R5KMRPT Responder® 5000 Feature Server Installation Guide

A Division of AMETEK, Inc.

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1: General Information

The Responder Feature Server (RFS) Application is a Web based application (part number: R5KMRPT) with different modules that allow facilities to enhance the Responder 5000 Nurse Call System in multiple ways. The Application provides customizable Activity Boards to caregivers for a clear view of the Responder 5000 (R5K) nurse call activities in real time on a unit or multiple unit basis. It provides room and patient management tools for operational support. A reporting module provides the longer-term picture (up to eighteen months) of the facility and the way nursing and patients' requests are met. Finally, an administration module provides a tool for user management and application customization.

Should you be new to configuring R5KMRPT Application or new to R5K, we strongly recommend that you:

1) familiarize yourself with the entire R5K product line (best explained in the Responder 5000 Configuration Guide and Responder 5000 Component Installation Guide) and

2) take the time to review and understand this entire document before attempting to configure any system.

Revision History

This is the "A" version of KI-2911.

Revision	Summary
O	- Initial release
A	- System TCP/UDP Ports - SQL Express Installation - IIS Setup -PC Requirements Updated

Scope of this Document

Read this document if your duties include installing or maintaining the R5K Feature Server.

Customer Connection/Extranet

You can use Rauland's secure Customer Connection site to find, view, and/or download many support documents—including manuals, drawings, and reports. To request an account, follow the online instructions at: http://customerconnection.rauland.com.

Download the R5KMRPT Application Software from Rauland-Borg Customer Connection.

Alerts, Precautions, and Limitations

Observe the following alerts, precautions, and system limitations:

- ✓ R5KMRPT should be installed by the trained installer ONLY.
- ✓ R5KMRPT should be tested after installation before releasing product to the end-user/customer.
- ✓ Default R5KMRPT Username and Password should be changed after installation before releasing product to the end-user/customer.
- ✓ Activity Board is a secondary annunciation device and should not be used in place of a primary annunciation device.
- ✓ User should not run additional applications on the Activity Board client device to preclude other applications from preventing operation.
- ✓ System calls will not display on Activity Board during Responder Feature Server Data Module (R5KRSW) reboot.
- ✓ When displaying the Activity Board on a static display the OS and/or Web browser update may disrupt the displaying of calls until Web browser has been re-launched.
- ✓ Activity Board display fields should be double-checked to make sure

displaying the fields complies with HIPPA and local regulations.

- ✓ R5KRSW should be installed on a secure network to prevent unauthorized access.
- ✓ Reporting data is stored for a duration of 18 months from the date of occurrence. Data is automatically purged by the application after 18 months.

Related Documents

Other, related information can be found in the following documents:

- ✓ Responder 5000 Configuration Guide (KI-2908)
- ✓ Responder 5000 Component Installation Guide (KI-2907)
- ✓ Responder 5000 Software Application User Guide (KI-2910)

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2: Installation and First Steps

PC Requirements

In order to run the Responder Feature Server, you will need a Windows-based computer that meets or exceeds the following specifications:

- Quad Core CPU
- 8 GB of RAM
- 75 GB Free Hard Disk Space
- Ethernet 1000 Mbps port (for connection to R5K embedded system)
- Windows Server 2012 R2
- Microsoft .Net Framework version 3.5
- Microsoft .Net Framework version 4.5 or later
  - Use Windows Control Panel | Programs and Features to enable appropriate .Net Framework
- Internet Information Services (IIS) version 6.0 or later
  - Use Windows Control Panel | Programs and Features to enable IIS
- MS SQL Server 2014 (Express edition with tools)
  - Download appropriate version of MS SQL from Microsoft Web site or
  - Connect RFS to the existing MS SQL

Requirements to run Client features:

- 1024 x 768 or Better Video Resolution
- Web browser (one of the following)
  - Internet Explorer - Version 11.0 or later
  - Chrome – Version 58.0.xx or later
- Microsoft Excel™ (to run Reports) – Excel 2016 – if RFS Reports will be displayed in Excel format

Adobe Acrobat Reader (to review manuals and install diagrams) – version 2017 - if RFS Reports will be displayed in Adobe format

Responder Feature Server Software Components

Responder Feature Server Application consists of the following application level components:

- The Activity Board module allows a user to view nurse call activity and service requests on any display(s) connected to LAN-enabled computers.
- The Reports module allows a user to generate and view customizable reports that reflect historical nurse call events.
- The Patient Details module allows facilities to manage patients by displaying a compact view of all patients within a facility.
- The Administration module allows an Administrator to manage users, create activity boards, and modify overall settings of the system.

RFS Application Components

R5KMRPT Application consists of the following software components:

- MS SQL Express - MS SQL Server 2014 (Express edition with tools)
- R5KRSW App Service
- R5KRSW Service

Installing the Software

Unless you have specific reasons to make other installation choices, we strongly recommend using the defaults (folders, language, etc.). The folder choice will impact the location of future software updates. We also recommend that you exit all other programs before beginning the installation process.

To install the software

1 Run R5KMRPT Application Installation program.

- You can access the setup routine via the Start menu (Start | Run | X:\R5KInstaller.exe [where X = the drive letter assigned to the location of the installation program]).

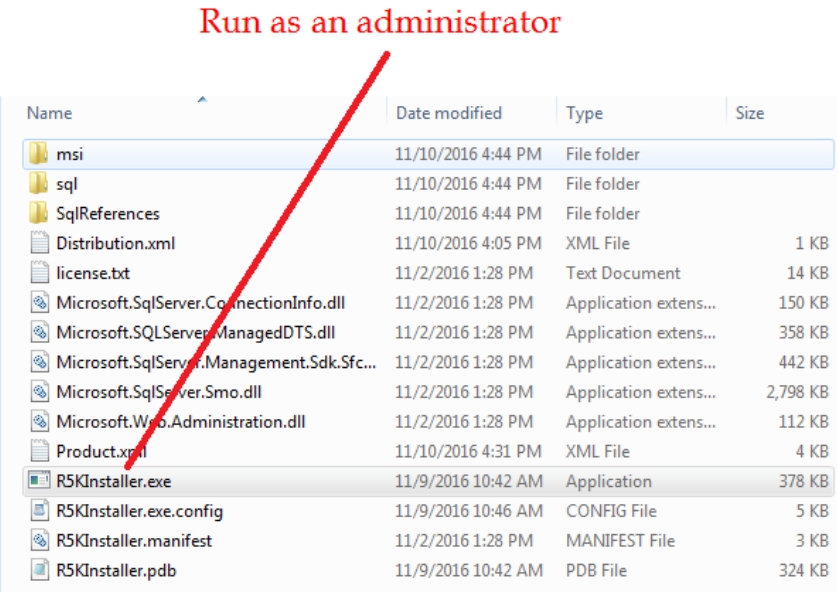


Figure 1: R5KMRPT Application Installation Program

2 The InstallShield License Agreement (bearing the Responder Feature Server Data Module (R5KRSW) version number) will appear:

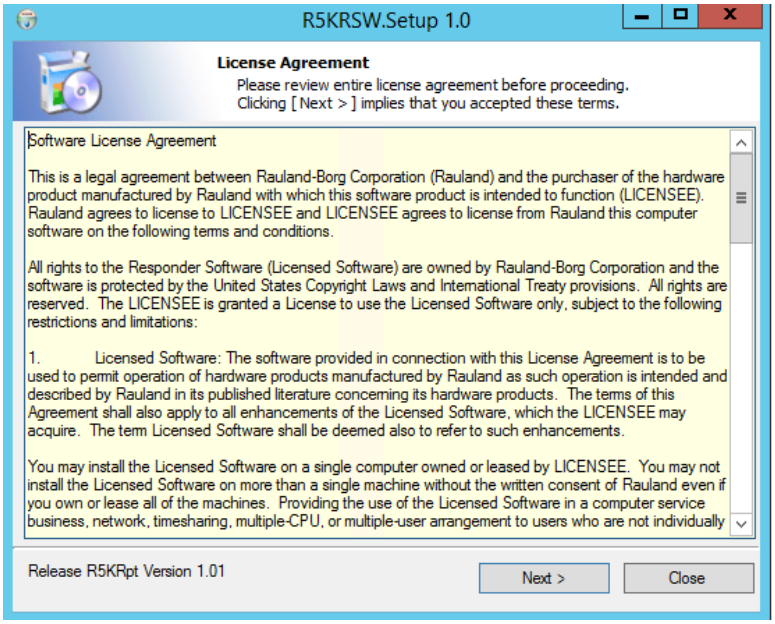


Figure 2: R5KMRPT Application Installation Program

- Agree to the license agreement and click on Next.

3 The R5KRSW Component Detection screen will appear.

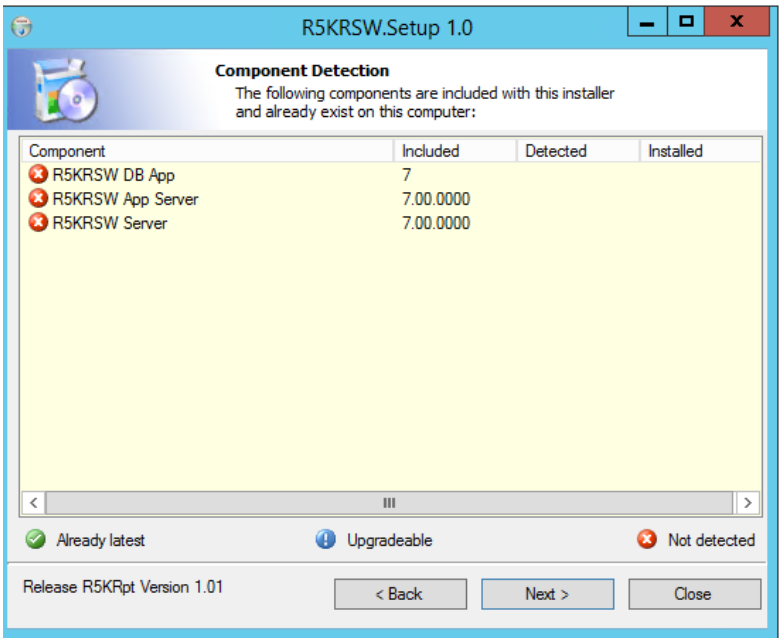


Figure 3: R5KMRPT Application Installation Program

- Verify the status of R5KRSW components and click on Next.

4 R5KRSW Setup screen will appear:

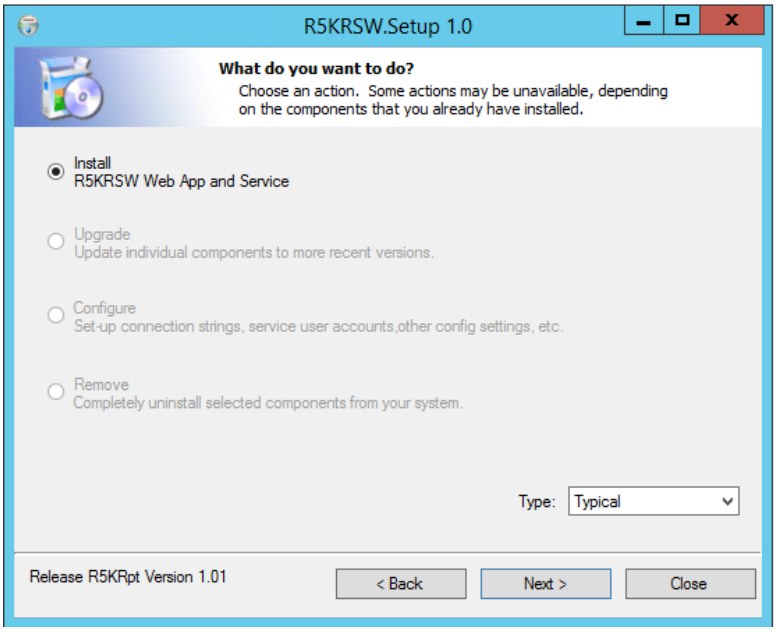


Figure 4: R5KMRPT Application Installation Program

5 Make one of the following selections and click on Next:

- Select “Install” if this is a first time software installation
- Select “Update” if you wish to make updates to the already installed software
- Select “Configure” if you want to remove or upgrade any of the software components or to change the install path
- Select “Remove” if you wish to remove installed software

6 System Service selection screen will appear:

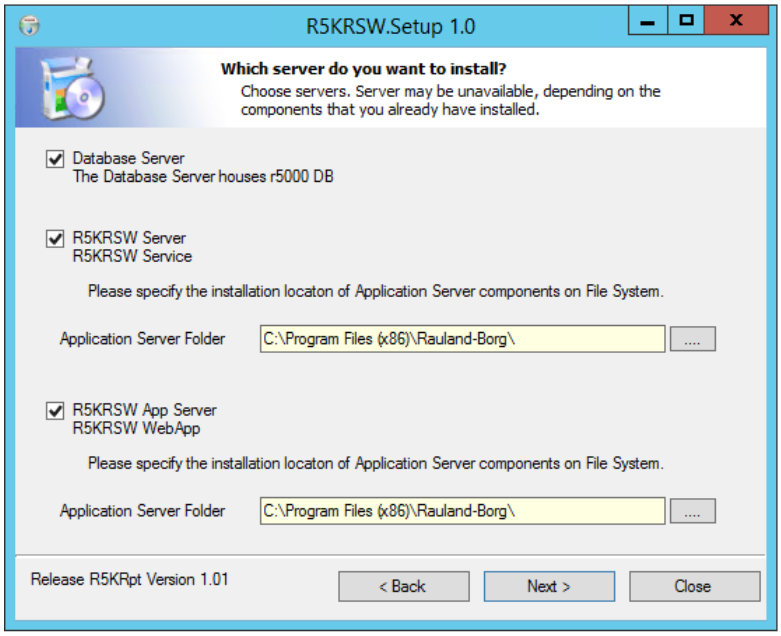


Figure 5: R5KMRPT Application Installation Program

7 Select desired services and its location(s) to be installed and click on Next.

- Database Server/The Database Server houses r5000 DB checkbox refers to creating RFS database in MS SQL

8 If this is the first time installation r5000 database has to be created

- R5KRSW Server (R5KRSW Service) is a service communicating with R5K system
- R5KRSW App Server (R5KRSW App Service) is a service communicating with Web Server providing information to RFS Client
- If this is the first time installation R5KRSW Service and R5KRSW App Service have to be installed.

9 System Components Requirements screen will appear:

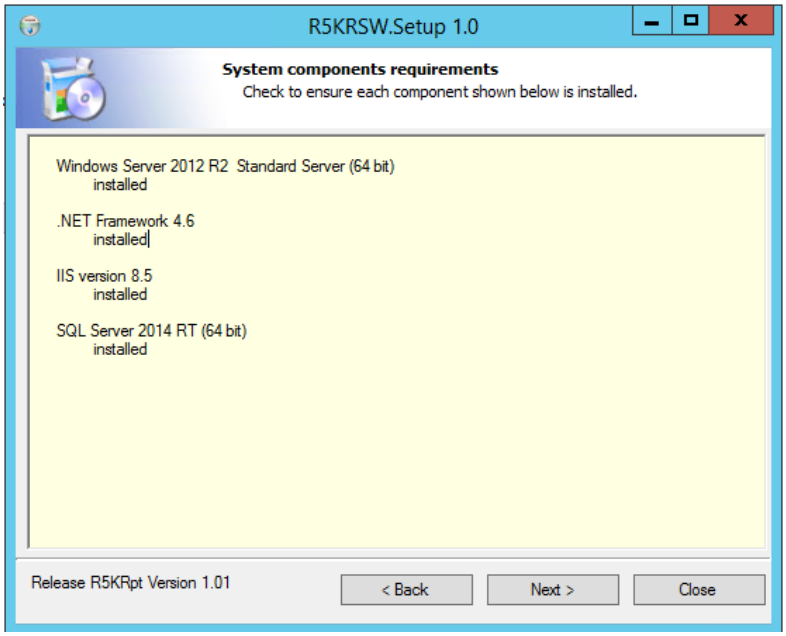


Figure 6: R5KMRPT Application Installation Program

- Verify if required system components are installed and click on Next

10 MS SQL setup screen will appear:

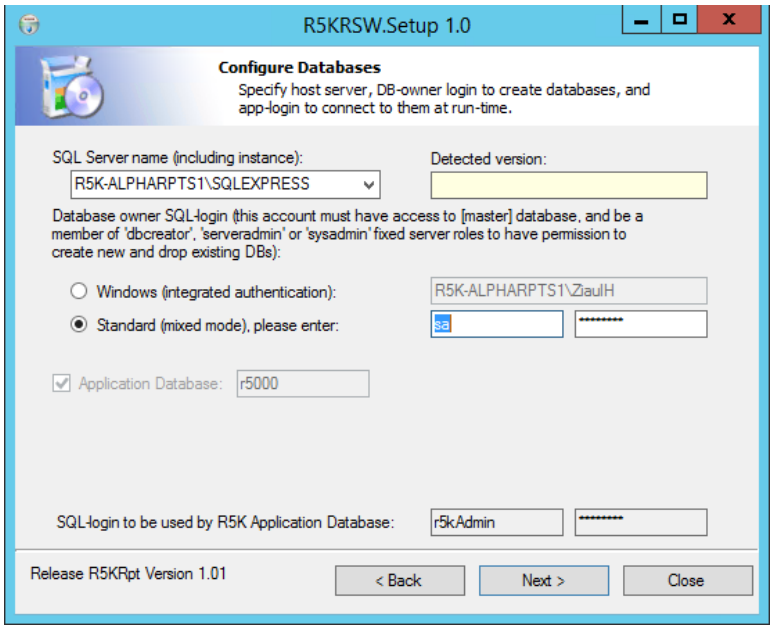


Figure 7: R5KMRPT Application Installation Program

- "SQL Server name (including instance)" gives user an option selecting MS SQL engine. System scans for the existing MS SQL Servers.
- Select MS SQL Server R5KRSW will connect to and create RFS (r5000) database
- "Detected version" provides information about selected MS SQL Server
- Select MS SQL authentication method R5KRSW will use to connect to MS SQL Server
- Windows (integrated authentication) - Uses the security features of Windows clients and servers. SQL Server validates the account name and password using the Windows principal token in the operating system. This means that the user identity is confirmed by Windows.
- Standard (mixed mode) - When using SQL Server Authentication, logins are created in SQL Server that are not based on Windows user accounts. Both the user name and the password are created by using SQL Server and stored in SQL Serve
- Please refer to MS SQL Manuals for detailed description
- Click on Next

11 R5KRSW Web Configuration screen will appear:

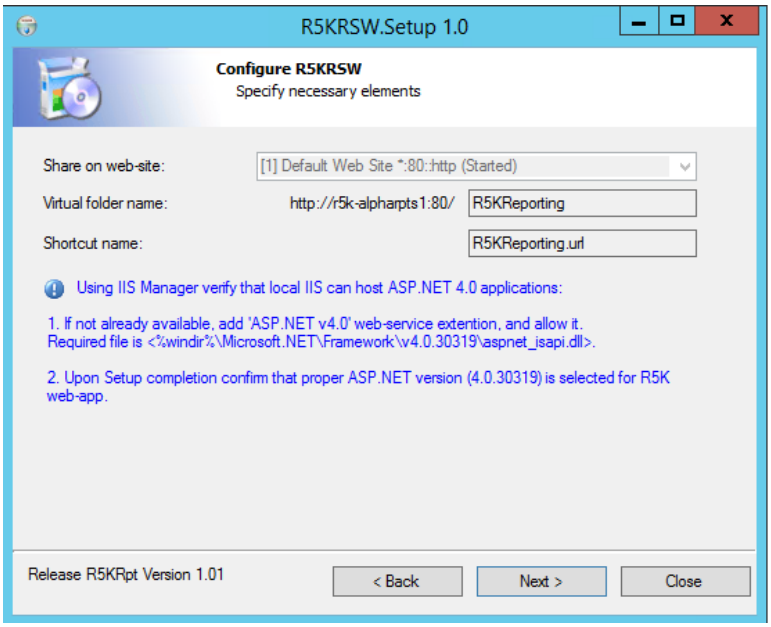


Figure 8: R5KMRPT Application Installation Program

Responder Feature Server can use existing facility's Web site. We strongly recommend contacting facility's IT personnel and making changes for the entries below:

- "Share on web-site" – provides an option of changing Web Site hosting RFS content
  - When "Typical" installation selected, this entry is disabled.
- "Virtual Folder" – provides an option of changing directory hosting RFS content
  - When "Typical" installation selected, this entry is disabled.
- "Shortcut Name" (URL Alias) allows you to provide a more understandable name (URL) to the RFS content
  - When "Typical" installation selected, this entry is disabled.
- Click on Next

We recommend consulting changes with the site's IT personnel.

12 Installation Summary screen will appear:

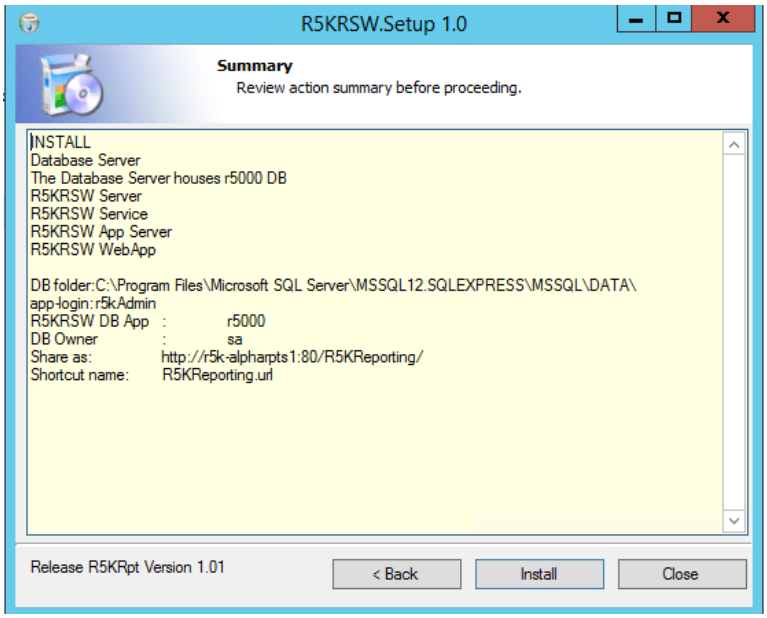


Figure 9: R5KMRPT Application Installation Program

- Verify selected options are correct. If not click on Back to modify installation parameters.
- Click on Next

13 Setup verification screen will appear:

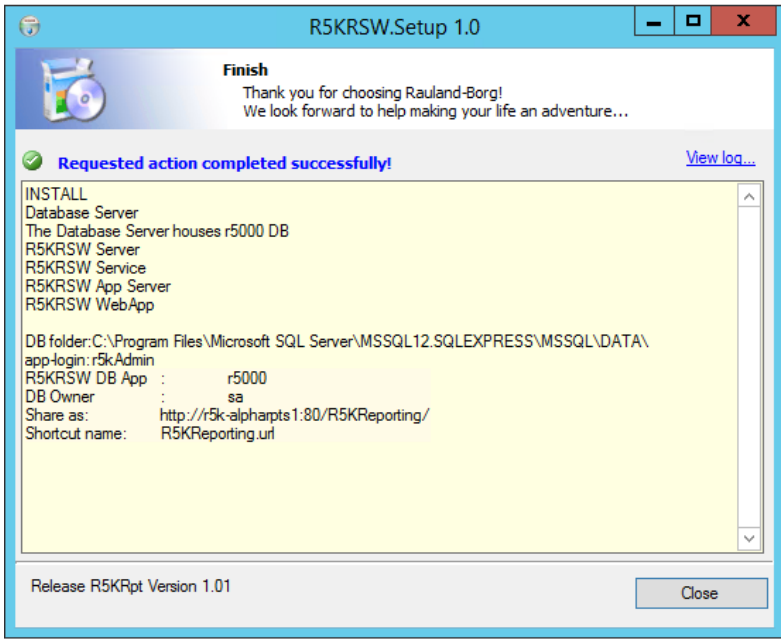


Figure 10: R5KMRPT Application Installation Program

R5K Configuration Software – System Options Settings

After successful installation, it is necessary to add R5KMRPT information to the system.

Open Responder 5000 Configuration Software (R5KWare) and navigate to "System Options" – "Servers & Email: tab:

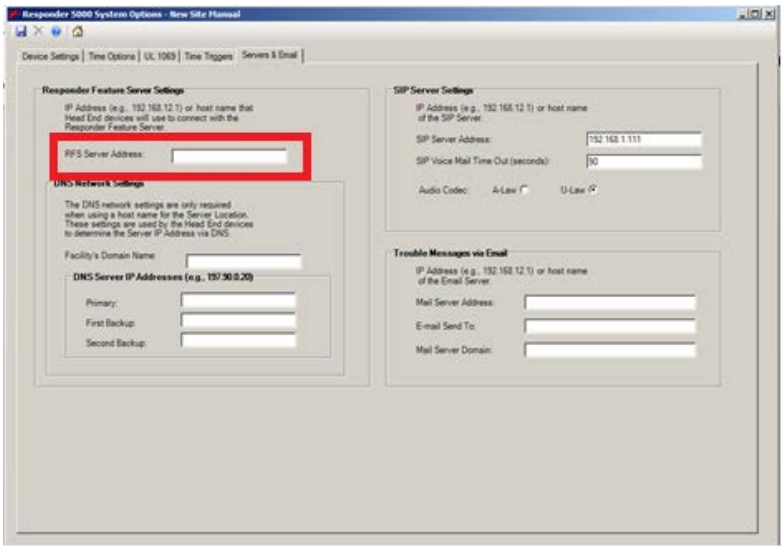


Figure 11: System Options Editor (Time Triggers Tab)

In Responder Feature Server section enter IP Address or host name that Head End will use to connect to R5KRSW.

R5K Configuration Software Application Licenses

R5KMRPT Application requires R5KMRPT License.

To install R5KMRPT License

1 Generate Token needed to obtain product license.

- Responder 5000 has to be fully configured in order to generate a Token

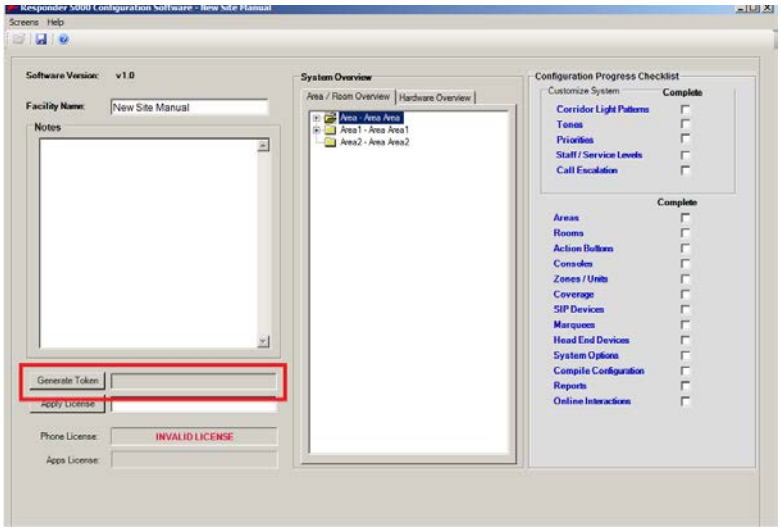


Figure 12: R5KWare Generate Token

2 Connect to Rauland-Borg License portal - http://ordersconnection.rauland.com/instance2EnvAALogin/html/login.html

- Provide Customer Number

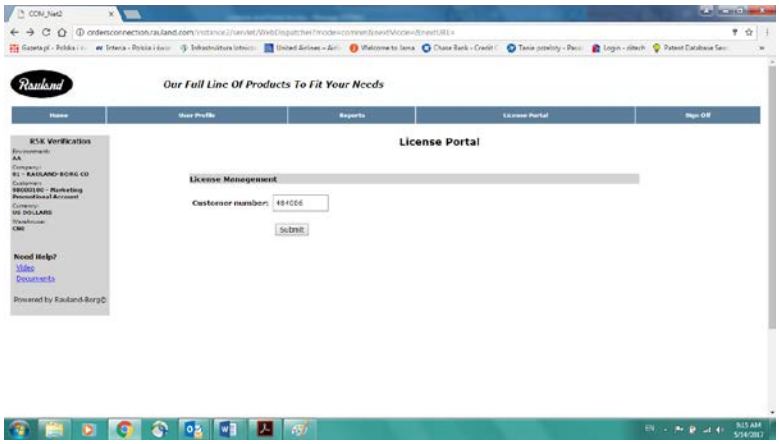


Figure 13: Rauland-Borg License Portal

3 Select type of the R5K License

- Make sure selected License includes R5KMRPT License

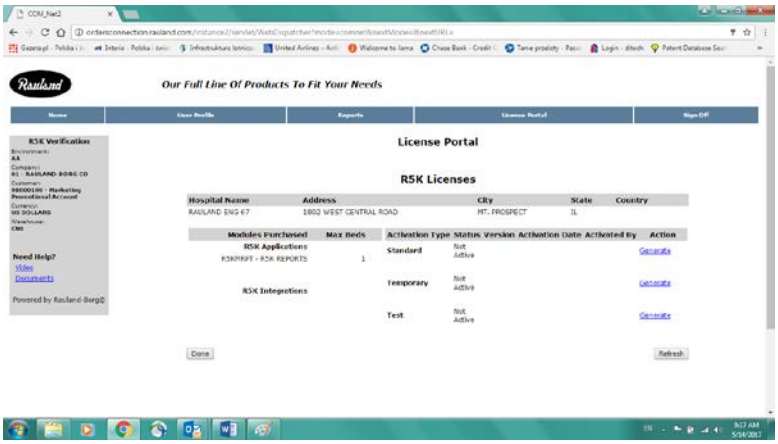


Figure 14: Rauland-Borg License Portal

4 Enter Token and click on Generate

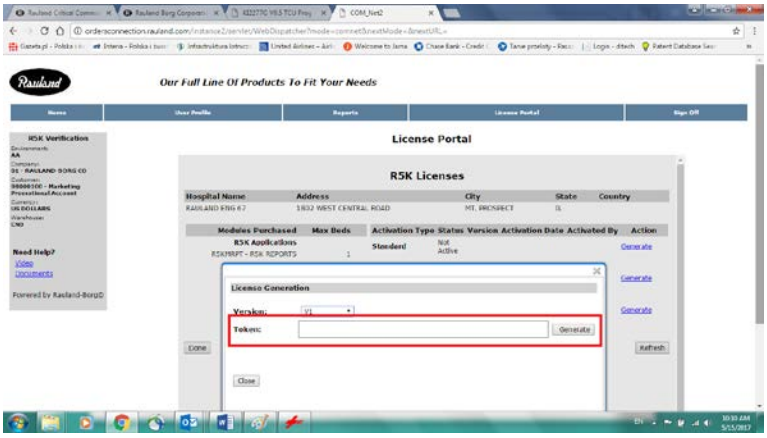


Figure 15: Rauland-Borg License Portal

- Portal can also send an email with the License code

5 Enter generated License in a Home Screen of R5KWare and click on Apply License

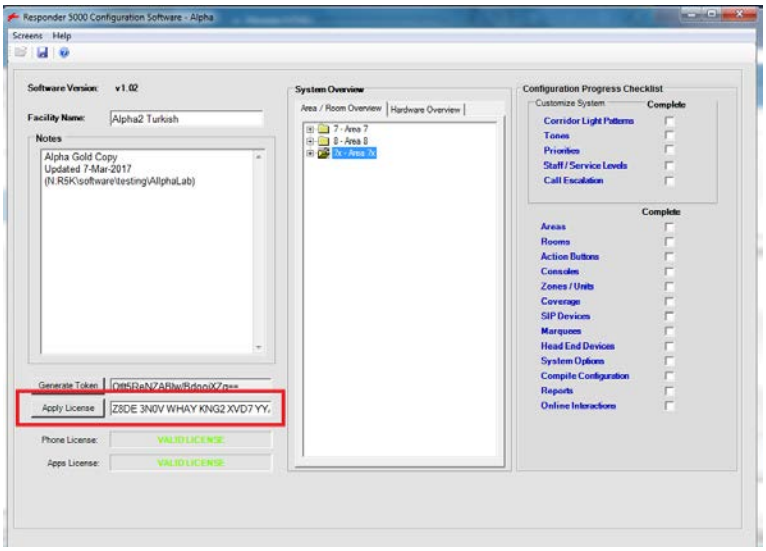


Figure 16: R5KWare Apply License

Selecting Units to send to Responder Feature Server R5K Configuration Software Zones Settings

The RFS Application Reports and Activity Board groups rooms into "Units". Units are created in the R5K Configuration Software in the Zones Editor. Zones are used as a way to group Areas, Rooms, Beds into logical units for programming. All rooms in the ER can be grouped into an ER Zone or all the even number rooms could be grouped into an ER-Even Zone. A large system may have many zones created to make programming coverage easier. For the RFS Application to receive a Unit the Zone must be marked "Is Unit" in the Zones Editor. This allows only specific Zones to be sent to the RFS Application as a Unit. Zones can include items from other zones or include other zones. This allows custom Zones to be marked Units specifically for reports or you can mark existing Zones as Units to send the RFS Application.

Refer to KI-2908, Responder 5000 Configuration Guide for more information configuration Zones.

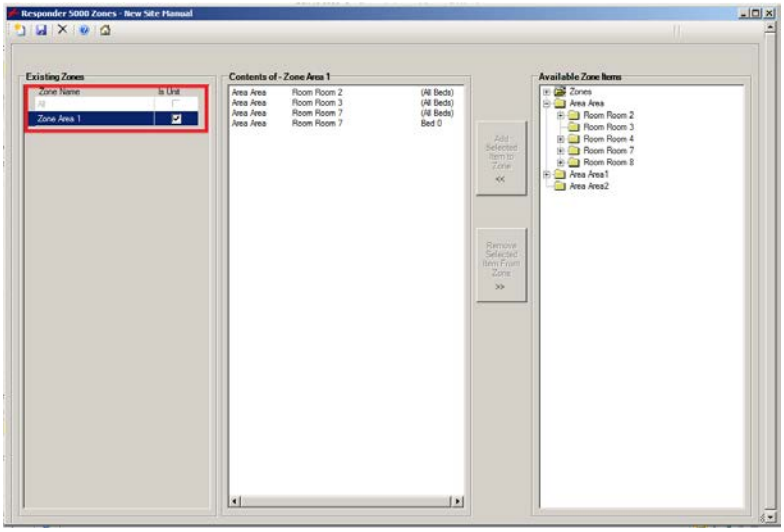


Figure 17: R5KWare Zone Editor

R5KMRPT Application Changing Default Port

The Responder Feature Server communicates with The Responder 5000 system R5KMSCs using default UDP port 5003. To change the UDP port follow these steps:

1 Open Responder 5000 Configuration Software and navigate to "System Options" – "Device Settings" – "Interconnection"

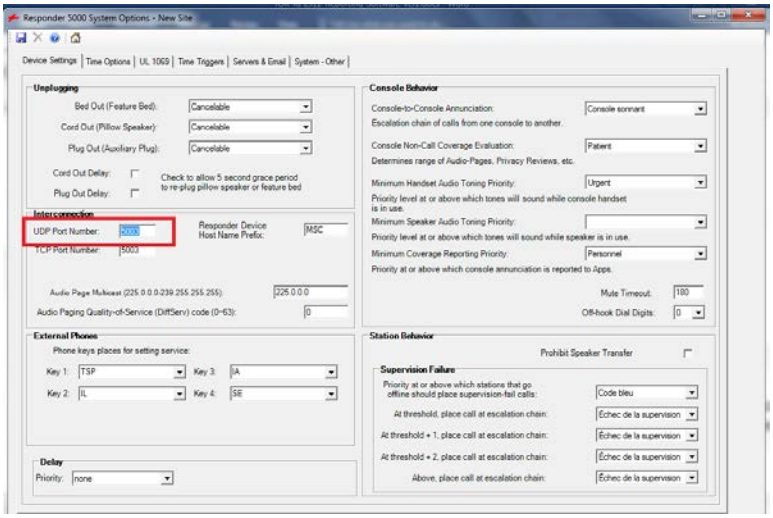


Figure 18: R5KWare System Options – Device Settings

- Change UDP Port Number

2 Compile Configuration File and Download to the system

3 Navigate to the default directory C:\Rauland-Borg\R5K_Facilities\xxxxxx (xxxxxx is the site name that you used in the R5KWare while creating the configuration)

4 Copy the R5KRpt.xml manually to the default directory of the R5KReportService C:\Program Files (x86)\Rauland-Borg\R5KRSW\R5KReportService

5 Please note that, if it's a first time R5KMRPT installation or the default UDP port number is changed the R5KRpt.xml file needs to be copied manually to the R5KReportService directory. However, if it's a software upgrade the R5KRpt.xml gets copied automatically to the R5KReportService directory provided the R5KRSW Service is running

R5KMRPT Configuration for a first time installation

For a first time R5KMRPT installation, the R5K.ReportingService.exe.config and the web.config files need to be edited in order to configure the R5KRSW Service and R5KRSW App-Service respectively.

Before start configuring the R5KRSW Service, installer should know the following information that are required to edit the R5K.ReportingService.exe.config.

- Host name of the Responder Feature Server
- Path of the R5K.ReportingService.exe (default path is C:\Program Files (x86)\Rauland-Borg\R5KRSW\R5KReportService)
- Path of the R5K.ReportingWebApp (default path is C:\Program Files (x86)\Rauland-Borg\R5KRSW\R5KReportWebApp)
- System email address and password (for sending Recurring reports; typically it's an administrator email)
- Sender name to be displayed on email of the Recurring reports
- SMTP or SMTPS host URL name
- SMTP or SMTPS port number

For the R5KRSW App-Service configuration, the 'ServiceUri' parameter in the web.config file needs to set with the Responder Feature host name. This host name match be the same host name used in the R5K.ReportingService.exe.config.

Editing R5KMRPT Configuration files

Navigate to the directory containing R5KReportService

- Default location is: C:\Program Files (x86)\Rauland-Borg\R5KRSW\R5KReportService\

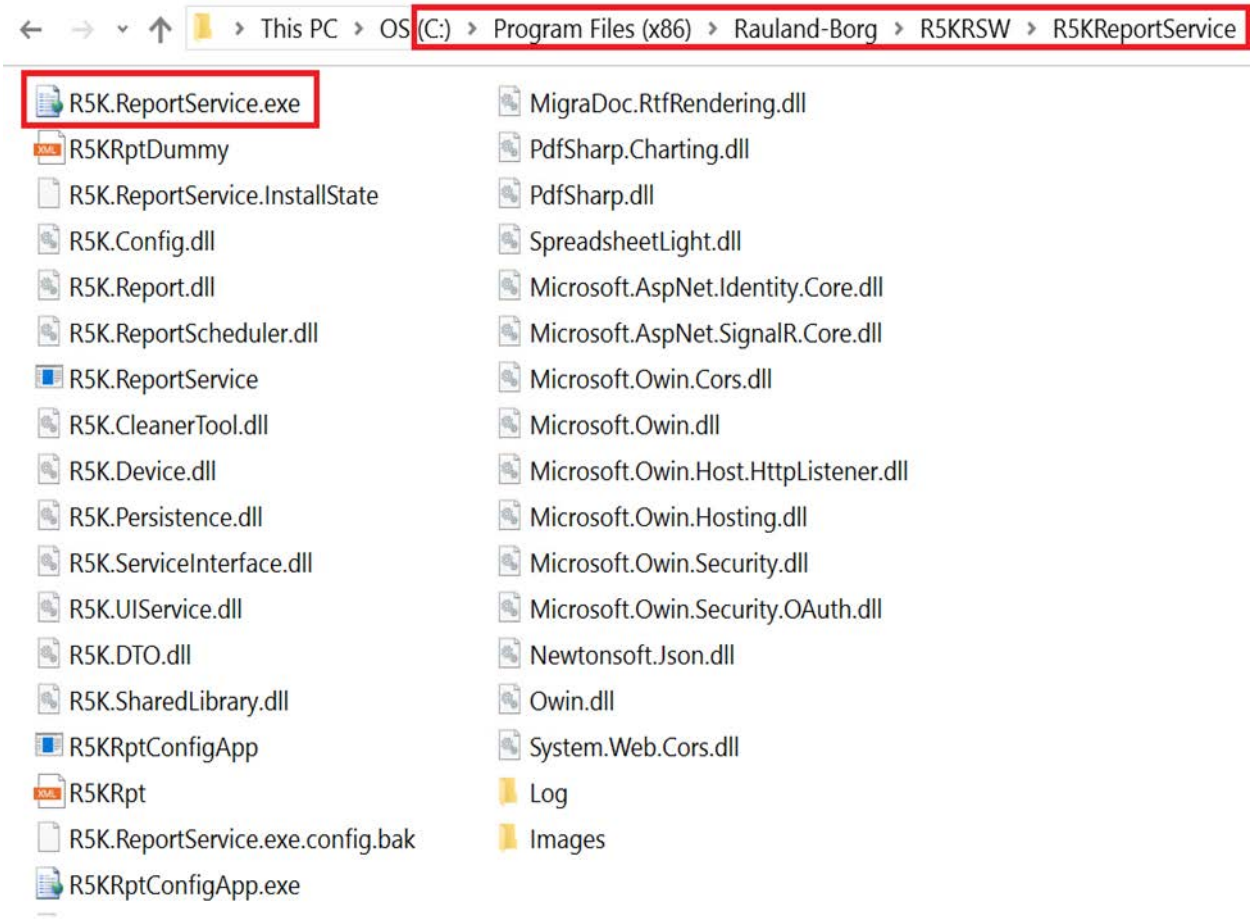


Figure 19: R5KRSW Service directory

- Open *R5K.ReportingService.exe* (config) for editing

```
<?xml version="1.0" encoding="utf-8"?>
<configuration>
  <startup>
    <supportedRuntime version="v4.0" sku=".NETFramework,Version=v4.5.2" />
  </startup>
  <connectionStrings>
    <add name="R5K.ConnectionString" connectionString="Data Source=ZIAULH2900\R5KRPTDB;Initial Catalog=r5000;Integrated Security=False;
                User ID=r5kAdmin;Password=Passw0rd;Connect Timeout=10" />
  </connectionStrings>
  <appSettings>
    <add key="R5kConfig" value="C:\tfs.rauland\DefaultCollection\R5K Reporting\R5K-International-NonRTL\R5KReportService\R5KRpt.xml" />
    <add key="UdpListeningPortOffset" value="3" />
    <!-- This offset value will be added to the port no. supplied by the R5KRpt.xml in order to
                                create an Udp listening port for receiving transactions from MSCs and R5KWare-->
    <add key="R5kRowsPerPage" value="20" />
    <add key="R5kWebsiteHostLocation" value="C:\tfs.rauland\DefaultCollection\R5K Reporting\R5K-International-NonRTL\R5KReporting\R5K.WebUI\" />
    <add key="ClientUIServiceURI" value="http://localhost:9191" />
    <add key="RudpConnectionLostNotification" value="20" />
    <!-- in seconds, a Rudp connection lost notification sends out to client broweser -->
    <add key="ClientSettingsProvider.ServiceUri" value="" />
    <add key="RecurringReportJobTime" value="0200" />
    <!--military time-->
    <add key="CleanerToolJobTime" value="1710" />
    <add key="DefaultConfigVersion" value="000000009" />
    <!-- this must be same as in the Dummy version of R5KRpt.xml supplied with Installer-->
    <!--LogLevel possible values : DebugData, Trace, Info, Warning, Error, Exception-->
    <add key="LogLevel" value="Info" />
    <!--Use proper email address-->
    <add key="EmailUserName" value="R5000dev@Rauland.com" />
    <add key="NameToDisplay" value="R5KReport Admin" />
    <!--Use proper password-->
    <add key="EmailPassword" value="r5000" />
    <add key="SmtpHostUri" value="webmail.rauland.com" />
    <add key="SmtpPort" value="25" />
    <!--Provide the path where logging file is ought to be created, if "." or " " is specified then, logging file will be created in "~/bin/Debug/Log/" folder, which is the BaseDirectory.-->
    <add key="LogFilePath" value="." />
    <!--Time to generate reports should be mentioned in seconds.-->
    <add key="AlertTimeToGenerateReport" value="30" />
  </appSettings>
  <runtime>
    <loadFromRemoteSources enabled="true" />
    <assemblyBinding xmlns="urn:schemas-microsoft-com:asm.v1">
      <dependentAssembly>
        <assemblyIdentity name="Microsoft.Owin" publicKeyToken="31bf3856ad364e35" culture="neutral" />
        <bindingRedirect oldVersion="0.0.0.0-3.0.1.0" newVersion="3.0.1.0" />
      </dependentAssembly>
      <dependentAssembly>
        <assemblyIdentity name="Microsoft.Owin.Security" publicKeyToken="31bf3856ad364e35" culture="neutral" />
        <bindingRedirect oldVersion="0.0.0.0-3.0.1.0" newVersion="3.0.1.0" />
      </dependentAssembly>
      <dependentAssembly>
        <assemblyIdentity name="Microsoft.Owin.Security.OAuth" publicKeyToken="31bf3856ad364e35" culture="neutral" />
        <bindingRedirect oldVersion="0.0.0.0-3.0.1.0" newVersion="3.0.1.0" />
      </dependentAssembly>
    </assemblyBinding>
    <generatePublisherEvidence enabled="false" />
  </runtime>
</configuration>
```

Figure 20: R5K.ReportService.exe.config file

- Edit the configuration parameters as shown in the red colors of the above figure
- Save the R5K.ReportService.exe.config file

Navigate to the directory containing R5KReportWebApp

- Default location is: C:\Program Files (x86)\Rauland-Borg\R5KRSW\R5KReportWebApp\

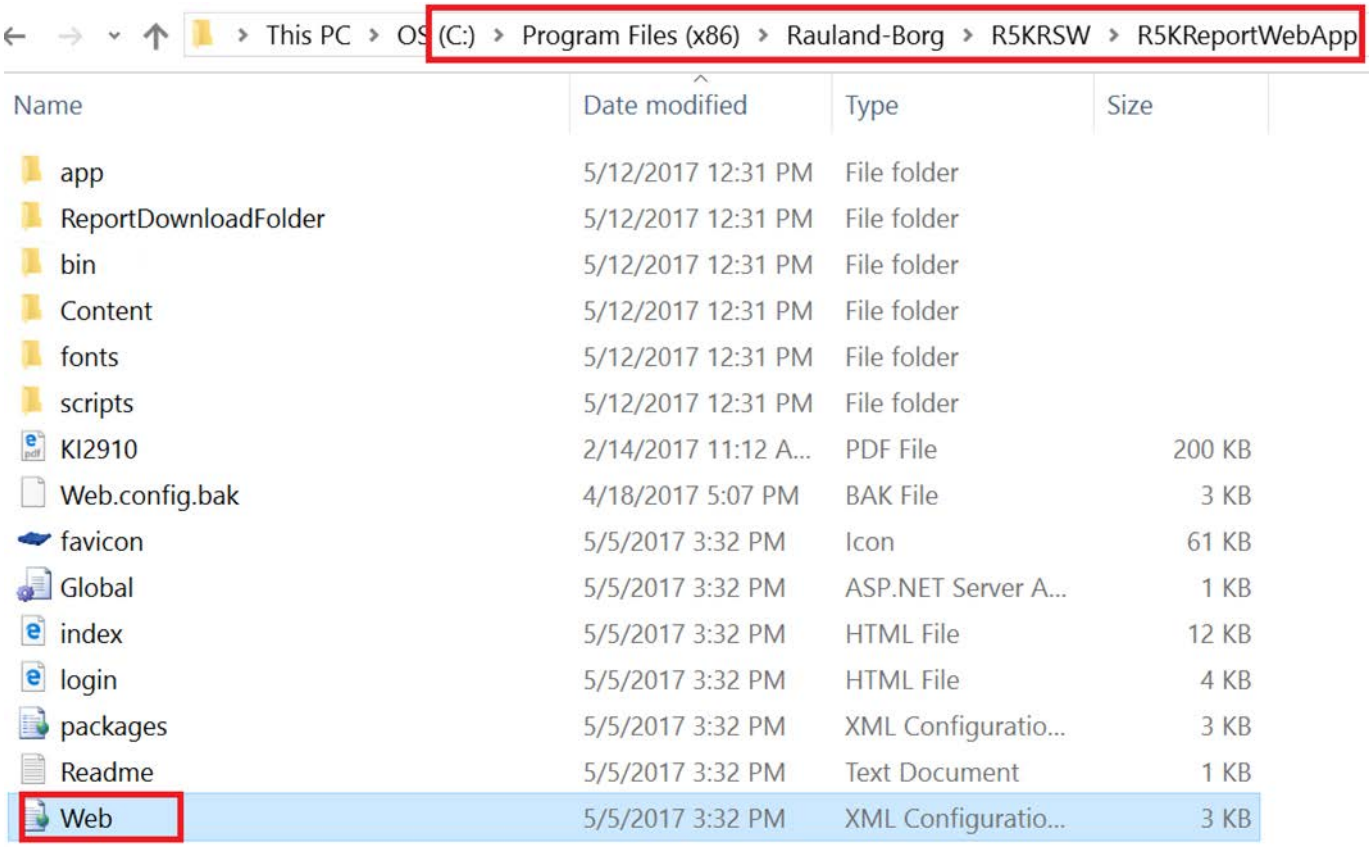


Figure 21: R5K.ReportWebApp directory

- Open *web.config* for editing

```
<?xml version="1.0"?>
<!--
  For more information on how to configure your ASP.NET application, please visit
  http://go.microsoft.com/fwlink/?LinkId=301879
  -->
<configuration>
  <appSettings>
    <add key="ServiceUri" value="'http://localhost:9191'" />
    <add key="webpages:Version" value="3.0.0.0" />
    <add key="webpages:Enabled" value="false" />
    <add key="ClientValidationEnabled" value="true" />
    <add key="UnobtrusiveJavaScriptEnabled" value="true" />
  </appSettings>
  <system.webServer>
    <staticContent>
      <remove fileExtension=".json" />
      <mimeMap fileExtension=".json" mimeType="application/json" />
      <remove fileExtension=".woff" />
      <mimeMap fileExtension=".woff" mimeType="application/font-woff" />
    </staticContent>
  </system.webServer>

  <!--
    For a description of web.config changes see http://go.microsoft.com/fwlink/?LinkId=235367.

    The following attributes can be set on the <httpRuntime> tag.
      <system.Web>
        <httpRuntime targetFramework="4.5.2" />
      </system.Web>
  -->
  <system.web>
    <compilation debug="true" targetFramework="4.5.2"/>
    <httpRuntime targetFramework="4.5"/>
  </system.web>
  <system.webServer>
    <defaultDocument>
      <files>
      </files>
    </defaultDocument>
    <handlers>
      <remove name="ExtensionlessUrlHandler-Integrated-4.0"/>
      <remove name="OPTIONSVerbHandler"/>
      <remove name="TRACEVerbHandler"/>
      <add name="ExtensionlessUrlHandler-Integrated-4.0" path="*." verb="*" type="System.Web.Handlers.TransferRequestHandler" preCondition="integratedMode,runtimeVersionv4.0"/>
    </handlers>
  </system.webServer>
  <runtime>
    <assemblyBinding xmlns="urn:schemas-microsoft-com:asm.v1">
      <dependentAssembly>
        <assemblyIdentity name="System.Web.Helpers" publicKeyToken="31bf3856ad364e35"/>
        <bindingRedirect oldVersion="1.0.0.0-3.0.0.0" newVersion="3.0.0.0"/>
      </dependentAssembly>
      <dependentAssembly>
        <assemblyIdentity name="System.Web.Mvc" publicKeyToken="31bf3856ad364e35"/>
        <bindingRedirect oldVersion="1.0.0.0-5.2.3.0" newVersion="5.2.3.0"/>
      </dependentAssembly>
      <dependentAssembly>
        <assemblyIdentity name="System.Web.WebPages" publicKeyToken="31bf3856ad364e35"/>
        <bindingRedirect oldVersion="1.0.0.0-3.0.0.0" newVersion="3.0.0.0"/>
      </dependentAssembly>
    </assemblyBinding>
  </runtime>
</configuration>
```

Figure 22: web.config file

- Edit the “ServiceUri” field
- Save the web.config file
- Start the R5K.ReportService from Window Services

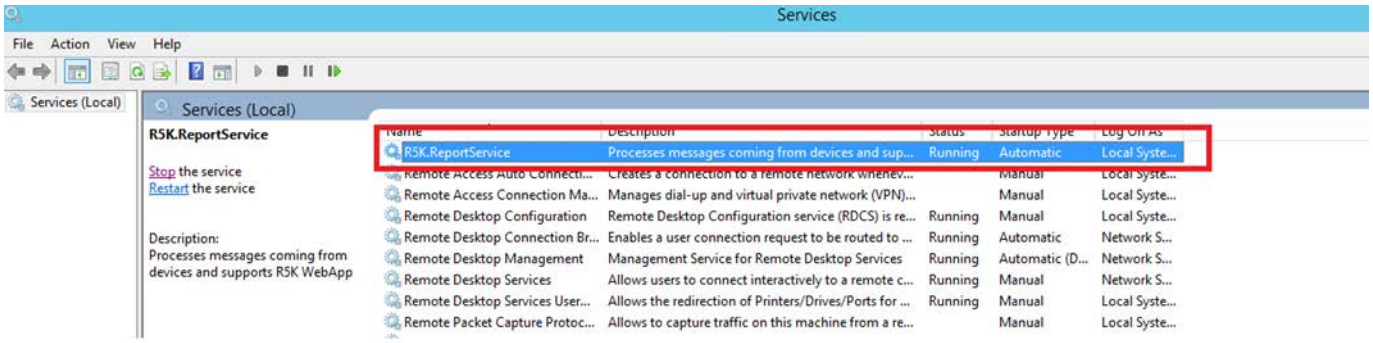


Figure 23: Starting R5K.ReportService

R5KMRPT Configuration for a Software Upgrade

After successful R5KMRPT software upgrade, start the R5K.ReportSerice from Window Services.

3

3: Accessing Application Software

R5KMRPT Application clients can access R5K via browsers installed on Client PCs, Macs, and iPads.

Responder Feature Server Client Requirements

R5KMRPT Application client supports the following Web browsers and needs the following applications:

- Web browser
  - Internet Explorer - Version 11.0 or later
  - Chrome – Version 58.0.xx or later
- Microsoft Excel™ (to run Reports) – Excel 2016 – if RFS Reports will be displayed in Excel format on the Client computer
- Adobe Acrobat Reader (to review manuals and install diagrams) – version 2017 - if RFS Reports will be displayed in Adobe format on the Client computer

Accessing the Software

To use any of the modules that comprise the R5KMRPT Application, a Web link shall be provided to you, and you must have permission to log into the system.

To Sign In:

1 Open a Web browser and navigate to the link provided by your Administrator:
- The Log In screen will appear:

Figure 24: R5KMRPT Application Sign in Screen

2 Enter your username and password.

- Software is installed with a Default Username – "r5kuser" and a default Password – "r5kuser".
- If you do not know your Username or Password, consult your system administrator.
- If you are using a touchscreen display, you may use the on-screen keyboard to make your entry.

3 Click on the Sign In button to continue.

To Sign Out:

1 Click on the Sign Out button in the My Profile module:

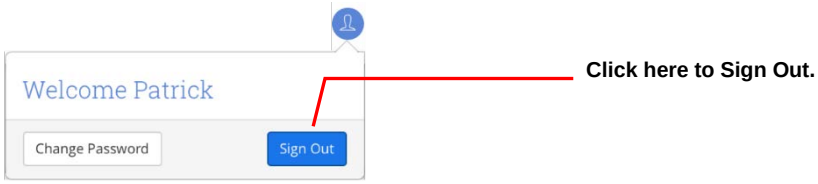


Figure 25: R5KMRPT Application Sign out Screen

Navigate between modules of the application

To access a specific module of the R5KMRPT Application you have to interact with the Main Navigation located at the top of each page.

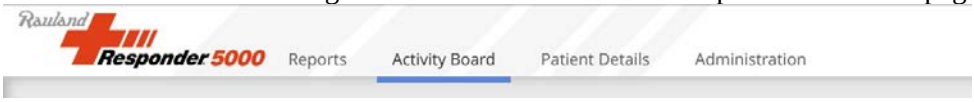


Figure 26: Application Main Navigation

By clicking on a desired module name the application will directed you to the specific module.

Navigate between features of a module

Each module has one or more features available for users to interact with. For example, the Reports module offers five reports, the recurring reports feature and report templating list view. A user can navigate between these features by:

1 Clicking on Reports Module name located on the at the top of each page.

2 Clicking on the desired report/feature (e.g. Detailed Call Data by Unit Report) situated on the left side of the screen.

3 The Detailed Call Data by Unit Report screen will be loaded.

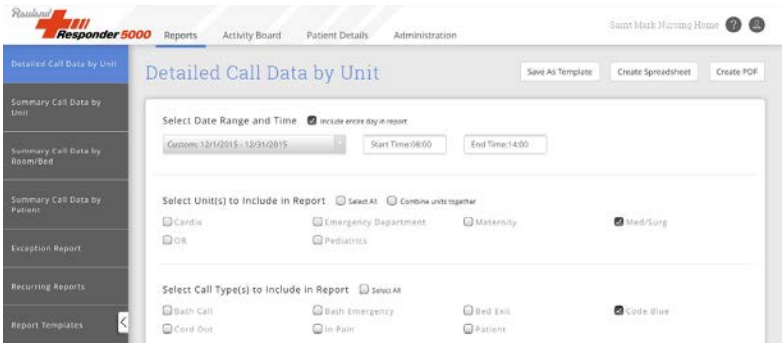


Figure 27: R5KMRPT Application Detail Call Data by Unit

Other Things You Should Know

- The Reports Software Application emails Recurring Reports at 2:00 AM (local time of the Responder Feature Server)

4

4: Network Ports Used In Reports Software Application

Due to security concerns and to protect facilities personnel from undesirable network traffic, a majority of facilities have implemented Fire Walls on their networks. However, Firewalls close certain TCP/IP ports to achieve this purpose. The Responder Feature Server Application requires specific network ports to be open. If the ports below are closed the facilities' IT department may open them up for the specific IP addresses assigned to the Reports Software Application components.

We recommend consulting Firewall changes with the site's IT personnel.

Below is the list of network (TCP/UDP) ports required for the proper setup and operation of Reports Software Application:

Port	TCP/UDP	Direction	Comments
5003	UDP	Outbound	This port is used to communicate with embedded side of R5K. In an event the port assignment is changed it is necessary to manually copy R5KRpt.xml file from R5KWare and after that restart R5K.Report Service.
5006	UDP	Inbound	This port is created using an offset value of three (3) as a default. Whatever port is used in R5KRpt.xml the R5K.Report Service adds the offset value to create this listening port. The offset value is configured in the R5K.ReportService.exe.config
9191	TCP	Inbound + Outbound	Keeping persistence connection as well as sending data/notifications to R5kWebApp (client browser) from R5KRpt Service
80	TCP	Inbound	HTTP Port
69	UDP	Inbound + Outbound	TFTP (Trivial File Transfer Protocol)
25	TCP	Outbound	SMTP (Simple Mail Transfer Protocol) or SMTPS (Simple Mail Transfer Protocol Secure) Port 25 is used as a default for SMTP. If facility uses different Port please remember to include new Port information in *R5K.ReportingService.exe* (config) as well.
5003, 5004	TCP, UDP	Inbound + Outbound	R5KWare Application exceptions for both ports is required for communications with system.

The following represents the typical configuration requirements for the R5K Reporting Software Application UDP and TCP Inbound/Outbound port configuration rules for the Windows Firewall on a Microsoft Windows Server 2012 R2.

- Open Windows Firewall (Windows Control Panel)

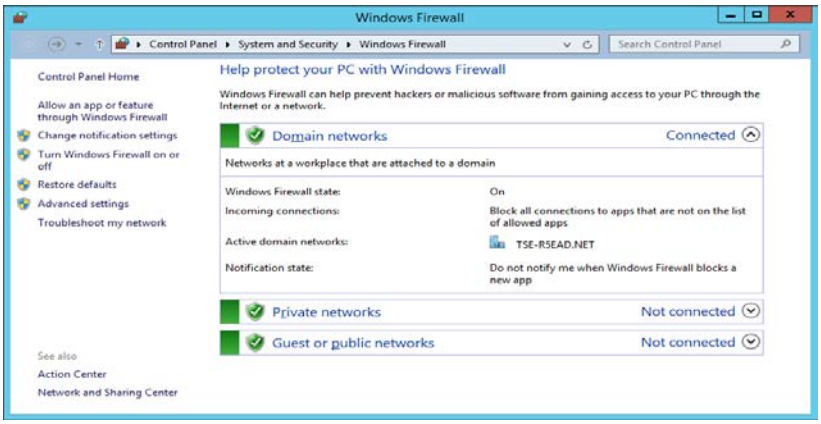


Figure 28: Windows Firewall

TCP Inbound Ports

- Click on Advanced settings and select Inbound Rules

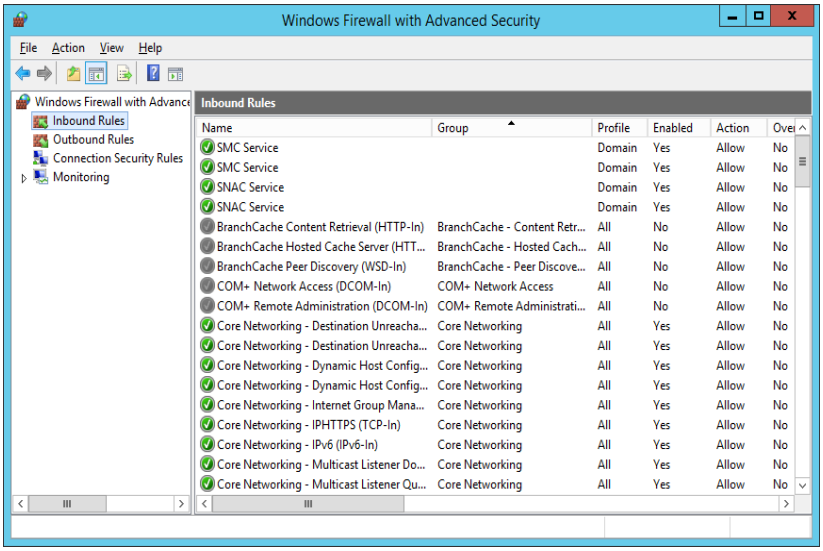


Figure 29: TCP Inbound Setup

- Right-click on Inbound Rules and click on “New Rule” to launch the wizard

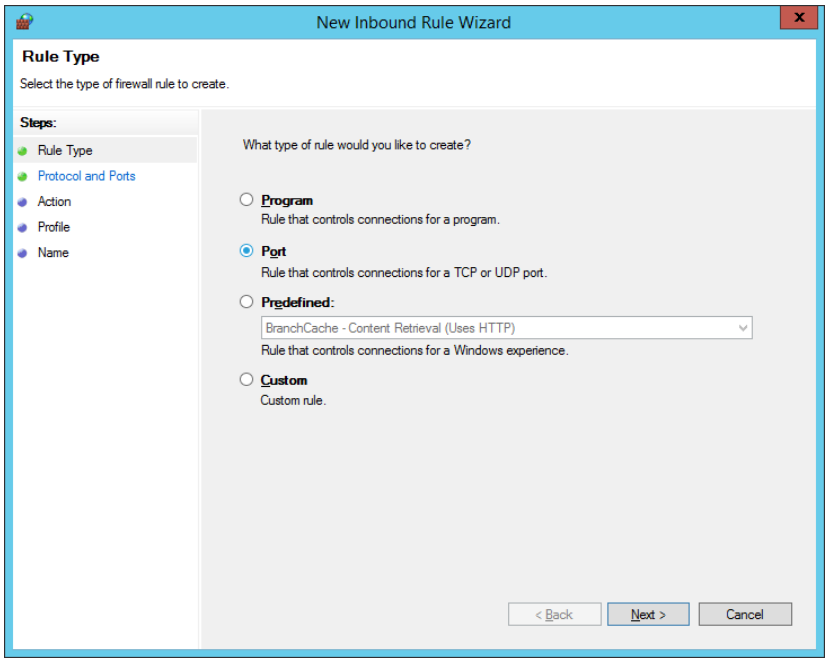


Figure 30: TCP Inbound Setup

- Select “Port” and click on “Next” under “Rule Type”

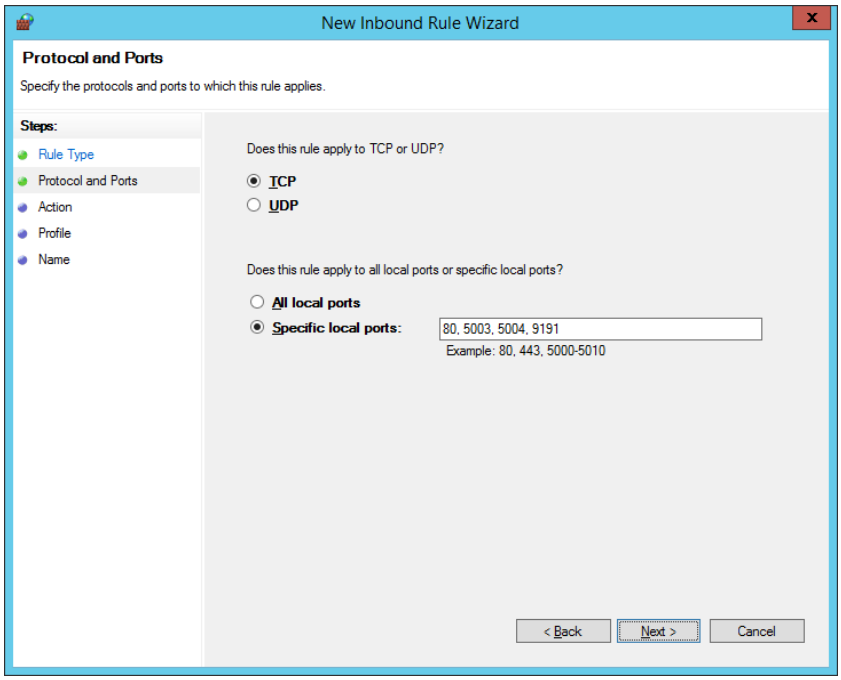


Figure 31: TCP Inbound Setup

- Select “TCP” and “Specific local ports”
- Enter “80, 5003, 5004, 9191” into the field.
- Click on “Next”

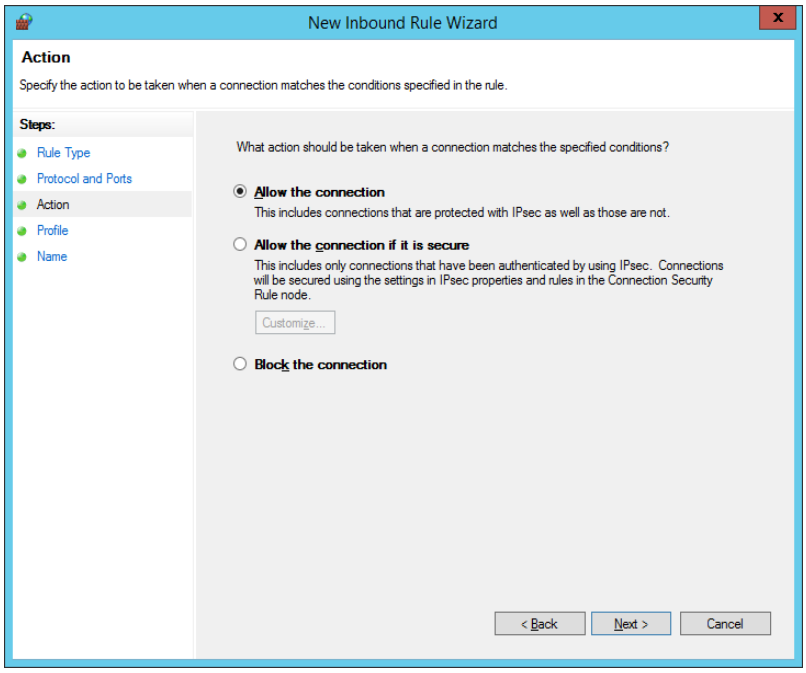


Figure 32: TCP Inbound Setup

- Select "Allow the connection" and click "Next"

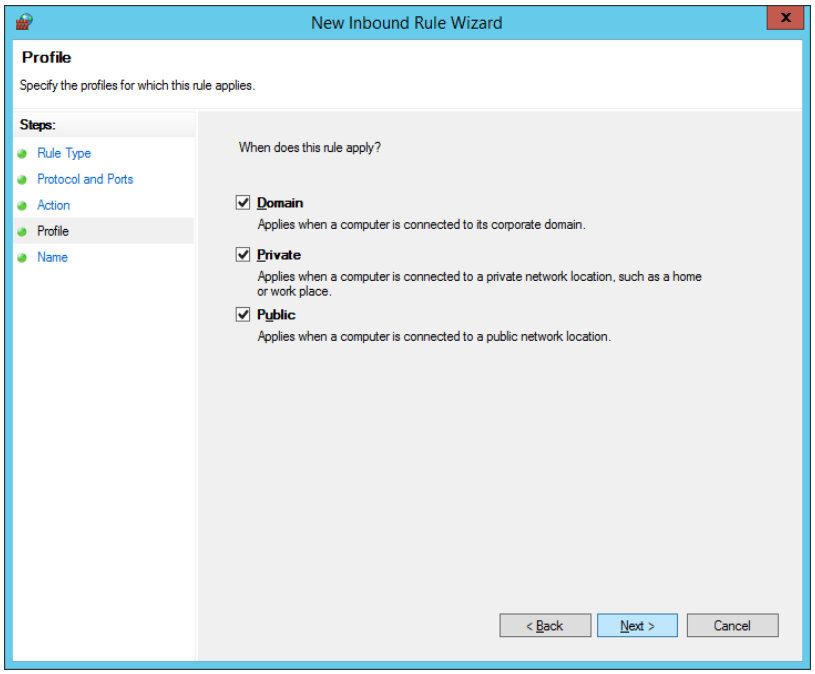


Figure 33: TCP Inbound Setup

- Check "Domain", "Private" and "Public" options and click "Next"

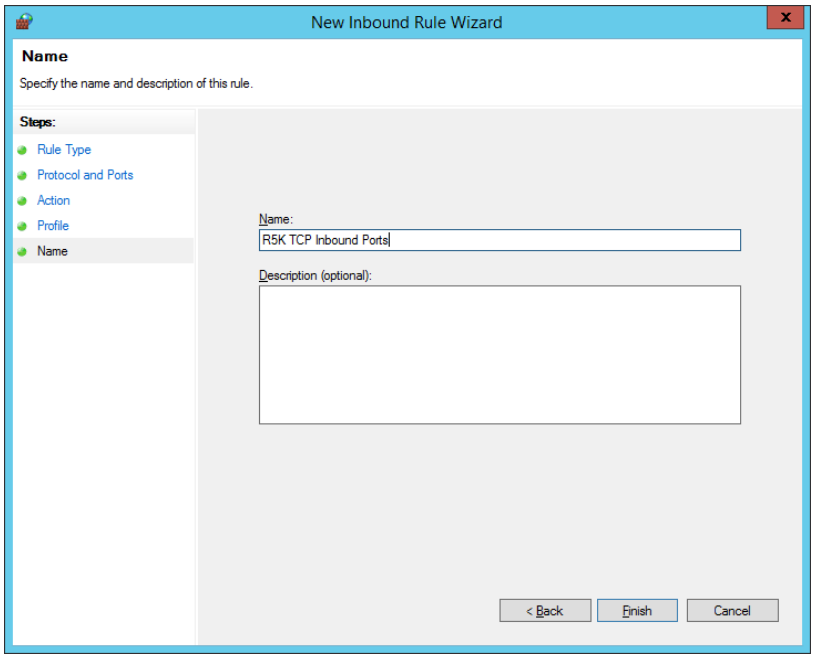


Figure 34: TCP Inbound Setup

- Enter name for the newly created rule. For example, “R5K TCP Inbound Ports” and click on “Finish”

UDP Inbound Ports

- Click on Advanced settings and select Inbound Rules

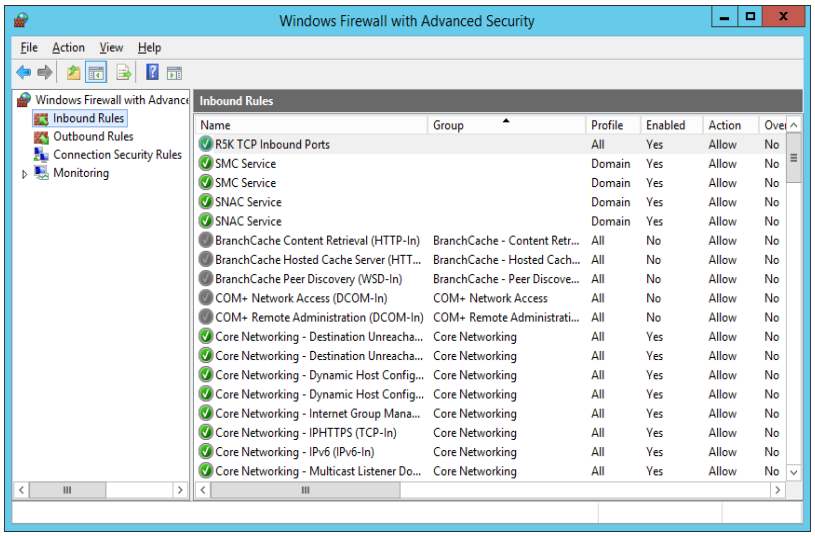


Figure 35: UDP Inbound Setup

- Right-click on Inbound Rules and click on “New Rule” to launch the wizard

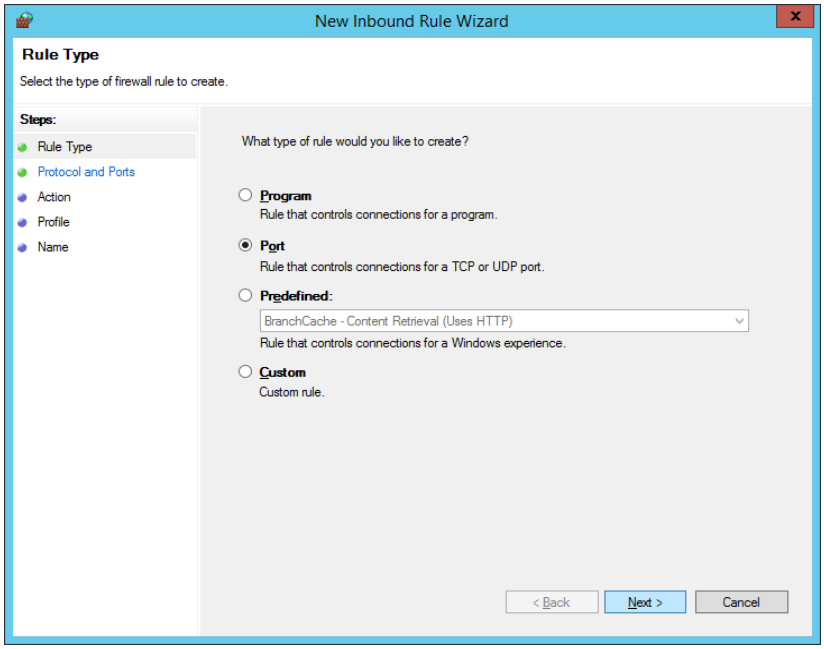


Figure 36: UDP Inbound Setup

- Select “Port” and click on “Next” under “Rule Type”

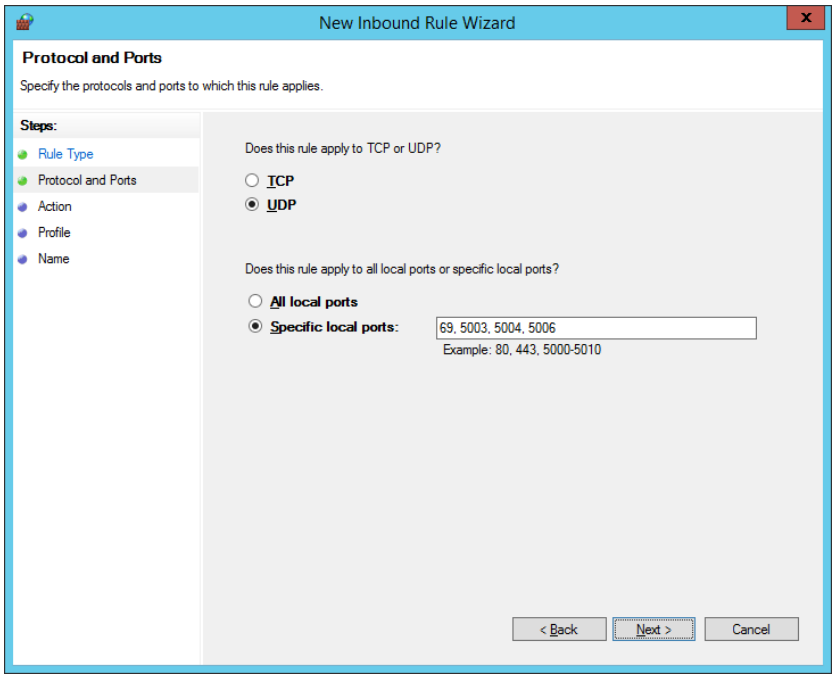


Figure 37: UDP Inbound Setup

- Select “UDP” and “Specific local ports”
- Enter “69, 5003, 5004, 5006” into the field.
- Click on “Next”

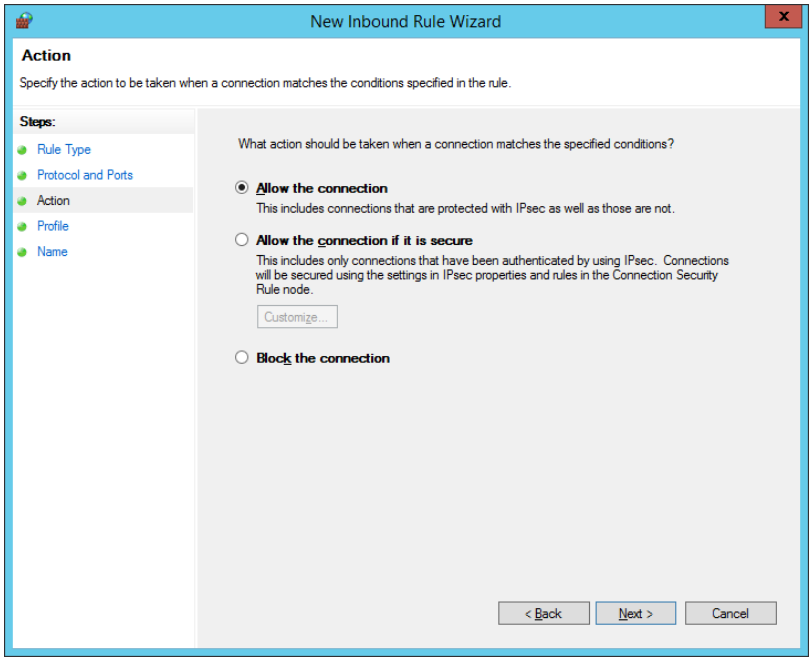


Figure 38: UDP Inbound Setup

- Select “Allow the connection” and click “Next”

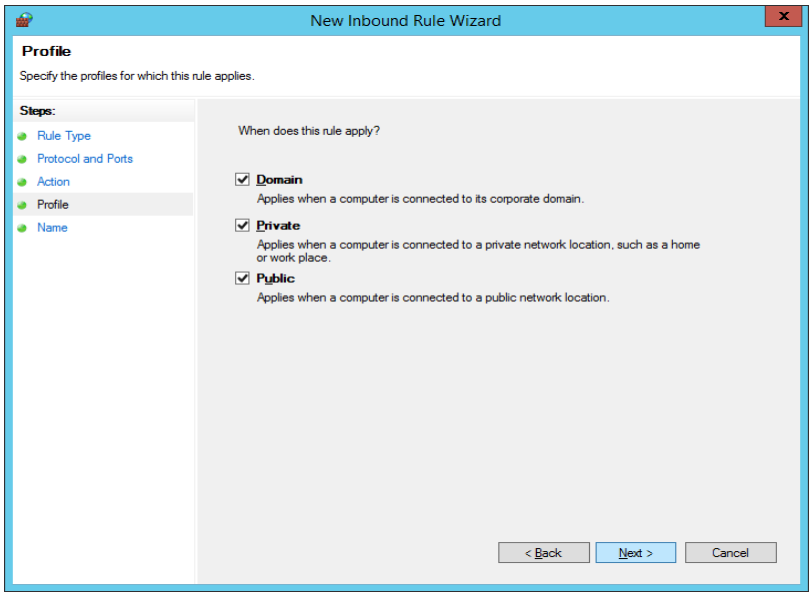


Figure 39: UDP Inbound Setup

- Check “Domain”, “Private” and “Public” options and click “Next”

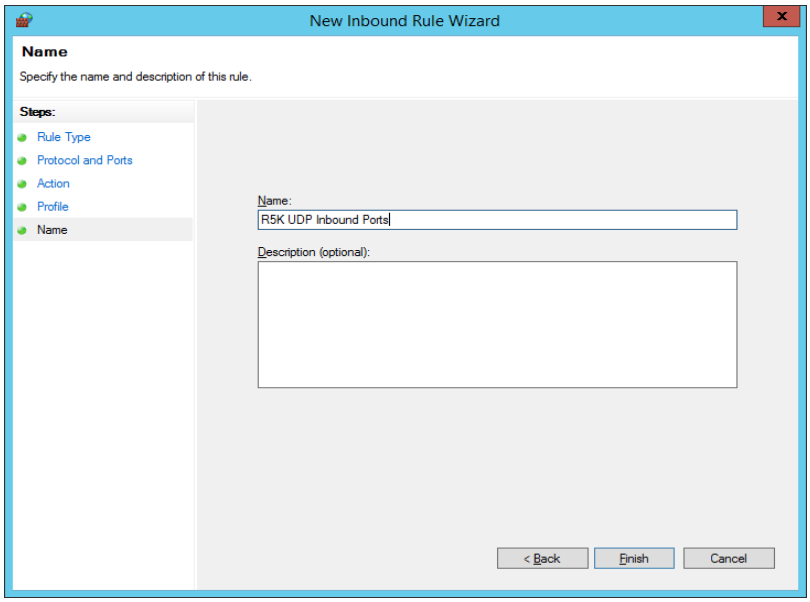


Figure 40: UDP Inbound Setup

- Enter name for the newly created rule. For example, “R5K UDP Inbound Ports” and click on “Finish”

TCP Outbound Ports

- Click on Advanced settings and select Inbound Rules

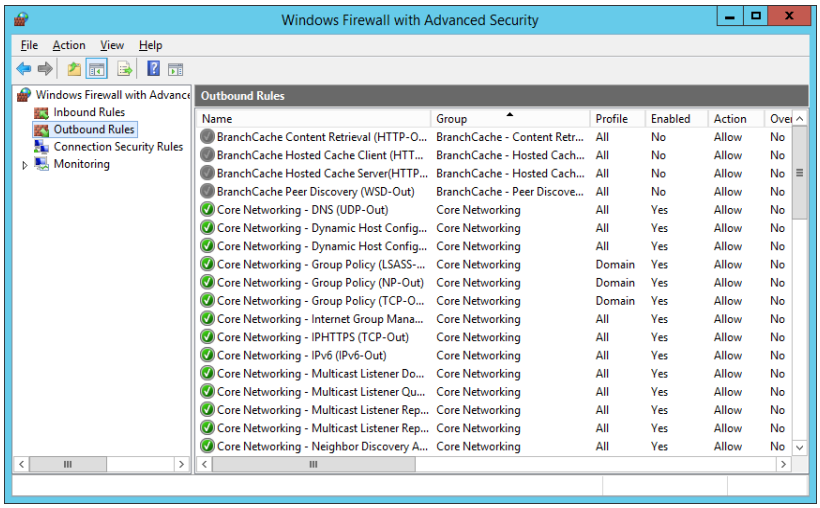


Figure 41: TCP Outbound Setup

- Right-click on Outbound Rules and click on “New Rule” to launch the wizard

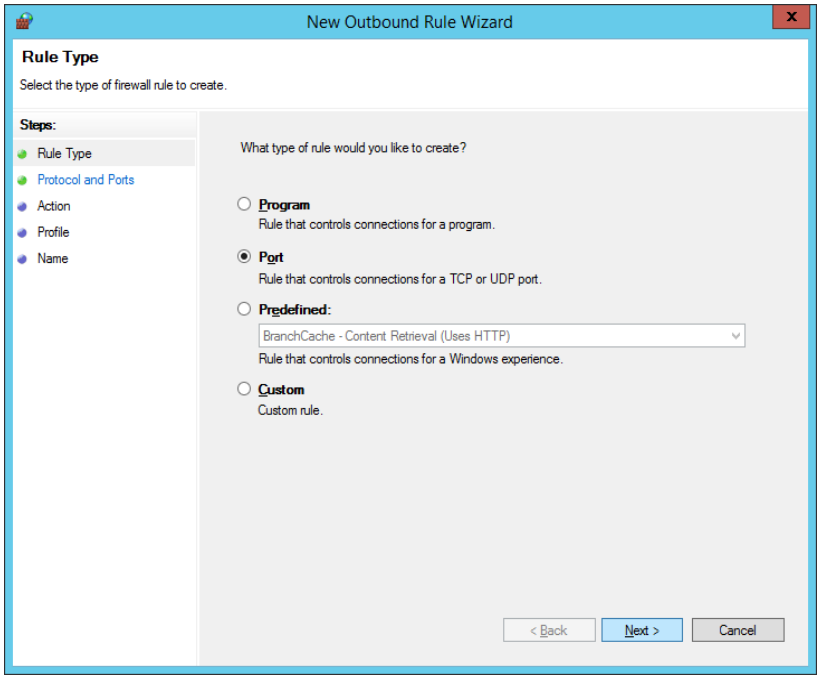


Figure 42: TCP Outbound Setup

- Select “Port” and click on “Next” under “Rule Type”

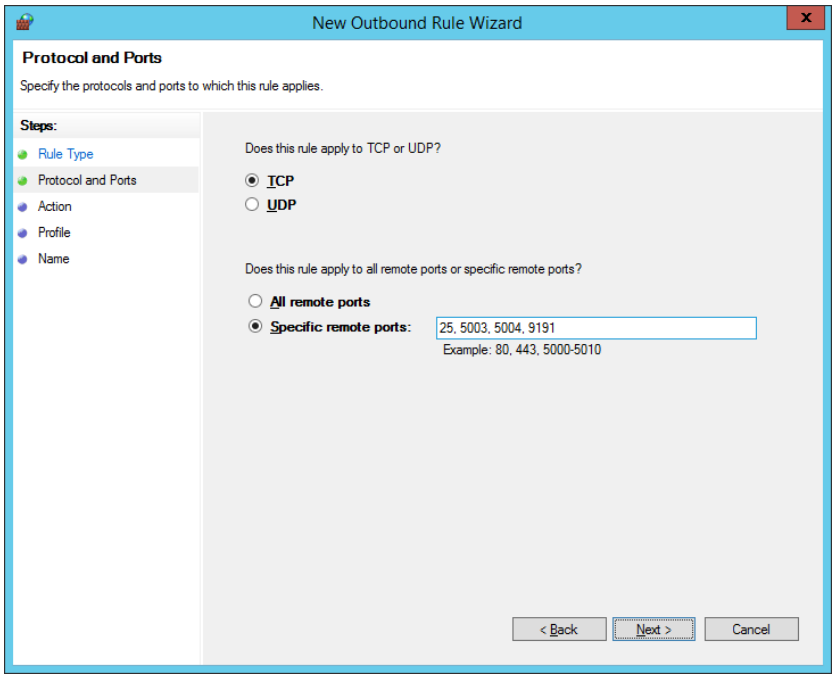


Figure 43: TCP Outbound Setup

- Select “TCP” and “Specific local ports”
- Enter “25, 5003, 5004, 9191” into the field.
- Click on “Next”

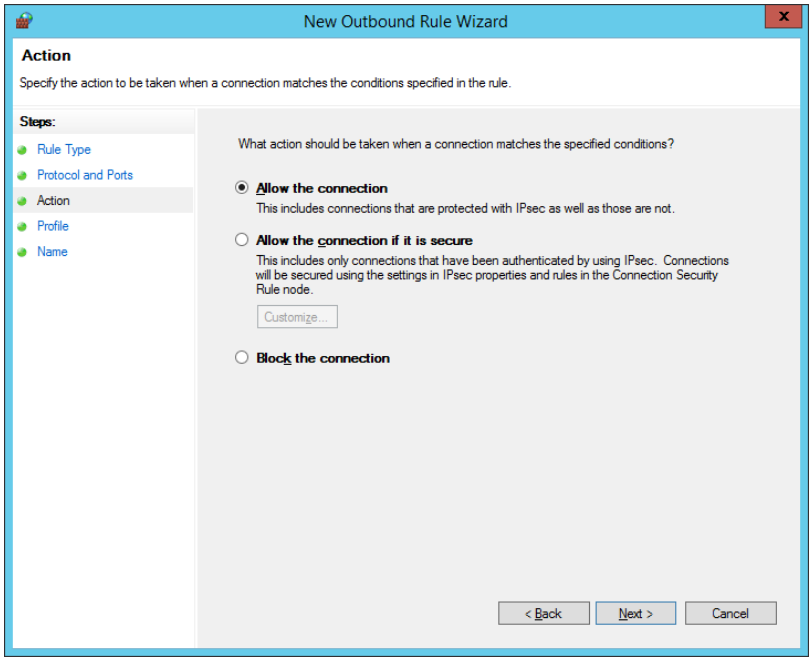


Figure 44: TCP Outbound Setup

- Select “Allow the connection” and click “Next”

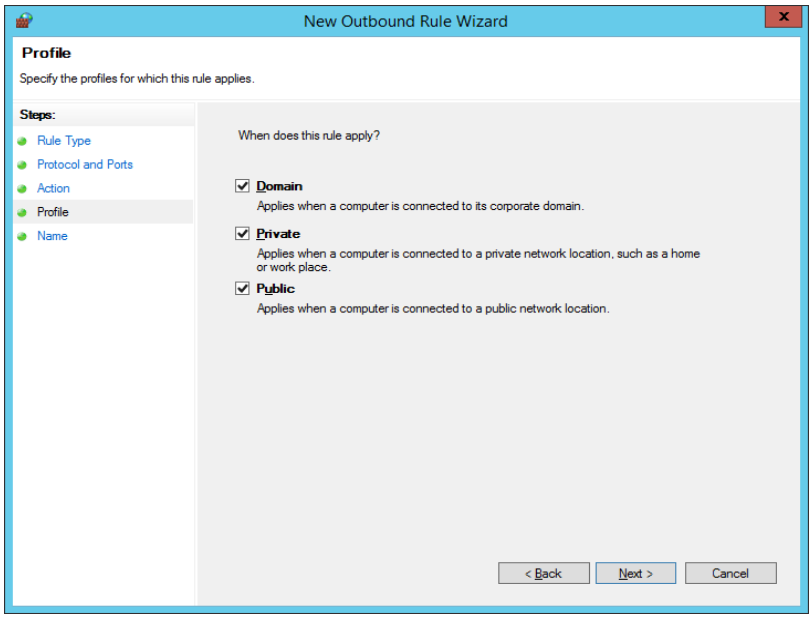
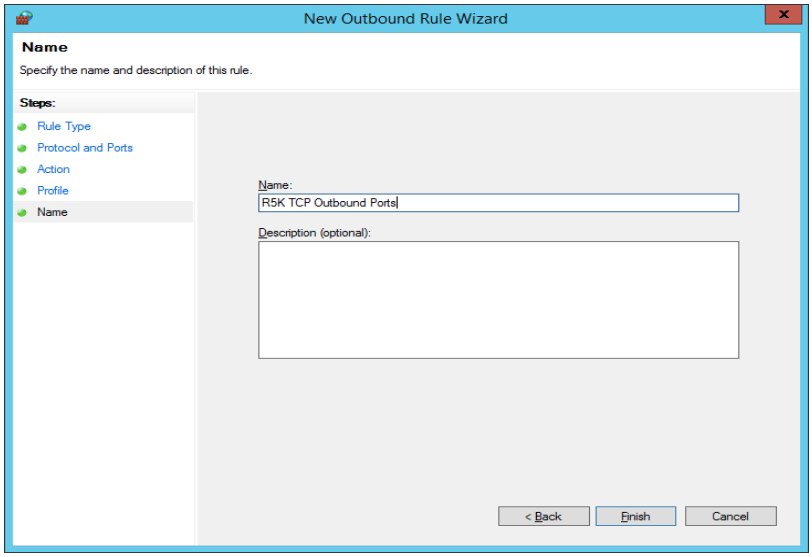


Figure 45: TCP Outbound Setup

- Check “Domain”, “Private” and “Public” options and click “Next”



- Enter name for the newly created rule. For example, “R5K TCP Outbound Ports” and click on “Finish”

UDP Outbound Ports

- Click on Advanced settings and select Outbound Rules

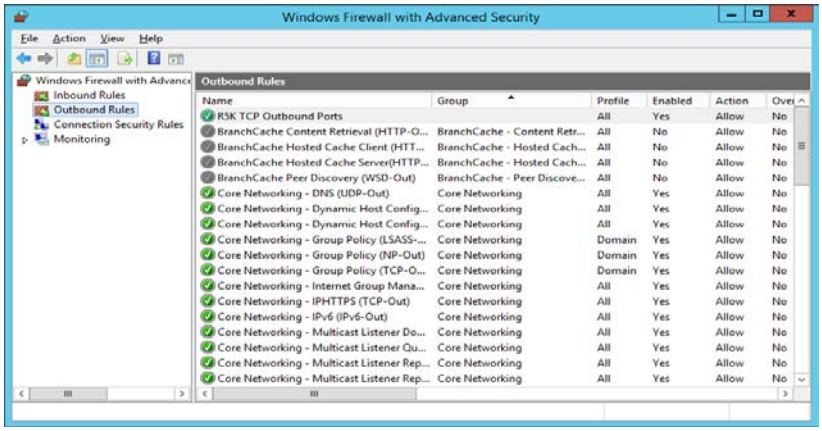


Figure 46: UDP Outbound Setup

- Right-click on Inbound Rules and click on “New Rule” to launch the wizard

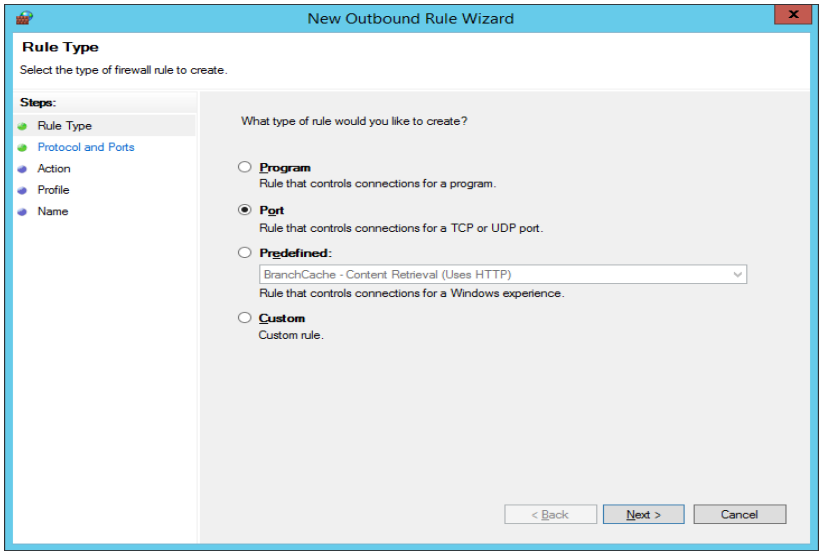


Figure 47: UDP Outbound Setup

- Select “Port” and click on “Next” under “Rule Type”

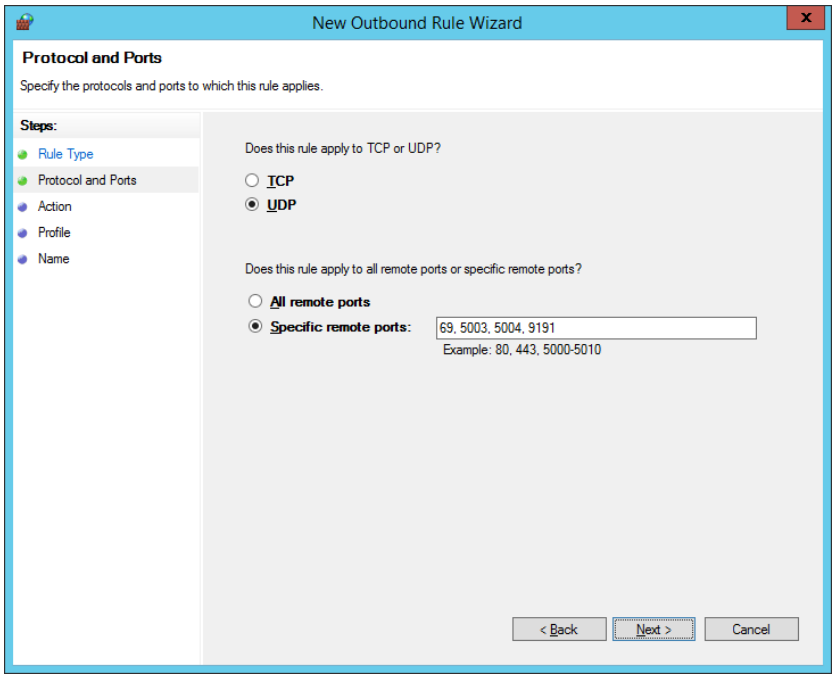


Figure 48: UDP Outbound Setup

- Select “UDP” and “Specific local ports”
- Enter “69, 5003, 5004, 9191” into the field.
- Click on “Next”

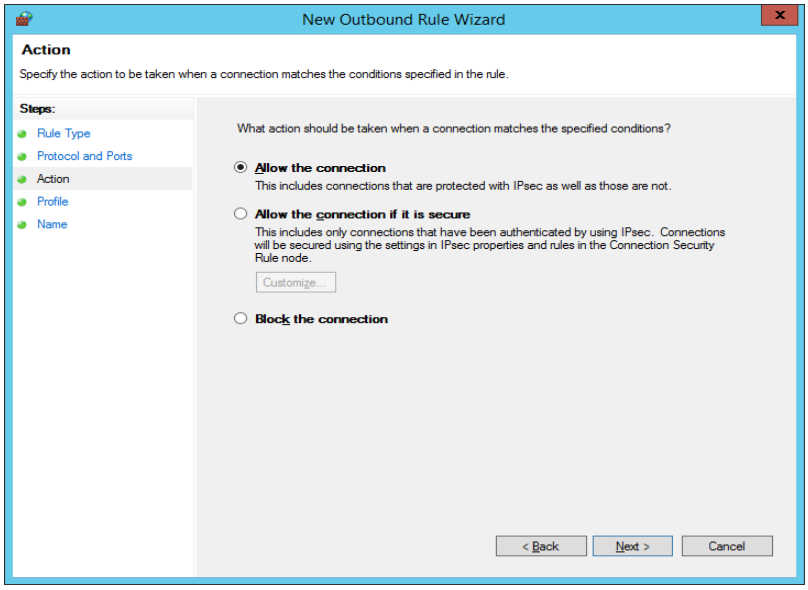


Figure 49: UDP Outbound Setup

- Select “Allow the connection” and click “Next”

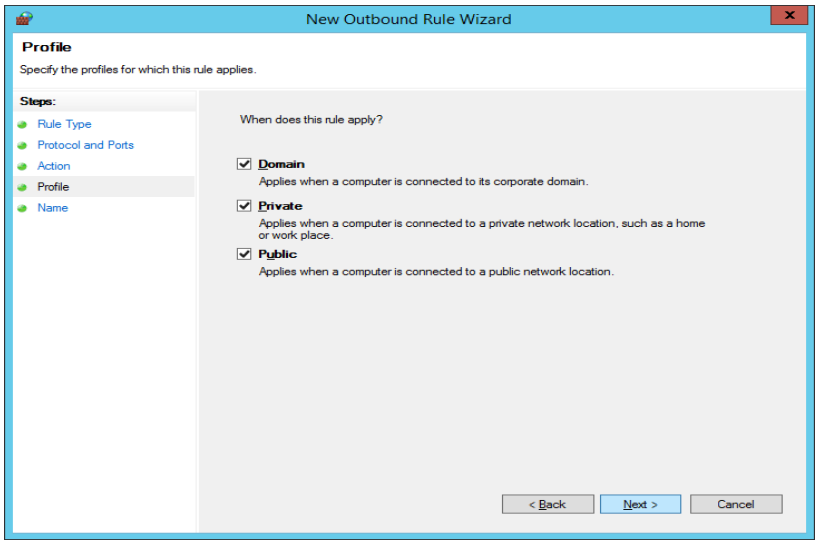


Figure 50: UDP Outbound Setup

- Check “Domain”, “Private” and “Public” options and click “Next”

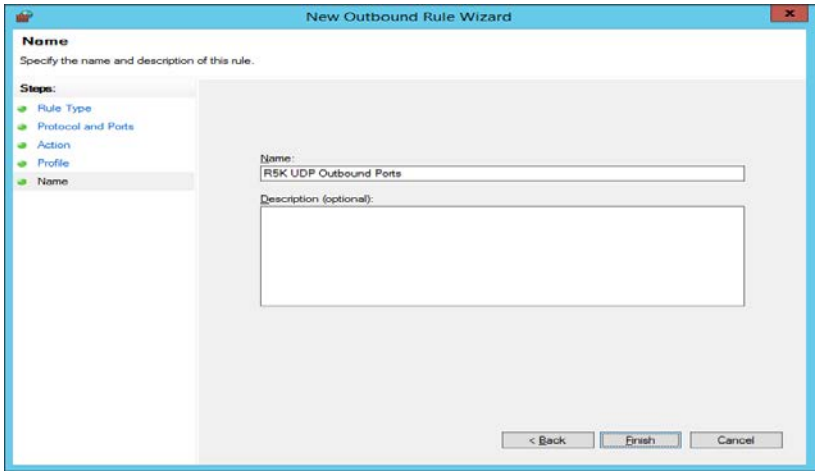


Figure 51: UDP Outbound Setup

- Enter name for the newly created rule. For example, “R5K UDP Outbound Ports” and click on “Finish”.
- Enable the firewall and test your system configuration.

Additional program exception rules must be created for each application to properly run,

- **R5Kware**
- **Internet Browsers: Internet Explorer or Chrome**

Once the firewall is enabled. Consult site’s IT personnel for assistance as needed.

5

5: MS SQL Express 2014 Installation

Download MS SQL Express 2014 (SQLEXPRWT_x64_ENU.exe) from Microsoft Web site.

- Double-click SQLEXPRWT_x64_ENU.exe to extract SQL Express 2014 installation files:

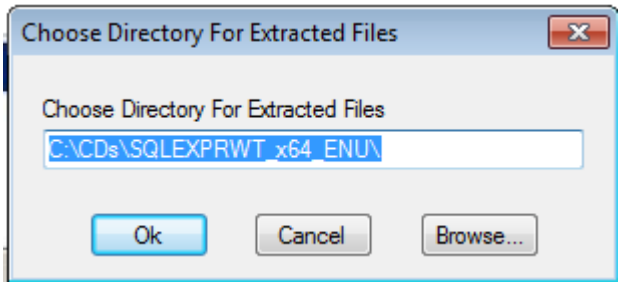


Figure 52: MS SQL Installation

- The SQL Express 2014 extraction of installation files will begin:

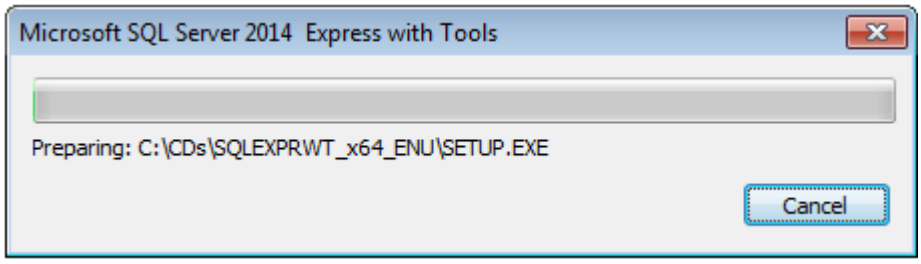


Figure 53: MS SQL Installation

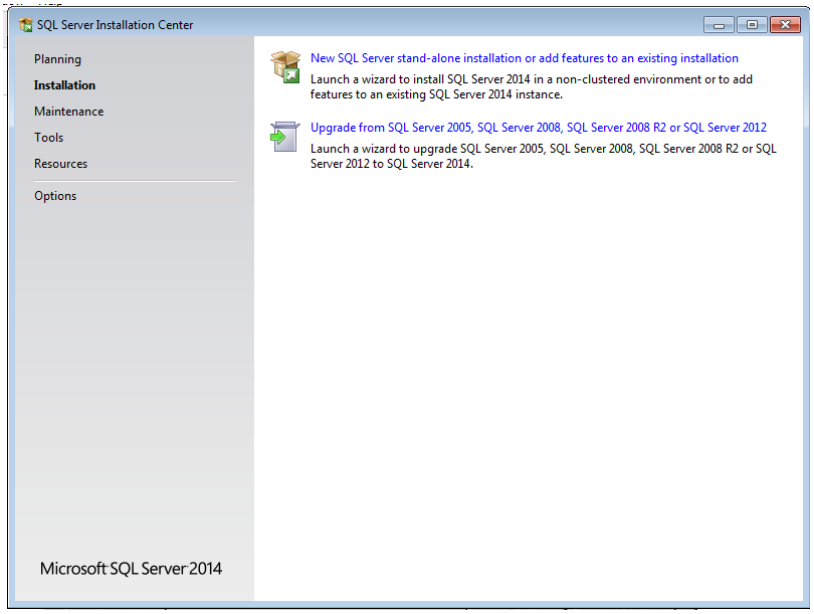


Figure 54: MS SQL Installation

- Select “New SQL Server stand-alone installation or add features to existing installation”:

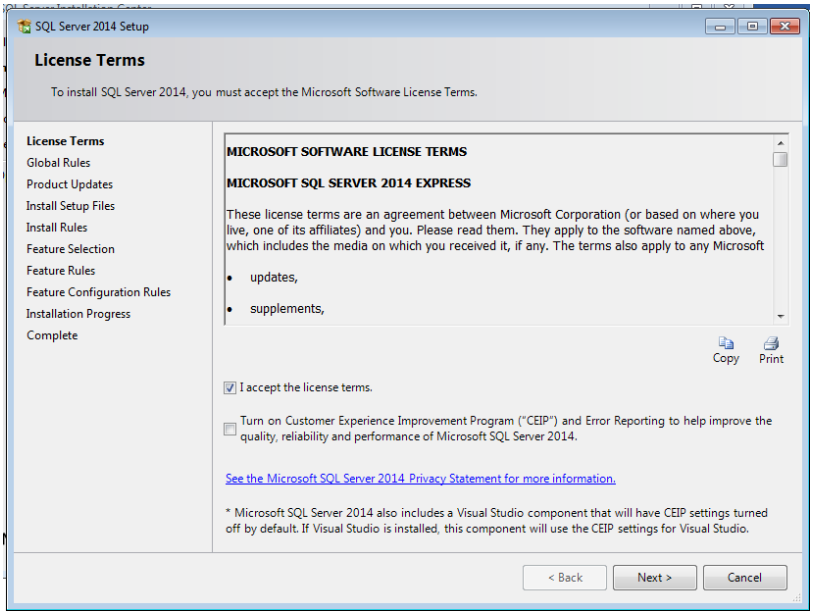


Figure 55: MS SQL Installation

- Check the "I accept the license terms" and click "Next" to continue:

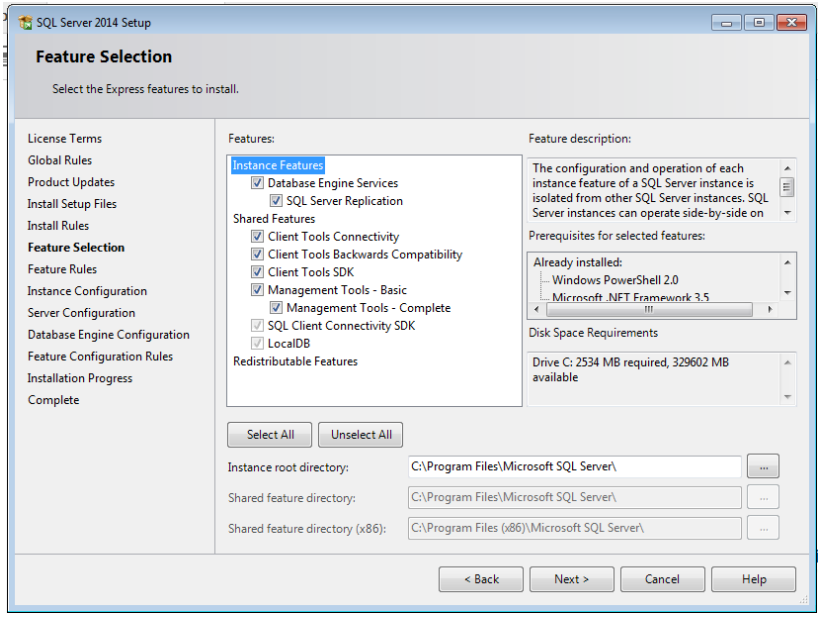


Figure 56: MS SQL Installation

- Make desired features selection and click “Next” to continue:

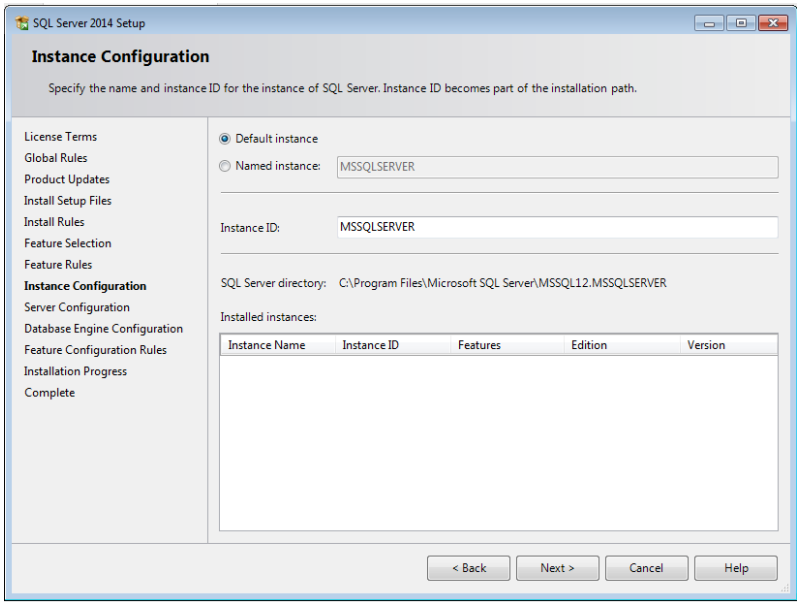


Figure 57: MS SQL Installation

- Select “Default instance” and click “Next” to continue:

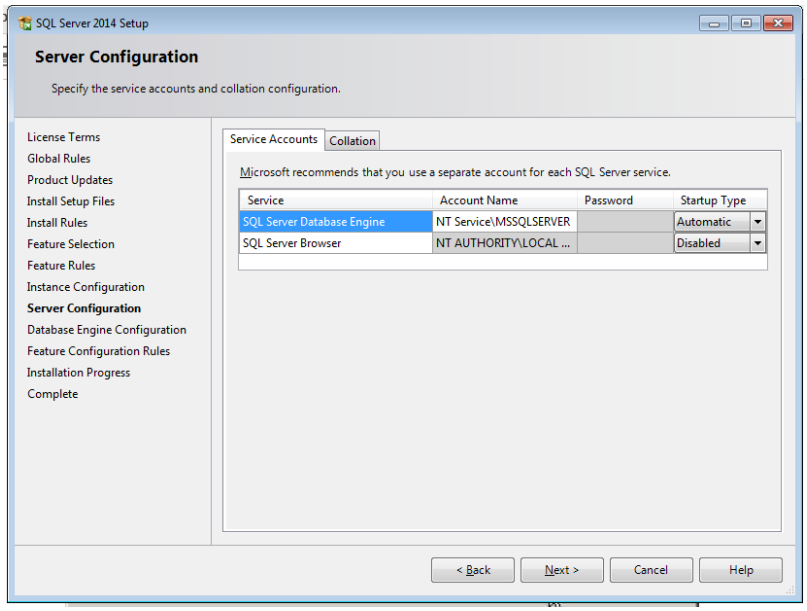


Figure 58: MS SQL Installation

- Make sure “SQL Server Database Engine” “Startup Type” is set to “Automatic” and click “Next” to continue:

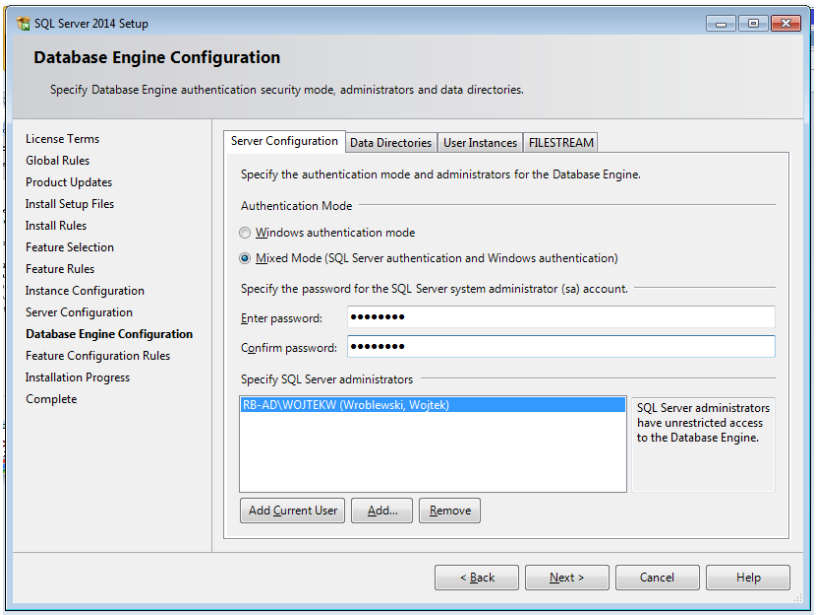


Figure 59: MS SQL Installation

- Select “Mixed Mode (SQL Server authentication and Windows authentication)”, enter password for “sa” and click on “Next” to continue. Installation begins:

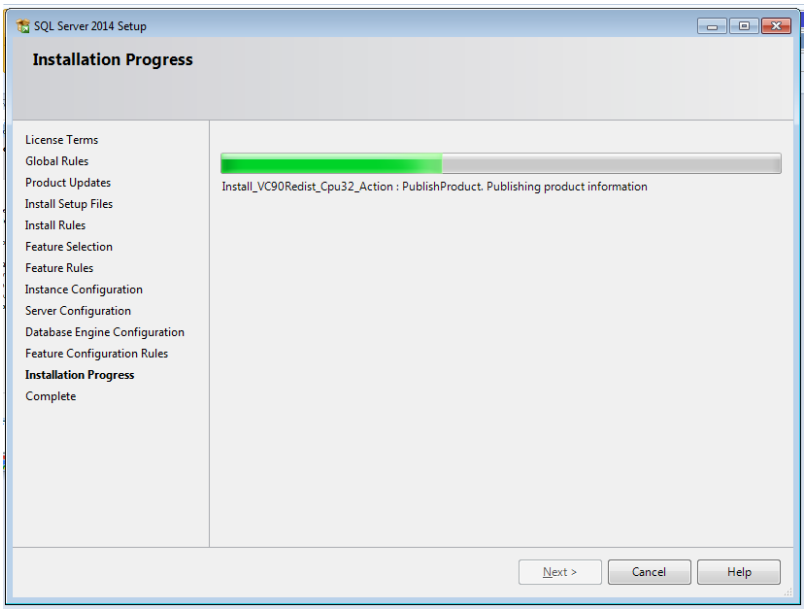


Figure 60: MS SQL Installation

- After successful installation you should see "Complete" screen:

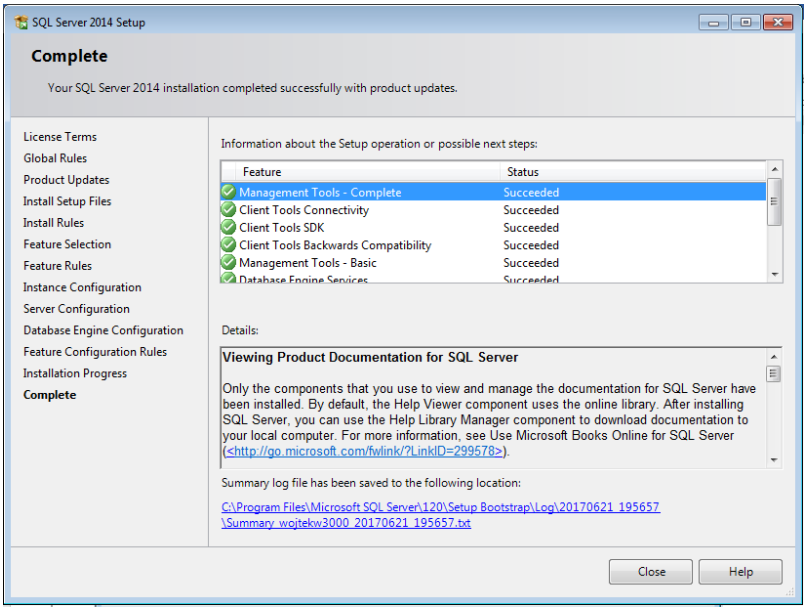


Figure 61: MS SQL Installation

6

6: IIS Setup

On a computer running Reporting Software Application open Server Manager -> Dashboard.

- Select “Add roles and features”:

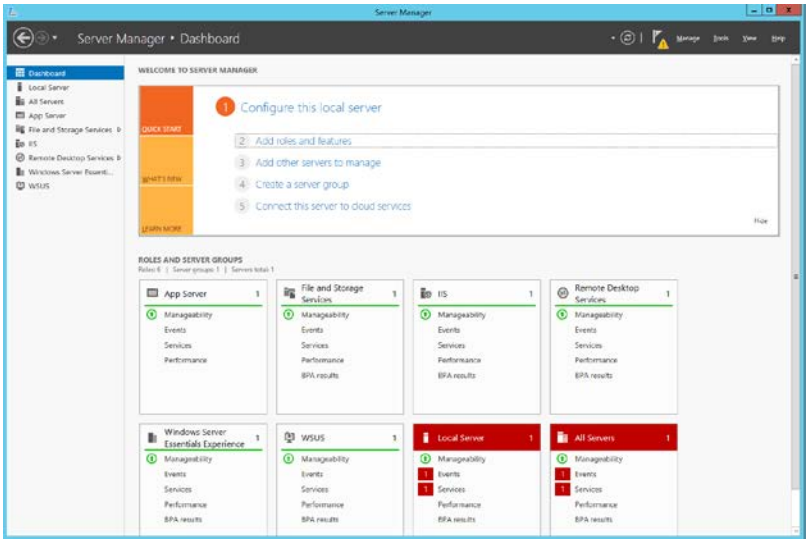


Figure 62: IIS Setup

- Select “Installation Type” and select “Role-based or feature-based installation” in “Add Roles and Features Wizard”:

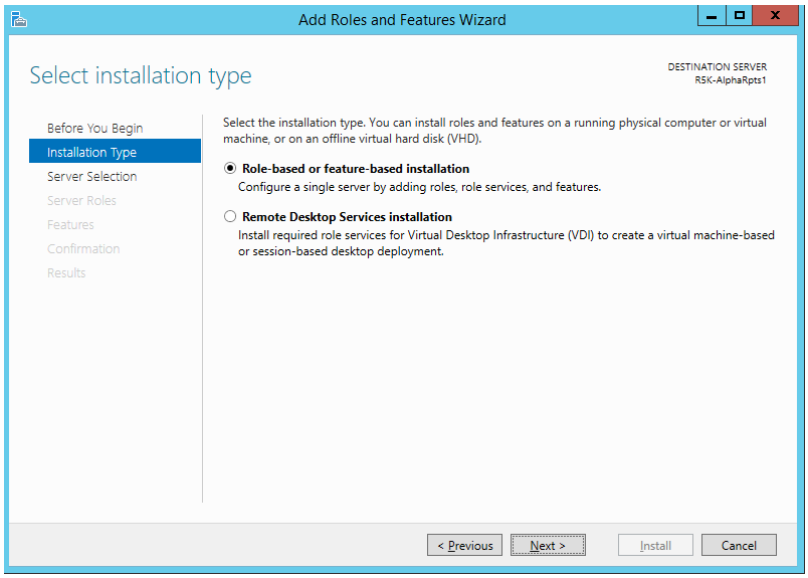


Figure 63: IIS Setup

- In "Server Selection" highlight the name of local server and click on "Next"

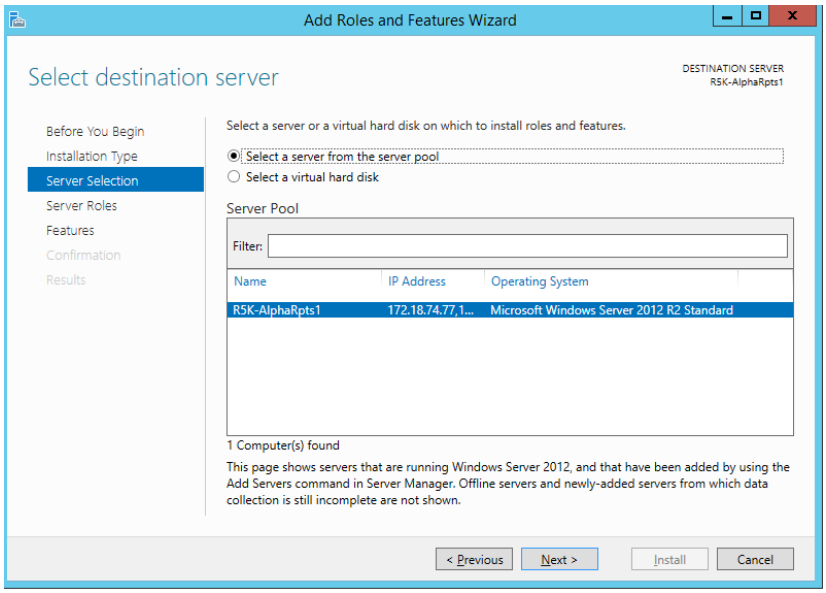


Figure 64: IIS Setup

- Select "Server Roles" in "Add Roles and Features Wizard" then:
  - Check and expend "Web Server (IIS)…" section
  - Make sure the following items are checked:
    - "Common HTTP Features (Installed)"
    - "HTTP Logging (Installed)"
    - "Logging Tools (Installed)"
    - "ODBC Logging (Installed)"
    - Request Monitor (Installed)"
    - "Tracing (Installed)"

- "IIS Management Console (Installed)"
- "IIS 6 Metabase Compatibility (Installed)"
- "IIS 6 Management Console (Installed)"

"IIS 6 Management Scripts and Tools (Installed)"

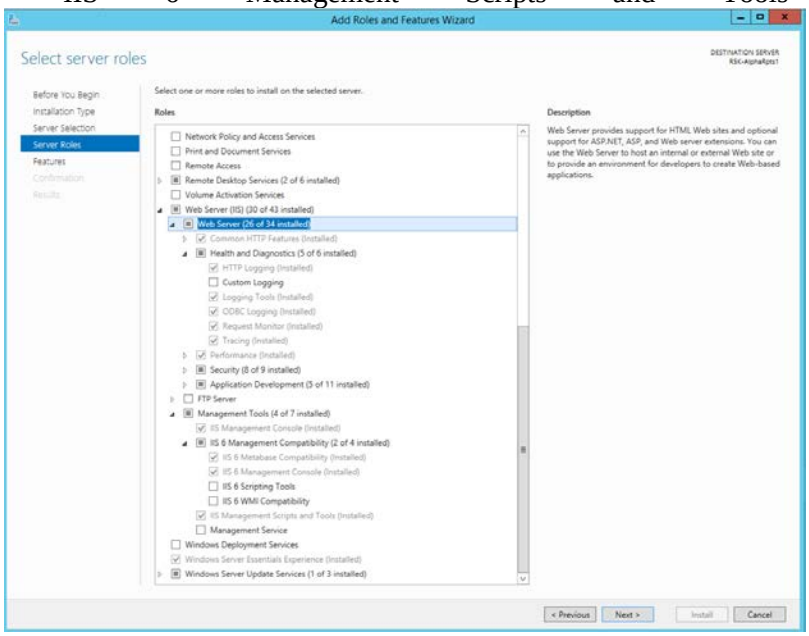


Figure 65: IIS Setup

- Select "Server Roles" in "Add Roles and Features Wizard" then:
  - Check and expend "Application Server" section
  - Make sure the following items are checked:
    - "NET Framework 4.5" (Installed)"
    - "TCP Port Sharing (Installed)"
    - Web Server IIS Support (Installed"

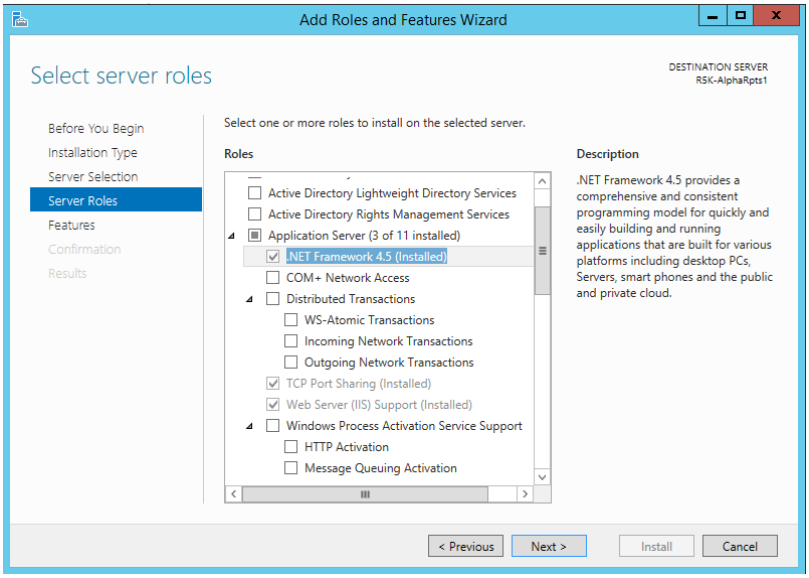


Figure 66: IIS Setup