



Configuring RentalPoint Web Services

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Configuring RentalPoint Web Services

1. What is RentalPoint Web Services?

RentalPoint Web Services, or RPWS, is an online tool that technicians use to view their upcoming assignments. Technicians can accept or decline assignments. Techs can also enter working hours and personal information such as primary and secondary skills. Changes to your data are updated in real-time. The webpage is hosted on your server and uses IIS (Internet Information Services) and the RPWS service to communicate directly with your RP database.

RPWS must first be configured before it can be used by your technicians in the field.

2. How to Configure Your Server

First you'll need to do some work on your server. This involves downloading and installing files that RPWS requires, then configuring the server roles and IIS.

2.1 Download and Install .NET Framework 4.5.1

Ensure you have the .NET Framework 4.5.1 (or later) installed

- See how to check <https://msdn.microsoft.com/en-CA/library/hh925568%28v=vs.110%29.aspx>
- If needed, you can use the MS Web Installer which automatically determines which files you need for your operating system. <http://www.microsoft.com/en-gb/download/details.aspx?id=40773>

2.2 Download and Install IIS

The IIS installation process depends on the operating system of your server. For easy installation we've included a few useful links.

For Windows 7

<http://www.iis.net/learn/install/installing-iis-7/installing-iis-on-windows-vista-and-windows-7>

For Windows 8 & Windows 10

<http://www.howtogeek.com/112455/how-to-install-iis-8-on-windows-8/>

For Windows Server 2008 R2

<https://community.landesk.com/support/docs/DOC-6797>

For Windows Server 2012 R2


<http://www.iis.net/learn/install/installing-iis-85/installing-iis-85-on-windows-server-2012-r2>



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2.3 Download and Install RPWS Files

Login to the RP downloads area (<http://rentp.com/updates/login.php>) and download **RPWS_Install_Files.zip**. Unzip the files to C:\inetpub\wwwroot**RPCrewWebpage**.

 RPCrewWebpage is a suggested default name; you can use any folder name that you choose. Be sure to remember it for future steps as you will use it in your link path.

2.4 Update ASP .NET Mappings

Run the **command prompt** as an Administrator. Type the following command in the command prompt and hit <enter>.

 The command is different for 32-bit and 64-bit operating systems, please ensure you run the correct command.

32-bit

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

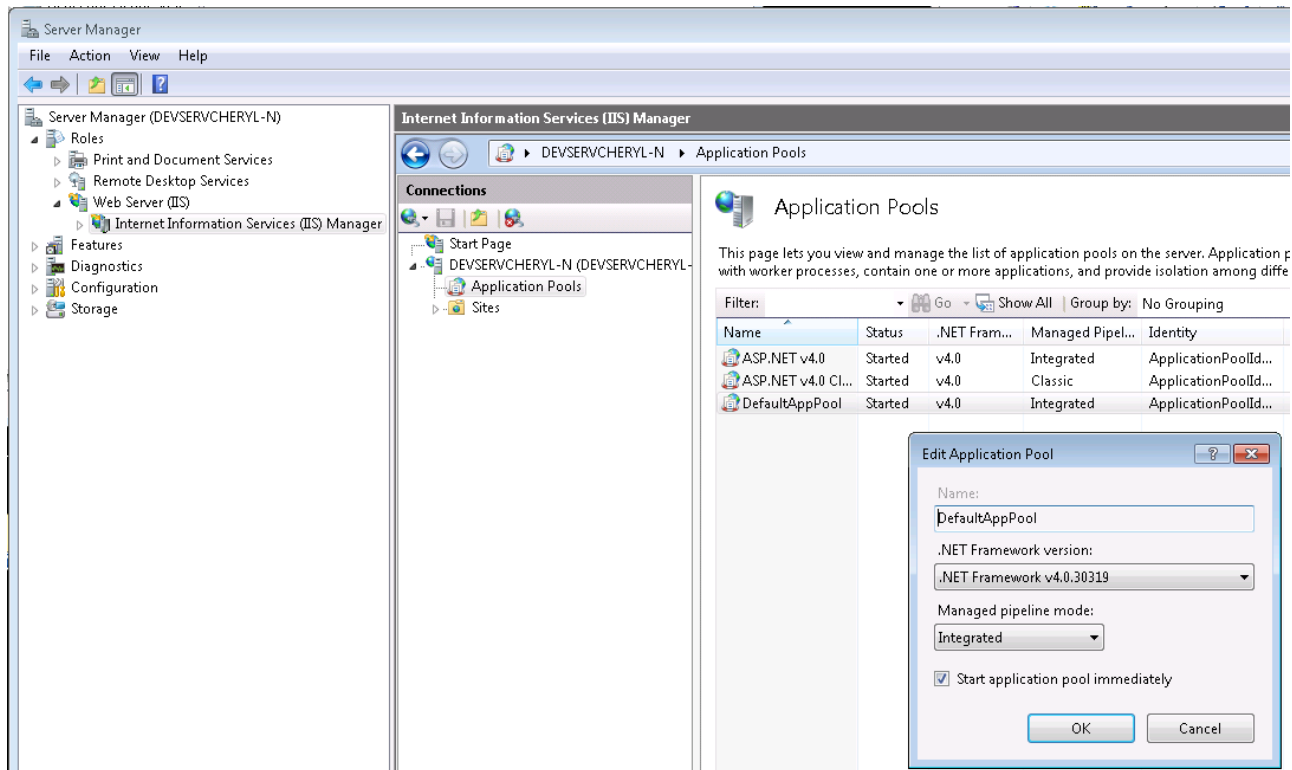
64-bit

```
%windir%\Microsoft.NET\Framework64\v4.0.30319\aspnet_regiis.exe -i
```

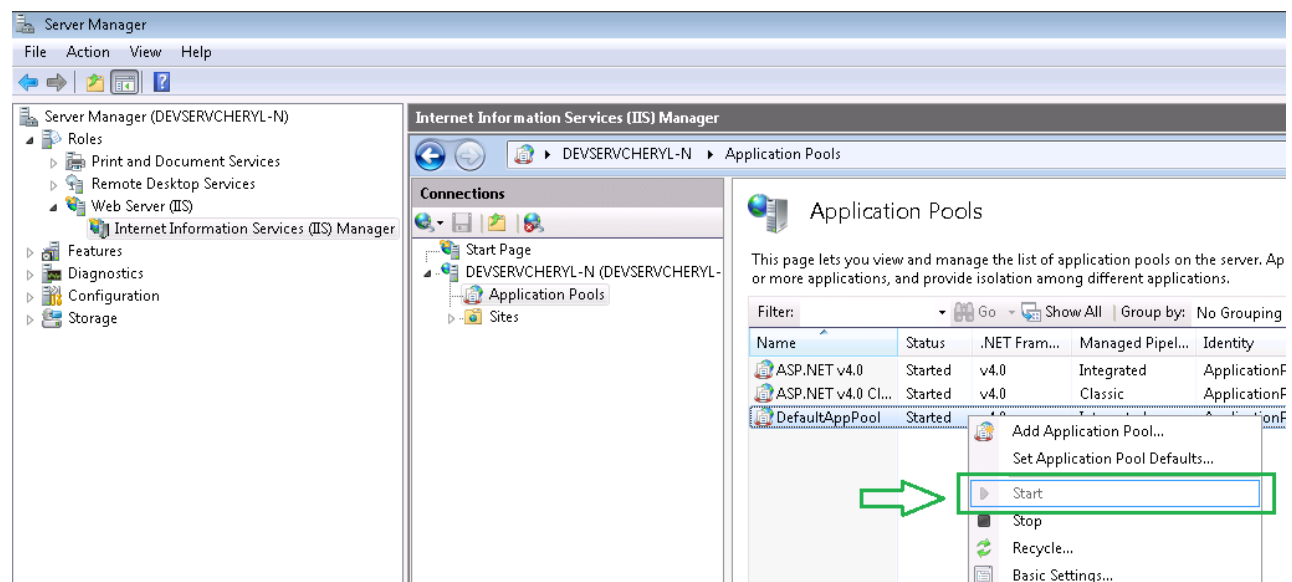
2.5 Configure Default Application Pool

Open **Server Manager** and navigate to the **DefaultAppPool**. Ensure that your settings are the same as the screenshot.

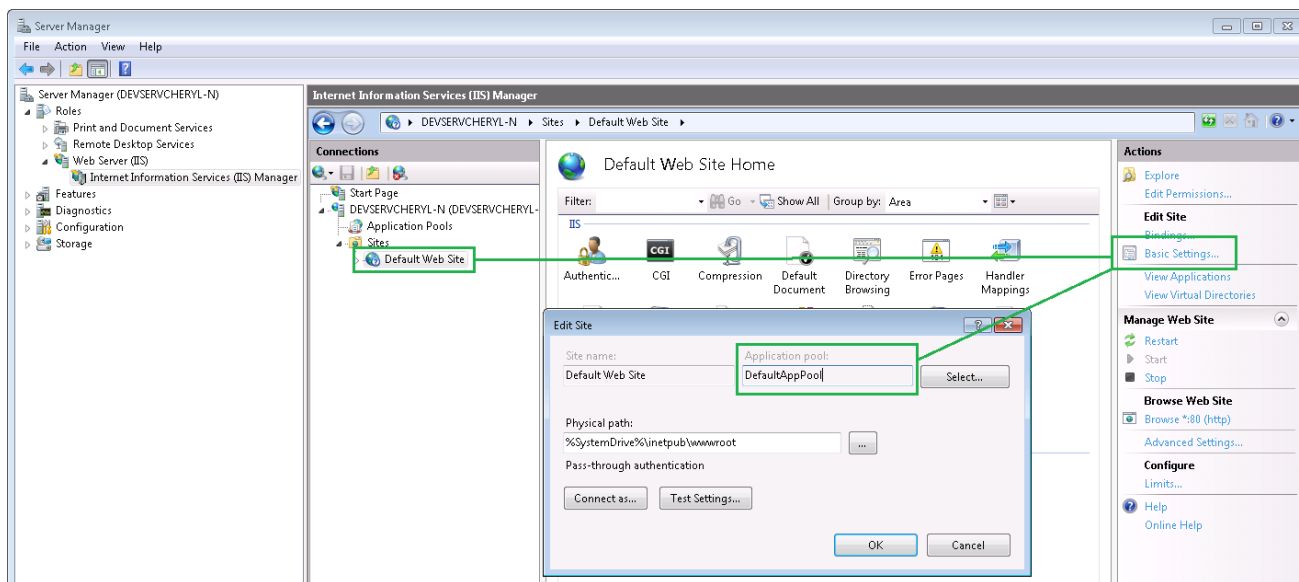
- To Open IIS Manager from Search Box in Windows 7, 8, 10 Click Start then type 'inetmgr' in the search box.



Ensure that the DefaultAppPool service is **Started**. If it's not started simply right click and select Start.

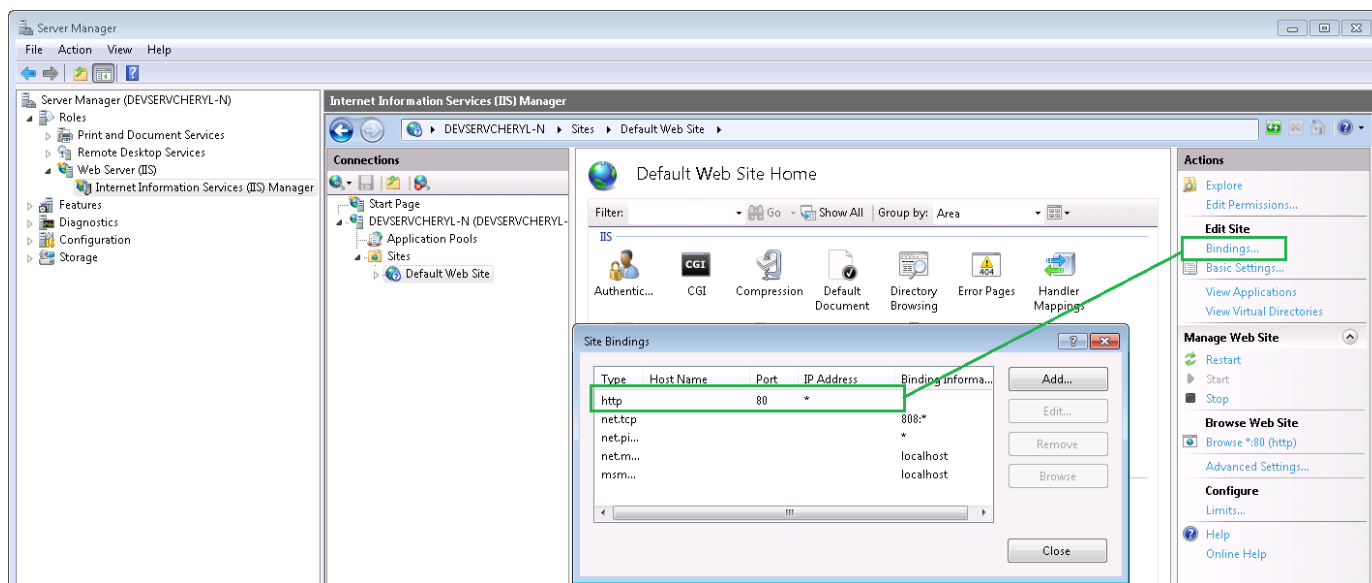


Now highlight Default Web Site and click **Basic Settings**. Ensure the **Application pool** for your website is set to **DefaultAppPool**.



2.6 Configure Bindings

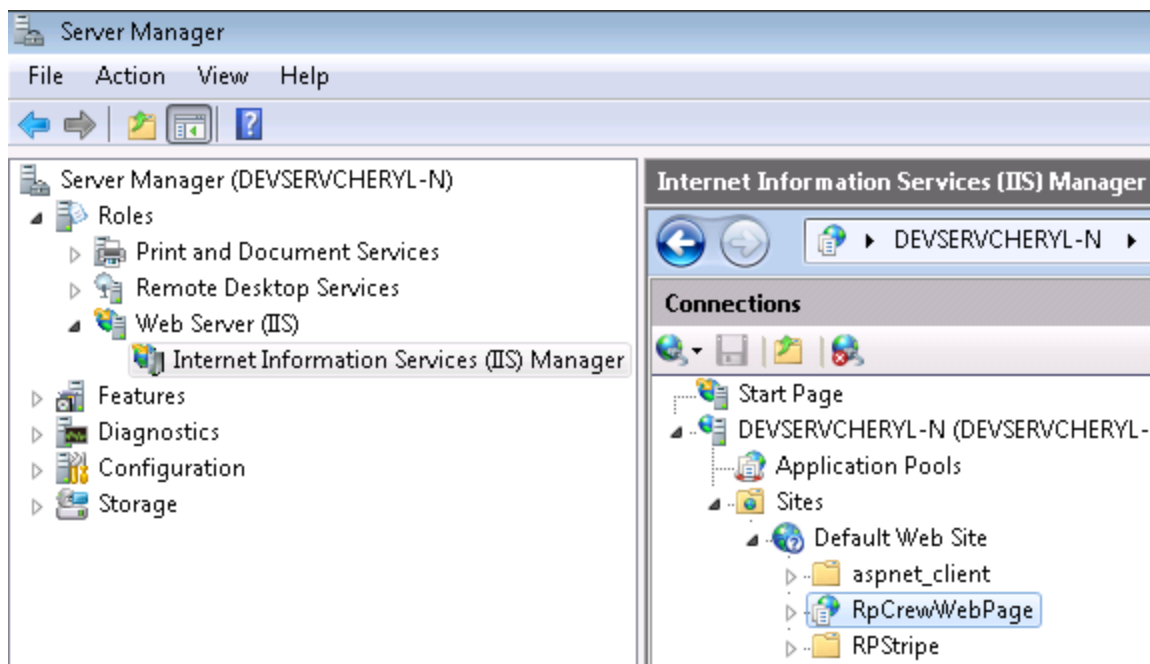
Click **Bindings ...** and ensure the settings are the same as the screenshot.



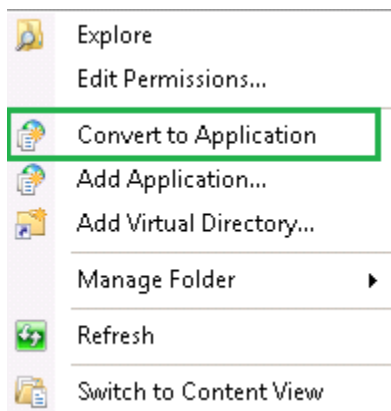
2.7 Configure RPWS as an Application

In **Server Manager** navigate to **RPCrewWebpage**. The icon should look like this : 

If your icon is the same, it means that the RPWS service is correctly configured as an application, you don't need to change anything.

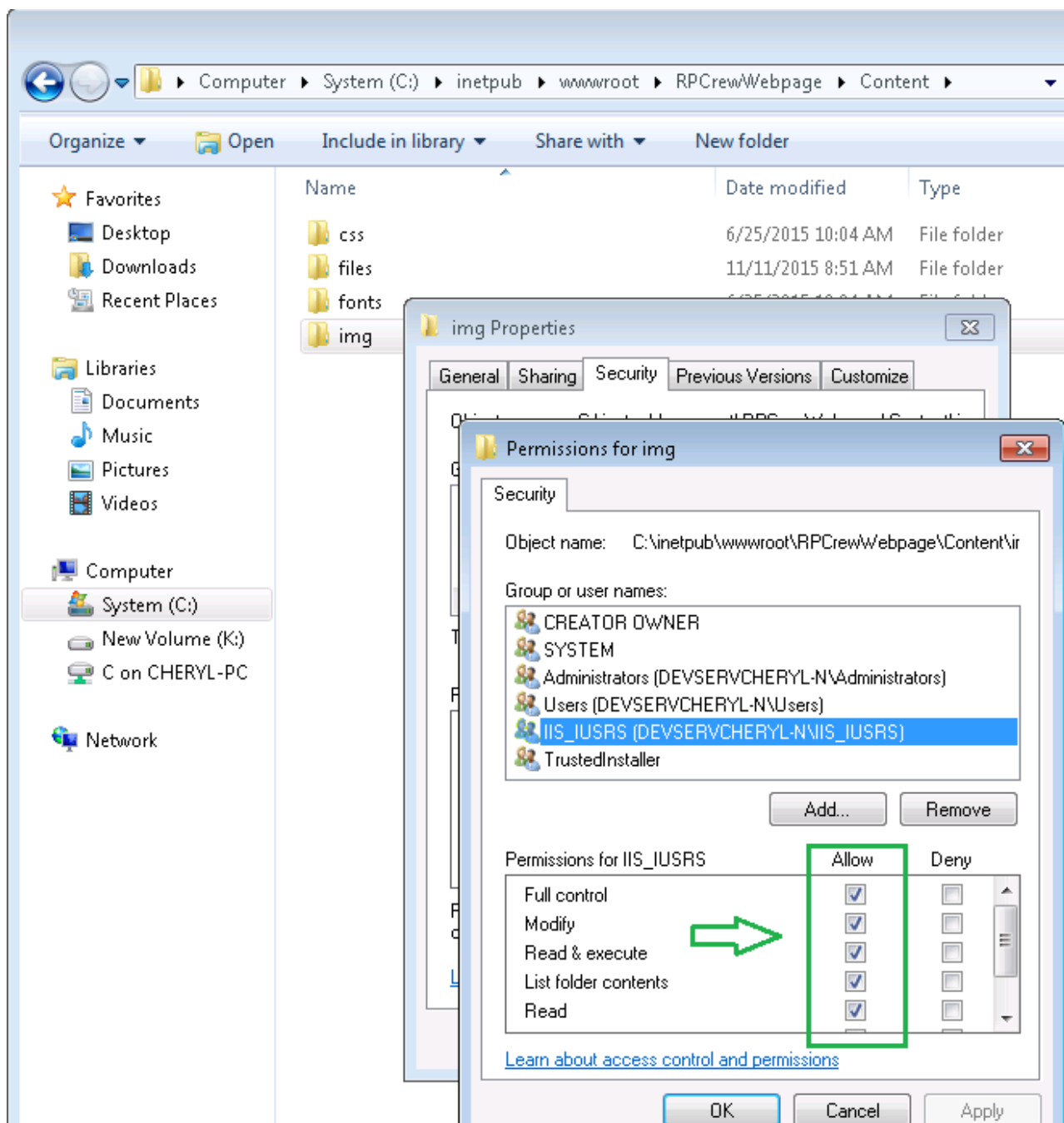


However if the icon is a folder instead, you will need to right click on **RPCrewWebpage** and select **Convert to Application**.



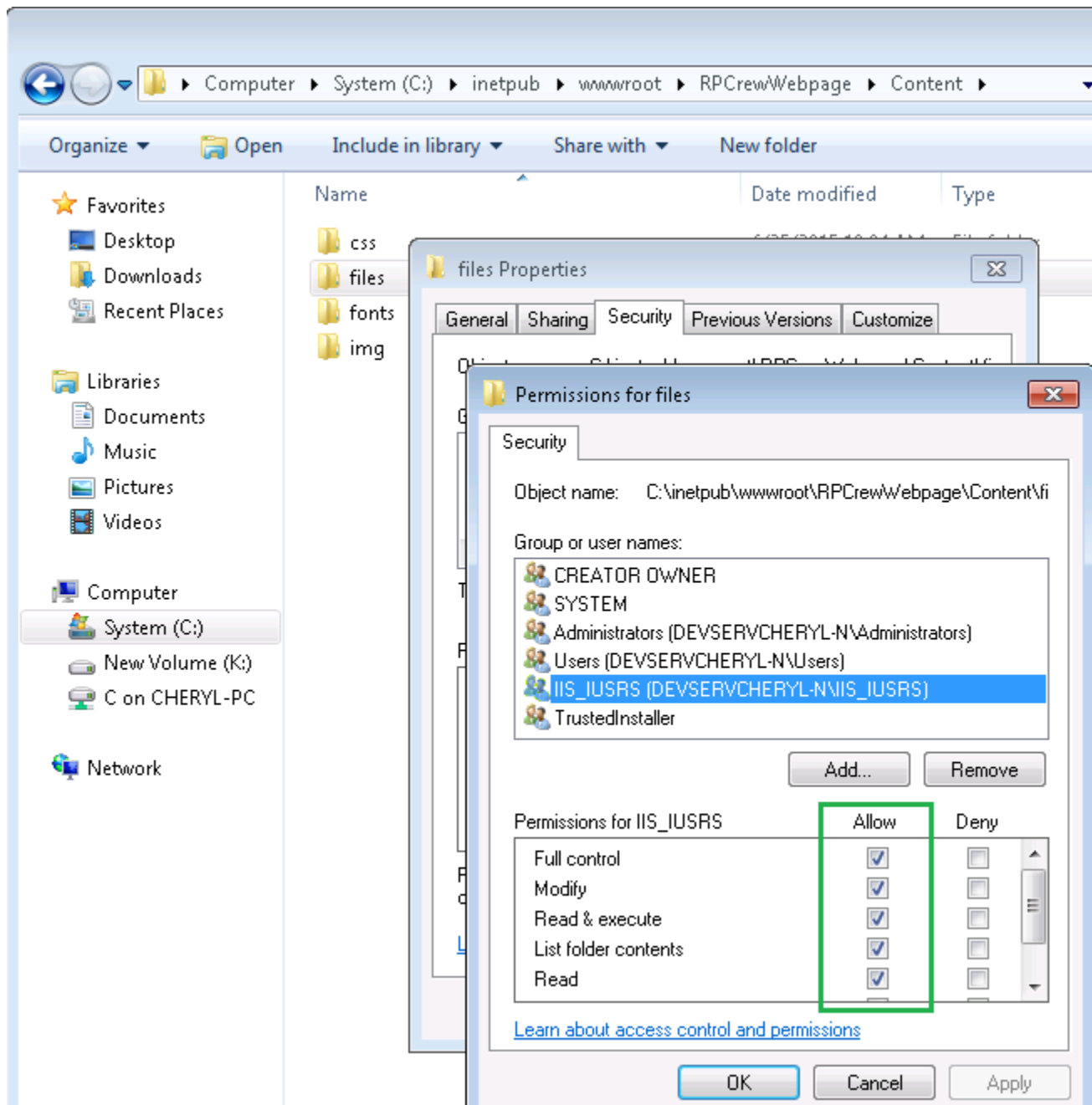
2.8 Enable Permissions to Upload Avatars

The RPWS allows a technician to customize his or her profile by selecting an avatar. You'll need to configure permissions on your server to allow techs to upload an avatar image. Navigate to C:\inetpub\wwwroot\RPCrewWebpage\Content and open the properties for the **img** folder. Ensure you have permissions set as follows:



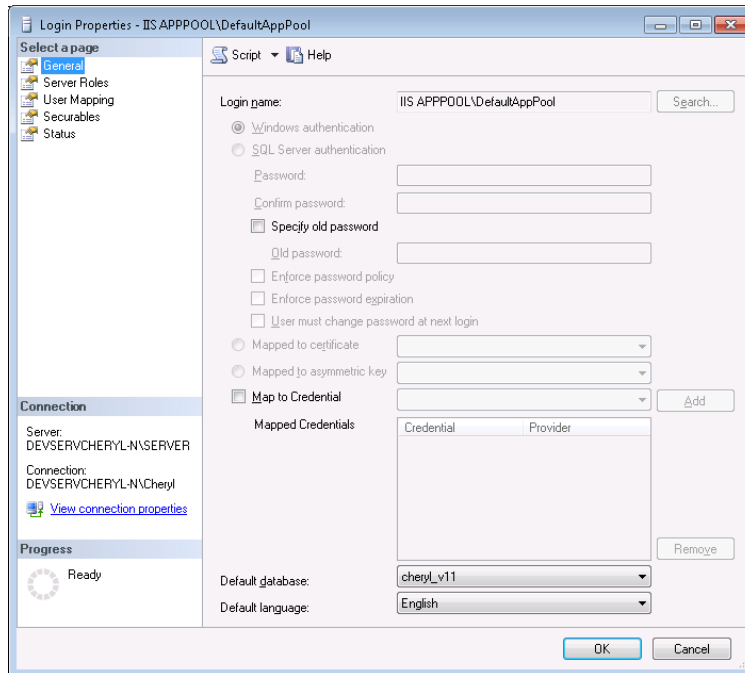
2.9 Enable Permissions to Upload Certificates and Licenses

Secondary Skills may be configured as **Certificate Required**. When a technician adds or modifies a secondary skill, he or she may be required to attach a certificate before saving. You'll need to configure permissions on your server to allow techs to upload certificate or license files. Navigate to C:\inetpub\wwwroot\RPCrewWebpage\Content and open the properties for the **files** folder. Ensure you have permissions set as follows:

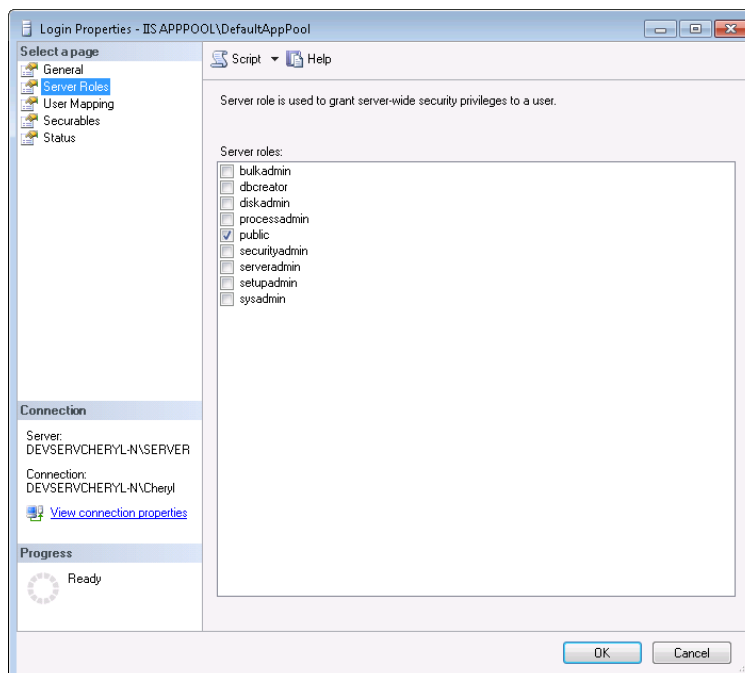


2.10 Enable Database Permissions

In SQL Management Studio configure the IIS APPPOOL\DefaultAppPool user with Windows authentication. Ensure that you set your Default Database and Default Language accordingly.

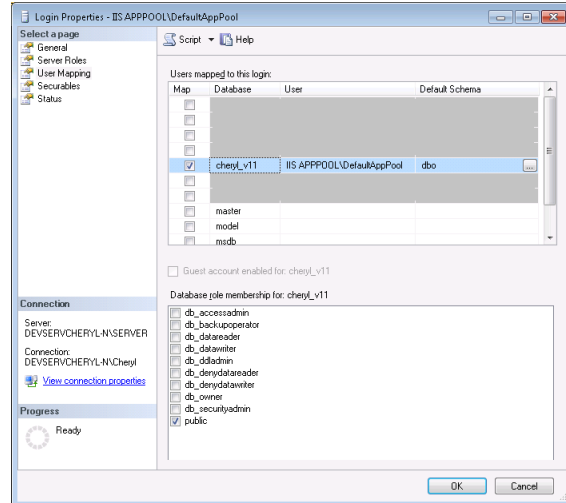


This user only has the **public** role assigned.



This user is only mapped to your RP database.

Use the following SQL script to grant the required permissions to this user. Ensure that you enter the appropriate DATABASE (highlighted).



```
DECLARE @USERNAME VARCHAR(50);
DECLARE @DATABASE VARCHAR(50);
SET @USERNAME = '[IIS APPPOOL\DefaultAppPool]';
SET @DATABASE = 'dev_data';
DECLARE @SQLText nvarchar(MAX);
SET @SQLText = '
USE {DATABASE}
GRANT CONNECT TO {USERNAME}
GRANT SELECT ON [dbo].[tblAddTechSkill] TO {USERNAME}
GRANT SELECT ON [dbo].[tblActivityType] TO {USERNAME}
GRANT SELECT ON [dbo].[tblContact] TO {USERNAME}
GRANT SELECT ON [dbo].[tblCultureCode] TO {USERNAME}
GRANT SELECT ON [dbo].[vwrPWebContact] TO {USERNAME}
GRANT SELECT ON [dbo].[tblPayroll] TO {USERNAME}
GRANT DELETE ON [dbo].[tblPayroll] TO {USERNAME}
GRANT SELECT ON [dbo].[tblActivity] TO {USERNAME}
GRANT DELETE ON [dbo].[tblActivity] TO {USERNAME}
GRANT SELECT ON [dbo].[tblContactSecondarySkills] TO {USERNAME}
GRANT DELETE ON [dbo].[tblContactSecondarySkills] TO {USERNAME}
GRANT SELECT ON [dbo].[tblBill] TO {USERNAME}
GRANT DELETE ON [dbo].[tblBill] TO {USERNAME}
GRANT EXECUTE ON [dbo].[Web_CalendarTechnicianEvent] TO {USERNAME}
GRANT EXECUTE ON [dbo].[Web_CalendarTechnicianEventList] TO {USERNAME}
GRANT EXECUTE ON [dbo].[Web_GetPayRoll] TO {USERNAME}
GRANT EXECUTE ON [dbo].[Web_GetPrimarySkills] TO {USERNAME}
GRANT EXECUTE ON [dbo].[Web_GetSecondarySkills] TO {USERNAME}
GRANT EXECUTE ON [dbo].[Web_GetTimeLineItems] TO {USERNAME}
GRANT EXECUTE ON [dbo].[Web_UpdateCalendarActivityEvent] TO {USERNAME}
GRANT EXECUTE ON [dbo].[Web_UpdateCalendarCrewEvent] TO {USERNAME}
GRANT EXECUTE ON [dbo].[Web_UpdateContact] TO {USERNAME}
GRANT EXECUTE ON [dbo].[Web_UpdateExternalPrimarySkill] TO {USERNAME}
GRANT EXECUTE ON [dbo].[Web_UpdateExternalSecondarySkill] TO {USERNAME}
GRANT EXECUTE ON [dbo].[Web_UpdatePayRoll] TO {USERNAME}
';
SET @SQLText = REPLACE (@SQLText, '{USERNAME}', @USERNAME)
SET @SQLText = REPLACE (@SQLText, '{DATABASE}', @DATABASE)
EXECUTE (@SQLText)

SET @SQLText = '
USE msdb
GRANT CONNECT TO {USERNAME}
GRANT SELECT ON [dbo].[sysmail_profile] TO {USERNAME}
';
SET @SQLText = REPLACE (@SQLText, '{USERNAME}', @USERNAME)
EXECUTE (@SQLText)
```



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2.11 Update Config File and Test Connection

Navigate to C:\inetpub\wwwroot\RPCrewWebpage and open the **Web.config** file in a text editor (such as Notepad).

Change **Data Source** to your SQL server name.

Change **Initial Catalog** to your RentalPoint database.

```
RPIni.ini - Notepad
File Edit Format View Help
[DIRECTORIES]
HPSYS_DIR=C:\RentalPointv11\sys
CONFIGFILEPATH=C:\RentalPointv11\sys
HPDATA_DIR=E:\customer data\Blinding Light
HPINFO_DIR=C:\RentalPointv11\info
HPDOCS_DIR=E:\Rentalpointv11\docs
ARCHIVEDOCSPATH=
HPROOT_DIR=C:\RentalPointv11
HPREPORTS_DIR=E:\RentalPointv11\Reports
TEMPLATES_DIR=E:\Rentalpointv11\docs\Templates
FR_TEMPLATES_DIR=E:\RentalPointv11\data\FastReportTemplates
[DATABASE]
DATABASENAME=v11_database Catalog
SERVERNAME=MyServer\SQLEXPRESS Source
CONNECTIONSTRING=
CONNECTION2=
SQLPROVIDER=
[LOGIN]
USESQLAUTH=0
LOGINNAME=
PASSWORD=
NoListopsonLogin=NO
[OTHER]
Backuponthispc=NO
```

```
<connectionStrings>
  <add name="DefaultConnection" connectionString="Data Source=(local);Initial Catalog=dev_data;Integrated
Security=SSPI;Persist Security Info=False;" providerName="System.Data.SqlClient"/>
</connectionStrings>
```



Configuring RentalPoint Web Services

Open a browser and enter <http://localhost/RPCrewWebpage/>. (Or whatever name you used for your directory 2.3 above. A login prompt will display.



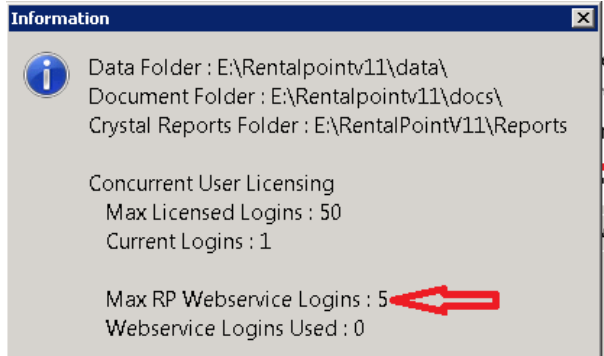
See Section 4 'Troubleshooting' if you have problems displaying the login prompt.

A screenshot of the RPWebServices login interface. The title "RPWebServices" is at the top in a large, bold, black font. Below it, the text "Sign in to start your session" is centered. There are two input fields: "User Name" with a person icon and "Password" with a lock icon. Below the password field is a checkbox labeled "Remember Me" with a checkmark icon. To the right of the checkbox is a blue button labeled "Sign In". At the bottom, the text "RentalPoint © 2015 RentalPoint. Version 1.001" is displayed.

3. How to Configure RentalPoint



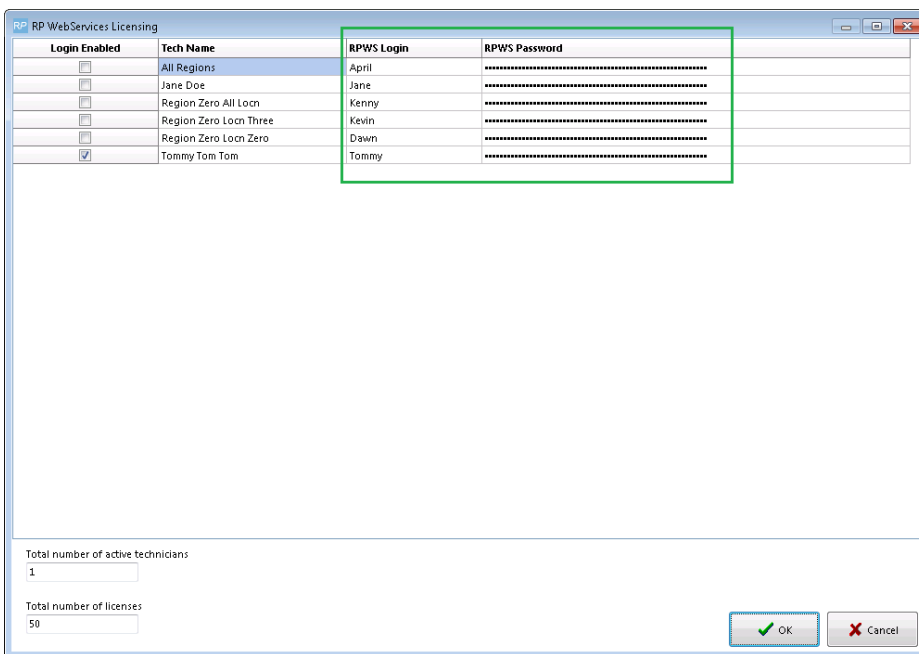
You will need RPWS user licenses to access the RPWS license setup.
Goto help→status off the main Rentalpoint menu



Please contact support@rentp.com if you do not have an RPWS license file.

Launch RentalPoint and from the main menu, go to 'Setup→RP WebServices Licensing'.

- To activate an RPWS login for a technician simply tick the checkbox beside the technician name.
- The info boxes at the bottom of the window will keep track of how many licenses are available and how many are in use.
- Next, enter a User Name and Password. These are the login credentials that the tech will use when accessing RPWS via a browser.



Login Enabled	Tech Name	RPWS Login	RPWS Password
<input type="checkbox"/>	All Regions	April
<input type="checkbox"/>	Jane Doe	Jane
<input type="checkbox"/>	Region Zero All Locn	Kenny
<input type="checkbox"/>	Region Zero Locn Three	Kevin
<input type="checkbox"/>	Region Zero Locn Zero	Dawn
<input checked="" type="checkbox"/>	Tommy Tom Tom	Tommy

Total number of active technicians
1

Total number of licenses
50


OK Cancel




Configuring RentalPoint Web Services

RPWebServices

Sign in to start your session





☒ Remember Me

RentalPoint © 2015 RentalPoint. Version 1.001



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4. Troubleshooting

- Localhost Connection

On the machine that you are using to host RPWS, open a browser and type **http://localhost/RPCrewWebpage**. If it fails to load the page then you most likely need to allow the IIS service to broadcast through your firewall.

- LAN Connection

On a different workstation on the same LAN, open a browser and type **http://(Local IP Address of Server Machine)/RPCrewWebpage**. This is testing that another workstations inside your office can talk to RPWS. If this fails, then IIS is probably blocked by the Server Machine firewall or you have the wrong IP address for the server. You need to ensure you are using the local IP address of the server machine and not the external IP address (from a browser window). You can locate the internal IP address, by going to Start -- Run -- cmd (then press enter). Type **ipconfig** and this will tell you the internal IP address in use by this machine. It should be something like 192.168.x.x or similar.

- WAN Connection

To connect to RPWS from outside the LAN, (ie. your technicians on site) you may have to allow IIS through a port in the firewall and forward it to the internal IP address of the Server machine. Without doing this the router WILL ignore all communication attempts to RPWS. Once configured you should be able to type **http://(External IP Address of Server Machine)/RPCrewWebpage** from any browser window and see the login page displayed.


- HTTP Error 500.19 – Internal Server Error: Cannot Add Duplicate Collection Entry

Duplicate collection entries may result in a conflict between the application level configuration and the site level configuration. To fix this you'll simply need to add a **remove** statement to the Web.config file located in the RPCrewWebpage root folder.

HTTP Error 500.19 - Internal Server Error

The requested page cannot be accessed because the related configuration data for the page is invalid.

Detailed Error Information:

Module	CustomErrorModule	Requested URL	http://localhost:80/rpws_files
Notification	SendResponse	Physical Path	C:\inetpub\wwwroot\RPWS_Files
Handler	Not yet determined	Logon Method	Not yet determined
Error Code	0x800700b7	Logon User	Not yet determined
Config Error	Cannot add duplicate collection entry of type 'mimeMap' with unique key attribute 'fileExtension' set to '.json'		
Config File	\\?C:\inetpub\wwwroot\RPWS_Files\web.config  Location of Config file		

Config Source:

```

37: <staticContent>
38: <mimeMap fileExtension=".json" mimeType="application/json" />  Find this line in the file
39: </staticContent>

```

Resolution:

1. Navigate to the Web configuration file outlined in the error information above
2. Add the 'remove' line above the file name that is having the issue

```

<handlers>
  <remove name="ExtensionlessUrlHandler-Integrated-4.0" />
  <remove name="OPTIONSVerbHandler" />
  <remove name="TRACEVerbHandler" />
  <add name="ExtensionlessUrlHandler-Integrated-4.0" path="*." verb="*" type='
</handlers>
<staticContent>
  <remove fileExtension=".json" />
  <mimeMap fileExtension=".json" mimeType="application/json" />
</staticContent>
</system.webServer>

```

<http://blogs.msdn.com/b/chaun/archive/2009/12/04/iis7-error-cannot-add-duplicate-collection-entry-of-type-mimemap-with-unique-key-attribute-fileextension.aspx>

- Error 500.19 – The requested page cannot be accessed because the related configuration data for the page is invalid

HTTP Error 500.19 - Internal Server Error

The requested page cannot be accessed because the related configuration data for the page is invalid.

Detailed Error Information:			
Module	IIS Web Core	Requested URL	http://localhost:80/rpws_files
Notification	BeginRequest	Physical Path	C:\inetpub\wwwroot\RPWS_Files
Handler	Not yet determined	Logon Method	Not yet determined
Error Code	0x80070021	Logon User	Not yet determined
Config Error	This configuration section cannot be used at this path. This happens when the section is locked at a parent level. Locking is either by default (overrideModeDefault="Deny"), or set explicitly by a location tag with overrideMode="Deny" or the legacy allowOverride="false".		
Config File	\\?\C:\inetpub\wwwroot\RPWS_Files\web.config		

Config Source:	
30:	</modules>
31:	<handlers>
32:	<remove name="ExtensionlessUrlHandler-Integrated-4.0" />

Resolution:

- Open Server Manager and goto Add Roles / Turn Windows Features on/off (for Windows 7,8,10)
- Check all Application development features except 'CGI'

