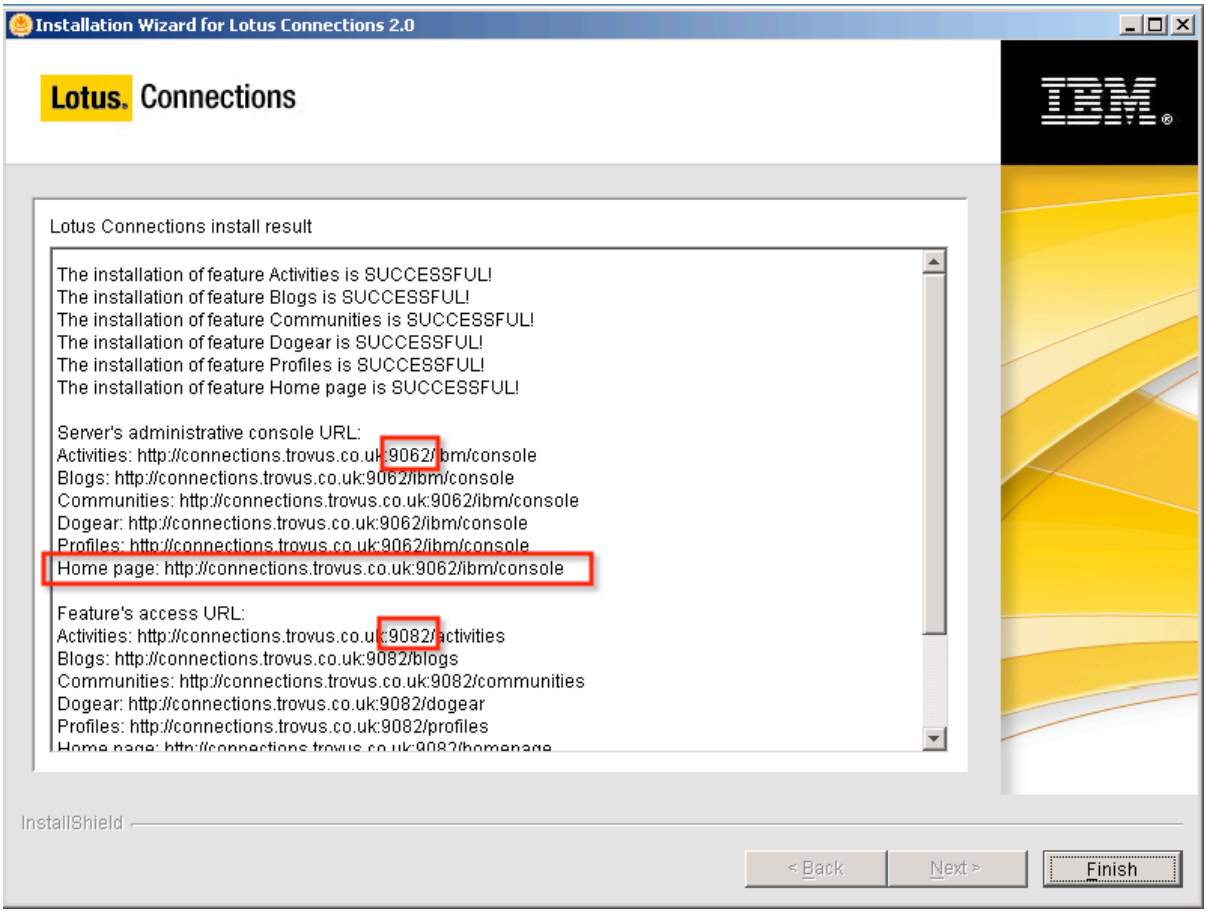
Click Next

Click Next on the summary screen and wait for Connections to install.

After while and all being well you should see a success screen. Note the URLs especially the port numbers. Note each feature may have a different port number if you used different Profiles and/or servers. You will need these port numbers in the Map Virtual Hosts section below.

You will also need the Server administrative console URL form the Home Page. Note this as *<connectionsadmin>*.

The Feature's access URL for the Home page is *<connectionhome>*



Click Finish

Configure Lotus Connections

Cache static content

Edit `httpd.conf` in *<httpinstall>*`\conf`

You can set HTTP Server to cache static content by performing the following.

Search for the line `LoadModule expires_module modules/mod_expires.so`

If it is commented out remove the # to uncomment the line.

Add the following to the end of the file:

```
ExpiresActive On

ExpiresByType application/x-javascript "access plus 1 day"
ExpiresByType text/css "access plus 1 day"
ExpiresByType text/plain "access plus 1 day"
ExpiresByType text/xsl "access plus 1 day"

ExpiresByType image/gif "access plus 1 day"
ExpiresByType image/jpeg "access plus 1 day"
ExpiresByType image/png "access plus 1 day"
ExpiresByType image/bmp "access plus 1 day"

ExpiresByType image/icon "access plus 1 day"
```

Save and close the file

Configure applications

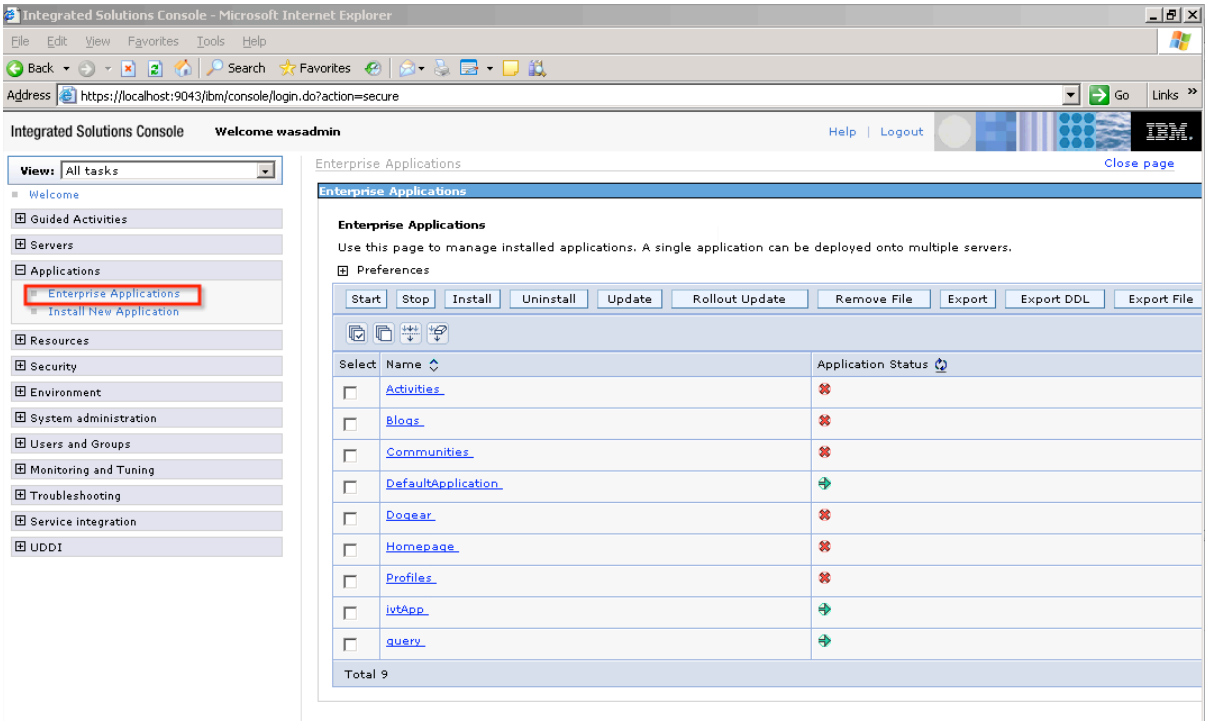
Note that if you installed Connections across multiple profiles you will need to repeat these steps for all Profiles.

From Start -> Control Panel -> Administrative Tools -> Services right click IBM WebSphere Application Server 6.01 <*hostname*>Node01 and press Start

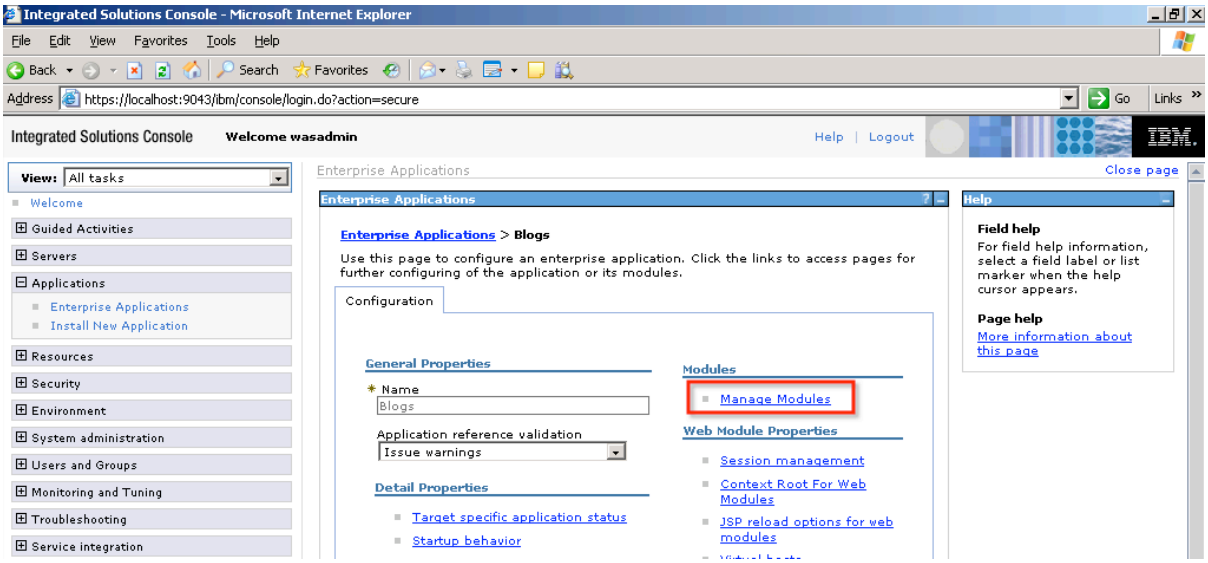
Once the service has started launch the Administrative Console from the Start menu.

Log in using <*wasadminuser*> and <*wasadminpwd*>.

Select Applications -> Enterprise Applications from the left hand side of the Administration console.



Click the Blogs application



Click Manage Modules

Select all the check boxes.

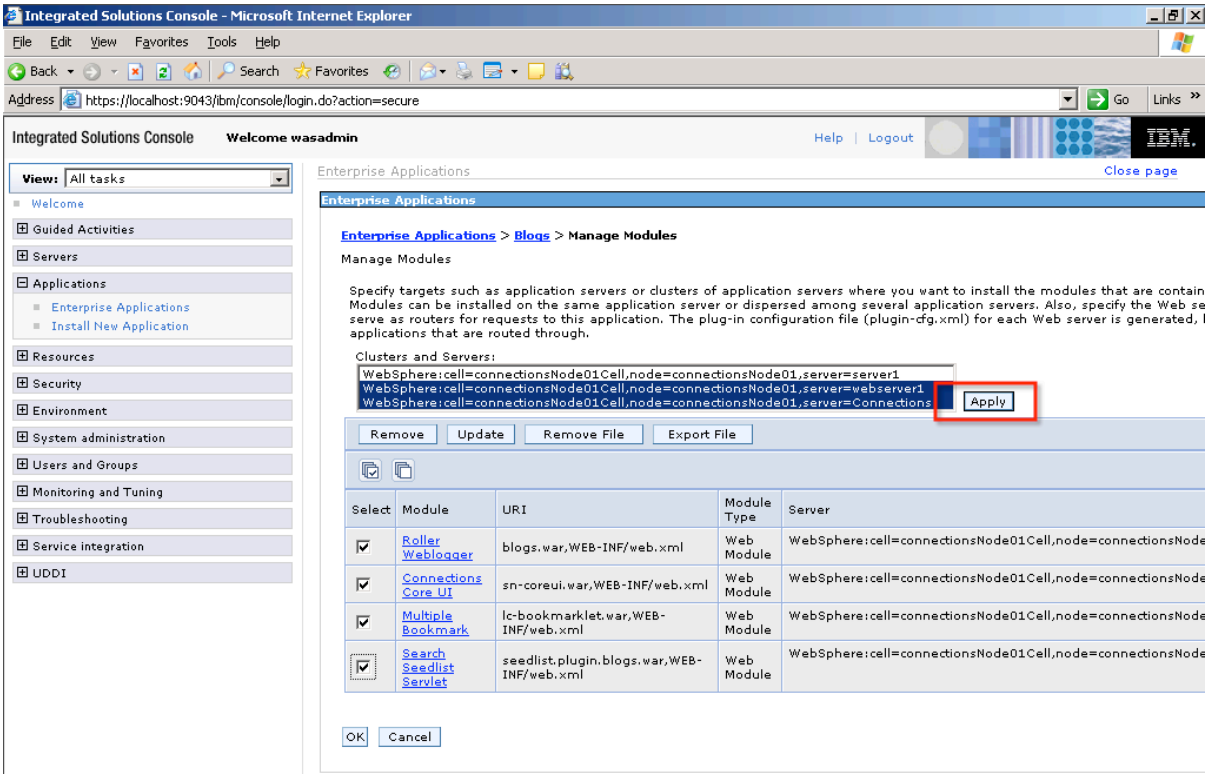
Under Clusters and Servers click `webserver1`.

iI you used the Compact install, hold down Ctrl and select *<connectionsserver>*.

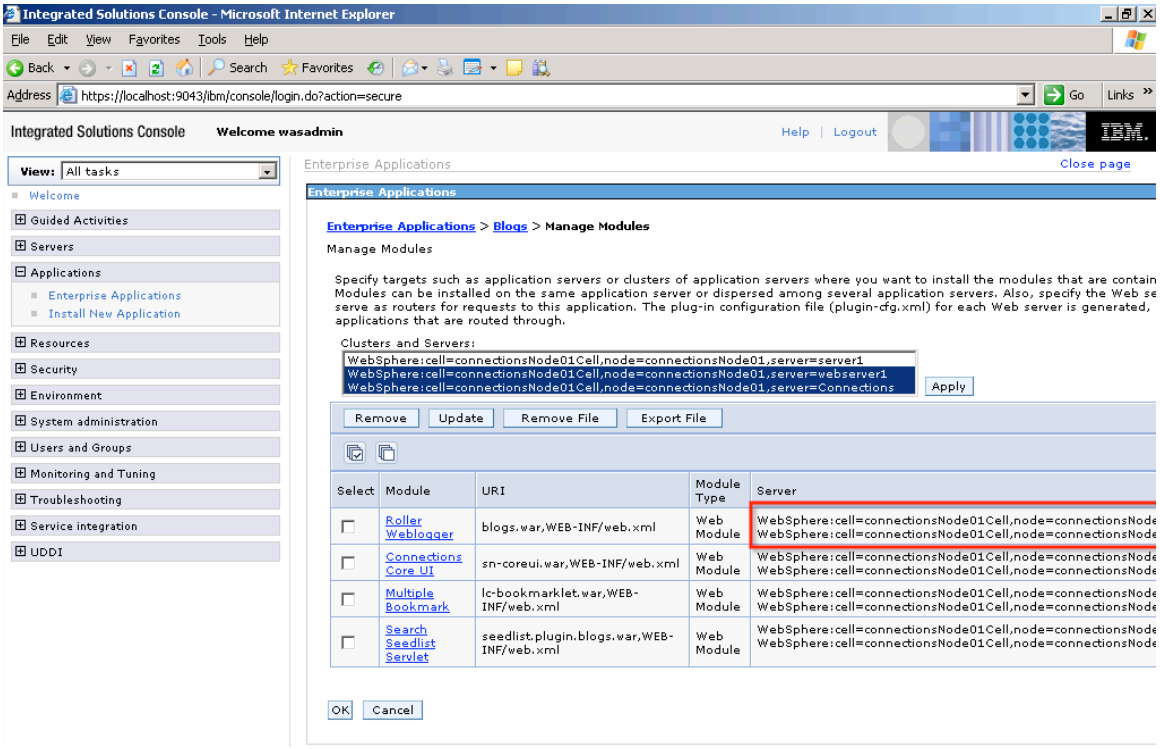
If you used Typical or Custom install, hold down Ctrl and select the server onto which you installed the Blogs feature.

Either way, wnsure both the webserver and the application server are selected.

Note the Infocenter tells you only to select certain modules. I played safe and selected all of them.



Click Apply (you **must** click Apply before OK).

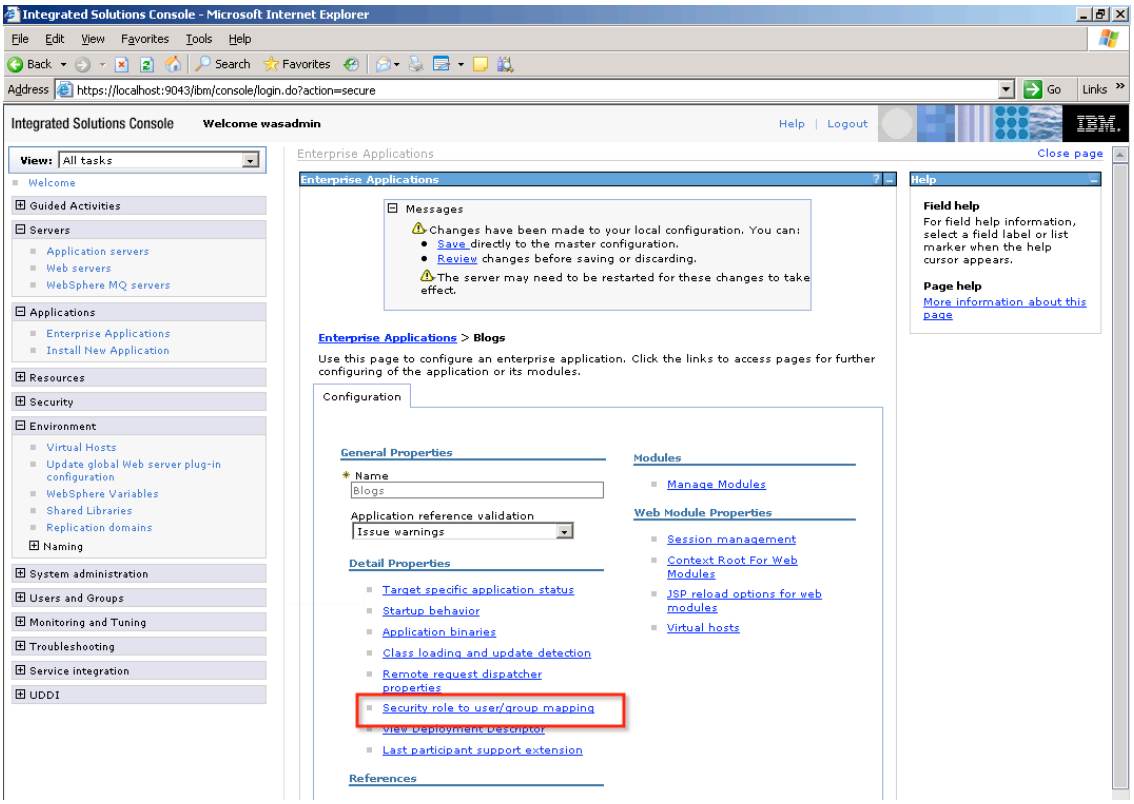


Ensure that both the webserver and the application server appear in the highlighted area.

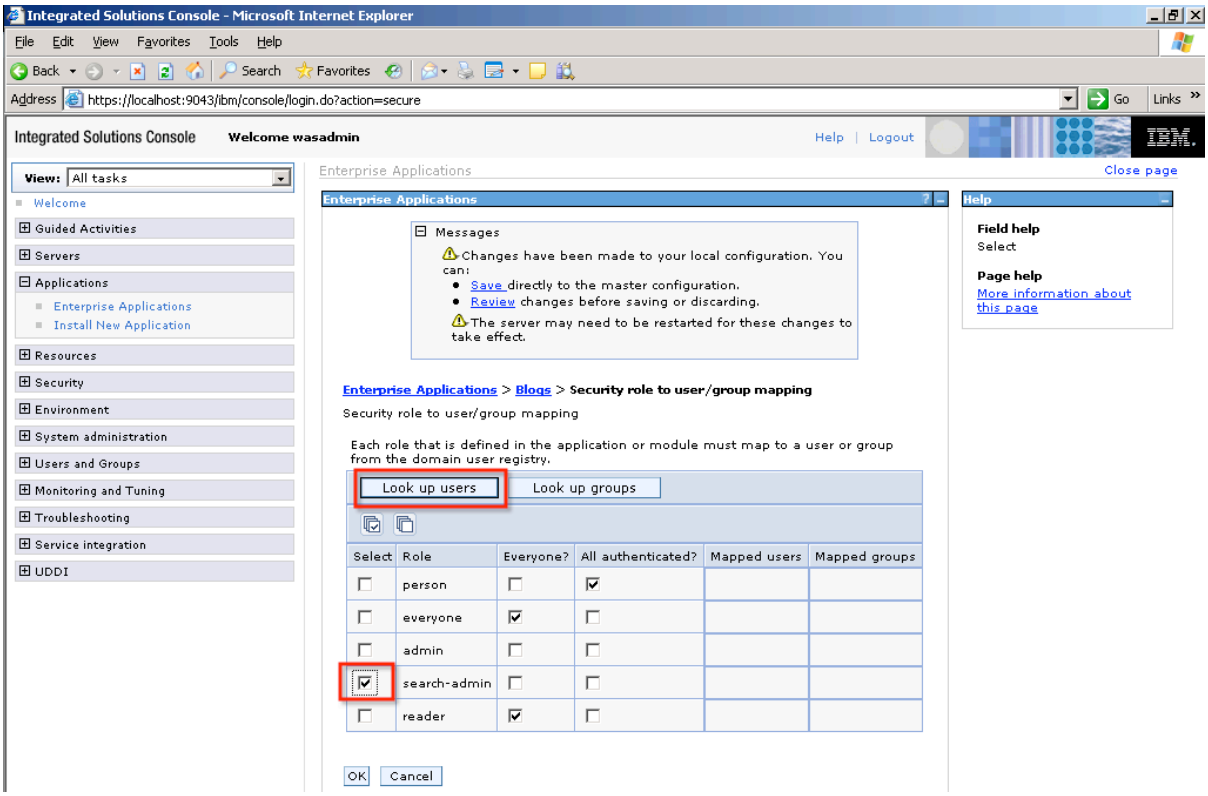
Press OK

We now need to assign a task id for searching and an administrative ID for some of the features.

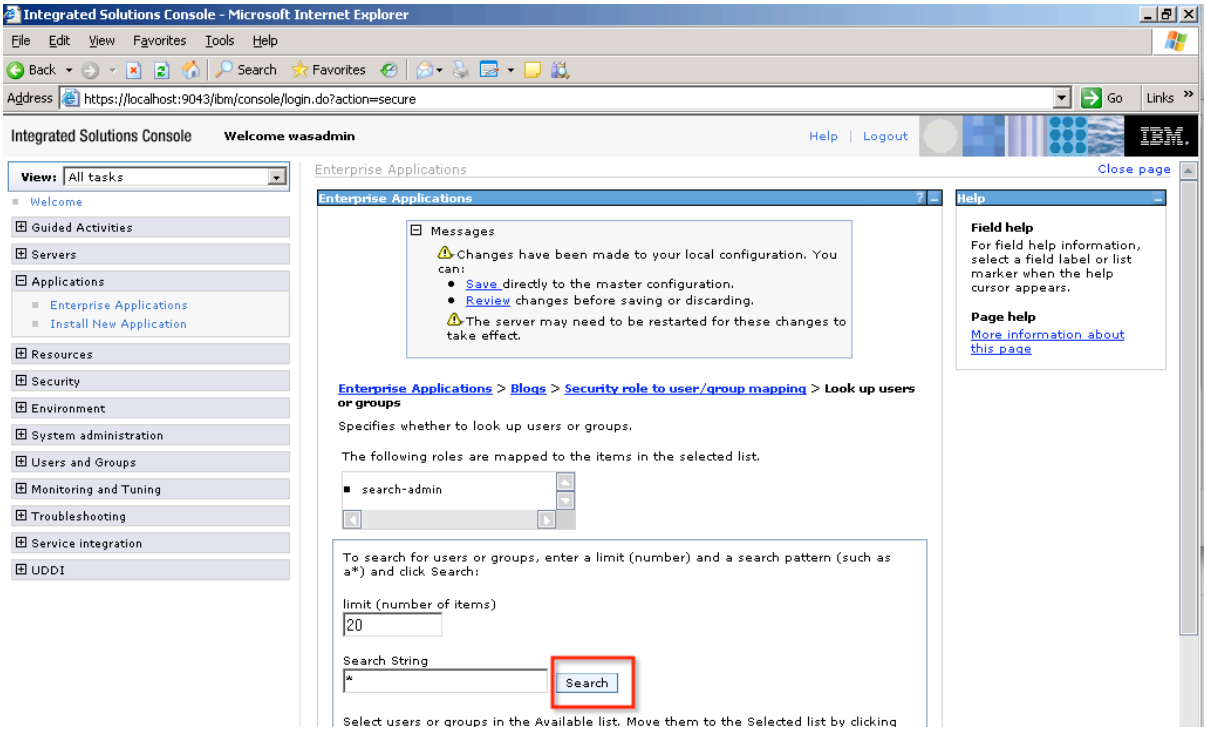
Click Security role to user/group mapping.



Click the search-admin check box

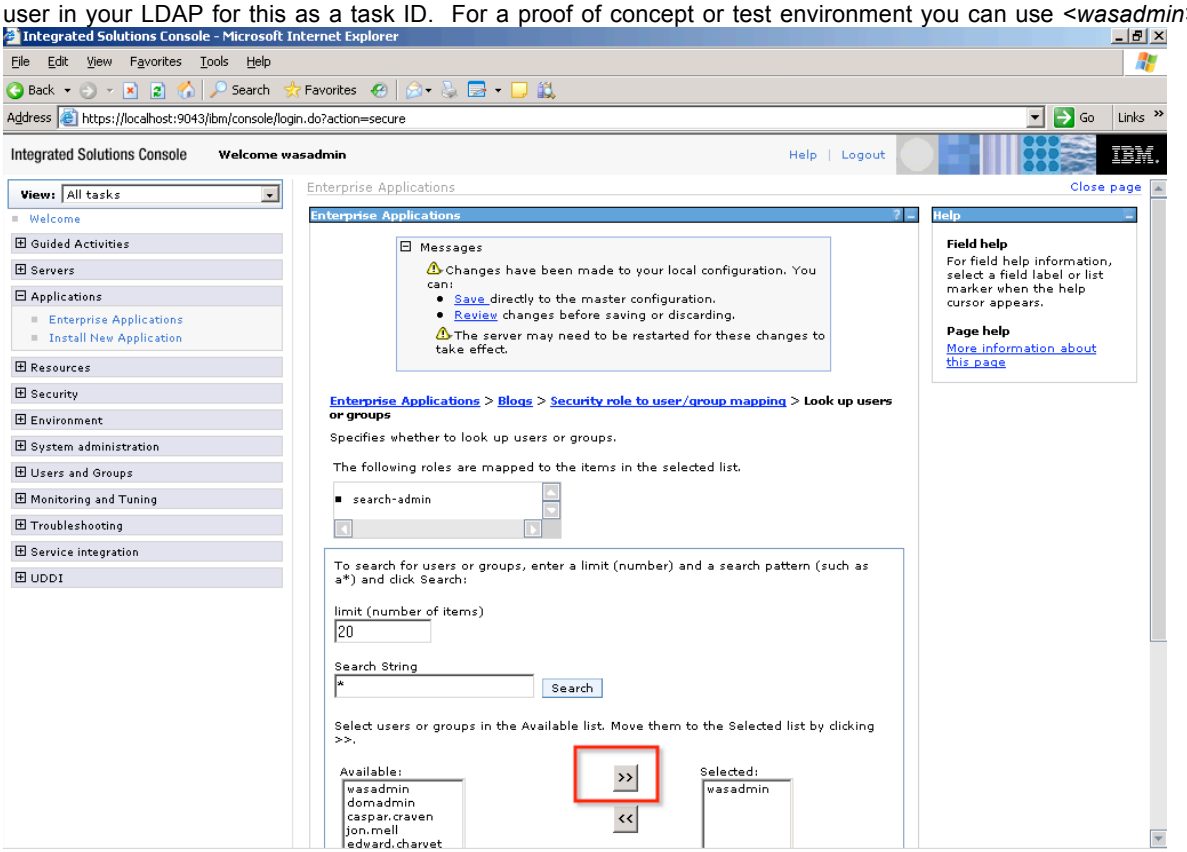


Click Look up users



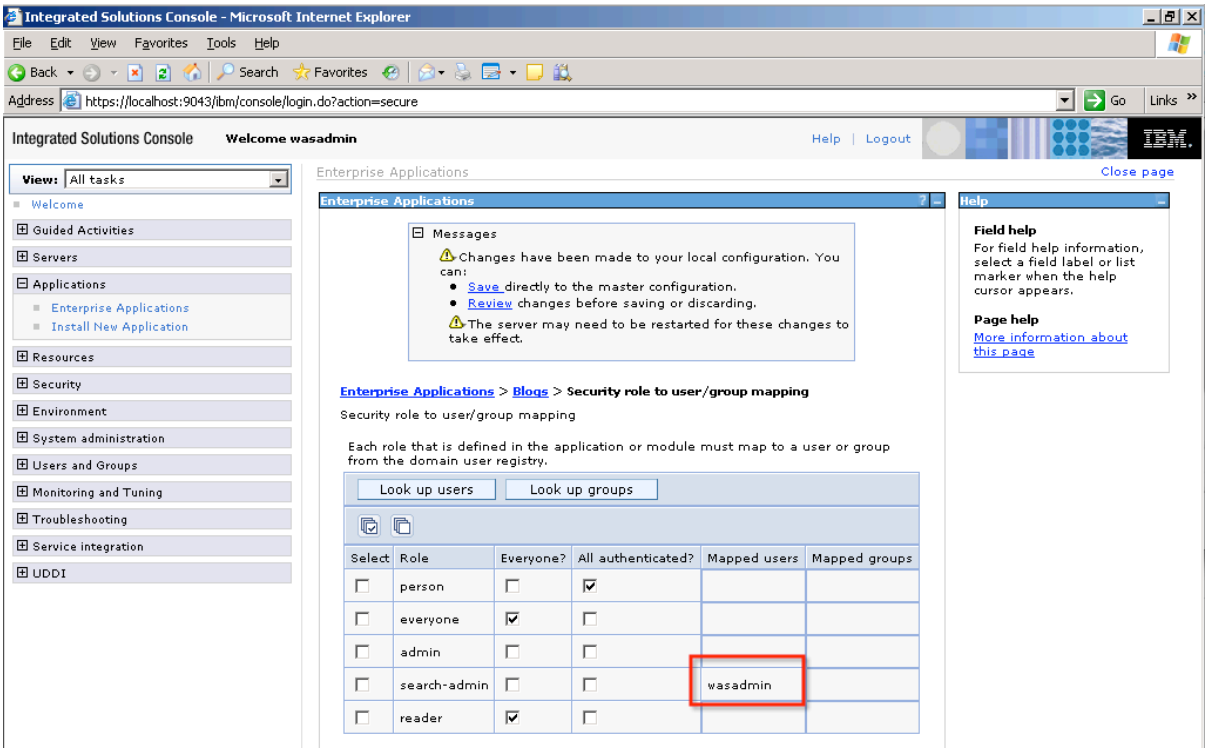
Click Search

Select a user to be used as the search administrator. In a production environment you should have a defined user in your LDAP for this as a task ID. For a proof of concept or test environment you can use *<wasadmin>*.

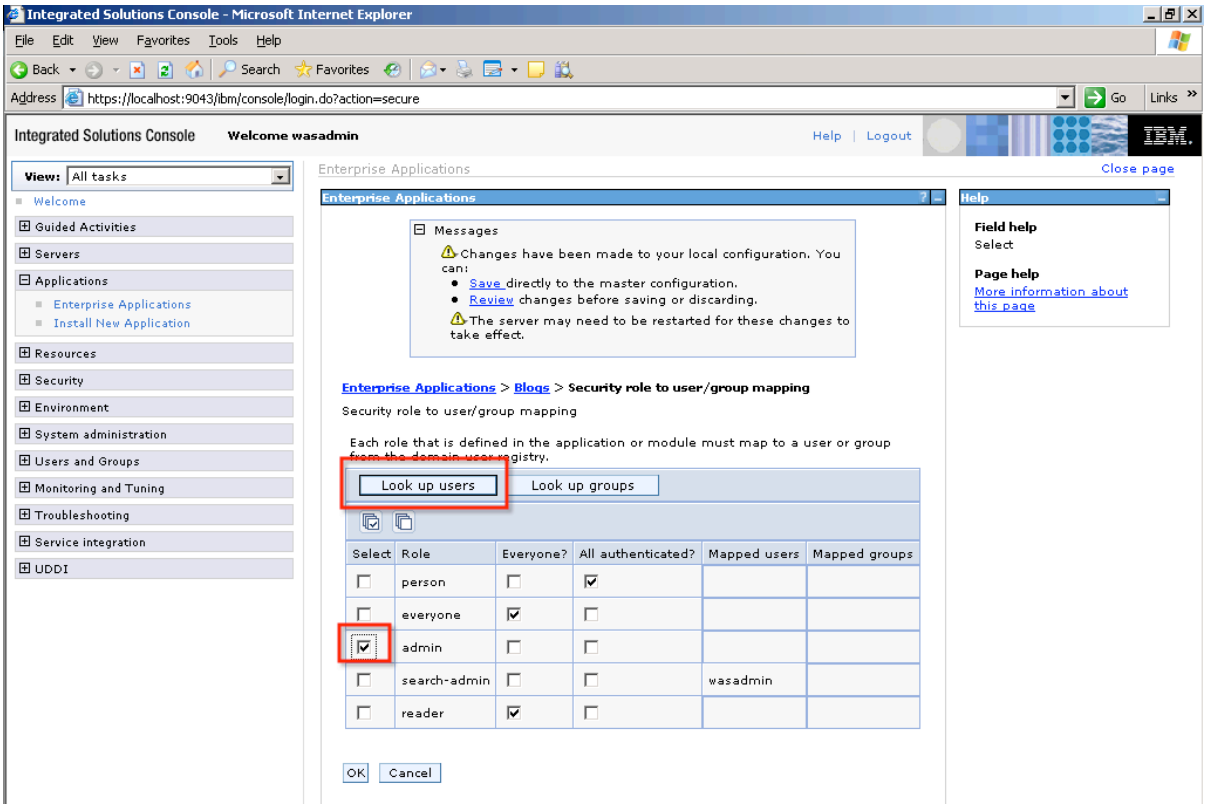


Click OK

Check the user has been added to the Mapped Users column

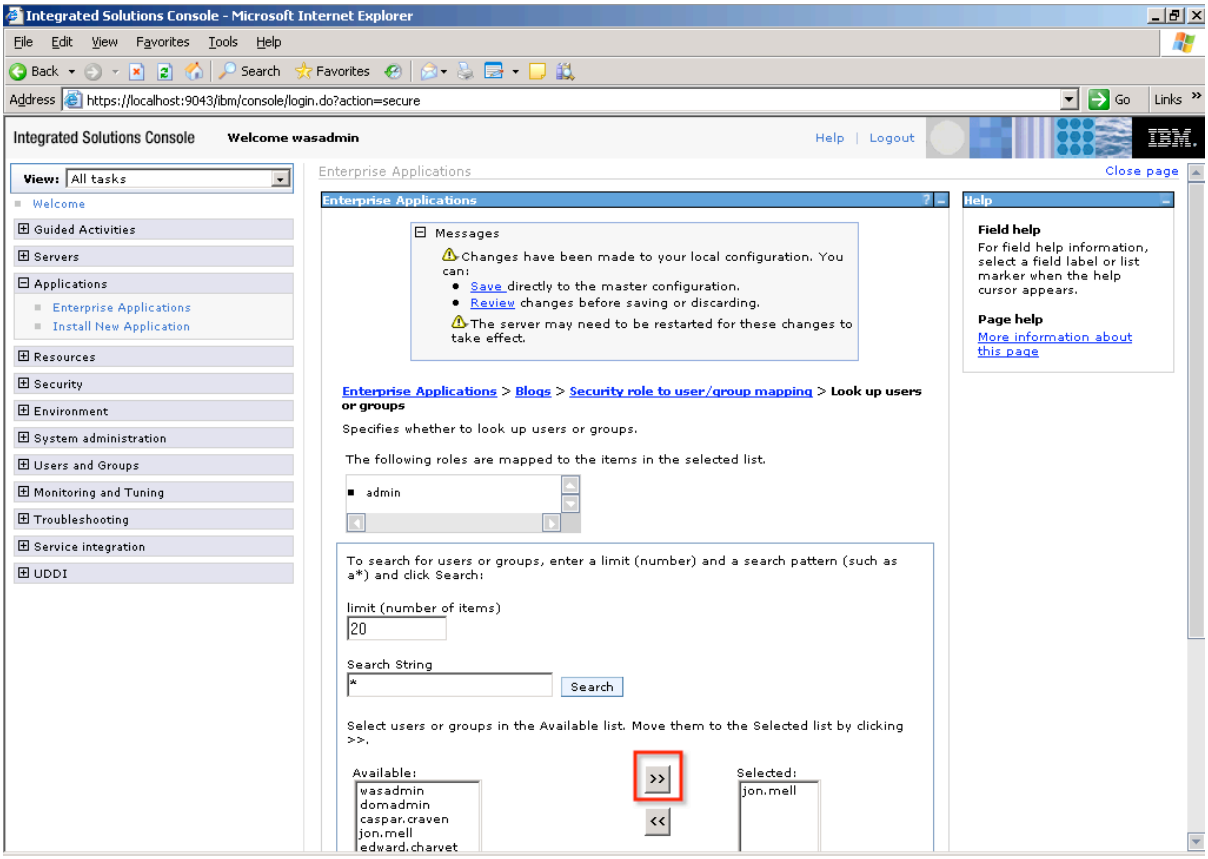


Select the admin check box



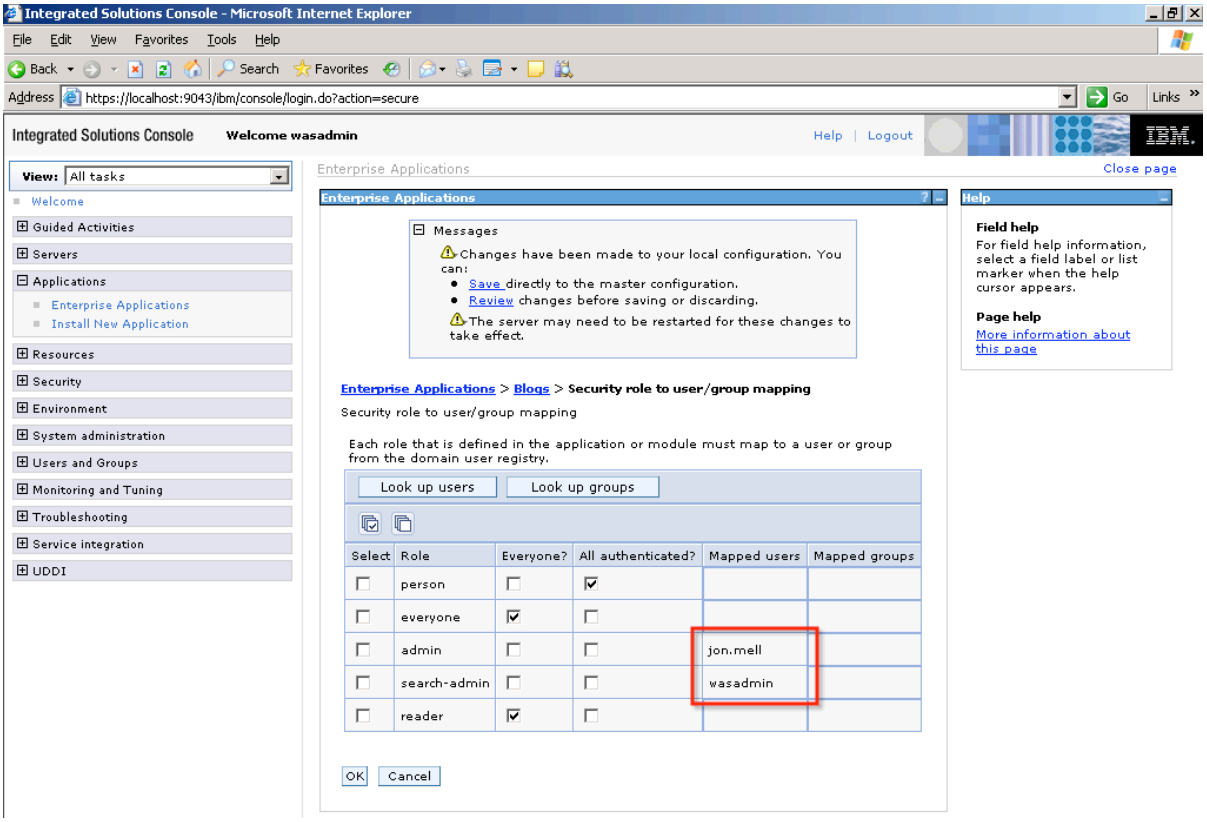
Click Look up users

Select a real person who will perform administrative tasks, and not a task ID as per search-admin

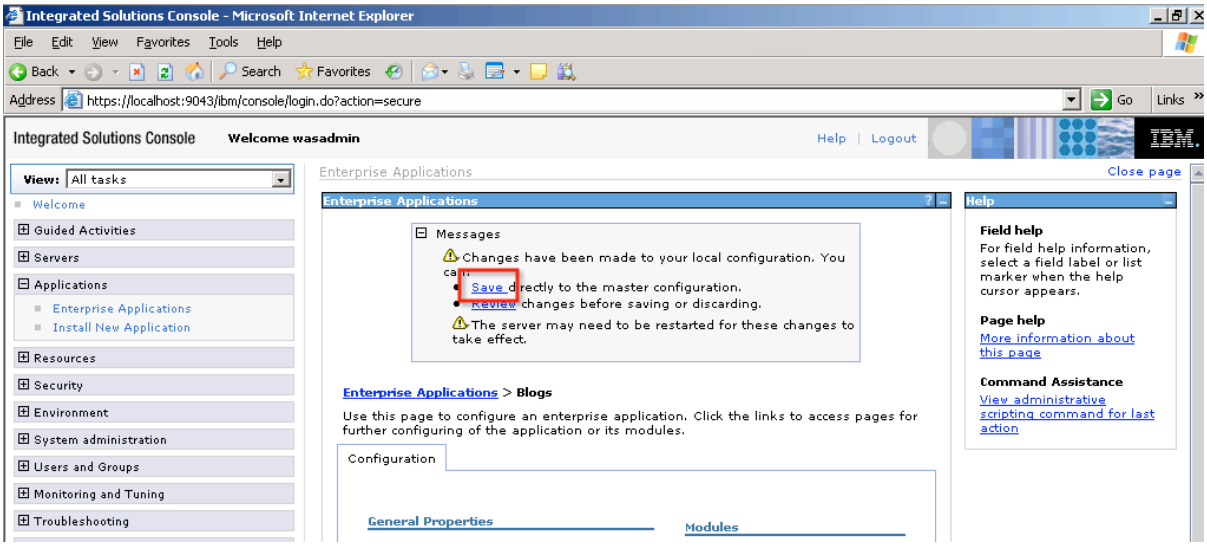


Click OK

Check both the task id has been mapped to search-admin, and the administrative user has been mapped to admin



Click OK



Click Save

Repeat the Manage Modules and Security role to user/group mapping steps for

- Activities (search-admin role only),
- Communities, (search-admin and admin roles)
- Dogear, (search-admin role only)
- Homepage (admin role only)
- Profiles (search-admin and admin roles)

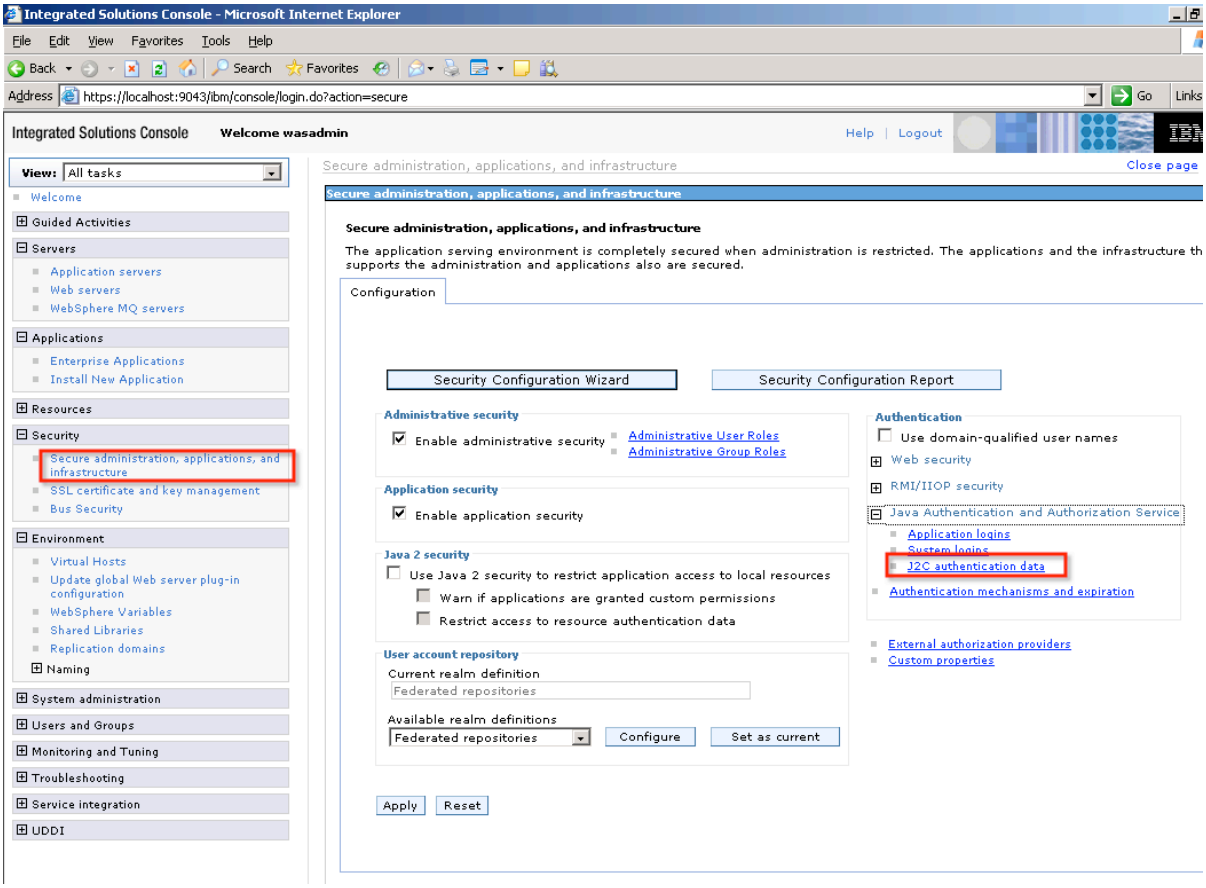
When on the Manage Modules screen ensure that all check boxes are selected and both the webserver and the application server are selected under Clusters and Servers.

Ensure you press Apply before OK and that the webserver and the application server are listed under the 'Server' column for each module.

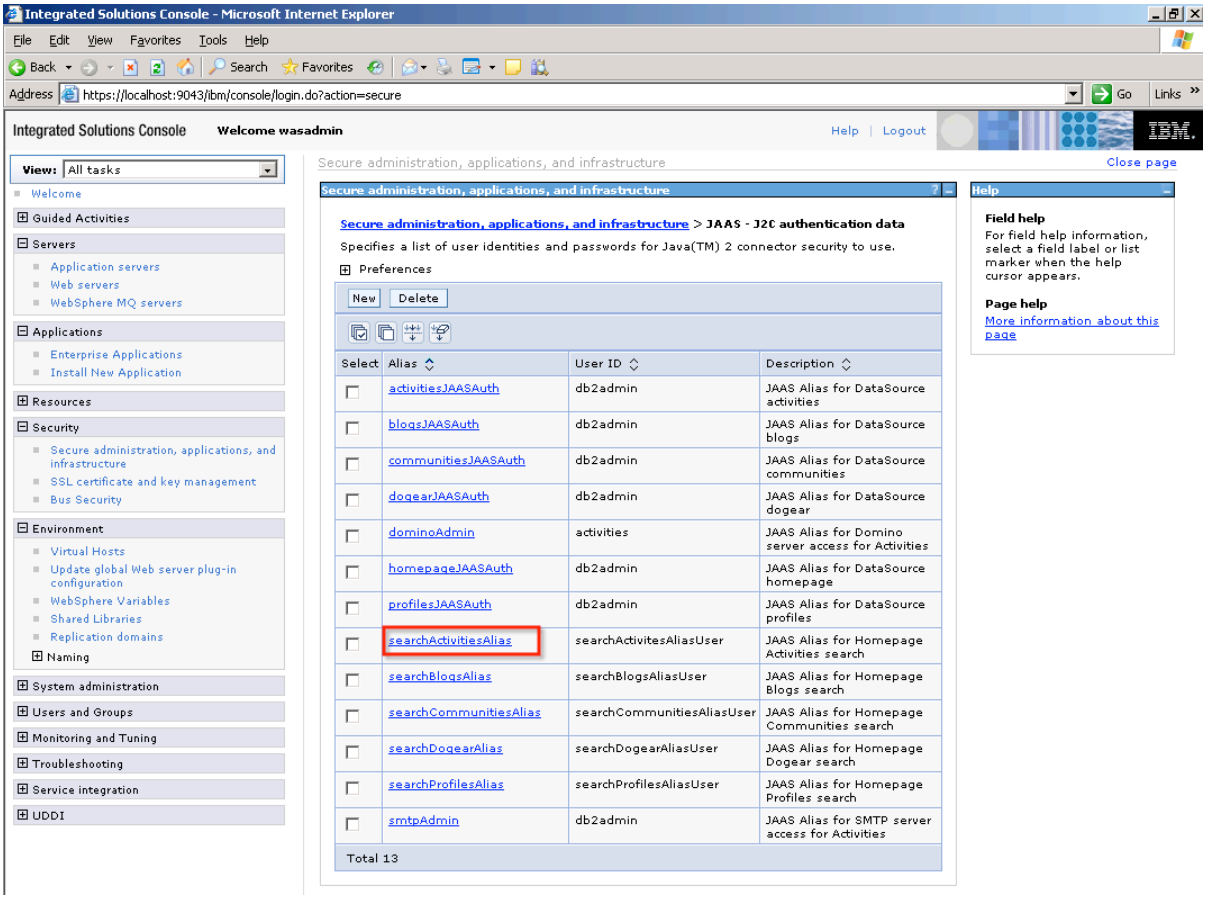
Ensure that you click Save at the end of the process.

Configure Search

Click Security, then Secure administration, applications and infrastructure on the left hand side.



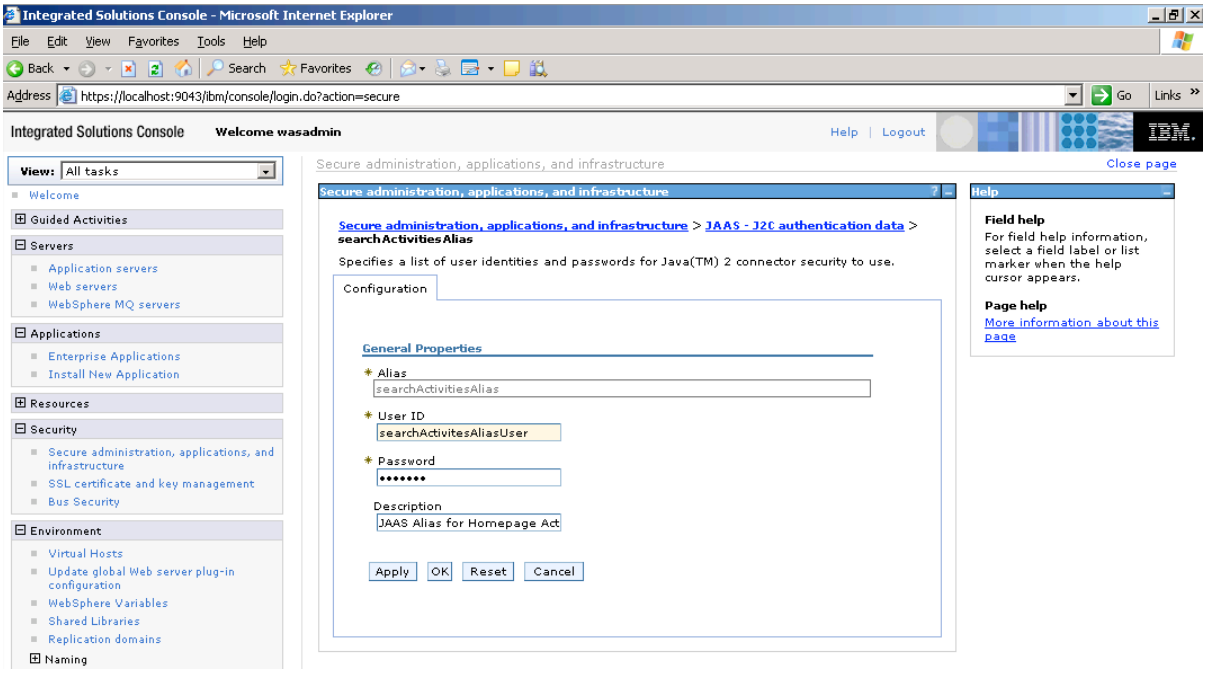
Click Java Authentication and Authorization Service on the right hand side and then J2C authentication data.



Click searchActivitiesAlias.

Change the UserID to the user you mapped to the search-admin role for Activities (eg <*wasadmin*>)

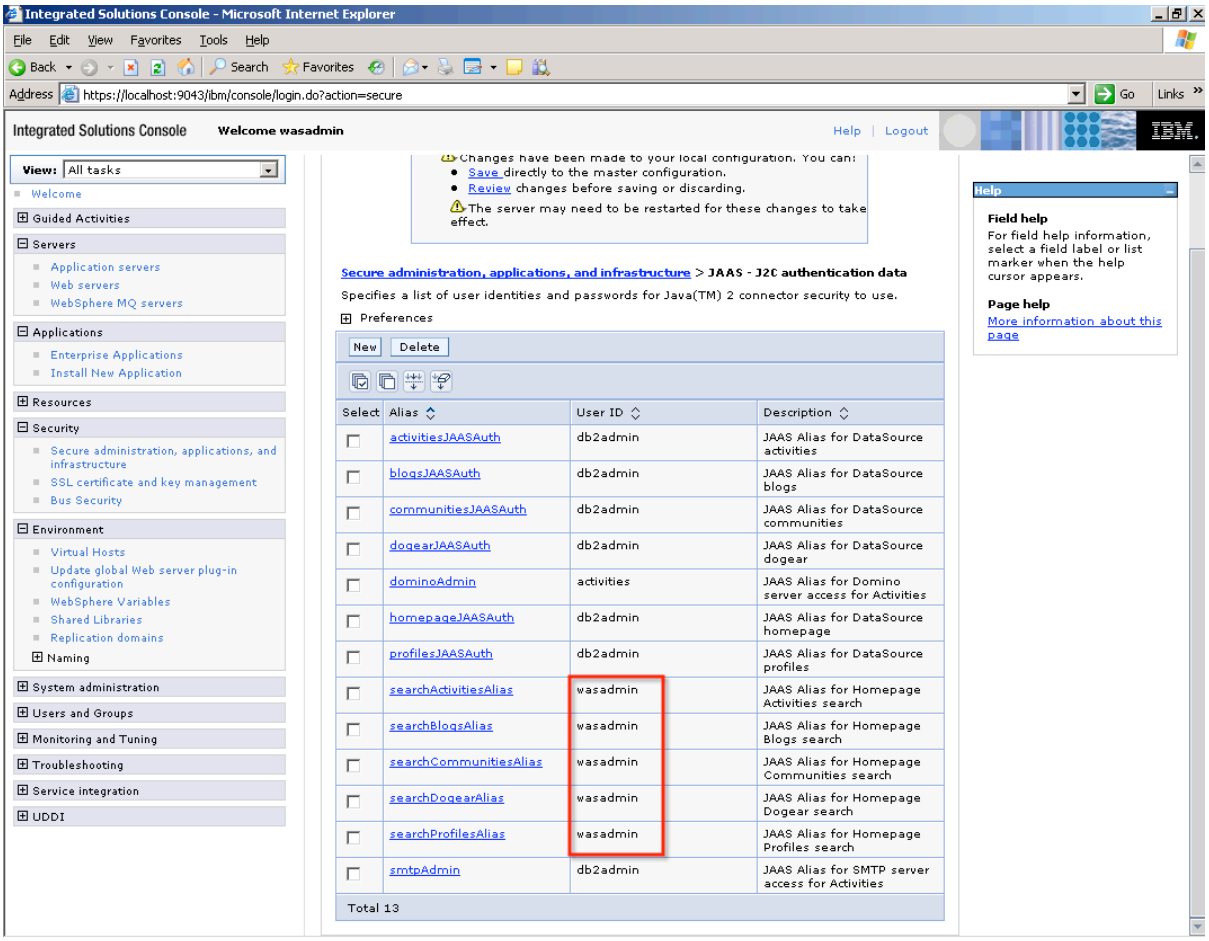
Enter the password for this user



Click OK.

Repeat the process for searchBlogsAlias, searchCommunitiesAlias, searchDogearAlias and searchProfilesAlias. Note there is no alias for the home page as it is not searchable.

When you are finished the JAAS – J2C authentication data screen should look something like this



Click Save.

Install SchedularCalendars

From the command line and navigate to

`<wasinstall>\profiles\AppSrv01\bin` (eg `C:\WebSphere\AppServer\profiles\AppSrv01\bin`) and run `wsadmin`

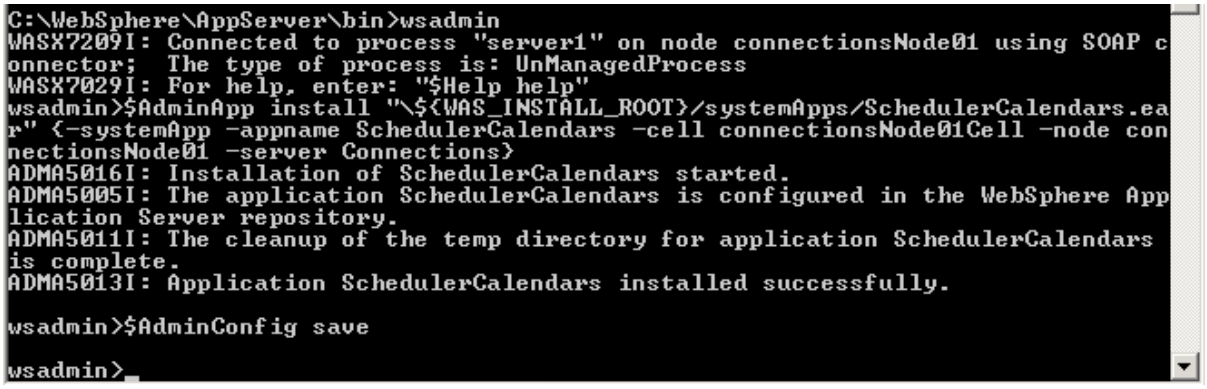
Do not run this command from *<wasinstall>*`\bin`

If asked to log in use *<wasadmin>*

Run the following command (one single command with no line breaks). Note this command, including *<ConnectionsServer>* is case sensitive. If you used the Typical or Custom install method then *<ConnectionsServer>* needs to be the server where you installed the Home page feature.

```
$AdminApp install "\${WAS_INSTALL_ROOT}/systemApps/SchedulerCalendars.ear" {-
systemApp -appname SchedulerCalendars -cell <hostname>Node01Cell -node
<hostname>Node01 -server <ConnectionsServer>}
```

Then type `$AdminConfig save`



Type `quit`

Create index schedule

Run `wsadmin –lang jython`

Note all commands here are case sensitive

Type

`execfile('homepageAdmin.py')`

```
wsadmin>execfile('homepageAdmin.py')
No Homepage services found
HomePage Configuration Environment initialized
```

Type

`HomepageCellConfig.checkoutConfig('c:/','<hostname>Node01Cell')`

```
wsadmin>HomepageCellConfig.checkOutConfig('c:/','connectionsNode01Cell')
Homepage Cell level configuration file successfully checked out
wsadmin>
```

You will now set the time to run the indexing service for search. You can index different features at different times. For example, Activities which changes frequently can be set to be indexed every few hours whereas Profiles might be done overnight.
You need to use the CRON format to set the time.

Type:

`HomepageCellConfig.addTask("<taskname>","<start time in CRON format>","<start by time in cron format>","<features to search>")`

Where

<taskname> is an arbitrary string defining this task – eg `DailyAt1am`

<start time in CRON format> is the start time – eg Monday to Friday at 1am would be `"0 0 1 ? * MON-FRI"`

<start by time in CRON format> is the time when the task should be cancelled if it has not started. This prevents tasks from queuing up. For example, this string would cancel the index if it hadn't started by 1:10am `"0 10 1 ? * MON-FRI"`

<features> is a comma separated list of features for the task to search, eg `"activities, blogs"`

For example, this adds a task to index all features at 1am Monday-Friday

`HomepageCellConfig.addTask("dailyAt1am","0 0 1 ? * MON-FRI", "0 10 1 ? * MON-FRI", "activities,blogs,communities,dogear,profiles")`

```
wsadmin>HomepageCellConfig.addTask("dailyAt1am","0 0 1 ? * MON-FRI", "0 10 1 ? *
 MON-FRI", "activities,blogs,communities,dogear,profiles")
Loading schema file for validation: /c://homepage-config.xsd
c://homepage-config_CHANGED_.xml is valid
wsadmin>
```

As another example, this task will index all features every 5 minutes (not recommended for a high volume production system!)

`HomepageCellConfig.addTask("every5minutes","0 5/5 0-23 ? * MON-FRI", "0 11/5 0-23 ? * MON-FRI", "activities,blogs,communities,dogear,profiles")`

Google CRON if you need any help with the format!

Type `HomepageCellConfig.checkInConfig()`

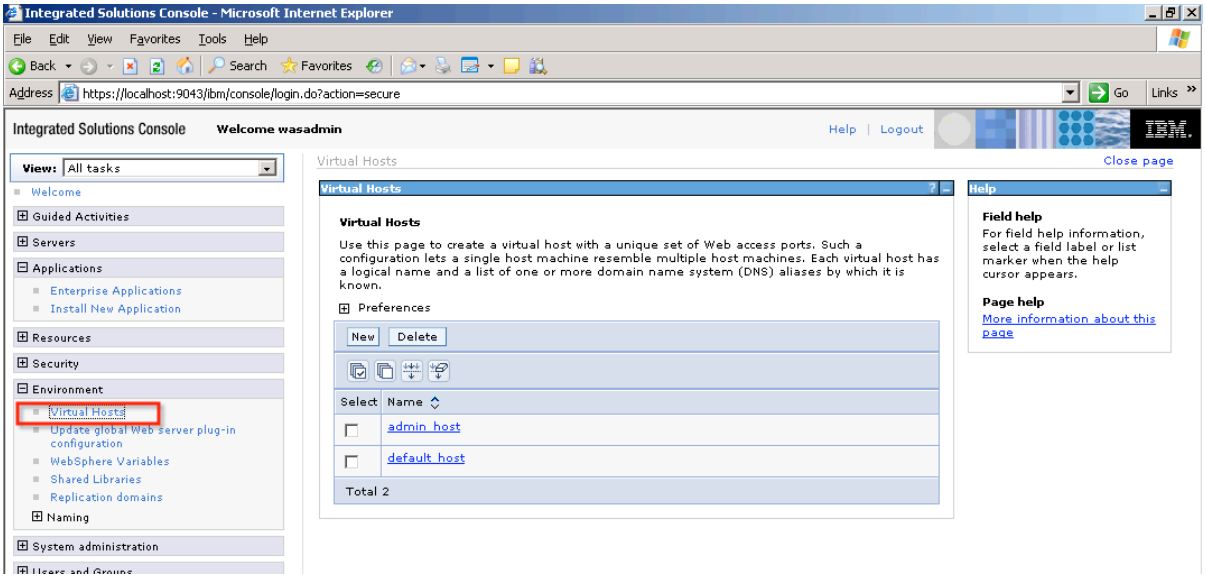
```
wsadmin>HomepageCellConfig.checkInConfig()
Using configuration arguments :
        workingDirectory: c:/
        cellName: connectionsNode01Cell
        nodeName: None
        serverName: None
Loading schema file for validation: /c://homepage-config.xsd
c://homepage-config.xml is valid
Homepage cell level configuration file successfully checked in
wsadmin>
```

Type `quit`. **Note that search will not work until this task has run for the first time.**

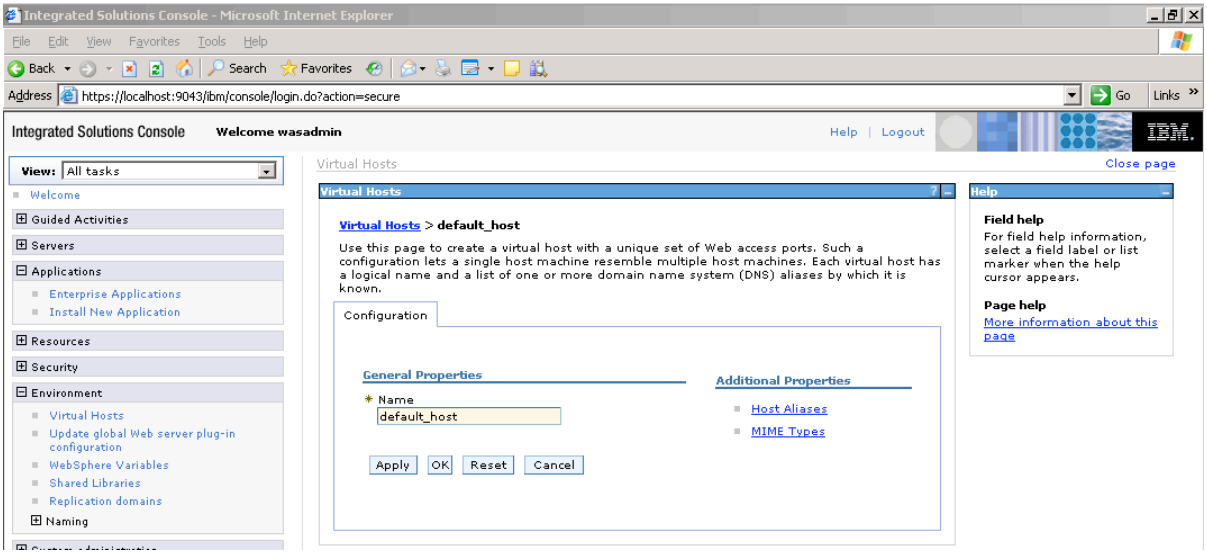
Map virtual hosts

This step is only required if you used a Typical install and created multiple WebSphere servers on a single profile.

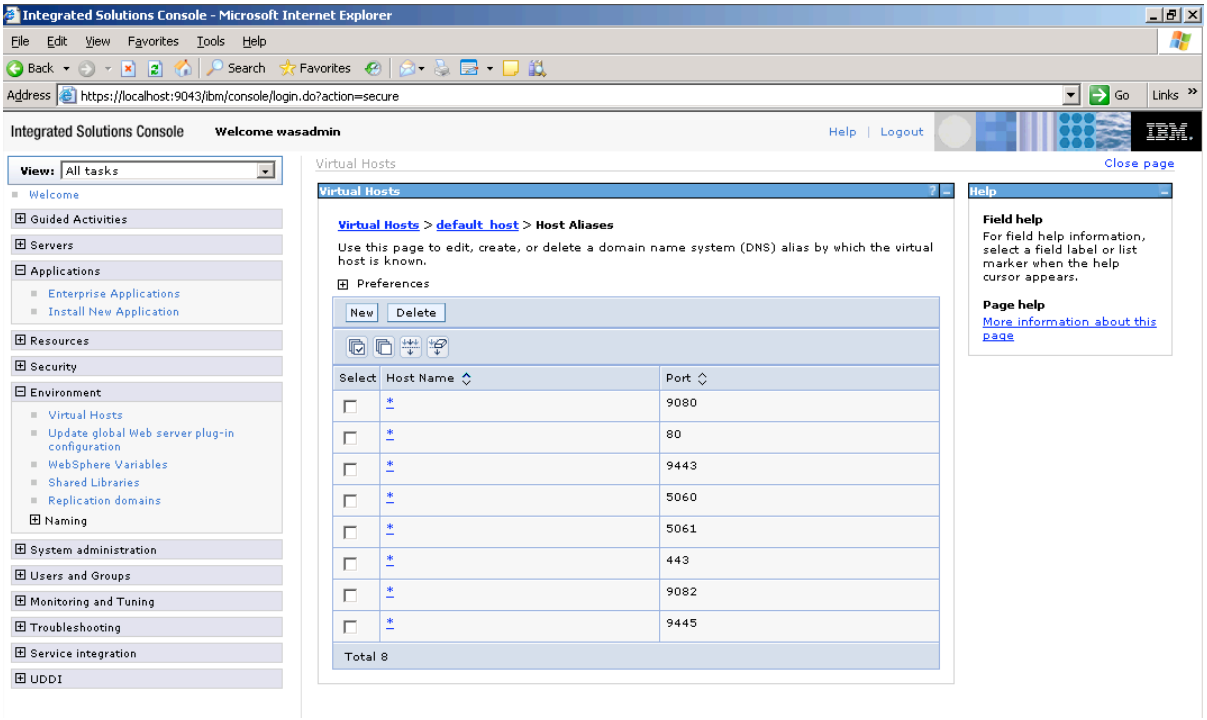
Click Environment -> Virtual Hosts on the left hand side



Click default_host



Click Host Aliases



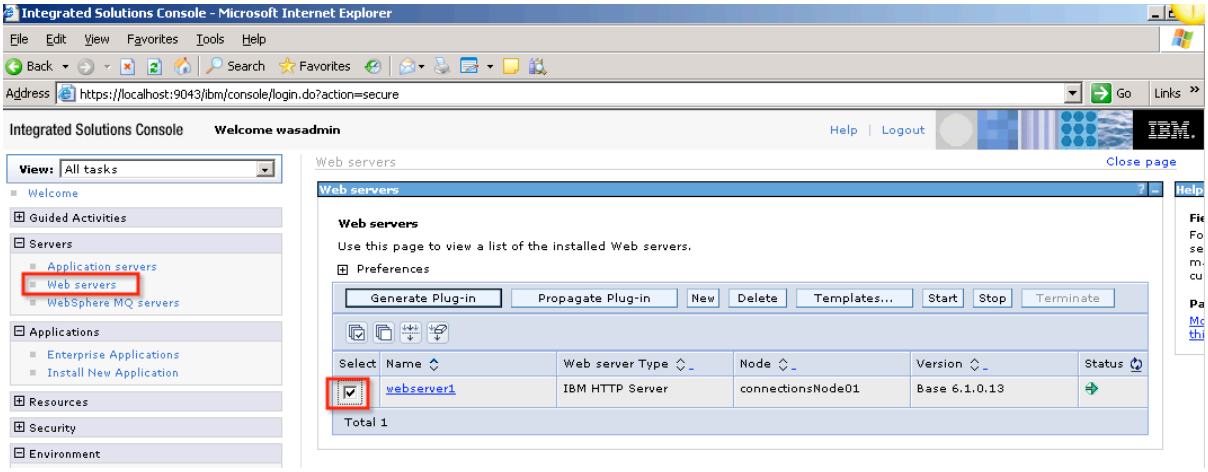
For each Lotus Connections feature (Profiles, Dogear, Blogs, Activiites, Communities, Homepage) click new.

The Host name is the feature name (eg Activities). The port is the port shown in the Feature access URL shown at the end of the Connections installation.

If you chose a Compact install these port numbers will all be the same and this step will not be necessary.

Generate Plugin

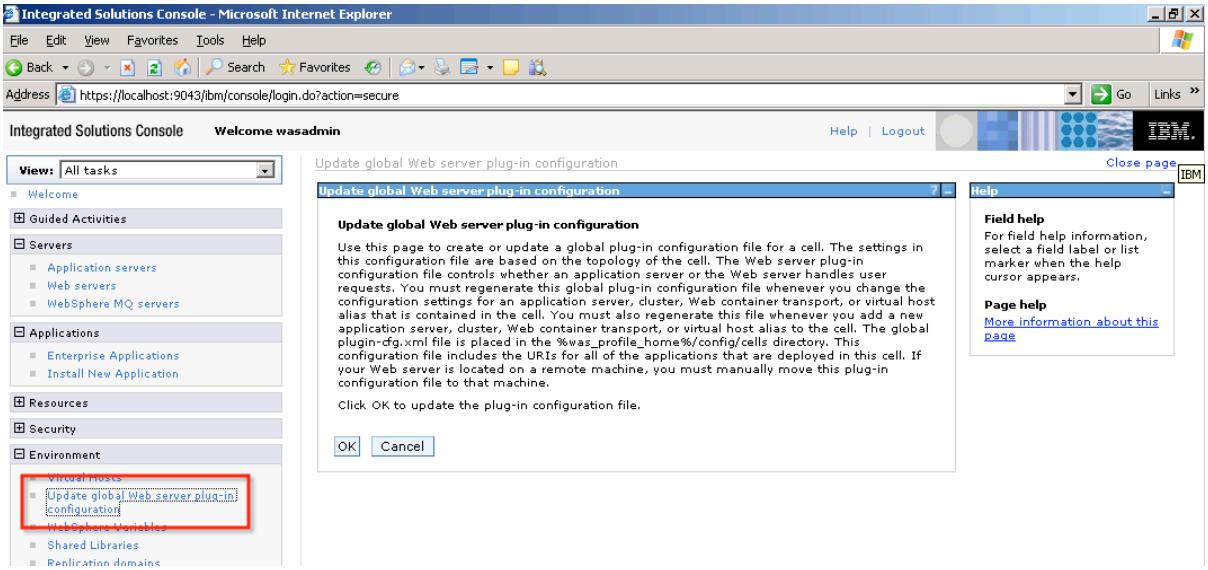
Click Servers -> Web Servers on the left hand side. Select the webserver1 check box



Click Generate Plug-in

Select the check box again and click Propogate plug-in

Click Environment -> Update global Web server pliug-in configuration



Click OK

Configure LotusConnections-config.xml

Backup and then edit the LotusConnections-config.xml file found in:

`<wasinstall>\profiles\AppSrv01\config\cells\<hostname>Node01Cell\LotusConnections-config`

Note `AppSrv01` will be different if you have used custom profiles.

Save a backup version of this document

There will be an `<sloc:` entry for each feature (Blogs, Communities etc.)

Within the entry there is an href and ssl_href for each feature with a URL. This URL will have a port number – eg http://<hostname>:9082/activities and https://<hostname>:9445/activities

Change both URLs so that the port information is removed and they look like:

http://<hostname>/activities

https://<hostname>/activiities

and repeat for all other features.

Essentially wherever there is a URL in this document with a port number you should remove it.

Save and close this file.

Final steps

Click Start -> All Programs ->IBM HTTP Server v6.1 -> Stop HTTP Server

Click Start -> All Programs ->IBM HTTP Server v6.1 -> Start HTTP Server

From the command line navigate to

`<wasinstall>\bin` (eg `C:\WebSphere\AppServer\bin`) and run

and run

`stopserver server1 –username <wasadmin> -password <wasadminpwd>`

`stopserver <connectionsserver> –username <wasadmin> -password <wasadminpwd>`

Then run

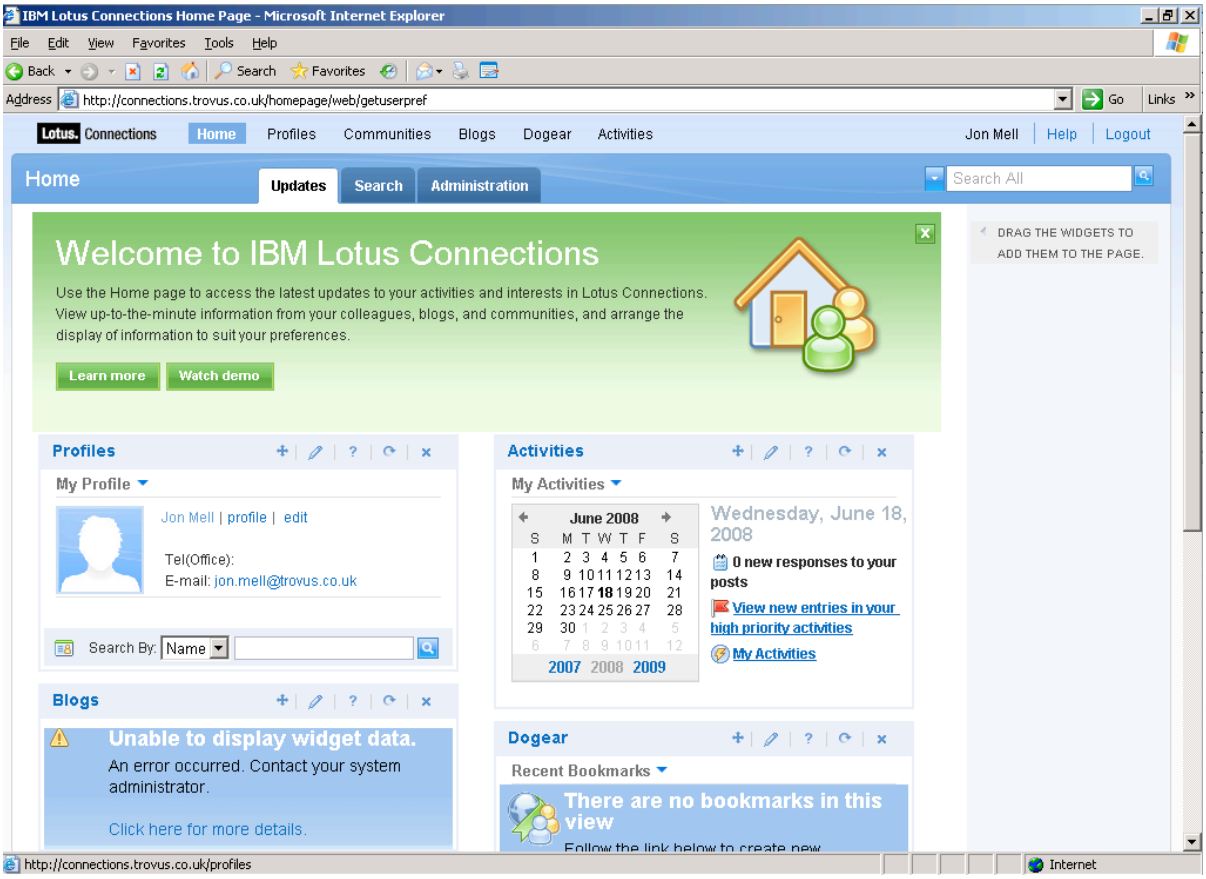
`Startserver <connectionsserver>`

If you installed Connections across multiple servers using the Typical or Custom method start these servers too.

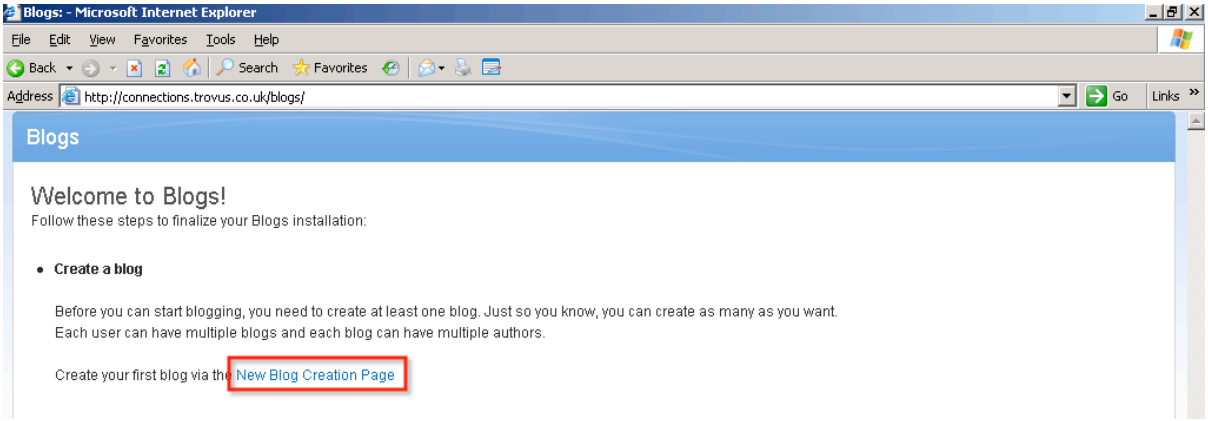
Then open a browser to *<connectionshome>*

Log in using the user that you mapped to the admin roles for Homepage and Blogs

You should see a page that looks like this

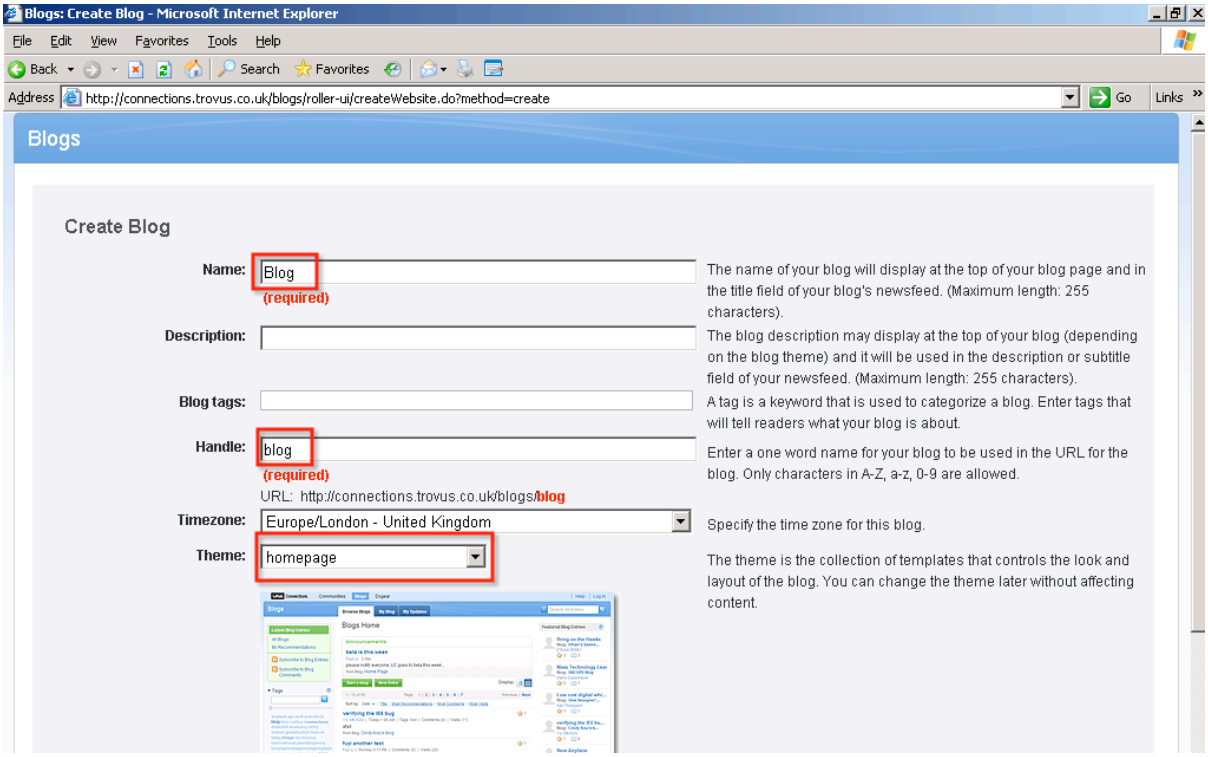


The blogs feature needs configuring. Click Blogs at the top of the page.

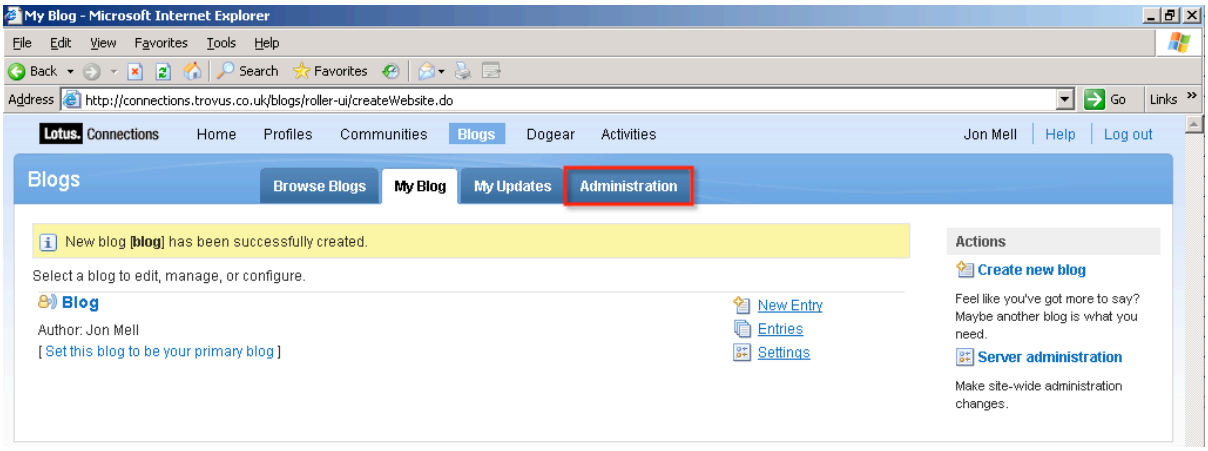


Click New Blog Creation Page

Enter a name and a handle and change the theme to homepage

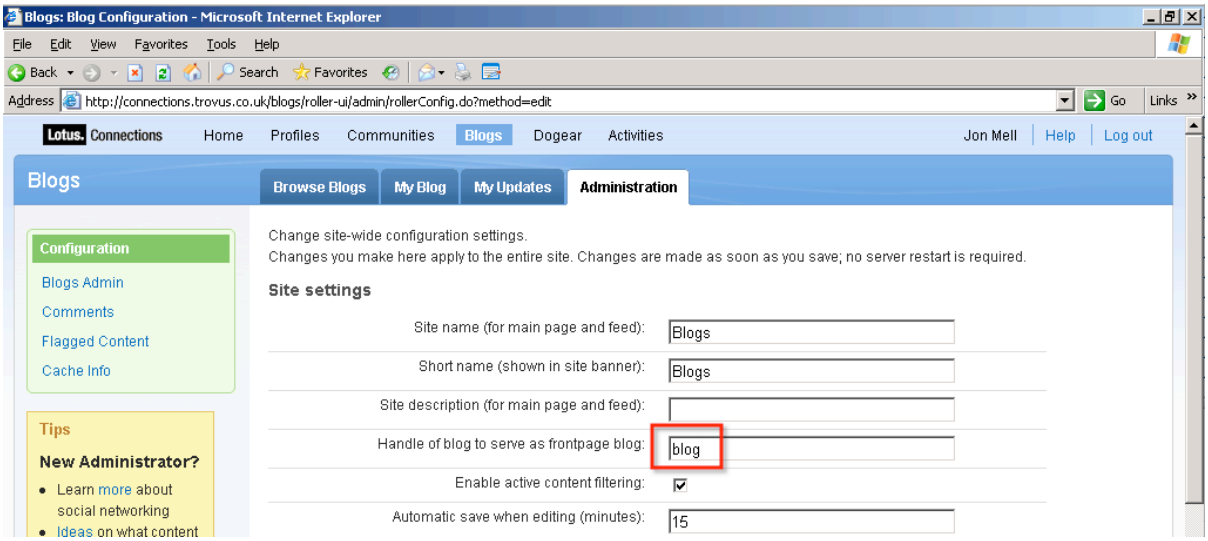


Click Create Blog



Click Administration.

Enter the handle of the blog you just created in Handle of blog toserver as frontpage blog.



Click Save

Log out and log back in and the blogs widget on the homapage should now say that no blog entries are available rather than “unable to display widget data”.