



IFS TOUCH APPS SERVER INSTALLATION GUIDE

ABSTRACT

IFS Touch Apps Server is an On Premise version of the IFS Touch Apps Cloud. The On Premise version doesn't need a separate installation of the IFS Cloud Uplink, that part is integrated.

The IFS Touch Apps Server is a Web Application that runs in IIS and uses a small administration database that runs in SQL Server Express.

This document describes how to install IFS Touch Apps Server. Since the product and the installation itself is using a number of Microsoft Technologies a brief instruction on how to install these are included, for details we refer to current documentation from Microsoft.

VERSION HISTORY

- 1.0.0 IFS Touch Apps Server Release 1.0.0
- 1.0.1 IFS Touch Apps Server Release 1.0.1. Backward compatible with version 1.0.0
- 1.1.0 IFS Touch Apps Server Release 1.1.0. Backward compatible with version 1.0.0
- 1.1.1 IFS Touch Apps Server Release 1.1.1. Backward compatible with version 1.0.0
- 1.2.0 IFS Touch Apps Server Release 1.2.0. Backward compatible with version 1.0.0
- 1.3.0 IFS Touch Apps Server Release 1.3.0. Backward compatible with version 1.0.0
- 1.4.0 IFS Touch Apps Server Release 1.4.0. Backward compatible with version 1.0.0
- 1.5.0 IFS Touch Apps Server Release 1.5.0. Backward compatible with version 1.0.0
- 1.6.0 IFS Touch Apps Server Release 1.6.0. Backward compatible with version 1.0.0
- 1.7.0 IFS Touch Apps Server Release 1.7.0. Backward compatible with version 1.0.0
- 1.8.0 IFS Touch Apps Server Release 1.7.0. Backward compatible with version 1.0.0



Contents

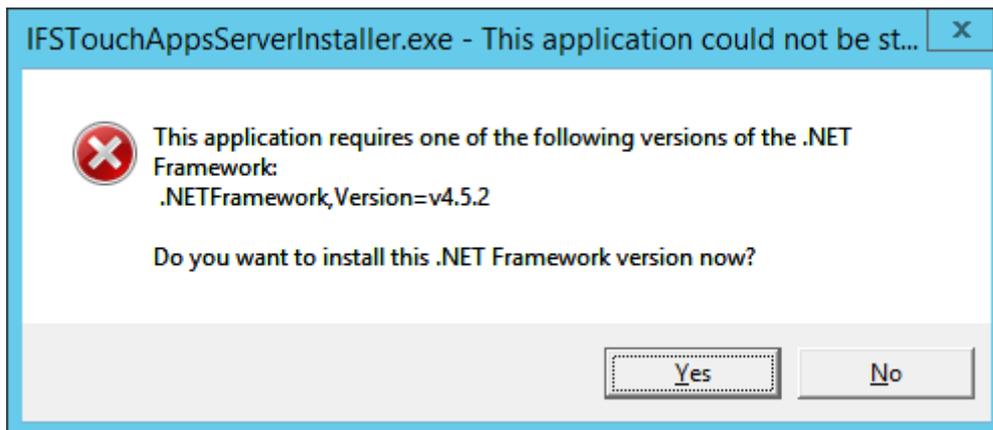
Abstract	1
Version History	1
Prerequisites	4
A Quick Guide to setting up IIS on Windows Server 2008 R2	4
A Quick Guide to setting up IIS on Windows Server 2012 R2	4
Configuring an existing IIS installation	5
Install Web Deploy	5
Install SQL Server Express	6
Windows Server 2008	6
Windows Server 2012	6
Using an existing SQL Server Instance.....	6
Touch Apps Server installation.....	7
Page One - Database	7
Page Two - Installation information.....	8
Page Three - IIS.....	9
Page Four - Installation	10
IIS Configuration.....	11
HTTPS	11
Configuration settings	13
Installing IFS Touch Apps Server in a Web Farm.....	14
SQL Server Installation	14
IIS Installation.....	15
Install on the File Server.....	16
Create a Common User	17
Common User modifications for SQL Server.....	18
Common User modifications for IIS	19
Share Web Content.....	20
Share Web Configuration.....	22
Export Certificate	23
Add a Web Server.....	23
Import Certificate	23
Enable Certificate Access	23



Setting up a Load Balancer	24
Setting up ARR.....	24
Upgrading a Web Farm	26
Local User Authentication	26
IIS Modifications.....	26
Configuration Changes	26
Push Notification	27
Further IFS Touch Apps Server Administration.....	27
Upgrading an existing IFS Touch Apps Server installation	28
Troubleshooting	28
The installation is completed but the web site folder doesn't contain any files.	28
Server Error in Application "IFS TOUCH APPS SERVER"	28

PREREQUISITES

The IFS Touch Apps Server can be installed on Windows Server 2008 R2 or Windows Server 2012 R2. The server should have IIS with a Default Web site and .NET 4.5.2 or later installed. If the installer is started without the correct version of .NET a dialog will be displayed allowing you to install the required version. We recommend using the version that the Microsoft download site suggests.



A QUICK GUIDE TO SETTING UP IIS ON WINDOWS SERVER 2008 R2

The base for this guide is a new VM in Windows Azure, other VM: s or servers might have a different configuration.

1. Start Server Manager
2. Select Roles
3. Add Roles \ Web Server (IIS)

Enable following items (and added required features)

- Web server \Application Development \ ASP.NET
- Web Server \ Performance \ Dynamic Content Compression

Run (as Administrator) the following command

```
%windir%\Microsoft.NET\Framework\v4.0.30319\aspnet_regiis.exe -iru
```

A QUICK GUIDE TO SETTING UP IIS ON WINDOWS SERVER 2012 R2

The base for this guide is a new VM in Windows Azure, other VM: s or servers might have a different configuration.

1. Start Server Manager
2. Select Local Server
3. ROLES AND FEATURES
4. Add Roles and Features \ Web Server (IIS)

Enable following items (and added required features):

- .NET Framework 4.5 Features \ WCF Services \ HTTP Activation
- Web Server \ Performance \ Dynamic Content Compression

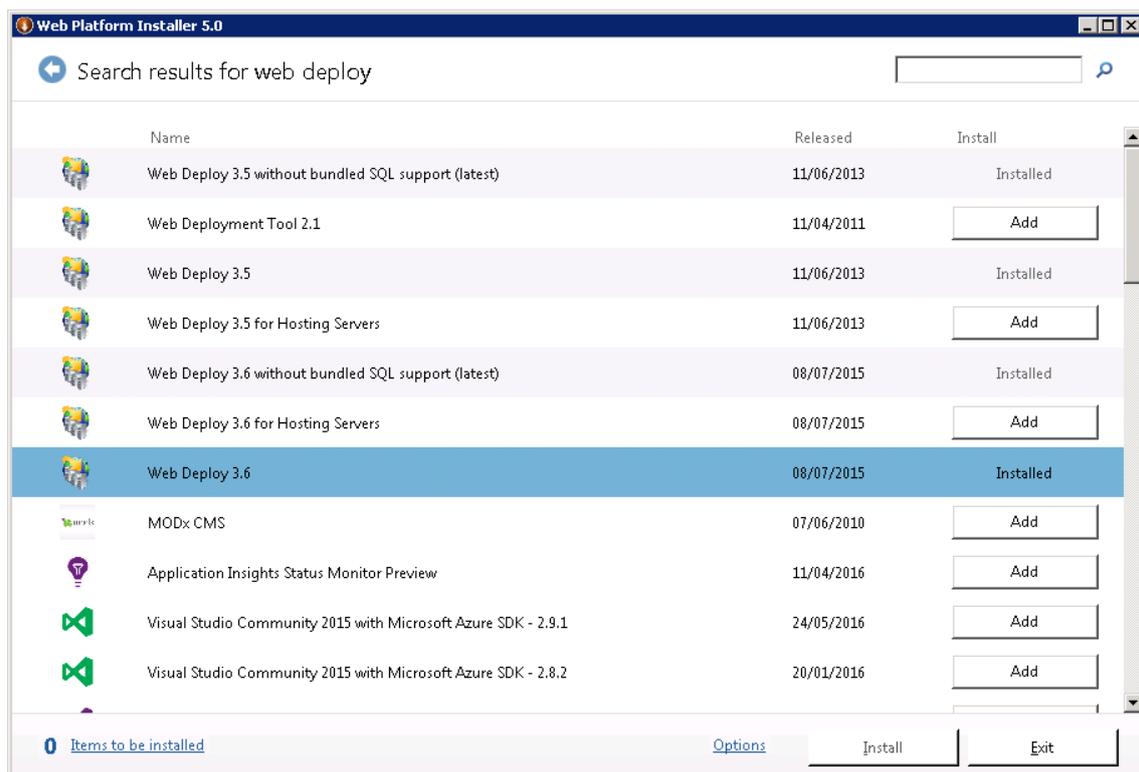
CONFIGURING AN EXISTING IIS INSTALLATION

The Touch Apps Server requires HTTP Activation and Dynamic Content Compression to run. See the above quick guides for information on how to do this on different Windows versions.

INSTALL WEB DEPLOY

The installation makes use of Microsoft Web Deploy. To be able to run the installer, the server must have the Web Deploy Tool installed. The easiest way to install the Web Deploy Tool is to install it through Microsoft Web Platform Installer, it can be found [here](#)

When the Web Platform Installer is installed, start it and search for Web Deploy Tool (Current Version is 3.6).



Click Add and Install.

The application uses a small SQL Server database. You can either use an existing SQL Server Installation or install Microsoft SQL Server Express 2012 (or later).

INSTALL SQL SERVER EXPRESS

To be able to run the SQL Server installer, .NET Framework 3.5 must be enabled on the server.

WINDOWS SERVER 2008

1. Start Server Manager
2. Select Features
3. Select Add Features
4. Select .NET Framework 3.51 Features \ .NET Framework 3.51

WINDOWS SERVER 2012

1. Start Server Manager
2. Local Server
3. ROLES AND FEATURES
4. Add Roles and Features
5. Select .NET Framework 3.5 Features \ .NET Framework 3.5 (includes .NET 2.0 and 3.0)

Microsoft® SQL Server® 2012 Service Pack 2 (SP2) Express can be found [here](#).

Microsoft® SQL Server® 2014 Service Pack 1 (SP1) Express can be found [here](#).

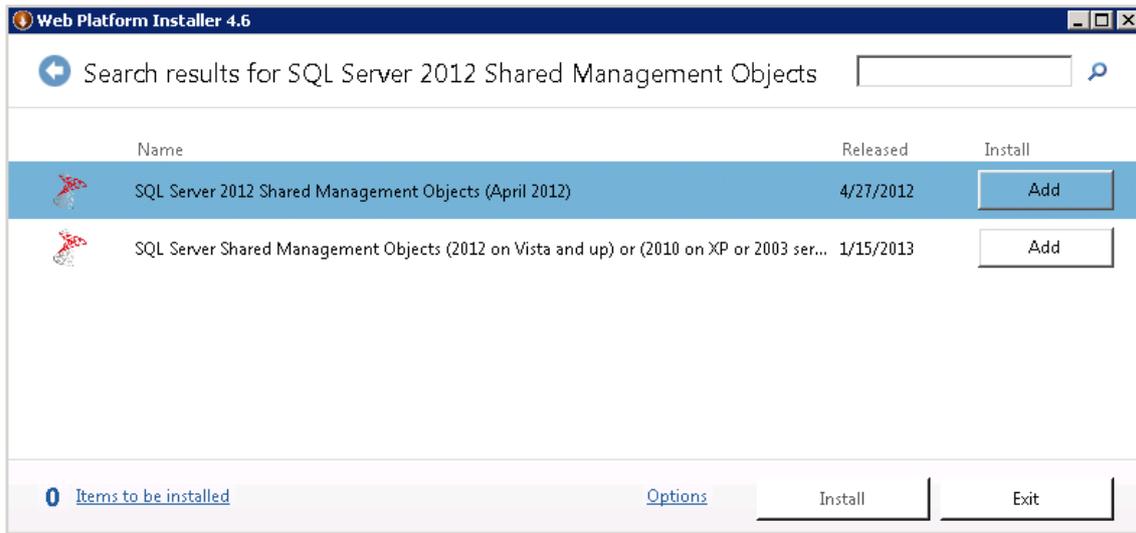
The only mandatory component is the database (SQLEXP_x64_ENU.exe option).

- 1 Start the downloaded SQL Server Installation Center.
- 2 Select New SQL Server installation. For the purpose of running IFS Touch Apps Server default values can be used.

USING AN EXISTING SQL SERVER INSTANCE

If you want to connect to an existing SQL Server Instance on another machine you need to install *“SQL Server 2012 Shared Management Objects”*.

Start Web Platform Installer and search for *“SQL Server 2012 Shared Management Objects”*.



Click Add and Install.

TOUCH APPS SERVER INSTALLATION

Download the latest version of the IFS Touch Apps Server from the IFS Cloud (<https://cloud.ifsworld.com>).

Unzip and run IFSTouchAppsServerInstaller.exe. If User Account Control (UAC) is enabled then use "Run as Administrator".

This will launch the installation wizard that will guide you through the installation process.

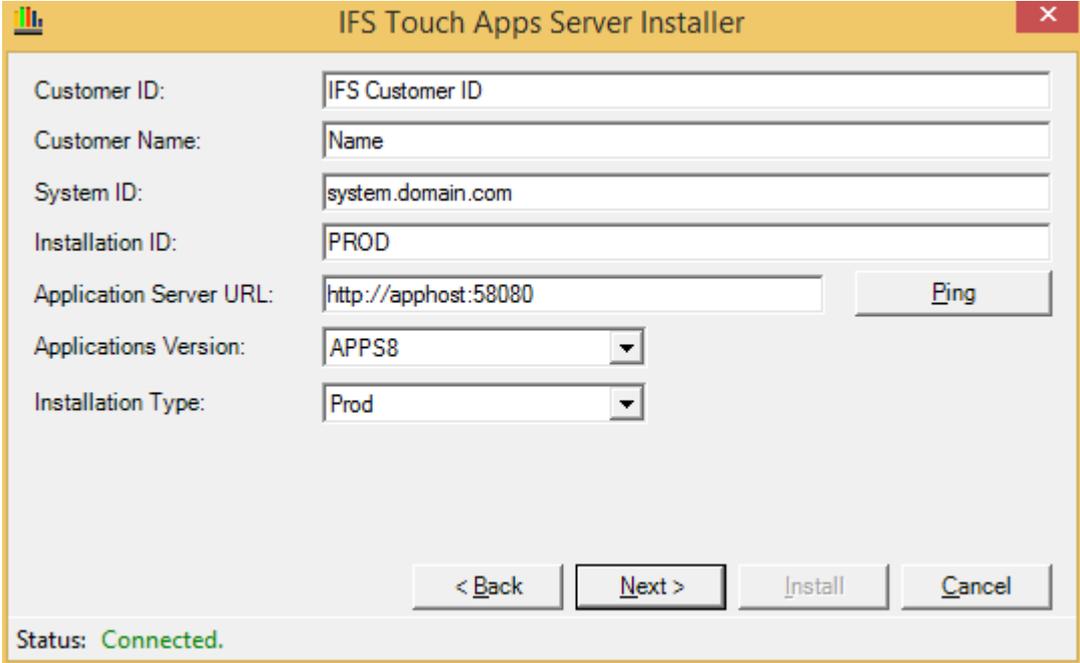
PAGE ONE - DATABASE



On the first page provide information about the SQL Server database used by the IFS Touch Apps Server. Specify the SQL Server Instance that you want to connect to and the name of the database that should be used by the IFS Touch Apps Server. The database should be dedicated to IFS Touch Apps Server and not shared with any other application. The database and tables will be created if they don't already exist.

Also specify if you want the installer to connect using integrated authentication (Current Windows User) or if you want to specify the username/password of an existing database user. This user is used by the installer when creating the database and tables and can be different from the runtime user used by the IFS Touch Apps Server. The installation user should have the *sysadmin* role granted.

PAGE TWO - INSTALLATION INFORMATION



The screenshot shows the 'IFS Touch Apps Server Installer' window. It contains the following fields and controls:

- Customer ID:** IFS Customer ID
- Customer Name:** Name
- System ID:** system.domain.com
- Installation ID:** PROD
- Application Server URL:** http://apphost:58080 (with a 'Ping' button next to it)
- Applications Version:** APPS8 (dropdown menu)
- Installation Type:** Prod (dropdown menu)

At the bottom, there are four buttons: '< Back', 'Next >', 'Install', and 'Cancel'. A status bar at the bottom left indicates 'Status: Connected.'

On page two specify your IFS Customer ID and the name of your corporation.

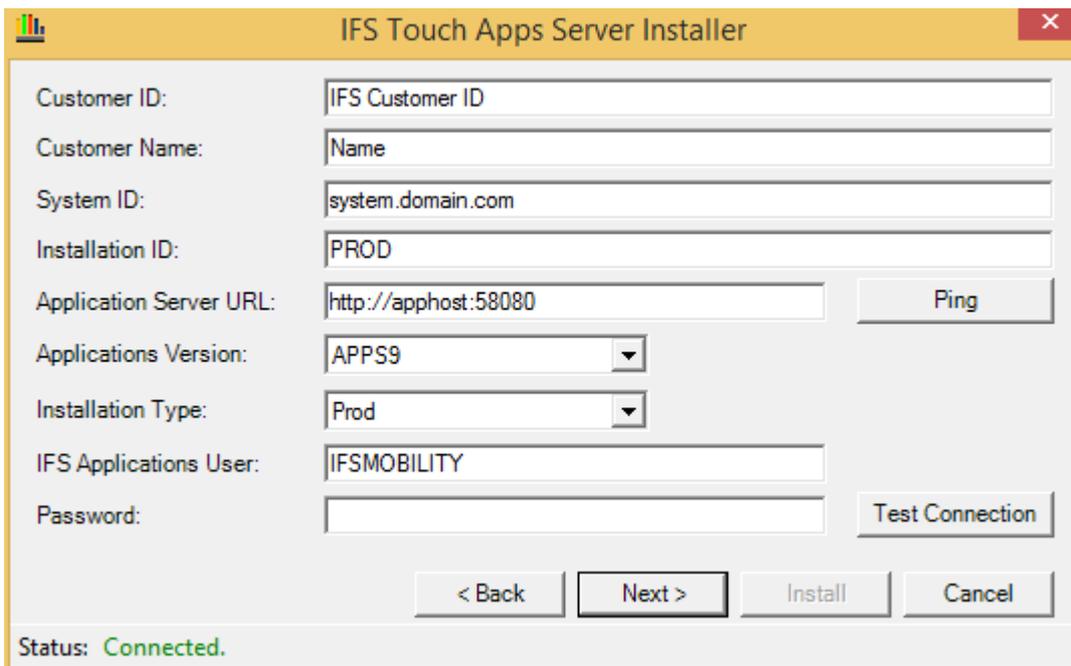
The System ID is the identifier entered in the client when end users connect to the system through IFS Touch Apps.

The Installation ID should be set to the Installation ID registered with IFS.

Also specify the URL to your IFS Applications installation (this is the same URL that is used from IFS Enterprise Explorer), the version of IFS Applications that you are using and if this is a production or a test system.

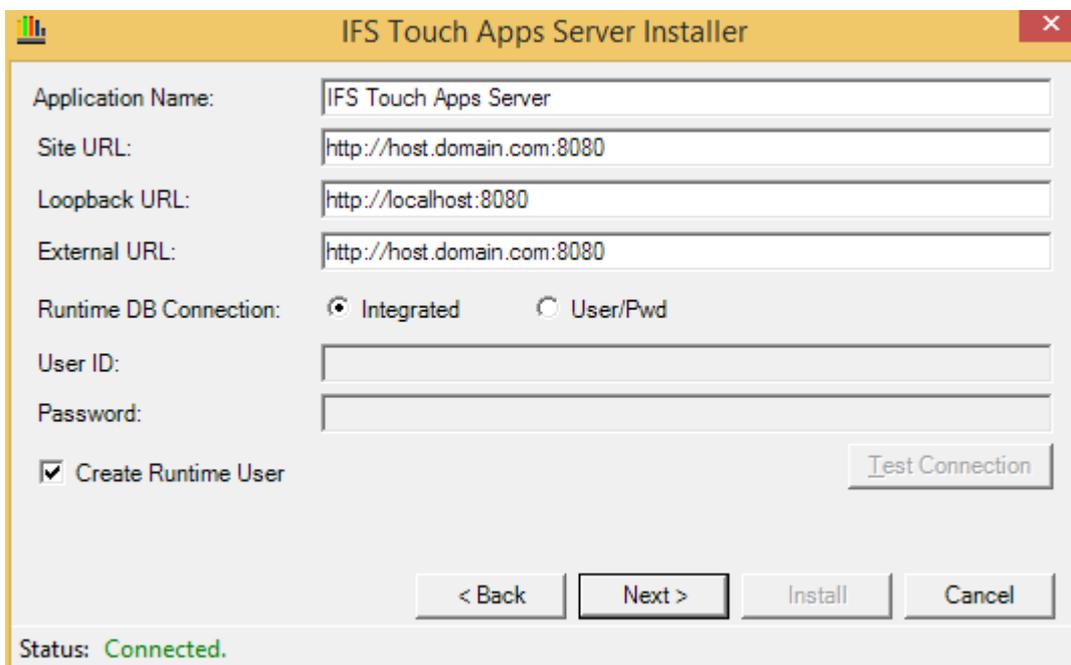
You can use Ping to validate that the Application Server is available.

For an Apps9 system you get two extra fields for an IFS User and Password. These are only used when using apps based on FNDMOB. For more details, please refer to IFS Applications Technical Documentation.



You can use Test Connection to validate the credentials.

PAGE THREE - IIS



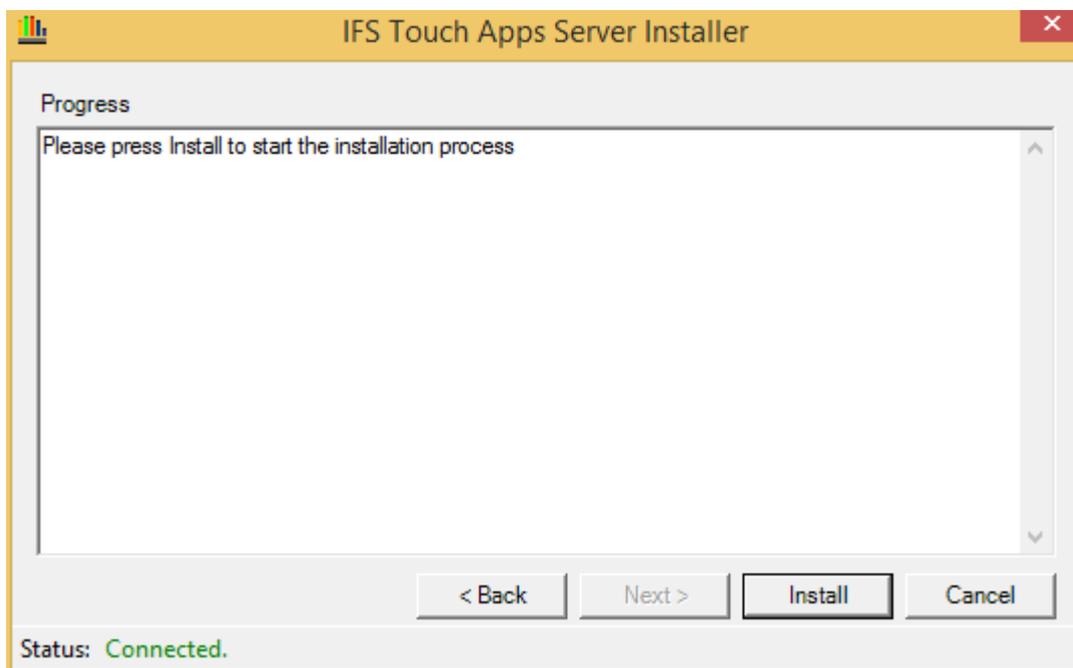
On the third page specify the name of the IIS application and URL's on which the IFS Touch Apps Server can be reached. The URL's are:

1. Site URL. The main setting used to configure the local IIS installation. This is the URL used to access the IFS Touch Apps Server in the corporate network.
2. Loopback URL. The Loopback URL is used for internal communication in the TAS. If the Site URL is configured with HTTPS it's recommended to add a second HTTP binding in IIS for the Loopback URL. This second binding should be blocked in the firewall to disallow external access to the HTTP endpoint.

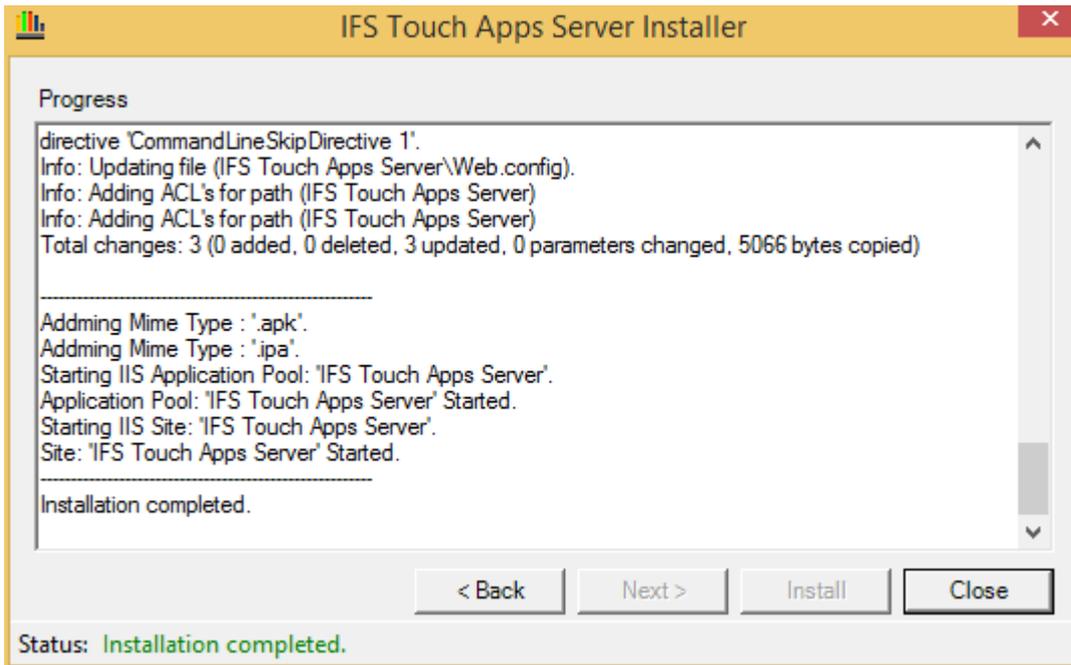
3. External URL. In some installations external (internet) access to the IFS Touch Apps Server use a different URL from the one in the Site URL. This is most often seen where the SSL/TLS channel is terminated in a reverse proxy, but there could be other reasons to use different URL's for local and internet access. The External URL is used when generating links for iOS apps on the app downloads page.

Also specify if the IFS Touch Apps Server should connect using integrated authentication (NT AUTHORITY\NETWORK SERVICE) or if you want to specify the username/password of a SQL Server user. (If the user doesn't exist it will be created with the specified password). If the Create Runtime User isn't selected, the specified Login and User must be created manually.

PAGE FOUR - INSTALLATION



On page four you start the installation process by pressing Install. You will see the result of the installation process in the Progress window as shown below.



If everything runs as expected, you will see Installation Completed in the status bar as well as in the Progress window. If the installation fails, the installation log file (*install.log*) contains details about the installation process progress.

If the Application Pool is too busy to be stopped, you will get the following message.



If you select Retry, the installer will wait 10 seconds and then retry to stop the Application Pool. This is repeated until the Application Pool is stopped or a total of 60 seconds of waiting time has passed.

If you select Cancel or if the Installer can't stop the Application Pool you need to use IIS Manager to stop it manually and then restart the installer.

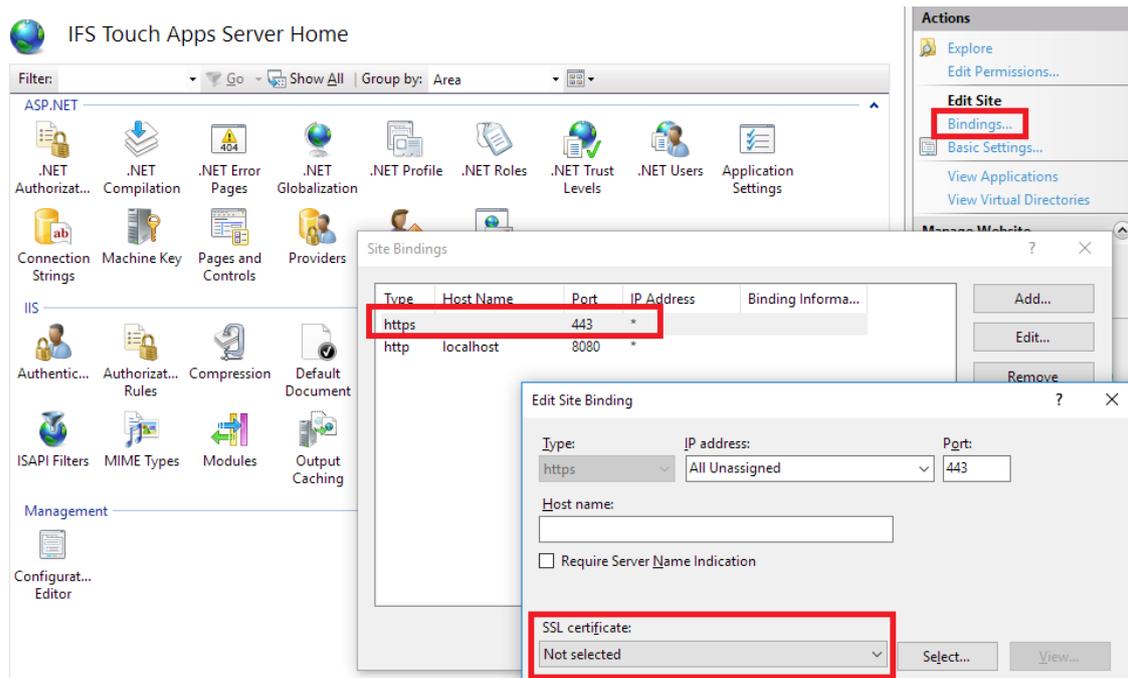
IFS CONFIGURATION

HTTPS

IFS recommends that the Touch Apps Server is only available over HTTPS for connections over the internet. The SSL connection can either be terminated in a proxy server or on the Touch Apps Server machine itself. If you want the Touch Apps Server machine to listen to HTTPS you specify the HTTPS address as the Site URL in the IFS Touch Apps Installer. If you want to

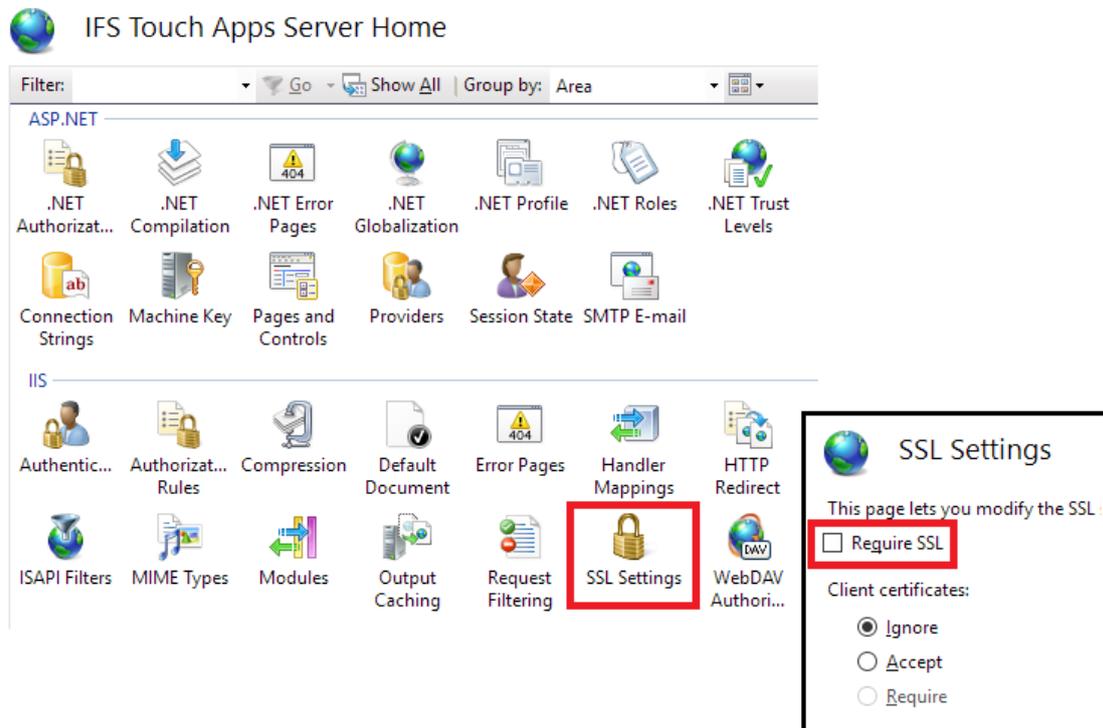
terminate the secure channel on a different machine, specify an HTTP address as Site URL and set the External URL to the HTTPS address.

When the Site URL is set to HTTPS the installer will create the required site binding in IIS and update web.config accordingly. However, the installer will not set a certificate for the binding. This must be done manually once the installer has been run. This is done in the IIS Manager. Go to Bindings, select the HTTPS binding and select a valid (trusted) certificate.



Please note that the SSL certificate must have been issued by a trusted certificate authority (CA). Self-signed certificates are not supported.

IFS recommend that the Loopback URL continue to use HTTP even if HTTPS is used for the Site URL. For this to work it's important that the site has not been configured to require an HTTPS connection. You should block HTTP access to the machine in the firewall settings, but IIS must accept HTTP connections for the Loopback functionality to work. The SSL Settings can be found in the IIS Manager. Make sure that the "Require SSL" checkbox is left unchecked.



SSL 3.0 SECURITY VULNERABILITY

We recommend that SSL 3.0 is disabled to protect against the POODLE attack.

Please follow the instructions in the IFS solution:

220962 - CVE-2014-3566 "POODLE" security vulnerability

Customers of IFS registered to use the Internet Support Center may access the solution from this link

https://support.ifsworld.com/lcs/secured/castrw/Solution.page?SOLUTION_ID=220962

Partner users please use the following link

https://support.ifsworld.com/partner/secured/castrw/Solution.page?SOLUTION_ID=220962

IFS users please use the following link

http://lcs.corpnet.ifsworld.com/login/secured/castrw/Solution.page?SOLUTION_ID=220962

CONFIGURATION SETTINGS

appSettings

Each Touch App consists of a server part and one or more clients. The server parts are .NET-assemblies that the TAS server reads from a directory.

Default the web.config/appSettings/ResourceLocation parameter isn't set. The TAS then looks for resource assemblies in the App subdirectory of the web application. Change this parameter to a valid path if resource assemblies should be loaded from another location.

system.diagnostics

Default a trace listener is set up to write errors to the file *TASTrace.log* in the *Log* directory. The configuration editor can be used to change the file location or logging level. Set *initializeData* to *Verbose* to get all trace messages. A list of logging levels can be found [here](#). In *traceOutputOptions* you can check *Callstack* to get exception call stacks in the log file.

INSTALLING IFS TOUCH APPS SERVER IN A WEB FARM

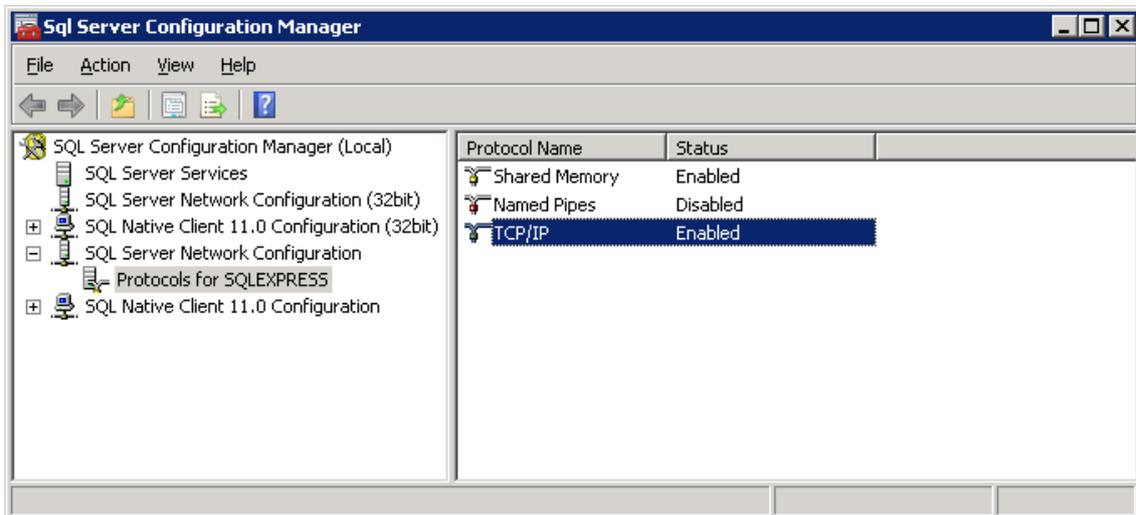
Helpful advice on setting up a web farm can be found from the following link <http://www.iis.net/learn/web-hosting/scenario-build-a-web-farm-with-iis-servers>

Note that the SSL Central Certificate Store is only available from IIS 8 onwards: therefore a Windows Server 2008 web farm will not support HTTPS. The secure channel must instead be terminated ahead of the web farm (e.g. in a reverse proxy).

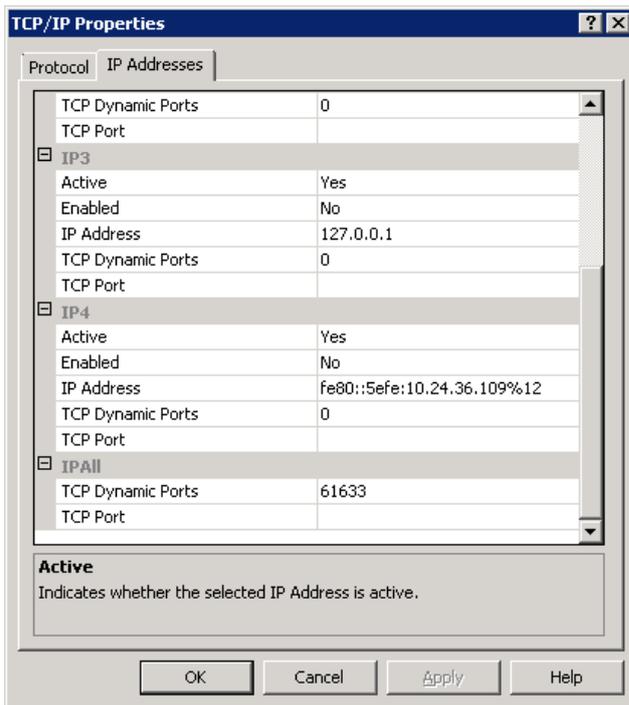
SQL SERVER INSTALLATION

The TAS administration database must be visible to all servers in the web farm. If the database is not to be a single point of failure then a failover or clustering installation should be considered. This is not available with SQL Server Express.

SQL Server configuration must be changed to enable remote connection through TCP/IP. This is achieved using the SQL Server Configuration Manager.

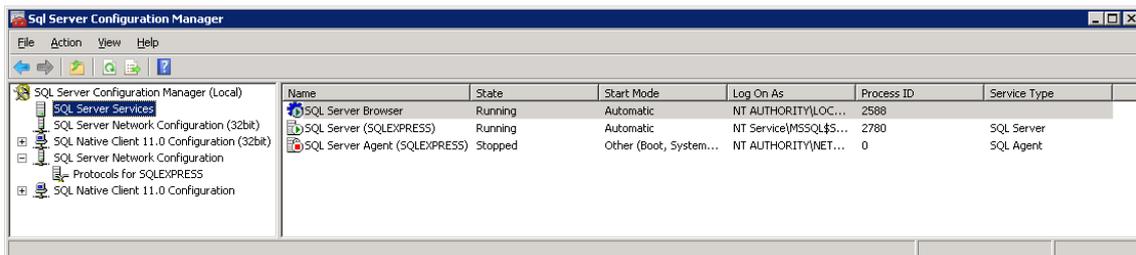


The actual TCP/IP port numbers used by SQL Server are controlled by the Properties form for TCP/IP.



If you wish to use a connection string like <server-name>\SQLEXPRESS (as the TAS Installer assumes) then the SQL Server Browser service must be started. Set its Start Mode to Automatic and start the service. The SQL Server service itself will also require a restart.

If you specify the TCP port number for the instance and connect to the database using a connection string like <IP-address>, <port-number> then the SQL Server Browser service is not required.

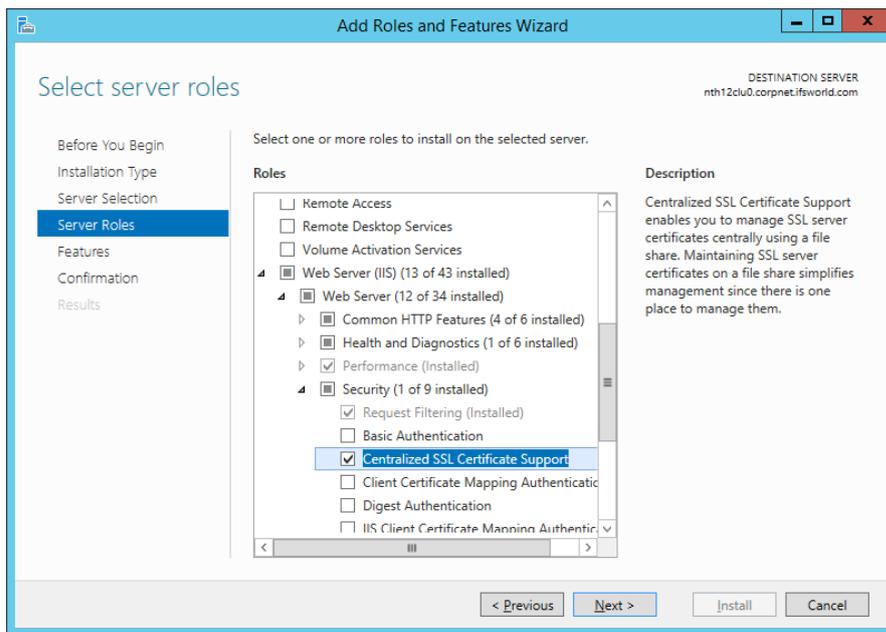


You will probably want to administer the database remotely so check you can connect to the database using SQL Server Management Studio on your own machine.

Finally, do not use "localhost\SQLEXPRESS" to specify the SQL Server Instance in the TAS Installer. Use the server name instead of localhost (or <IP-address>, <port-number>).

IIS INSTALLATION

On Windows Server 2012 (all web servers), ensure that "Centralized SSL Certificate Support" is installed.



INSTALL ON THE FILE SERVER

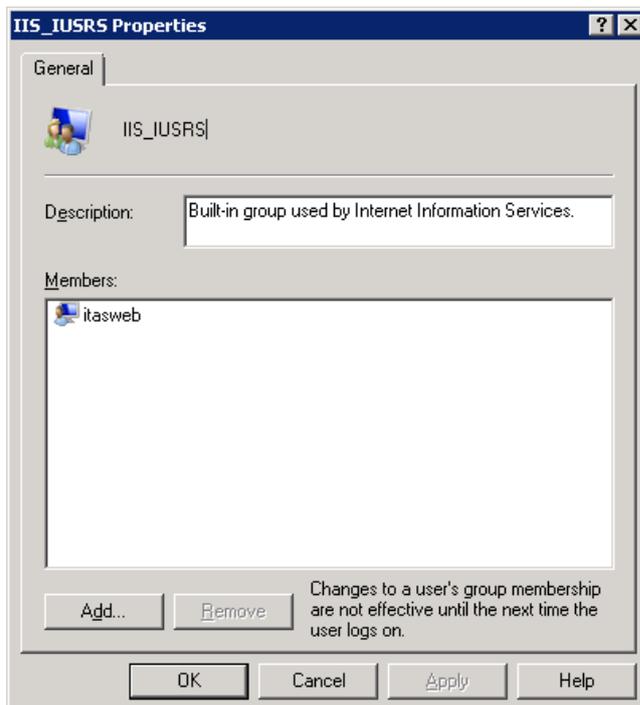
The File Server is used to hold the shared website and IIS configuration. Install on the file Server as if installing on a single server. The File Server can become a single point of failure in the web farm. DFS Replication can be used to alleviate this problem.

CREATE A COMMON USER

The Web Servers communicate with the File Server using file shares. If a Domain is not available to create a common user then local users with the same name and password can be created on the File Server and the Web Servers.

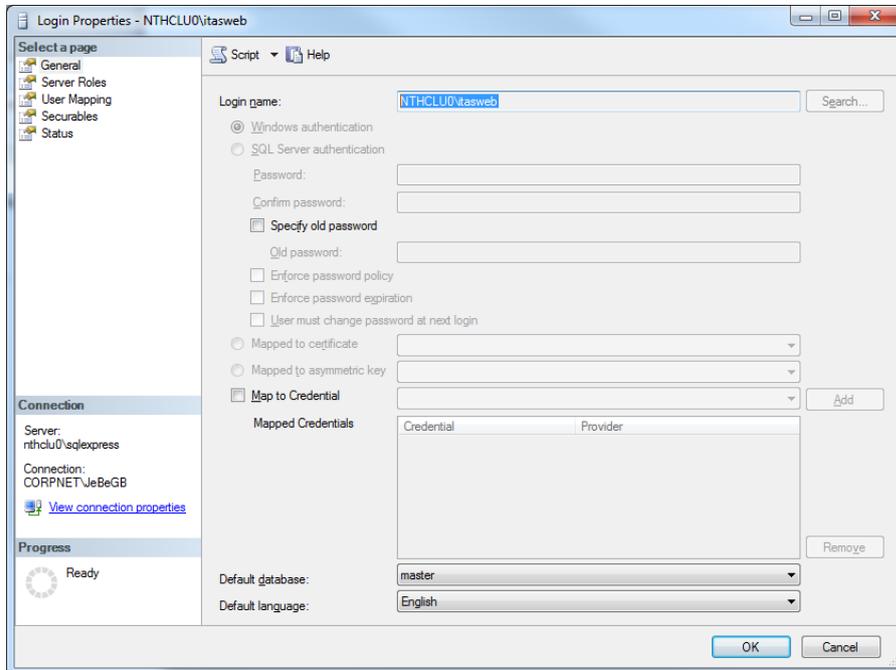


The common user must be added to the local group IIS_IUSERS.

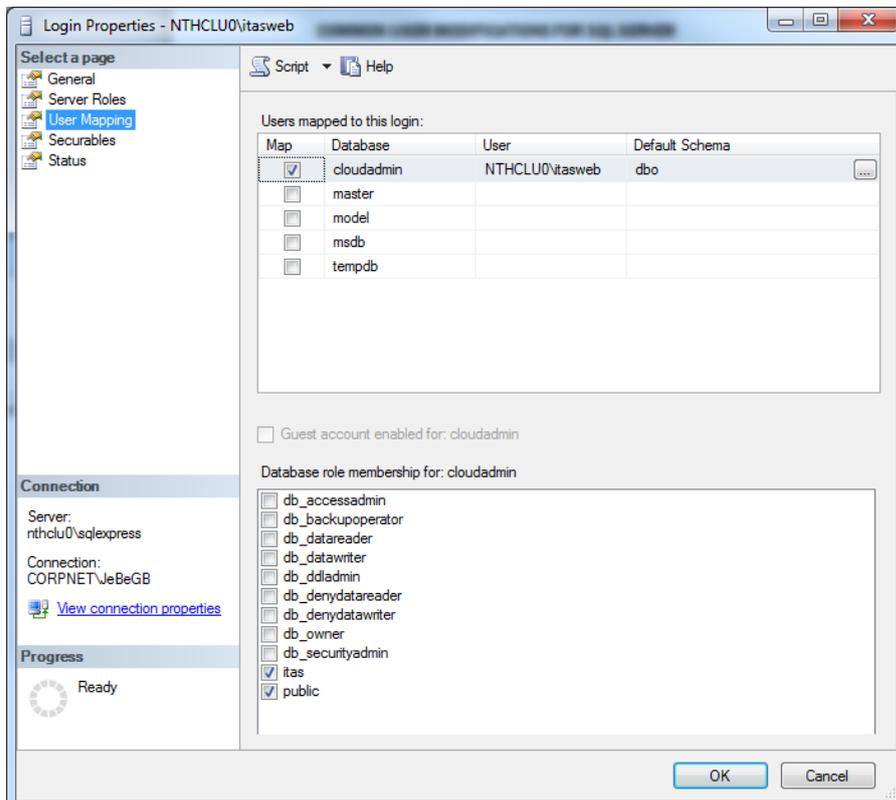


COMMON USER MODIFICATIONS FOR SQL SERVER

The Common User will need to connect to the Admin Database. Use SQL Server Management Studio to create a new Login for the Common User.

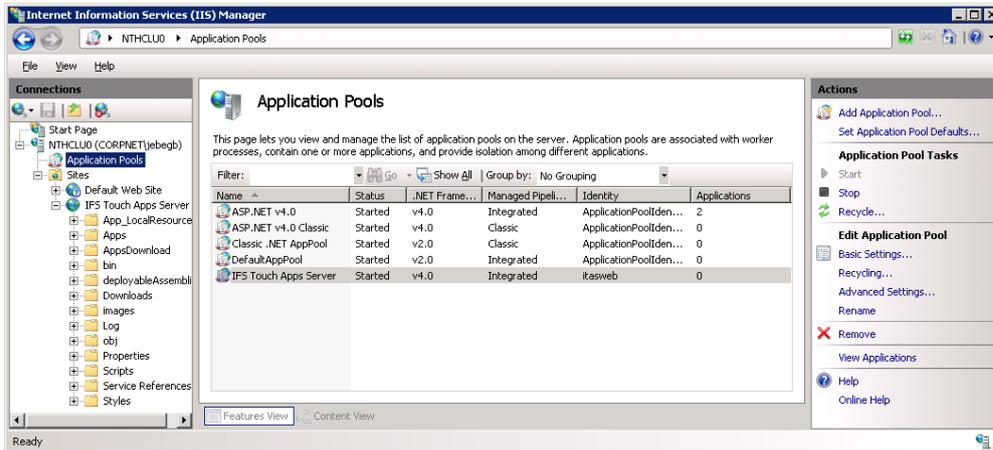


Ensure the User Mapping is set correctly for the Admin Database. In particular, ensure the “itas” role exists (it is created by the Installer) and is selected.

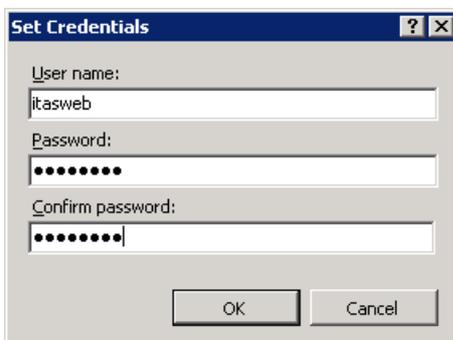
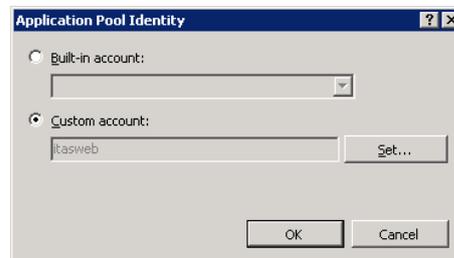
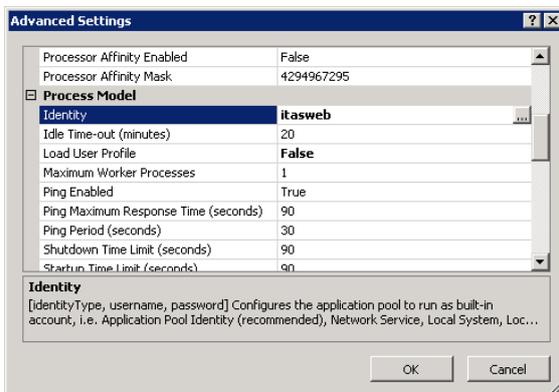


COMMON USER MODIFICATIONS FOR IIS

The IFS Touch Apps Server Application Pool must be modified to run as the Common User instead of Network Service. In IIS Manager, navigate to the Application Pools and click Advanced Settings for the IFS Touch Apps Server.



Change the Identity from the Built-in account NetworkService to the Common User (Custom account).



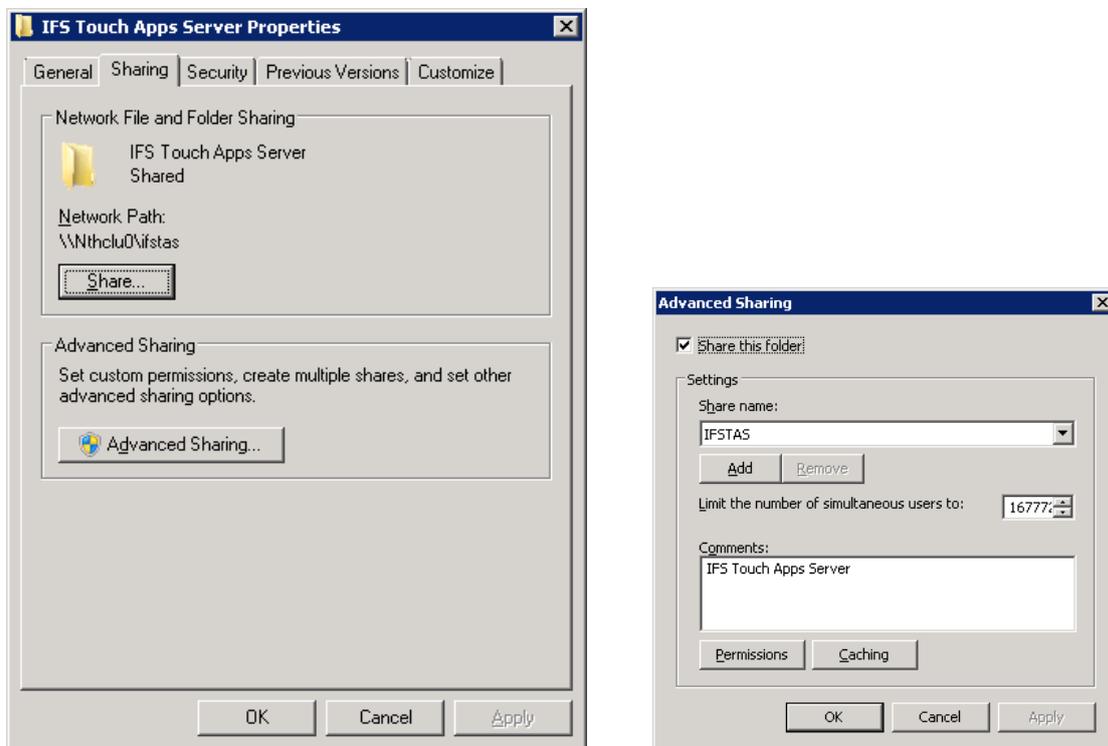
The common user must also be given access to the local machine certificate store through IIS.

Run (as Administrator) the following command

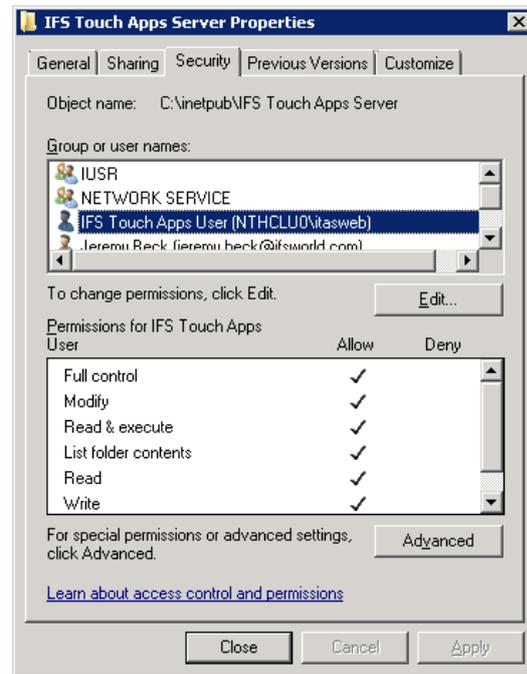
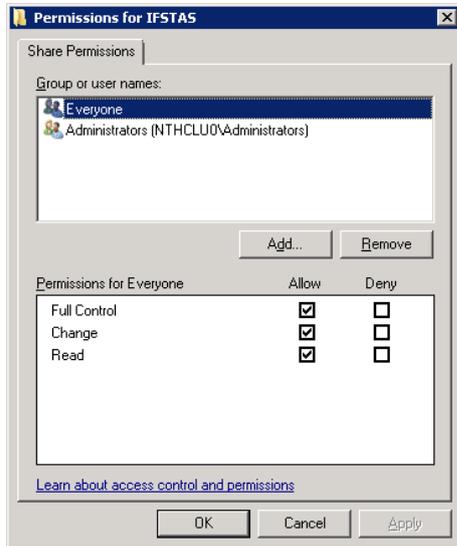
```
%windir%\Microsoft.NET\Framework\v4.0.30319\aspnet_regiis.exe -pa
IFS_TOUCHAPPS_SERVER <common-user>
```

SHARE WEB CONTENT

The TAS Installer creates the web content in C:\inetpub\IFS Touch Apps Server. This folder must be shared so that the web servers can access it. The share name must not include spaces so use the folder properties Advanced Sharing form to create the share.



The Share permissions are open. Security is imposed using the Folder Security properties.



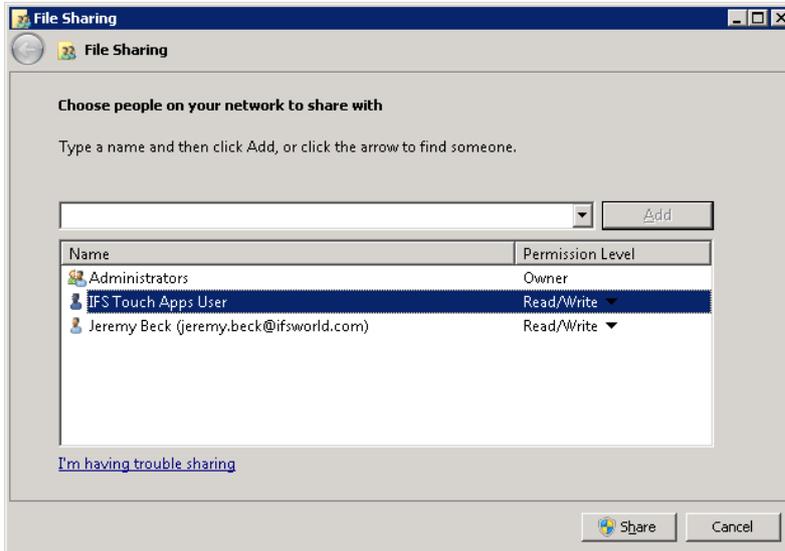
Using IIS Manager, modify the IFS Touch Apps Server web site to access its files using the shared folder using the credentials of the common user.



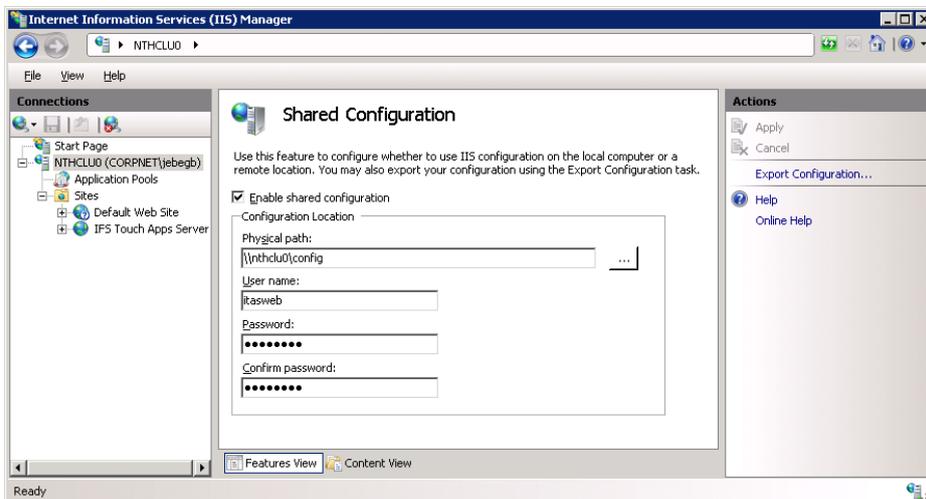
Restart the IFS Touch Apps Server Application Pool and check that the web site still works.

SHARE WEB CONFIGURATION

On the File Server create a folder C:\Config and share it with the common user. As the folder name does not contain spaces, the simplified File Sharing form can be used.



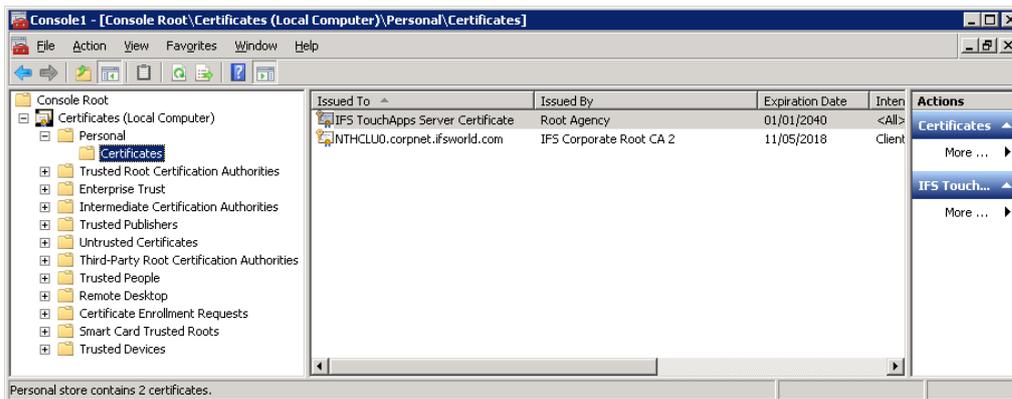
In IIS Manager, use the Shared Configuration feature and Export Configuration to the Shared Folder. Then enable Shared Configuration using the shared folder.



Restart IIS and check that the web site still works.

EXPORT CERTIFICATE

The IFS Touch Apps Server Certificate must be exported from the File Server and shared so that it can easily be imported on each Web Server. Using the Microsoft Management Console (mmc.exe), add the Certificates snap-in for the Computer account, managing the Local computer and browse to the Personal Certificates.



Right click the IFS TouchApps Server Certificate and select Export (beneath All Tasks). This starts the Certificate Export Wizard. Choose to export the private key and enter a password. Create a shared directory for the export file (you need read access to import the certificate on the web servers). Click Finish to export the certificate.

ADD A WEB SERVER

Install IIS on the web server as detailed above. If using a local common user, create it and add it to the IIS_IUSERS group. Using IIS Manager, enable Shared Configuration on the IIS Server. Restart IIS Manager and restart IIS. Check that the web site is served by the new web server.

IMPORT CERTIFICATE

Using the Microsoft Management Console (mmc.exe), add the Certificates snap-in for the Computer account, managing the Local computer and browse to the Personal Certificates. Right click Certificates and select Import (beneath All Tasks). This starts the Certificate Import Wizard. Navigate to the shared folder and change the filter to Personal Information Exchange. Select the certificate file you previously exported and enter the password.

ENABLE CERTIFICATE ACCESS

The common user must also be given access to the local machine certificate store through IIS. Run (as Administrator) the following command

```
%windir%\Microsoft.NET\Framework\v4.0.30319\aspnet_regiis.exe -pa
IFS_TOUCHAPPS_SERVER <common-user>
```

SETTING UP A LOAD BALANCER

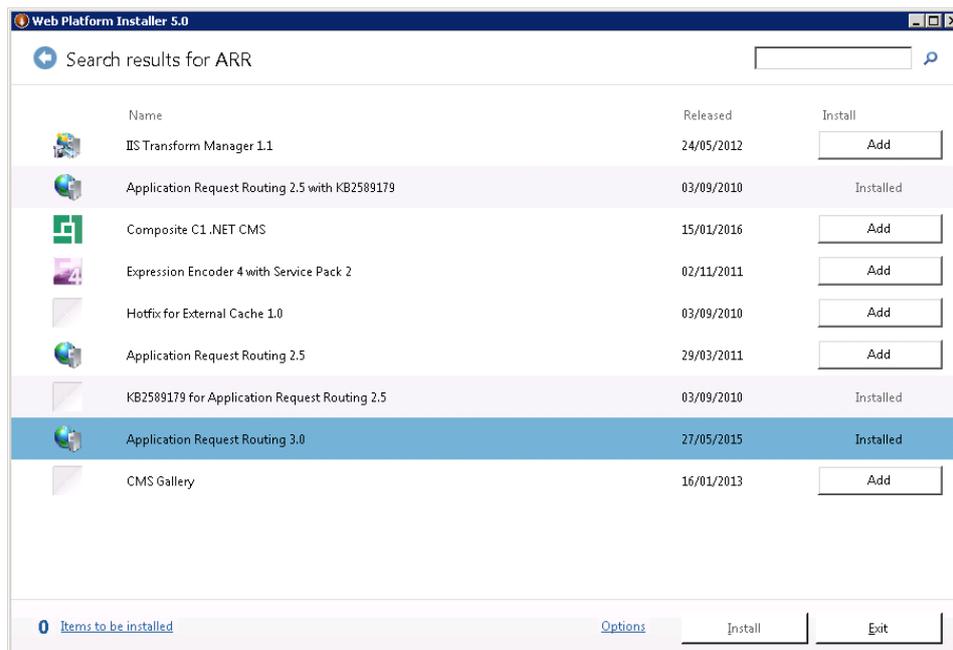
A Load Balancer is used to distribute client requests between the Web Servers. The Load Balancer may be implemented as software or in hardware. The Load Balancer is another single point of failure in the web farm.

Touch Apps requests require “Client Affinity”, i.e. all requests from a particular client (in a session), must be handled by the same server. If a client is routed to a different server, they must re-authenticate. Many Load Balancers (including Microsoft’s ARR) use cookies to implement Client Affinity. Most Touch Apps clients do not support cookies yet. This can affect your choice of Load Balancer.

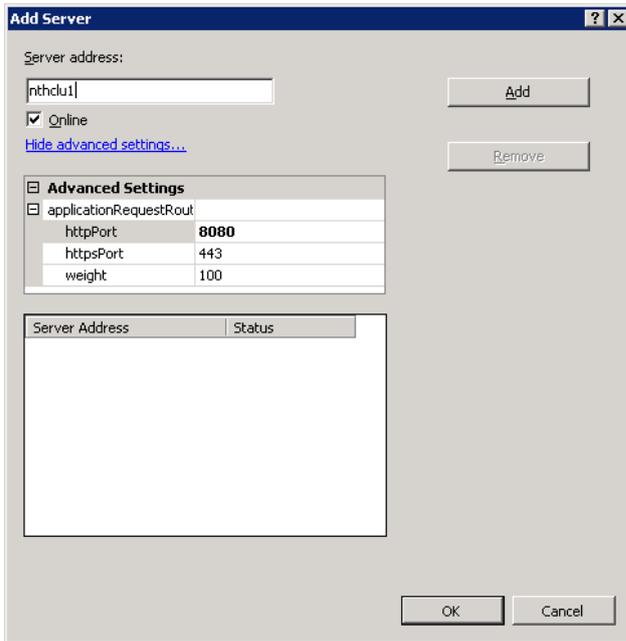
For ARR installations please refer to the next section for installation guidelines.

SETTING UP ARR

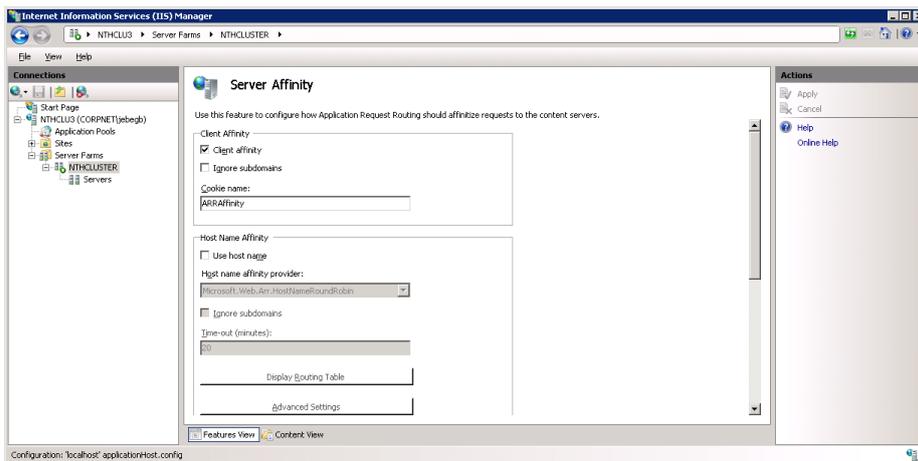
Install IIS on the Load Balancing Server as detailed above. Use the Web Platform Installer to install the latest version of Application Request Routing (ARR).



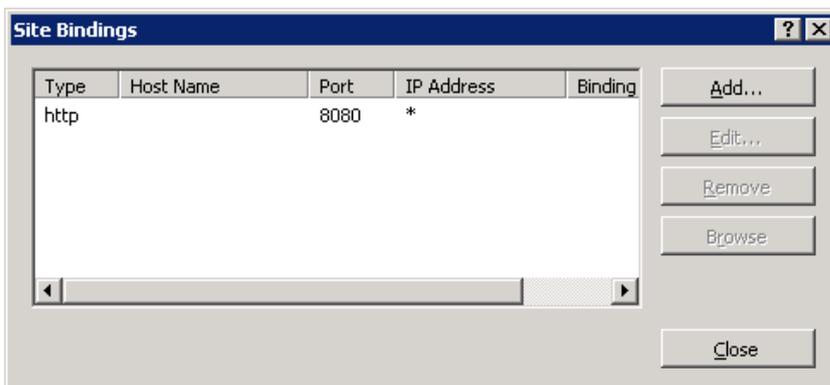
Using IIS Manager, create a new Server Farm and add each Web Server to the farm. Use the Advanced Settings to specify the outgoing HTTP port number.



Use the Server Affinity feature to enable Client Affinity.



Edit the Bindings of the Default Web Site to change the port number from 80 to 8080.



Restart IIS and check that the Load Balancer works. Note that Client Affinity will not work unless the machine name in the URL contains a ‘.’. Use the **full** machine name in the address.

UPGRADING A WEB FARM

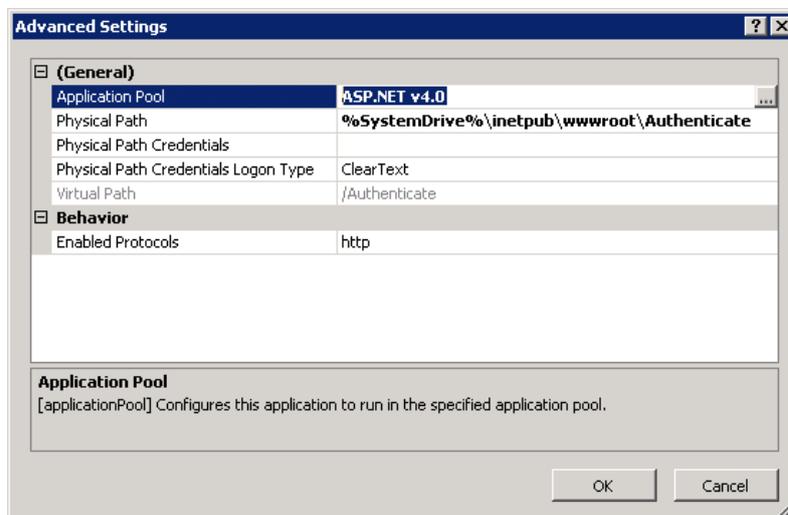
As all file content and web site configuration is shared from the File server. Just upgrade the installation on the File Server and the rest of the web farm will pick up the modifications automatically.

LOCAL USER AUTHENTICATION

The Customer Portal allows a sign in as a Local Administrator. In a clustered web farm, there is no sensible definition of ‘Local’. In a web farm, Local Administrator sign in can only be achieved using the IFS Touch Apps Authentication Web Service. The machine used to host the Authentication Web Service is the “Local” machine. This is another single point of failure. The latest Web Deployment Package for the Authentication Service can be downloaded from the IFS Cloud.

IIS MODIFICATIONS

By default, Web Deploy installs the Web Service on your File Server (or another Web Server) as the Authenticate application under the Default Web Site. In IIS Manager, use Advanced Settings to change the Application Pool for this application to ASP.NET v4.0 (or .NET v4.5).



CONFIGURATION CHANGES

The Touch Apps Server Web.Config file must be changed so that it passes all authentication requests to the Authentication service.

Change the endpoint for the Authentication Service to the correct machine and application name.

```

Web.config - Notepad
File Edit Format View Help
</assemblies>
</compilation>
<pages controlRenderingCompatibilityVersion="4.0" />
</system.web>
<system.diagnostics>
  <trace autoflush="true" indentsize="4">
    <listeners>
      <add name="TASTraceListener" type="System.Diagnostics.TextWriterTraceListener" initializedData="
      <filter type="System.Diagnostics.EventTypeFilter" initializedData="Error" />
    </add>
    </listeners>
  </trace>
</system.diagnostics>
<system.serviceModel>
  <client>
    <endpoint address="http://nthsclu0/Authenticate/AuthenticateService.svc" binding="basicHttpBinding
  </client>
  <behaviors>
    <serviceBehaviors>
      <behavior name="downlinkBehaviour">
        <!-- To avoid disclosing metadata information, set the value below to false and remove the me
        <serviceMetadata httpGetEnabled="false" />
        <!-- To receive exception details in faults for debugging purposes, set the value below to tr
        <serviceDebug includeExceptionDetailsInFaults="false" />
        <serviceThrottling maxConcurrentCalls="500" maxConcurrentSessions="500" maxConcurrentInstance
      </behavior>
    </serviceBehaviors>
  </behaviors>
</services>

```

Change the UseAuthenticateService key value to “true”.

```

Web.config - Notepad
File Edit Format View Help
  <binding name="webHttpBinding_IDownlinkInterface" maxBufferSize="65536" maxReceivedMessageSize=
  <readerQuotas maxStringContentLength="4194304" />
  <security mode="None" />
</binding>
</webHttpBinding>
</bindings>
<serviceHostingEnvironment multipleSiteBindingsEnabled="true" />
</system.serviceModel>
<system.webServer>
  <modules runAllManagedModulesForAllRequests="true" />
</system.webServer>
<appSettings>
  <add key="ResourceLocation" value="c:\temp\Apps\" />
  <add key="BaseUrl" value="http://nthsclu0.corpnet.ifsworld.com:8080" />
  <add key="CloudBaseUrl" value="http://ifsclouddev1.cloudapp.net:8080" />
  <add key="MaxJsonLength" value="8388608" />
  <add key="AccessProviderConnectionTimeout" value="60" />
  <add key="FtsOptions" value="0" />
  <add key="FtsTimeout" value="0" />
  <add key="LifetimeClientSession" value="30" />
  <add key="LifetimeDeviceRegister" value="1440" />
  <add key="UseAuthenticateService" value="true" />
</appSettings>
<connectionStrings>
  <add name="cloudadminEntities" connectionString="metadata=res://*/CloudAdmin.csdll|res://*/CloudAdmi
</connectionStrings>
</system.net>
<connectionManagement>
  <add address="*" maxConnection="500" />

```

You will have to repeat these changes every time you upgrade Touch Apps Server.

PUSH NOTIFICATION

For Push Notification, IFS Apps Server is informed how to call the TAS using the BaseUrl setting in Web.Config. This URL should identify the TAS Load Balancer. You will have to repeat this change every time you upgrade Touch Apps Server.

FURTHER IFS TOUCH APPS SERVER ADMINISTRATION

Please refer to IFS Touch Apps Server Administration Guide.

UPGRADING AN EXISTING IFS TOUCH APPS SERVER INSTALLATION

Upgrading an existing IFS Touch Apps Server installation is done by running the IFS Touch Apps Server installer.

When running the installer to upgrade an existing installation you will need to enter connection information for the existing SQL Server database. You also need to re-enter the port number of the Touch Apps Server IIS site if the installation doesn't use the default port (8080).

The installer will overwrite any manual changes done to the *web.config* file. These changes will have to be re-applied after the installation. You can read more about typical changes to *web.config* in the IIS Configuration section.

TROUBLESHOOTING

THE INSTALLATION IS COMPLETED BUT THE WEB SITE FOLDER DOESN'T CONTAIN ANY FILES.

- Open the installer configuration file (*IFSTouchAppsServerInstaller.exe.config*).
- Change the app setting *UseShellExecueForWebDeploy* value to **false**.
- Run the installer again.
- You should now get an error message in the installer log.
- When the error is resolved, change the setting back to **true**.

SERVER ERROR IN APPLICATION "IFS TOUCH APPS SERVER"

When navigating to the application (default <http://localhost:8080/>) you get:

HTTP Error 500.21 - Internal Server Error

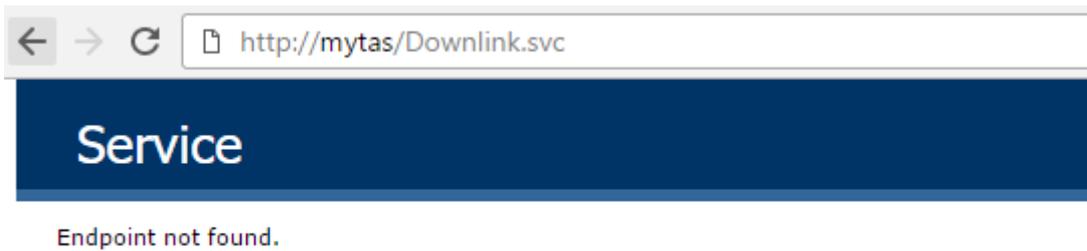
Handler "PageHandlerFactory-Integrated-4.0" has a bad module "ManagedPipelineHandler" in its module list

To solve this, register .NET 4.0 ASP.NET.

```
%windir%\Microsoft.NET\Framework\v4.0.30319\aspnet_regiis.exe -iru
```

WEB SITE WORKS BUT APPS CAN'T CONNECT

Ensure that you can reach the application service from your device. You can verify this in a browser. When you navigate to <Site URL>/Downlink.svc you should see a page similar to this:



If you can't reach the service, try to access the same URL from a browser on the TAS machine. If this works, the problem is most likely firewall/proxy related. However, if the problem remains when accessing the Downlink.svc URL locally on the TAS machine the problem could be related to Endpoint configuration in web.config. The Endpoints should match your IIS bindings.

If IIS has been configured for both HTTP and HTTPS, there should be two Endpoints in web.config as shown in the example image below.

```
<services>
  <service name="Ifs.TouchApps.OnPremise.ServerRole.Downlink" behaviorConfiguration="downlinkBehaviour">
    <endpoint address="" binding="webHttpBinding" bindingConfiguration="WebHttpBinding_IDownlinkInterface" name="IFSCloudDownlink" contract="Ifs.Cloud.Downlink.Interface.ICloudService" />
    <endpoint address="" binding="webHttpBinding" bindingConfiguration="WebHttpBinding_IDownlinkInterface_Transport" name="IFSCloudDownlink" contract="Ifs.Cloud.Downlink.Interface.ICloudService" />
  </service>
</services>
```

If IIS has been configured for just HTTP, there should be a single Endpoint entry in web.config (the one with bindingConfiguration set to webHttpBinding_IDownlinkInterface).