CardioLog 2011 Administrator Guide

Enterprise, Professional, Standard

Version: 2.0.3.0

By: Omri Cohen

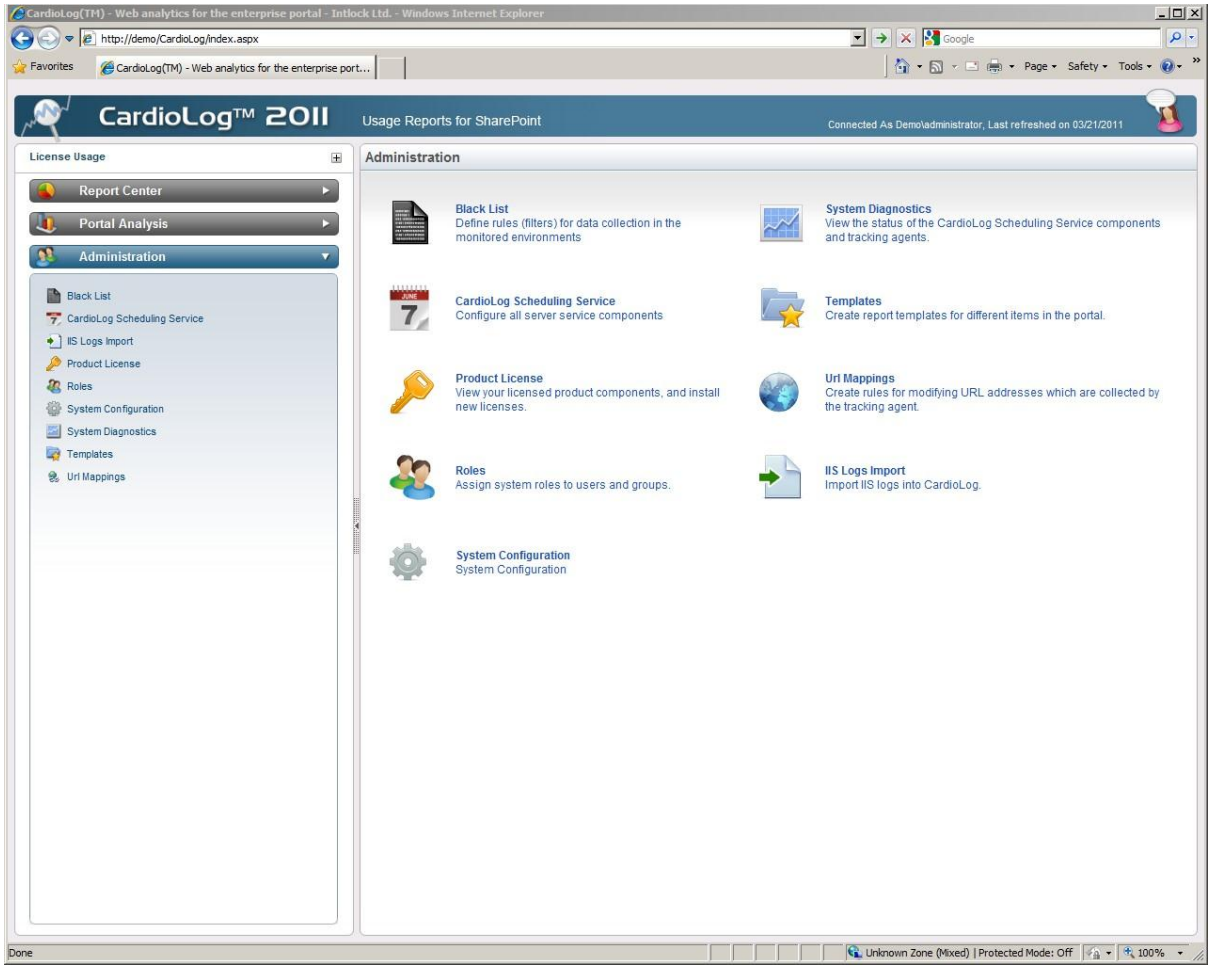
Date: May 1, 2011

Contents

1. Introduction

Users with the administrator role can use the Administration pane to configure the following system components:

- **System Configuration** - Includes the CardioLog Configuration Wizard to configure language and date format, the SharePoint Tree Service (which provides the structure of the monitored environment) and the SharePoint Tracking Agent (which monitors site usage), and reporting data cache configuration.
- **CardioLog Scheduling Service** - Performs different scheduled tasks such as: creating reports, sending email notifications, processing usage data, refreshing the portal structure, refreshing Active Directory data, and more.
- **Report Templates** - Defined for various objects, such as portal items (Homepages, Lists, Documents, etc.), portal users, report drill-downs, and more.
- **Black List** - A list of rules (filters) for data collection in the monitored environments.
- **System Roles** - Role assignments for users and groups.
- **Product License** - Provides information about the licensed product components and enables the installation of new licenses.
- **System Diagnostics** – A dashboard that displays the status of the CardioLog Scheduling Service components and tracking agents.
- **URL Mappings** - A list of rules for modifying URL addresses which are collected by the tracking agent.
- **IIS Logs Import** – A tool that allows you to gather existing usage tracking data, dated before the installation of CardioLog, by importing this information from IIS logs.



Administration pane

2. System Requirements

To ensure optimal operation, it is recommended to install the CardioLog application and database on dedicated servers.

Make sure that your system meets the following minimum hardware and software requirements:

	Professional Edition	**Enterprise Edition**
Platform	32-bit / 64-bit	64-bit
Operating System	Windows 2003/2008 Server or Windows 2003 R2/2008 R2 Server Standard Edition (fully patched)	Windows 2003/2008 Server or Windows 2003 R2/2008 R2 Server Standard Edition (fully patched)
Application Memory*	4 GB	Minimum** - 8GB Recommended - 16 GB
Processors*	2xQUAD	Minimum** - 2xQUAD Recommended - 4xQUAD
SQL Edition	Microsoft SQL Server 2005/2008 Standard Edition (fully patched)	Minimum** - Microsoft SQL Server 2005/2008 Standard Edition (fully patched) Recommended - Microsoft SQL Server 2005/2008 Enterprise Edition (fully patched)
SQL Memory	3 GB	8 GB
SQL Processors	2xQUAD	Minimum** - 2xQUAD Recommended - 4xQUAD
SQL Storage		
System Disk	10 GB	10 GB
Page File Disk	10 GB	10 GB
Database Disk	~150 GB (depending on the monitored environment)	~150 GB (depending on the monitored environment)
Transaction Log Disk	According to the backup policy	According to the backup policy
RAID	Raid 5/10 or similar	Raid 5/10 or similar
Additional Software & Services	• Microsoft .NET Framework 3.5	• Microsoft .NET Framework 3.5

	Service Pack 1 • Microsoft Chart Controls for Microsoft .NET Framework 3.5 • IIS 6.0, IIS 7.0 or IIS 7.5 • Microsoft Internet Explorer 6.0 or higher	Service Pack 1 • Microsoft Chart Controls for Microsoft .NET Framework 3.5 • IIS 6.0, IIS 7.0 or IIS 7.5 • Microsoft Internet Explorer 6.0 or higher

* This refers to hardware allocated for the CardioLog application pool and services (and not for the CardioLog SQL server)

** For up to 2,000,000 page views per month

For more information, see the CardioLog System Requirements guide.

3. CardioLog Architecture

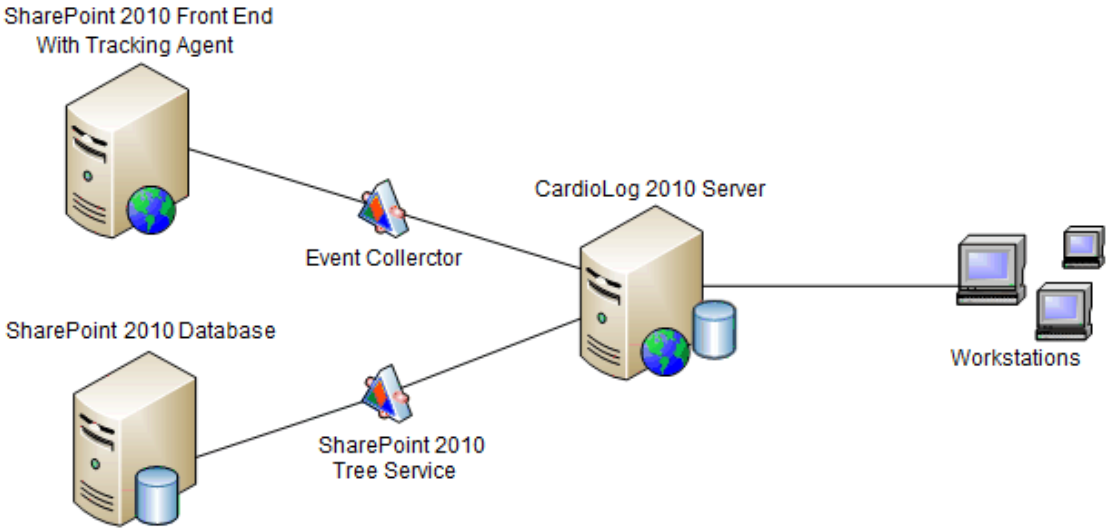
The CardioLog solution includes the following separate components:

UI	A web application for configuring and viewing the web analytic reports. Hosted on the CardioLog application server.
Database	A repository for storing all tracking and reporting data. Hosted on the SQL server.
Portal Tree Service	A web service that provides the structure of the monitored environment. CardioLog includes several off-the-shelf portal tree services, such as the SharePoint Tree Service.
Tracking Agent	A JavaScript tag that is included in the portal pages and monitors site usage. CardioLog includes several off-the-shelf tracking agents, such as the SharePoint Agent.
Event Collector	A web service which sends tracking data from the tracking agent to the main CardioLog database.
CardioLog Scheduling Service	A Windows services which runs scheduled jobs, such as event processing.
CardioLog Diagnostics Service	A Windows service which runs the health checks for the system.
Offsite Application	A web application which sends tracking data from tracking agents located in DMZ - to the Offsite database.
Offsite Database	A repository of tracking data in DMZ.

User Categories Service	A web service which provides additional visitor data from SharePoint user profiles, AD attributes or other custom sources.

Sample Configuration

This is a basic CardioLog configuration for SharePoint within an intranet environment:



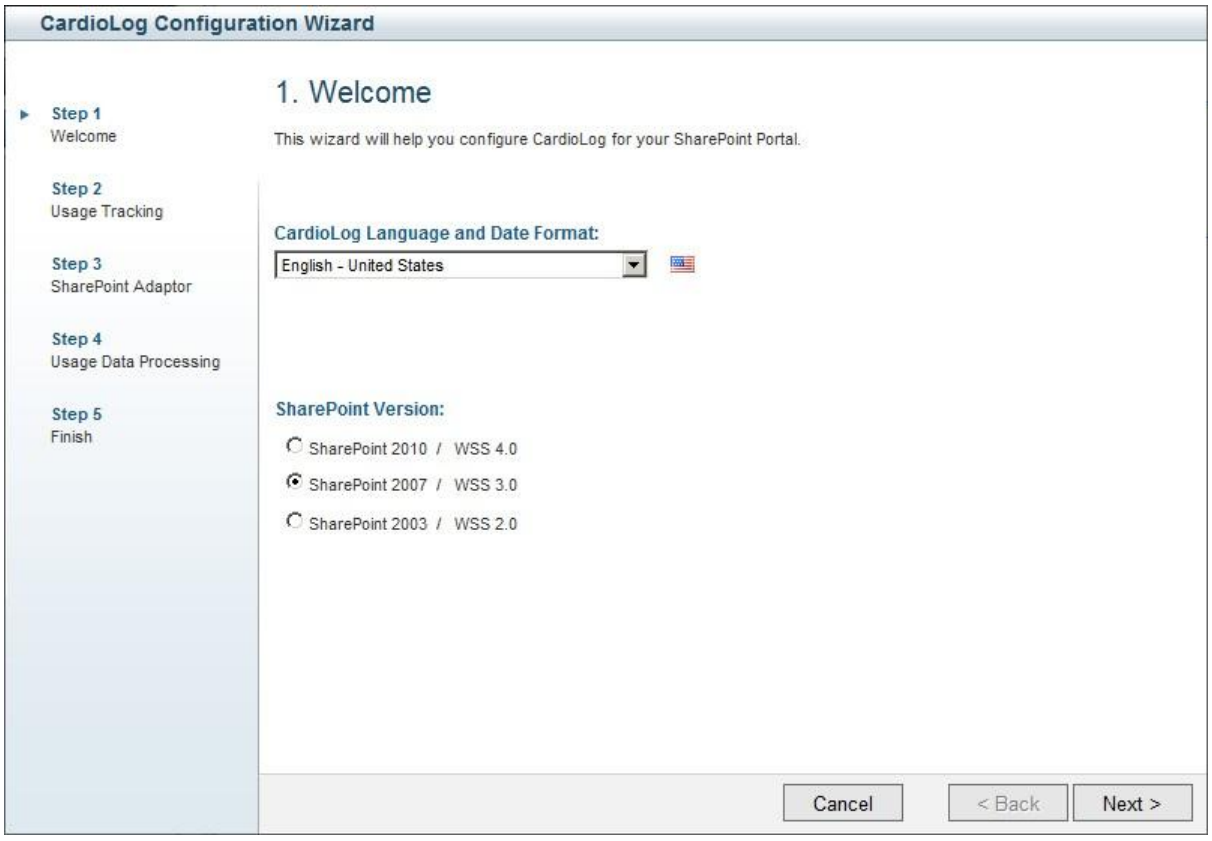
For performance reasons, it is recommended to separate CardioLog from the monitored environment and install it on a dedicated server.

4. System Configuration

4.1 Configuring Usage Tracking and Reporting

The CardioLog Configuration Wizard helps with configuring the CardioLog modules for your SharePoint Portal. These include the **SharePoint Tracking Agent** - a tool designed to monitor visitor behavior in SharePoint and the **SharePoint Adaptor** - which provides the structure of your SharePoint portal.

1. Launch **CardioLog**.
2. In the **Welcome** dialog, select the desired UI language (including date format) and SharePoint version. Click **Next**.



CardioLog Configuration Wizard

3. In the **Usage Tracking** dialog, enter the SharePoint WFE name and select **Yes** to let CardioLog add the tracking code automatically to all SharePoint pages served by the WFE (the tracking code is added to init.js in SharePoint 2010, and core.js in SharePoint 2007).

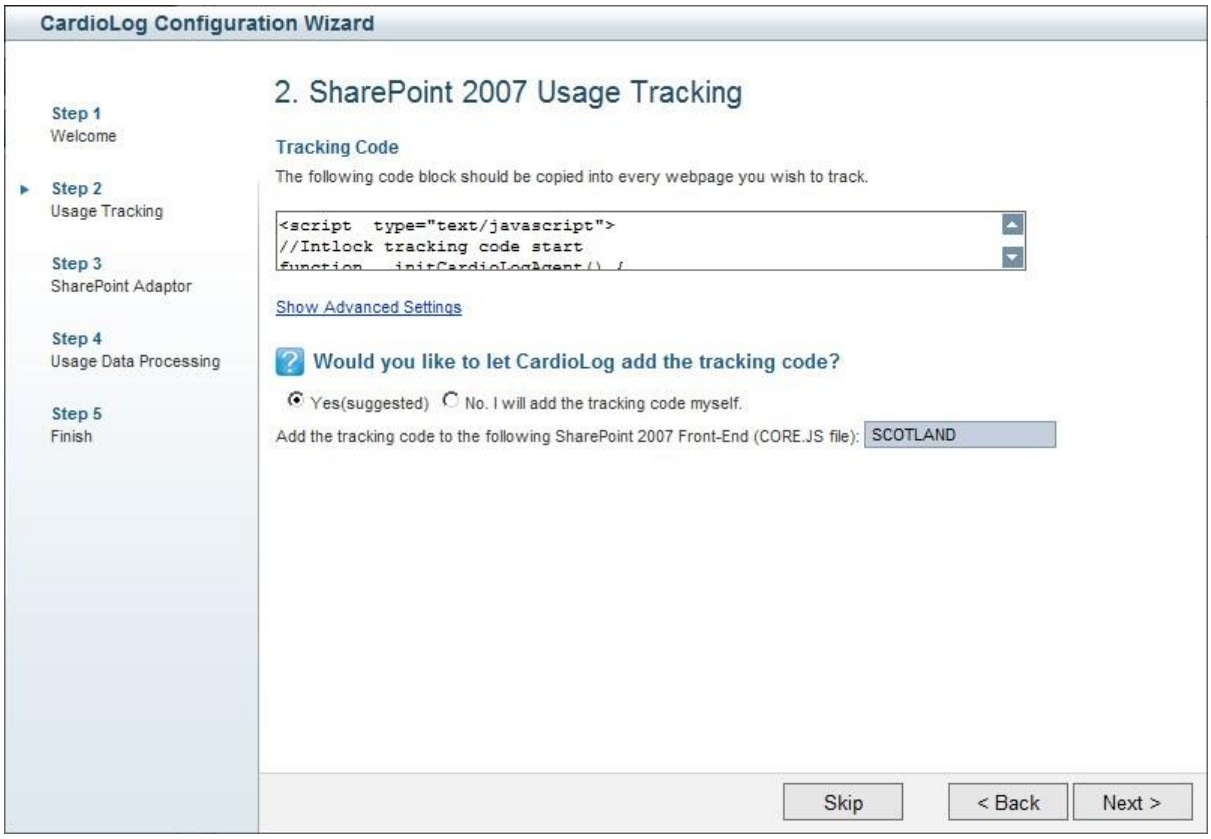
Click **Show Advanced Settings** to edit the CardioLog Agent location (domain and port).
Select **Require secure channel (SSL)** if your SharePoint portal runs on SSL and you have configured the CardioLog website for both http and https.

Note: The CardioLog service account must have write permissions to the SharePoint template directory:
[SharePoint 2010 Server]\%PROGRAMFILES%\Common Files\Microsoft Shared\web server extensions\14\TEMPLATE

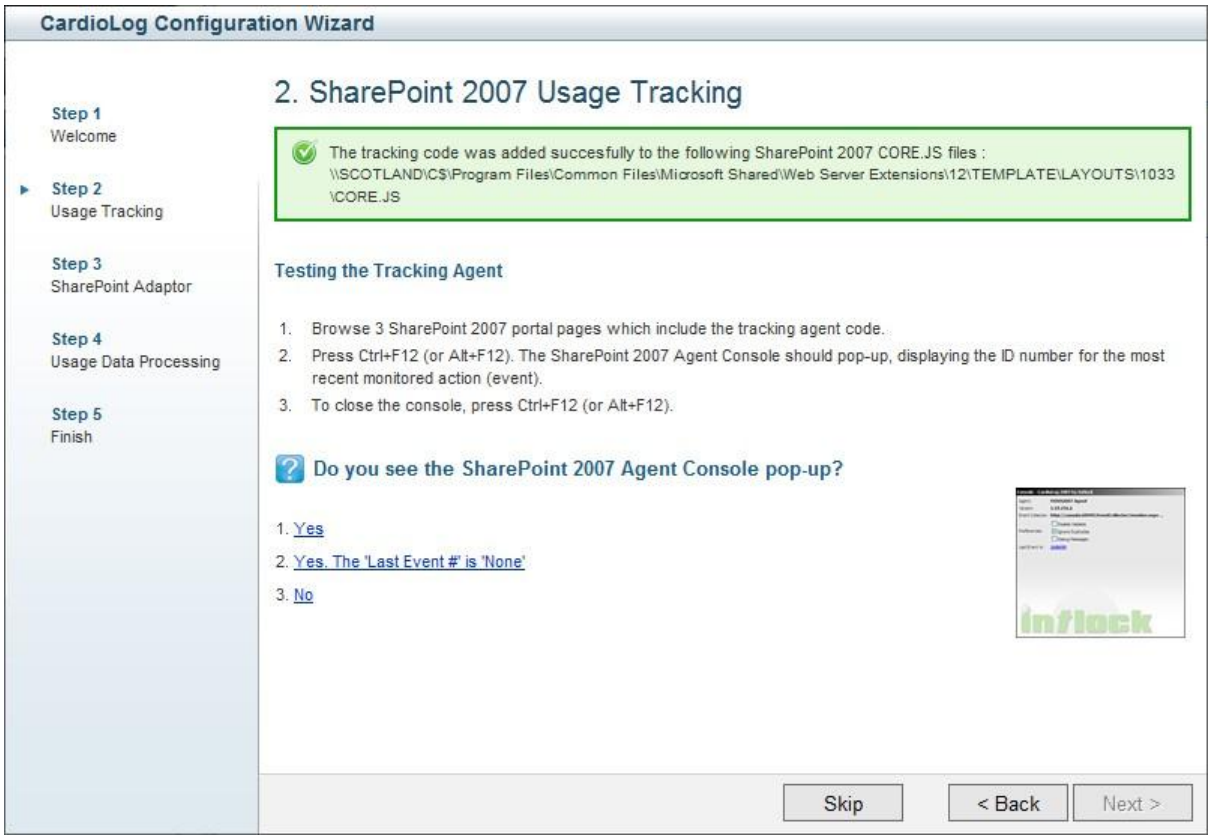
[SharePoint 2007 Server]\%PROGRAMFILES%\Common Files\Microsoft Shared\web server extensions\12\TEMPLATE

If you wish to add the tracking code yourself - select **No** and copy the JavaScript tracking code to a common page component of your choice - such as master pages, page toolbars, Web Parts, footer, etc. If you choose a common JavaScript (.js) file, verify you have removed the opening and closing <script> tags!

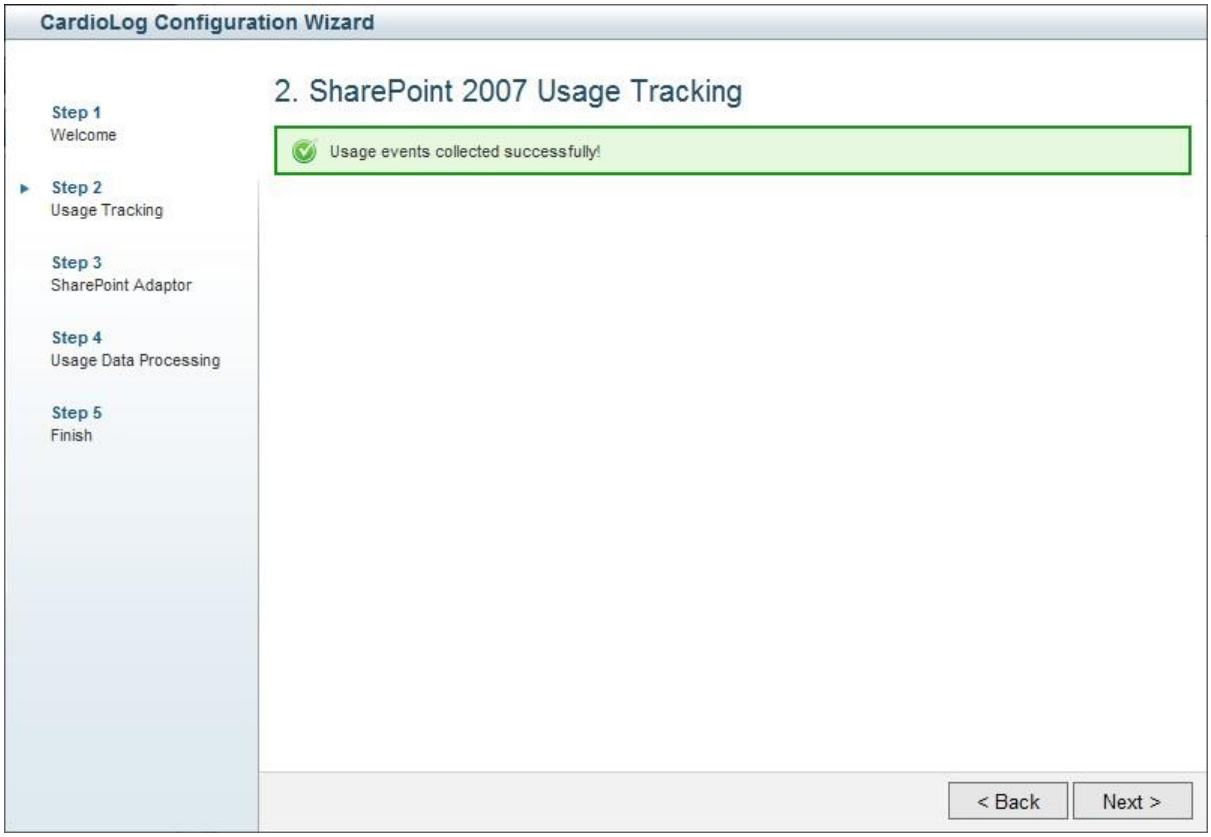
Click **Next**.



4. To test the Tracking Agent, go to a SharePoint portal page that includes the tracking agent code. Press Ctrl+F12 (or Alt+F12). The Tracking Agent Console should pop-up and displaythe ID number for the most recent monitored action (event). To close the console, press Ctrl+F12 (or Alt+F12).
   Click **Yes** if you see the Tracking Agent Console, then click **Next**. If you cannot see the console, or if the ID shows "None", use the wizard to troubleshoot the error or contact Intlock Support.



Step 2 – Usage Tracking



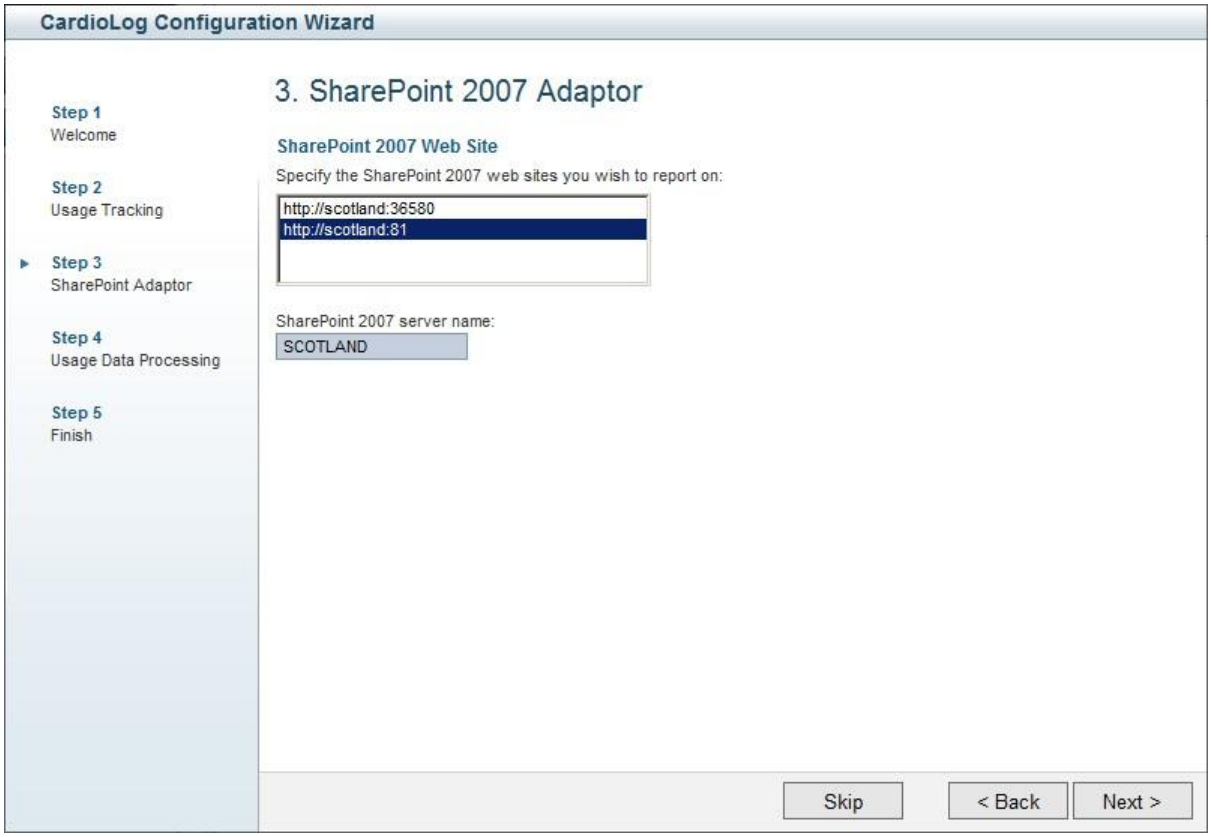
Step 2 – Usage Tracking

5. For multiple SharePoint WFE's - repeat steps 3 - 4 for each WFE.
6. In the **SharePoint Adaptor** dialog, enter the SQL server instance name and the SharePoint configuration database name for your farm. Specify the authentication method used to connect to the database. Click **Next**.

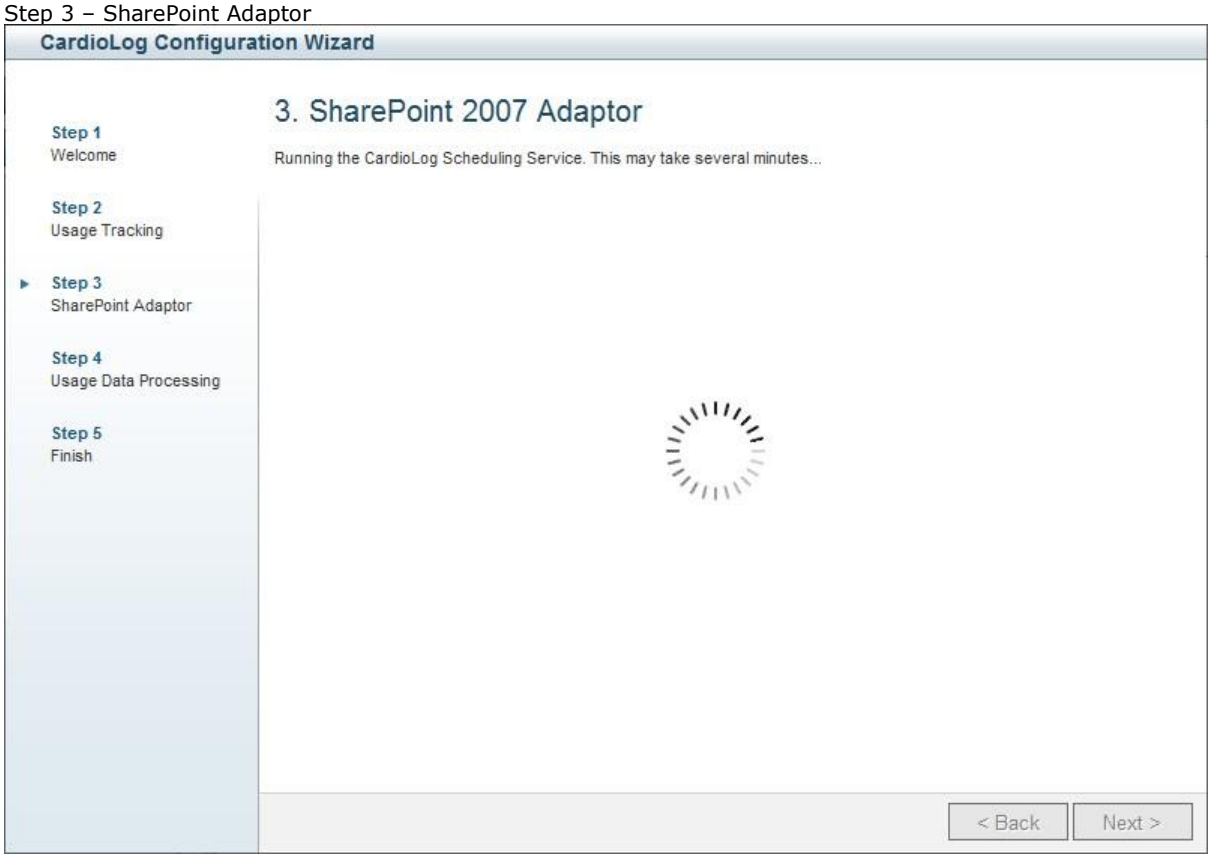
   Note: Please confirm that the CardioLog service account has read permissions (data reader) for all SharePoint configuration and content databases.

Step 3 – SharePoint Adaptor

7. In the **SharePoint Adaptor** dialog, select the SharePoint website/s you wish to report on (use Ctrl+left-click to select multiple websites). Enter the name of one of your SharePoint WFE's. Then click **Next**.
   Note: Loading your SharePoint tree structure may take several minutes (depending on the number of items in your tree).



Step 3 – SharePoint Adaptor

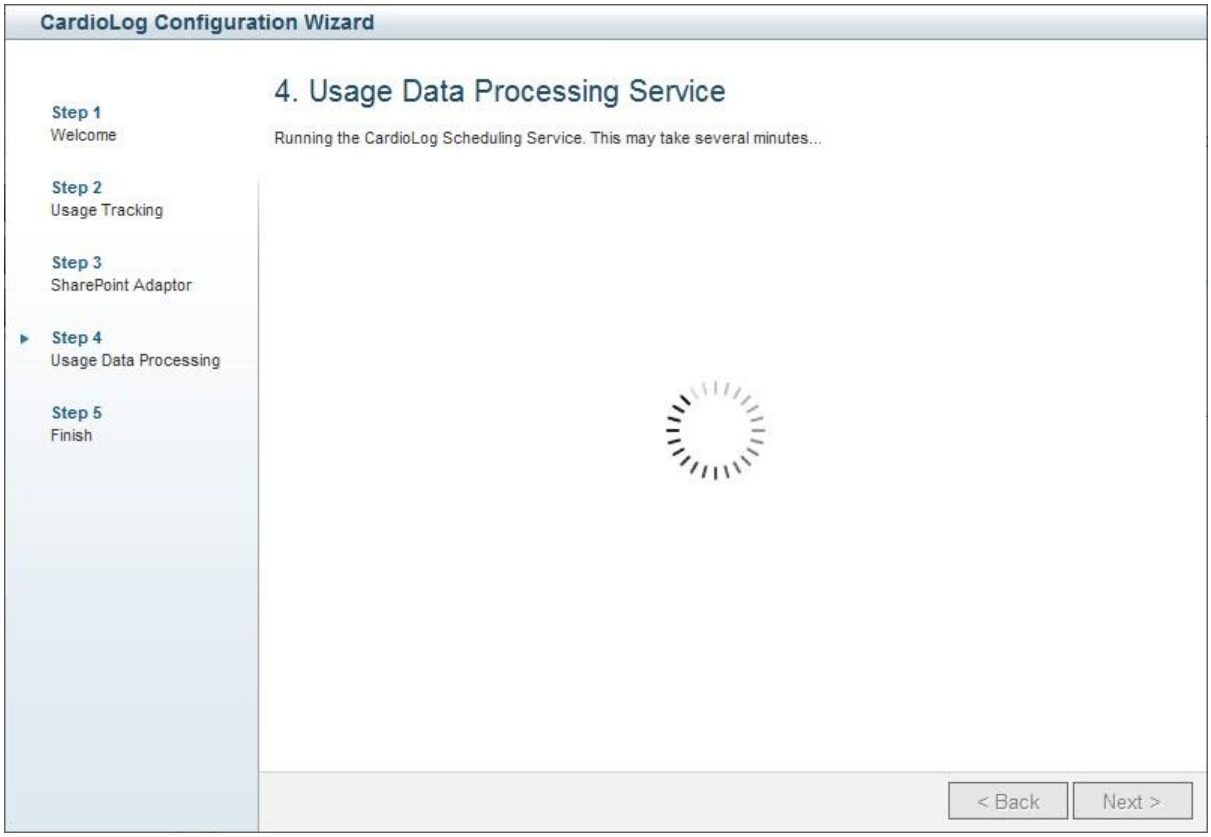


Step 3 – SharePoint Adaptor

8. In the **SharePoint Adaptor** dialog, expand the portal tree and verify that it shows the desired SharePoint web application. Click **Next**.

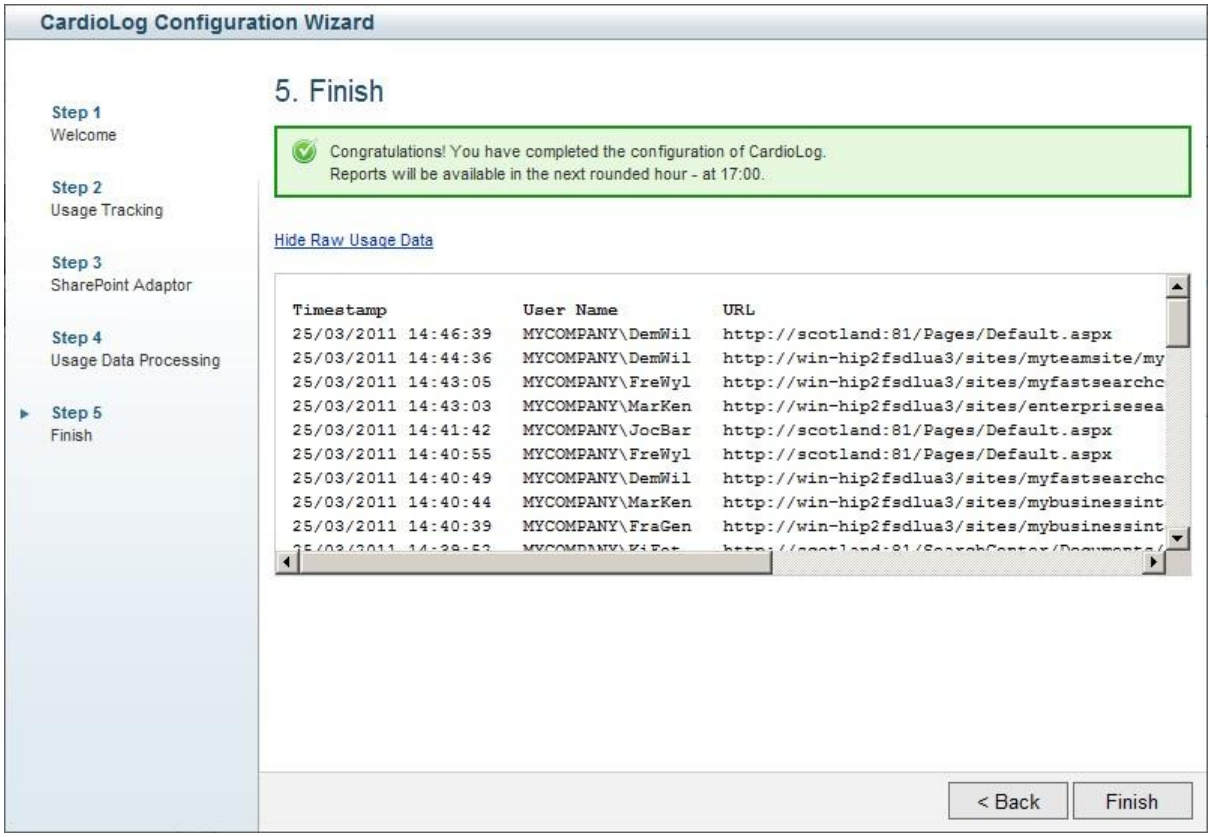
Step 3 – SharePoint Adaptor

9. In the **Usage Data Processing** dialog, click **Next**.



Step 4 – Usage Data Processing

10. In the **Finish** dialog, click **Finish**. Click **Show Raw Usage Data** to see the events collected so far. The data will be available in the reports within the next rounded hour.
11. For configuring both SharePoint 2007 and SharePoint 2010, repeat steps 1 - 10 for each SharePoint version.



Step 5 – Finish

4.1.1 Document Usage Tracking

By default, the SharePoint Agent tracks document usage for documents which are accessed through the browser. This is achieved by tracking browser clicks in document libraries (which are not displayed in Explorer view).

In order to track document access from non-browser sources - such as Windows Explorer or Outlook, you need to install the **CardioLog HttpModule for SharePoint**.

1. In the SharePoint server, add **CardioLogHttpModule.dll** to the GAC. The dll can be found at the CardioLog installation folder:
   \CardioLog\CardioLogScheduleServices\CardioLogHttpModule.dll
2. In the SharePoint server, for each web site, modify Web.config:
   In the <httpModules> section, add:

```
<add name="CardioLogHttpModule" type="CardioLog.HttpModules.EventsModule,CardioLogHttpModule,
Version=1.19.154.6, Culture=neutral, PublicKeyToken=56b51e29d93ab3fb" />
```

In the <appSettings> section, add:

```
<add key="CardioLog.Events.DocExtensions" value=".doc*.docx*.ppt*.pptx*.pps*.ppsx*.txt*.pdf*"/>
<add key="CardioLog.Events.ExcludeUserAgents" value="Microsoft Office Existence Discovery*"/>
<add key="CardioLog.API.EventsServiceUrl" value="http://CardioLog
server:port/CardioLogAPI/Events.asmx"/>
<add key="CardioLog.Events.LogFile" value="C:\CardioLogHttpModule.log"/>
<add key="CardioLog.Events.LogLevel" value="None"/><!--None,Error,Message-->
```

Enter you own values for:

- CardioLog.Events.DocExtensions (a list of star separated file extensions to track)
- CardioLog.Events.LogFile

3. In the CardioLog installation folder, open this file for editing: \CardioLog\CardioLogAgent\AgentEmbed.aspx
4. In **AgentEmbed.aspx**, set element.HandleFileExtension to false:
   `element.HandleFileExtension = false;`
5. Restart the SharePoint IIS server (iisreset).

Note: In case of multiple servers in your SharePoint farm, consider using the HttpModule as a farm scoped SharePoint solution. SharePoint has a class that will deal with Web.config issues in a way that handles rollback and recovery and ensures that all sites are configured the same.

4.1.2 Configuring Multiple Farms

Multiple SharePoint farms per adaptor can be configured within the corresponding Tree Service **Web.config** file:

In <CardioLog Installation Folder>\SP20XXTree\Web.config, add the following keys to the <appSettings>section:

- **profile_1_includedWebApps** - this is a star separated list of web applications (virtual servers) to include in the tree.
- **profile_1_SharePointTemplatePath –** this is the full path for the SharePoint 'TEMPLATE' directory.

```
<appSettings>
        <add key="profile_1_includedWebApps" value="http://<sharepoint server name>:<port>*" />
        <add key="profile_1_SharePointTemplatePath" value="\\<sharepoint server name>\C$\Program
Files\Common Files\Microsoft Shared\Web Server Extensions\1X\TEMPLATE\" />
</appSettings>
```

Add the following keys to the <connectionStrings>section:

- **profile_1_configDB** - this is the connection string for the SharePoint configuration database.
- **profile_1_contentDB** - this is a place holder for creating connection strings to the SharePoint content databases. *Note: Leave "Initial Catalog={0};Data Source={1} " as it is.*

```
<connectionStrings>
   <add name="profile_1_configDB" connectionString="Integrated Security=SSPI;Persist Security
Info=False;Initial Catalog=<sharepoint config database name>;Data Source=<database server name>" />
   <add name="profile_1_contentDB" connectionString="Integrated Security=SSPI;Persist Security
Info=False;Initial Catalog={0};Data Source={1}" />
</connectionStrings>
```

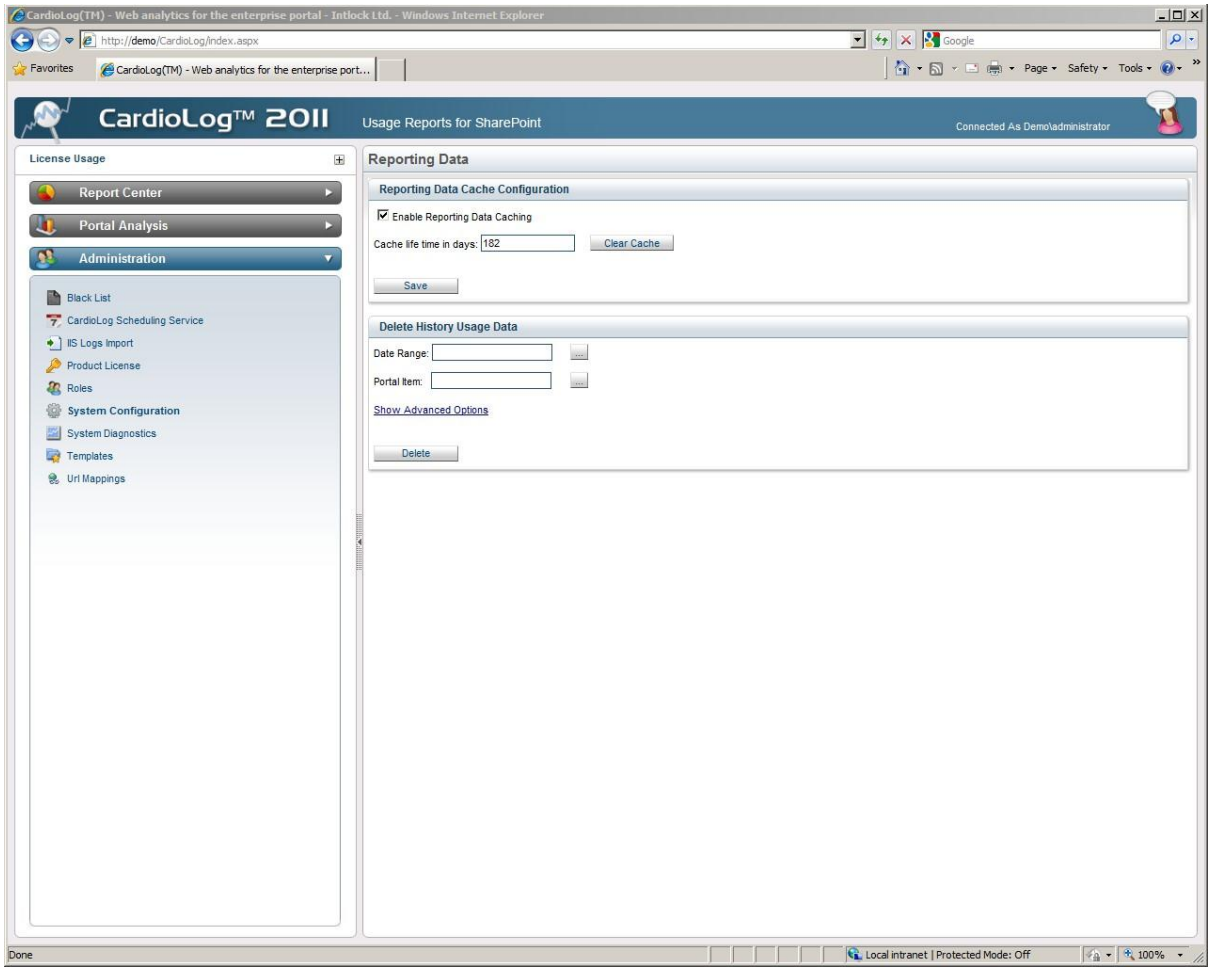
Add the profile to the Portal Tree Updates service component:
http://<CardioLog server>:<port>/SP20XXTree/default.aspx?profile=1

4.2 Managing Reporting Data

4.2.1 Cache Configuration

To improve performance, CardioLog caches the results for each reporting query in accordance with the specific report filters used. In the Cache Configuration page, you can define for how long queries are cached, and clear the entire reporting cache.

1. In the **Administration** pane, click **System Configuration**, and then select **Reporting Data**.
2. In the **Reporting Data Cache Configuration** box, check **Enable Reporting Data Caching** to enable report caching.
3. Fill out a value for the **Cache life time in days** field.
4. Click **Save**
5. Click **Clear Cache** if you want to clear the entire reporting cache.



System Configuration > Reporting Data

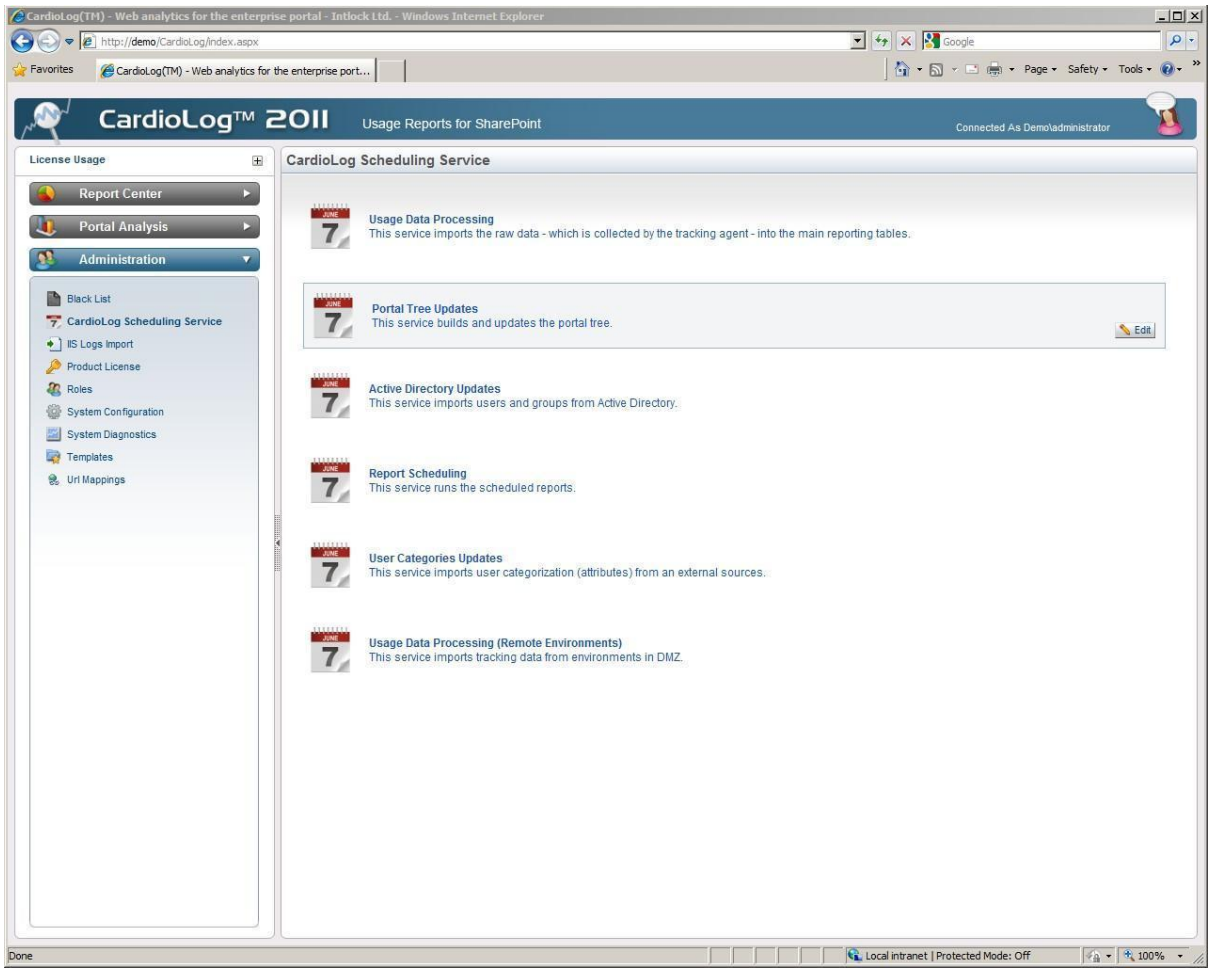
5. CardioLog Scheduling Service

Administrators can edit service components. In order to commit changes, you must restart the **CardioLog Scheduling Service**.

5.1 Editing service components

5.1.1 How to edit a service component

1. In the **Administration** pane, click **CardioLog Scheduling Service**.
2. Click a service component and select **Edit** or click the service component.



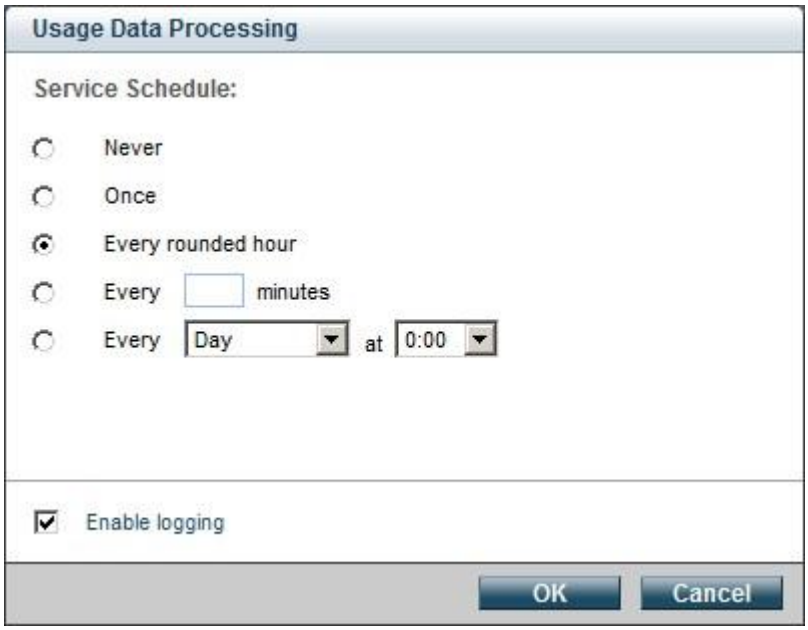
CardioLog Scheduling Service components

5.1.2 Service component scheduling

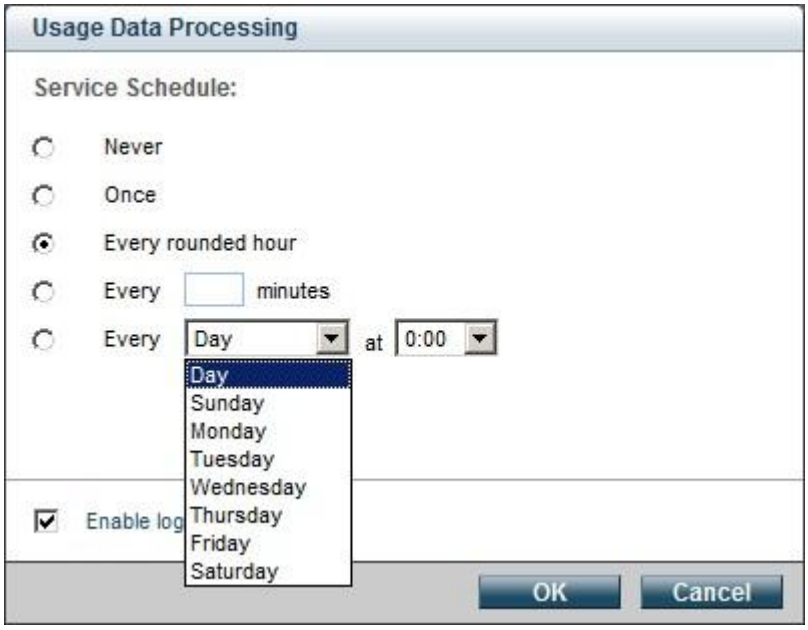
Each service component can be scheduled to run at defined time intervals.

1. In the **Administration** pane, click **CardioLog Scheduling Service**.
2. Click a service component and select **Edit** or click the service component.
3. The **Edit Service** dialog includes the following fields:

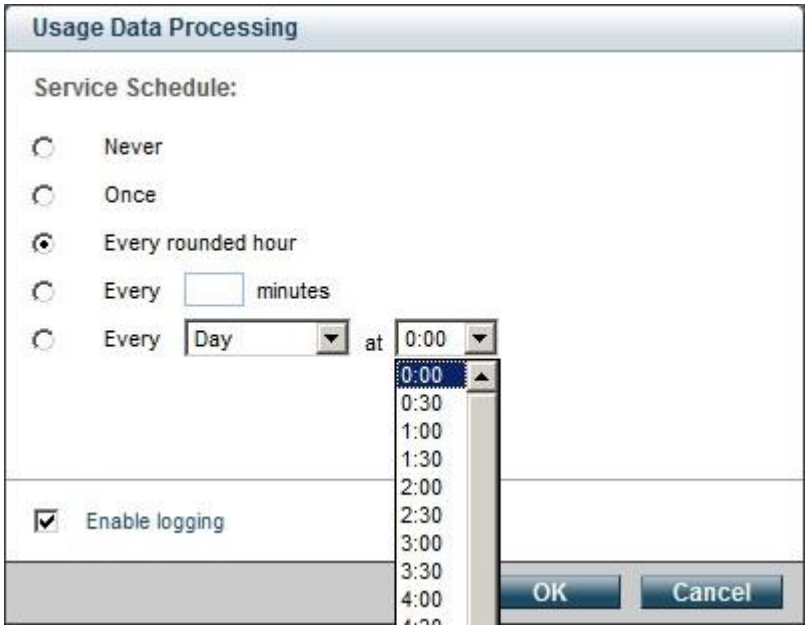
- **Enable Logging** - the component's activity is logged. The default log file path is at <CardioLog Installation Directory>\CardiologScheduleServices\Logs. The log file size is limited to 8MB.
- **Service Schedule Type** - defines the schedule for running the service component:
  - **Never** – not at any time.
  - **Once** - one time only, once the service is restarted.
  - **Every rounded hour** - every hour, on the hour (previously named "Hourly").
  - **Every X minutes** – every X minutes (previously named "Interval").
  - **Every Day at HH:MM** - Every day at HH:MM (previously named "Daily").
  - **Every [Weekday] at HH:MM -** Every [Weekday] at HH:MM. Select the day of the week and the time (previously named "Weekly").



Edit Service dialog



Select the day of the week



Select the time (HH:MM)

Note: In order to commit changes, you must restart the **CardioLog Scheduling Service**.

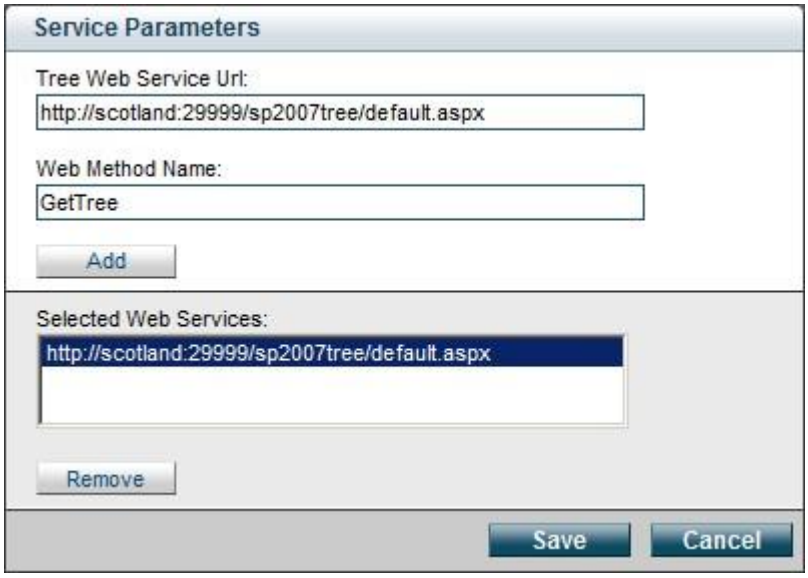
5.2 Usage Data Processing

The Usage Data Processing service component processes incoming tracking data from Event Collector every rounded hour by default.

5.3 Portal Tree Updates

The Portal Tree Updates service component is responsible for retrieving the structure of the portal (monitored environments). It does so by creating an XML file that portrays the hierarchal structure of the portal and then by translating the XML data into relational data. This structure is the basis for data aggregations.

1. In the **Administration** pane, click **CardioLog Scheduling Service**.
2. Click **Portal Tree Updates**.
3. Set the schedule type and then click **Next**.
4. In the **Service Parameters** dialog, enter a URL for your Portal Tree Web Service. If the web service has an .asmx extension, enter the Web Method name.
5. Click **Add** to add the Portal Tree Web Service to the selected web services.
6. Repeat steps 4-5 for each Portal Tree Web Service.
7. Click **Save**, and restart **CardioLog Scheduling Service**.



Portal Tree Updates - Service Parameters dialog

Transferring the portal structure through file system

By default, the SP20XXTree application exposes the portal hierarchal structure through an HTTP web service. For large portals, where the resources allocated for the web request (2 GB of memory) are insufficient for holding the structure of the portal, CardioLog can transfer the portal structure via the file system. To do so, add the following parameters to the Tree Web Service URL field:

```
http://<CardioLogServer>:<port>/SP20XXTree/default.aspx?output=file&logFilePath=[CardioLog Installation Folder]\CardioLogScheduleServices\Logs\SP20XXTree.xml
```

Collecting document versioning information for your SharePoint lists and libraries

In order to take full advantage of document modification reports, turn on versioning for your SharePoint lists and libraries.

To collect document versioning information from SharePoint, add the following parameters to the Tree Web Service URL field:

```
http://<CardioLogServer>:<port>/SP20XXTree/default.aspx?docVersion=true&output=file&logFilePath=[CardioLog Installation Folder]\CardioLogScheduleServices\Logs\SP20XXTree.xml
```

5.4 Report Scheduling

The Report Scheduling is responsible for the automatic generation of scheduled reports and their distribution through Email.

1. In the **Administration** pane, click **CardioLog Scheduling Service**.
2. Click **Report Scheduling**.
3. Set the schedule type and then click **Next**.
4. In the **Service Parameters** dialog, fill out the following fields:
   - **SMTP Mail Server** - A full DNS name for the SMTP Server. *Example: "mycompany.com"*

- **SMTP User Name, SMTP Password -** these are optional fields, for supplying credentials.
- **System Administrator e-mail address –** a recipients list of service error alerts. Click on **Search** to find Email addresses.

5. Click **Add** to add the e-mail address to the selected recipients list.
6. Click **Save**, and restart **CardioLog Scheduling Service**.

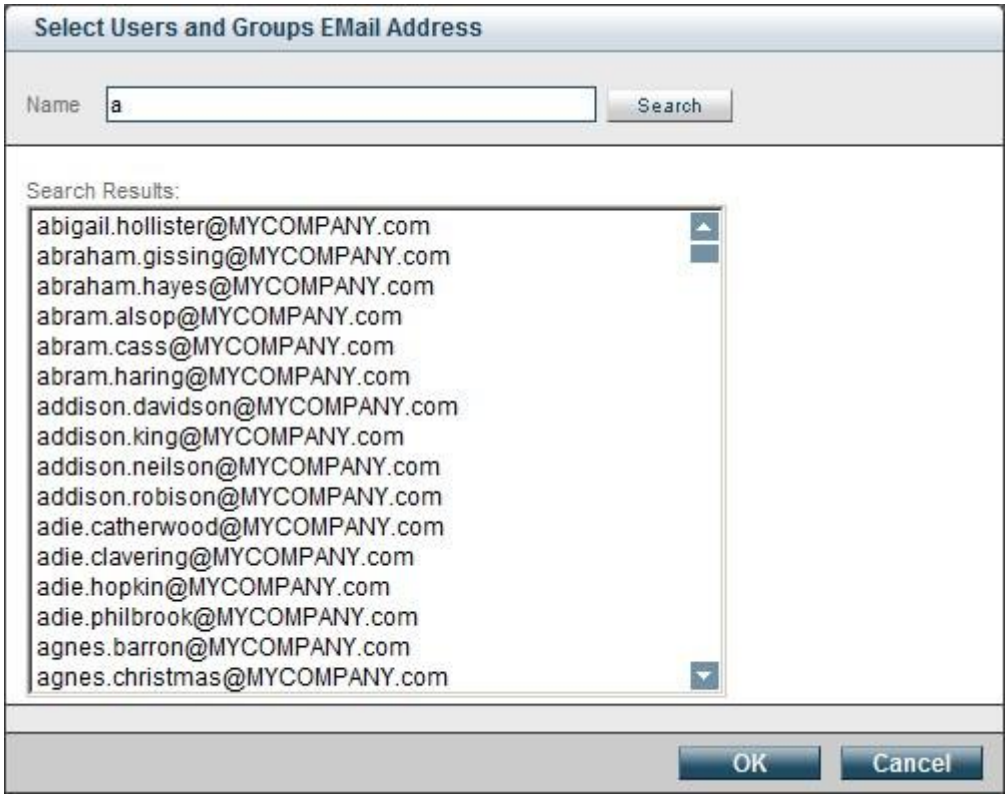
To configure a secure SMTP server with a non-default port, or the CardioLog reports email sender and subject, edit the following keys in the [CardioLog Installation Folder]\CardioLogSchedulingService\Settings.config file in the <handlersParams> section:

```
<param>
    <handlerId>6</handlerId>
    <name>SMTPMailFrom</name>
    <val><![CDATA[CardioLog_Reports@intlock.com]]></val>
</param>
<param>
    <handlerId>6</handlerId>
    <name>SMTPUseSSL</name>
    <val><![CDATA[0]]></val>
</param>
<param>
    <handlerId>6</handlerId>
    <name>SMTPPort</name>
    <val><![CDATA[25]]></val>
</param>
<param>
    <handlerId>6</handlerId>
    <name>SMTPMailSubject</name>
    <val><![CDATA[CardioLog Report]]></val>
</param>
```

Note that the <handlerId> should be the CardioLogScheduler id in the <handlers> section:

```
<handler>
    <handlerId>6</handlerId>
    <handlerName>CardioLogScheduler</handlerName>
…
```

Report Scheduling –Service Parameters dialog

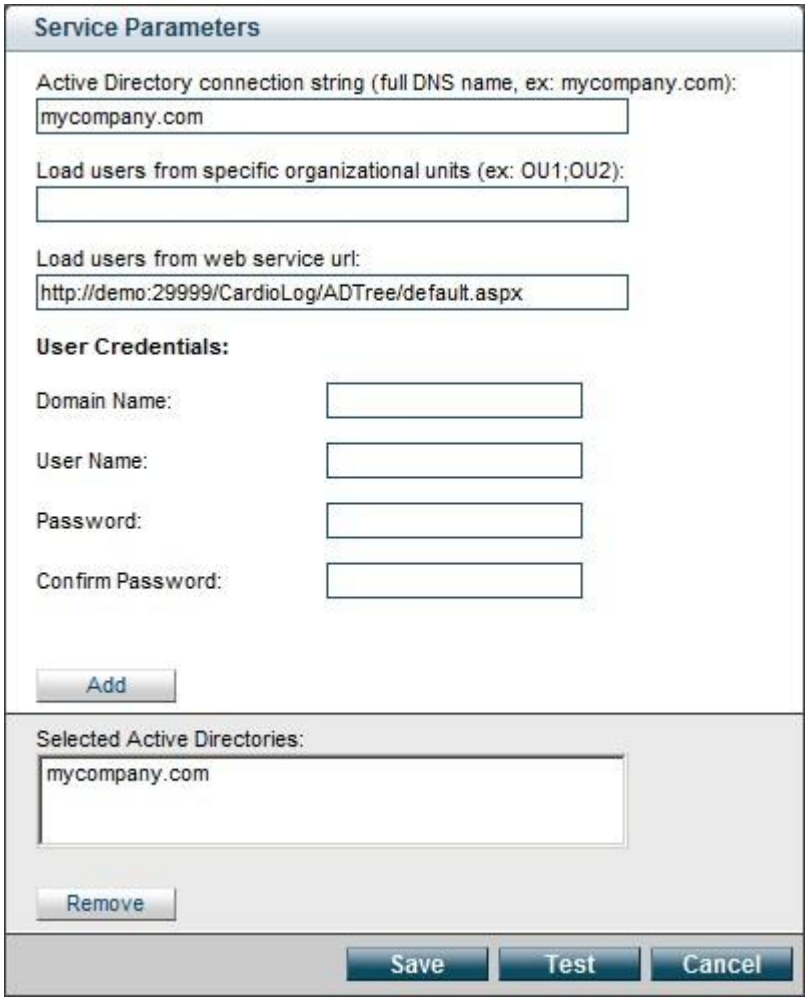


Select Users and Groups E-mail Address dialog

5.5 Active Directory Updates

CardioLog provides the ability to segment authenticated visitors by their user names and the groups they belong to. The Active Directory Updates service component retrieves the list of users and groups directly from Active Directory.

1. In the **Administration** pane, click **CardioLog Scheduling Service**.
2. Click **Active Directory Updates**.
3. Set the schedule type and then click **Next**.
4. In the **Service Parameters** dialog, fill out the following fields:
   - **Active Directory Connection String** - A full DNS name for the Active Directory Server. *Example: "mycompany.com"*
   - **Load Users From Specified Organizational Units -** A list of semicolon-separated organizational units. *Example: "OU1;OU2"*
     By default the Active Directory Updates service component loads users from the entire Active Directory.
   - **Load from external Web service URL -** this is an optional field, for loading users from an Active Directory which is located in DMZ (using a designated web service).
   - **Active Directory Credentials –** this is an optional field. If the CardioLog Scheduling Service account is a member of your domain, there is no need to supply credentials.
5. Click **Add** to add the Active Directory to the selected Active Directories.
6. Select the Active Directory domain in the selected Active Directories box and click **Test** to test the connection to your domain.
7. Repeat steps 4-6 for each Active Directory domain.
8. Click **Save**, and restart **CardioLog Scheduling Service**.



Active Directory Updates - Service Parameters dialog

5.6 User Categories Updates

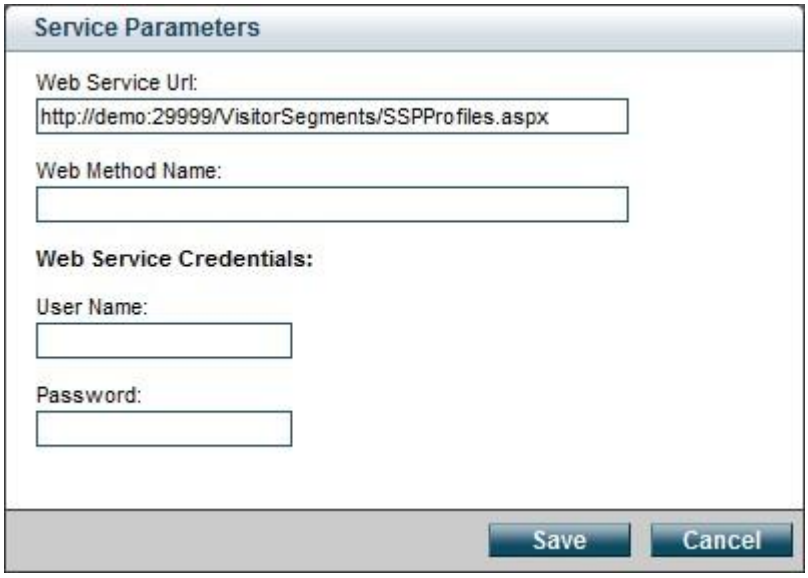
CardioLog provides the ability to segment visitors by any custom category. The User Categories Updates service component retrieves the list of custom categories from a designated web service.

To configure visitor segmentation by Active Directory attributes or by SharePoint user profiles, see the CardioLog Advanced Administration Guide.

1. In the **Administration** pane, click **CardioLog Scheduling Service**.
2. Click **User Categories Updates**.
3. Set the schedule type and then click **Next**.
4. In the **Service Parameters** dialog, fill out the following fields:
   - **Categories Web Service URL**
     Example: "http://<SERVER_NAME>/VisitorSegments/SSPProfiles.aspx"

- **Web Method Name** - optional
- **User Name -** optional
- **Password -** optional

5. Click **Save**, and restart **CardioLog Scheduling Service**.



Category Agent - Service Parameters dialog

5.7 Usage Data Processing (Remote Environments)

CardioLog can also monitor external environments (such as internet sites) and store the tracking data in a temporary repository (CardioLog Offsite DB). The Usage Data Processing (Remote Environments) service component is responsible for importing data from the temporary repository to the CardioLog database.

1. In the **Administration** pane, click **CardioLog Scheduling Service**.
2. Click **Usage Data Processing (Remote Environments)**.
3. Set the schedule type and then click **Next**.
4. In the **Edit Service Parameters** dialog, fill out the following fields:
   - **Offsite URL -** the Offsite web application URL
     Example: "http://<SERVER_NAME>/OffsiteSQL/DataRetrieve.aspx"
   - **Bulk Size** - the number of events to transfer in each bulk
     Example: 100
5. Click the **Add** the Offsite URL to the selected Offsite URLs.
6. Click **Save**, and restart **CardioLog Scheduling Service**.

Usage Data Processing (Remote Environments) - Service Parameters dialog

5.8 Starting the CardioLog Scheduling Service

1. Click on **Start** > **Run** > services.msc
2. Open **CardioLog Scheduling Service.**
3. In the **CardioLog Scheduling Service** properties window, click **Start** and then **OK**.

Note:

If you have selected Windows Authentication as the authentication access mode for the CardioLog database (this was done in the Installation Wizard), then the **CardioLog Scheduling Service** login account must be assigned a db_owner role for the CardioLog database.

6. Report Templates

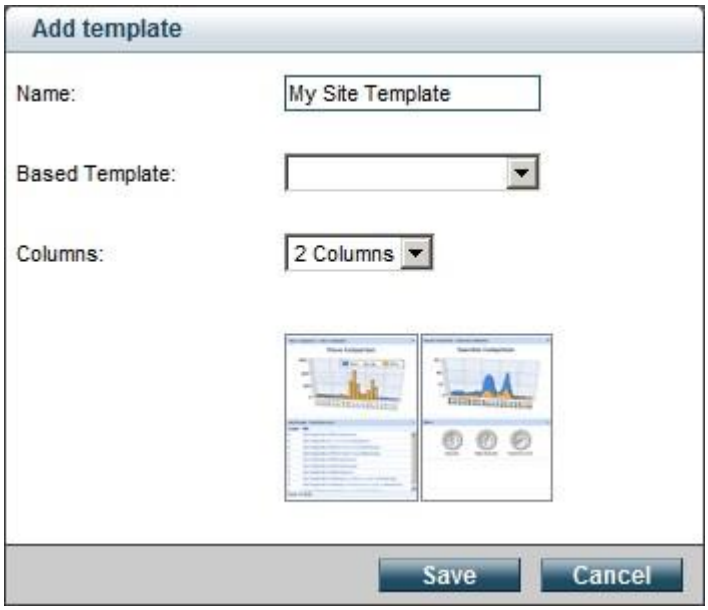
6.1 Creating templates

A user with the Administrator role in CardioLog can add templates to the various item types of the monitored environments.
CardioLog report templates are based on system item types. For example - To create a report template for SharePoint sites, select the **Site** item type.
To determine your item type, see the **Entity Type** in the item properties (In the Navigation pane, under Analysis Center, click an item in Object Explorer and then select **Properties**).

1. In the Navigation pane, under Administration, click **Templates** to view the system item types.
2. Click an item and select **Add.**

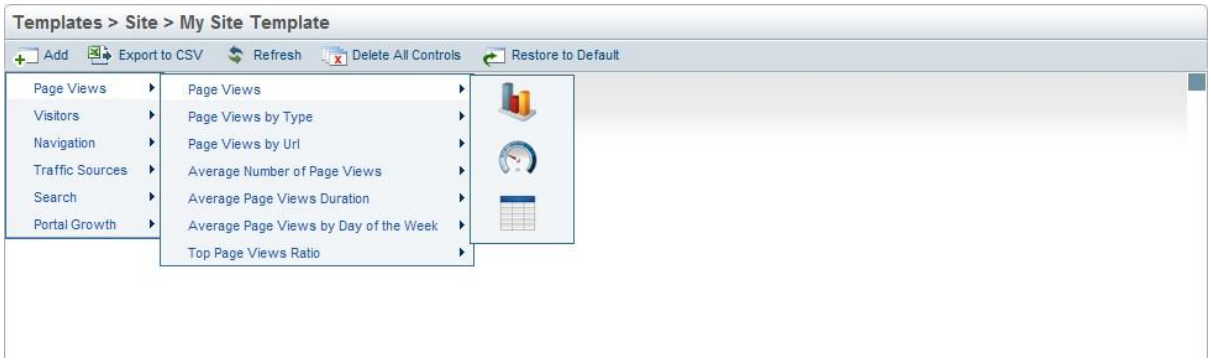
Add template

3. In the Add Template dialog, enter the template name in the **Name** text box and then select the number of columns for the template.
4. To base the new template on an existing template, select a template from the **Based Template** drop down list.
5. Click **Save**.

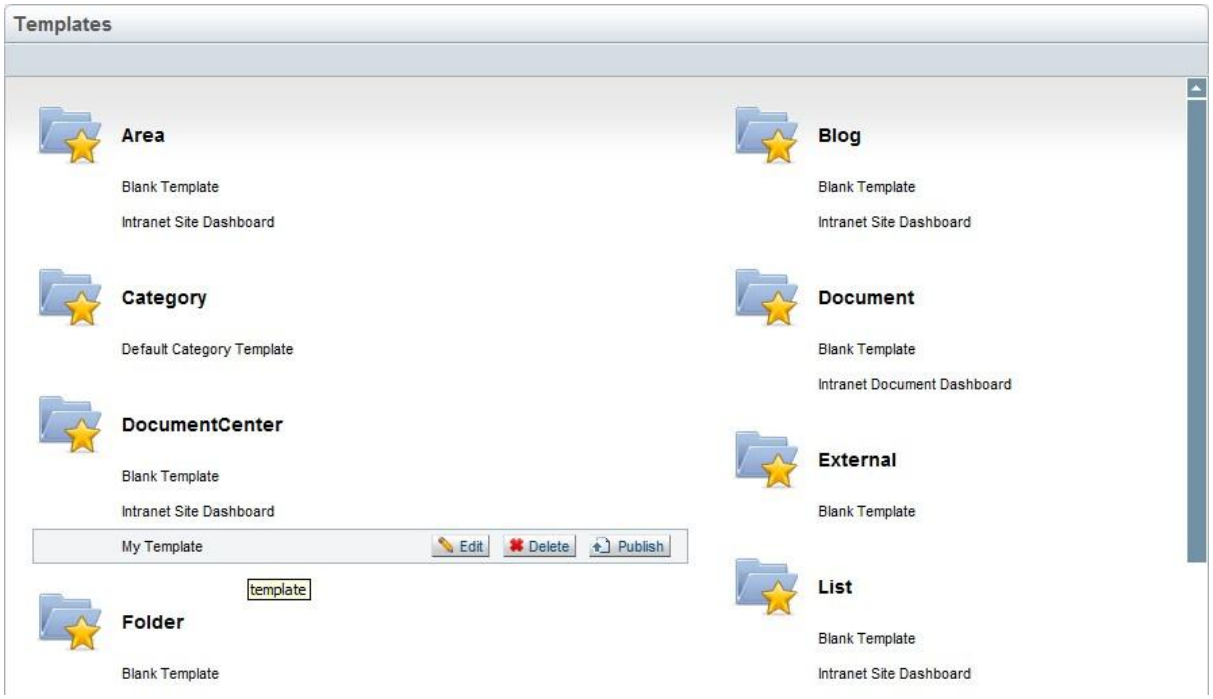


Add Template dialog

6. To edit a template, click on it and select **Edit**. When a template is in Edit Mode, you can add visual controls to it. Click **Add** in the Top Toolbar and select a visual control to add to the template (for a complete list of available visual controls, see the Reports Gallery).
7. To delete a template, click on it and select **Delete.**
8. To publish your template for drill down, click your template and select **Publish**. For more information about data drill down, see the CardioLog User Guide.



Template in Edit Mode



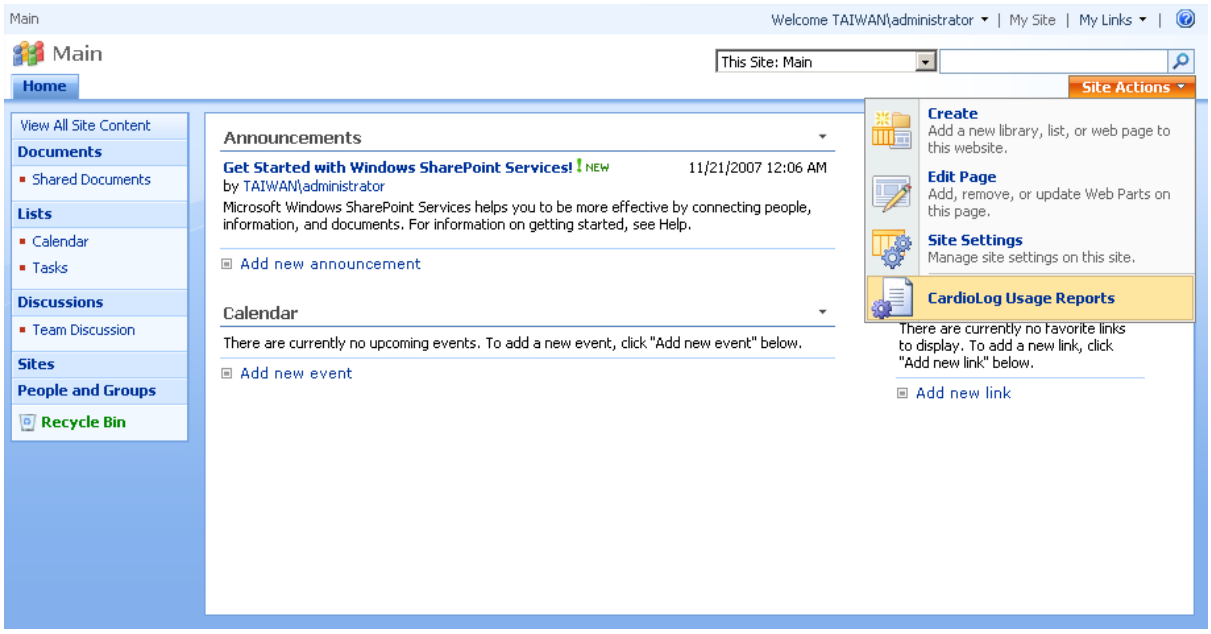
Edit/Delete/Publish Template

6.2 Displaying real time data from within your SharePoint portal

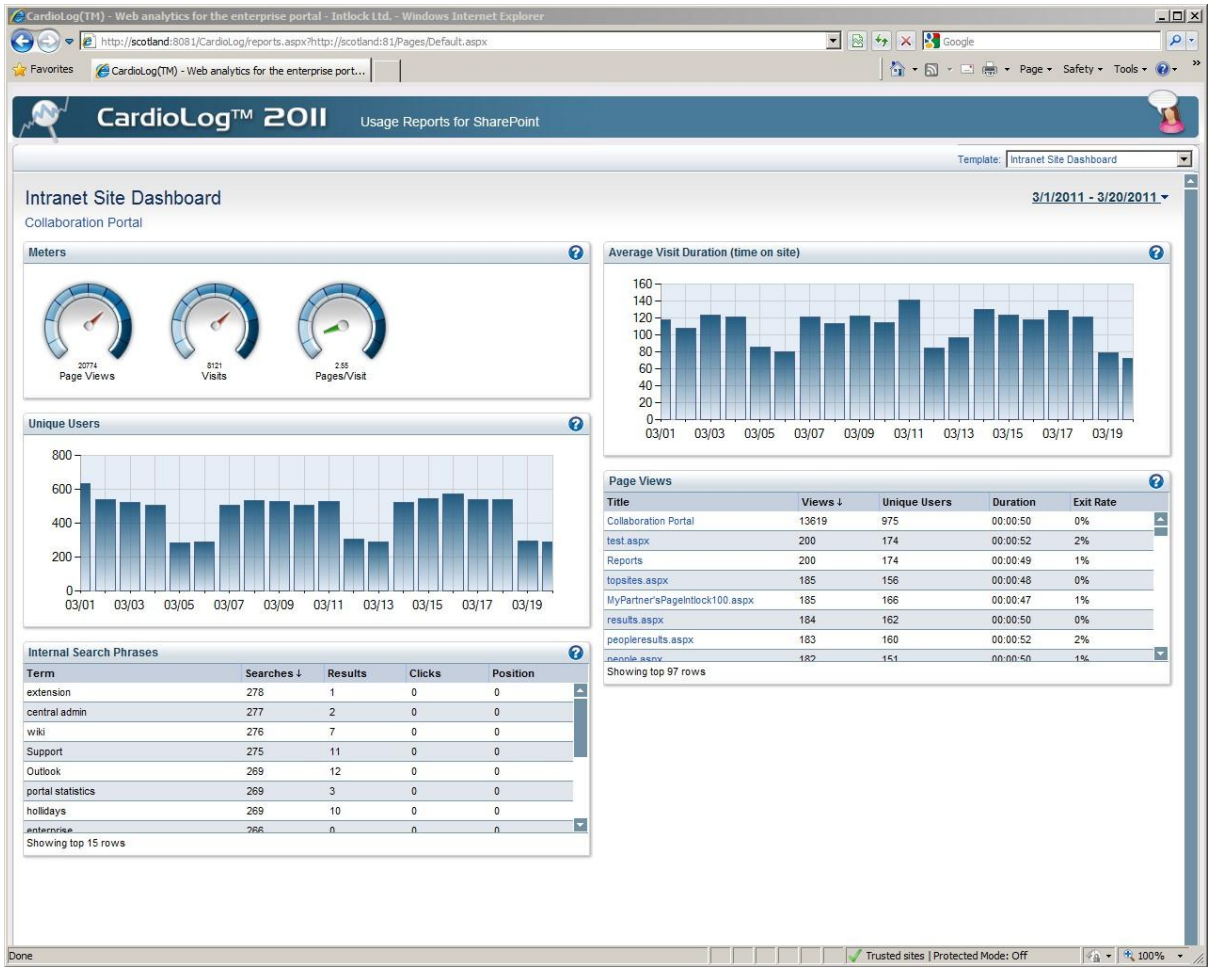
The capability to export a CardioLog report into a SharePoint Web Part (see How to export a report as a Microsoft SharePoint Web Part in the CardioLog User Guide) is designed for displaying specific usage reports within specific SharePoint pages (for instance, a Wiki site manager who wishes to display in the site homepage a list of the most popular wiki pages).

When it comes to ad-hoc reporting, you can use the "CardioLog Usage Reports" SharePoint Feature – which enables the submission of usage queries directly from your SharePoint portal.

1. The system administrator creates published report Templates for pages (objects) in the portal. These templates are available from the portal pages.
2. Install the "CardioLog Usage Reports" SharePoint Feature. Now each portal page displays (under Site Settings) a list of available templates for real time usage reports.
3. Select a desired template in order to run a real time usage report for the page you are visiting. The report is displayed in a new browser window.



Submit queries directly from portal pages with the "CardioLog Usage Reports" SharePoint feature



CardioLog Usage Report

6.2.1 Installing the "CardioLog Usage Reports" SharePoint Feature

1. Contact us for the download link.
2. Extract the zip file and drop CardioLogUsageReportsSolution.wsp under C:\Program Files\Common Files\Microsoft Shared\web server extensions\1X\BIN\
3. Execute the following commands from command prompt in order to add and deploy the solution to the SharePoint farm (edit the BIN directory path):

```
cd c:\program files\common files\microsoft shared\web server extensions\1X\BIN
stsadm -o addsolution -filename CardioLogUsageReportsSolution.wsp
stsadm -o deploysolution -name CardioLogUsageReportsSolution.wsp -local
```

4. Activate the "CardioLog Usage Reports" feature for the Site Collection of your choice.
5. Add the following JavaScript code to the file containing the CardioLog tracking code. Edit the CardioLog server name and port:

```
function getStatistics() {
 window.open("http://<CardioLogServer>:<port> /CardioLog/reports.aspx?"+document.location.href);
}
```

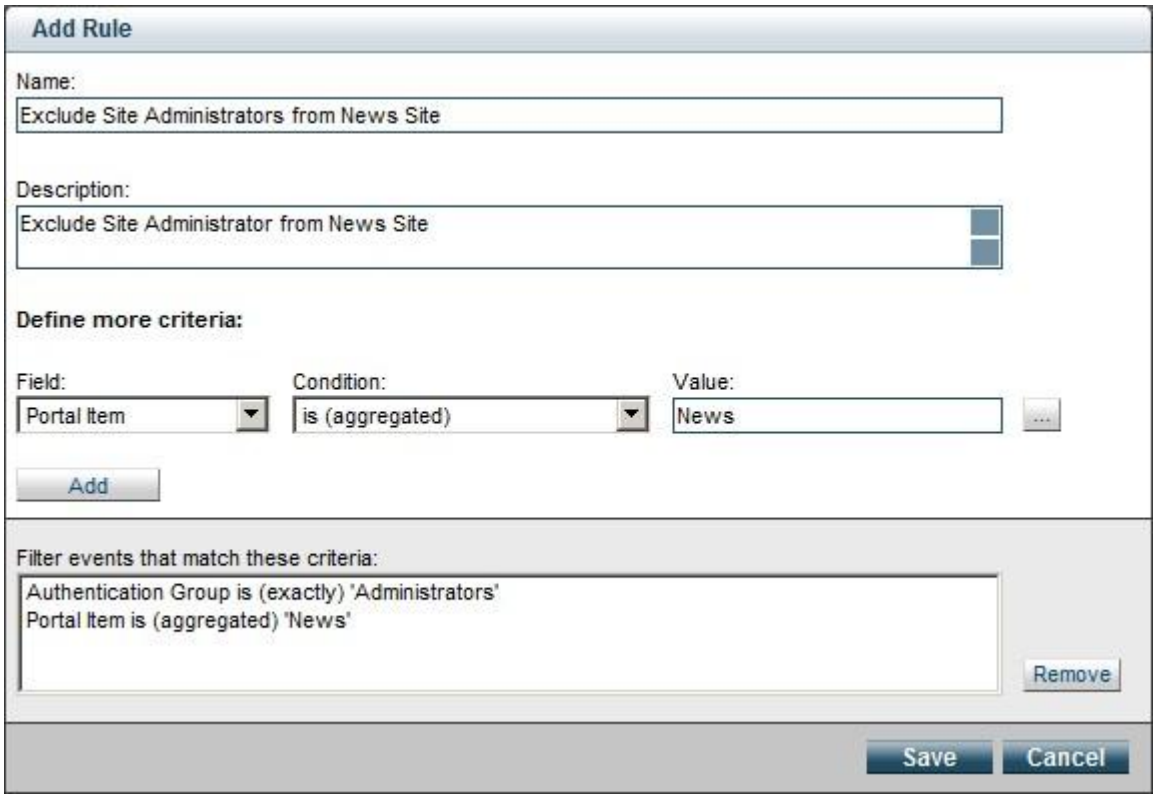
6. Perform IISRESET on all SharePoint WFE's.

7. Black List

7.1 Creating Rules

The Black List defines rules for data which should not be collected in the monitored environments. For example, data on views for a specific user in a specific time frame, etc. A Black List rule is applied from the moment the rule is created (and not retroactively).

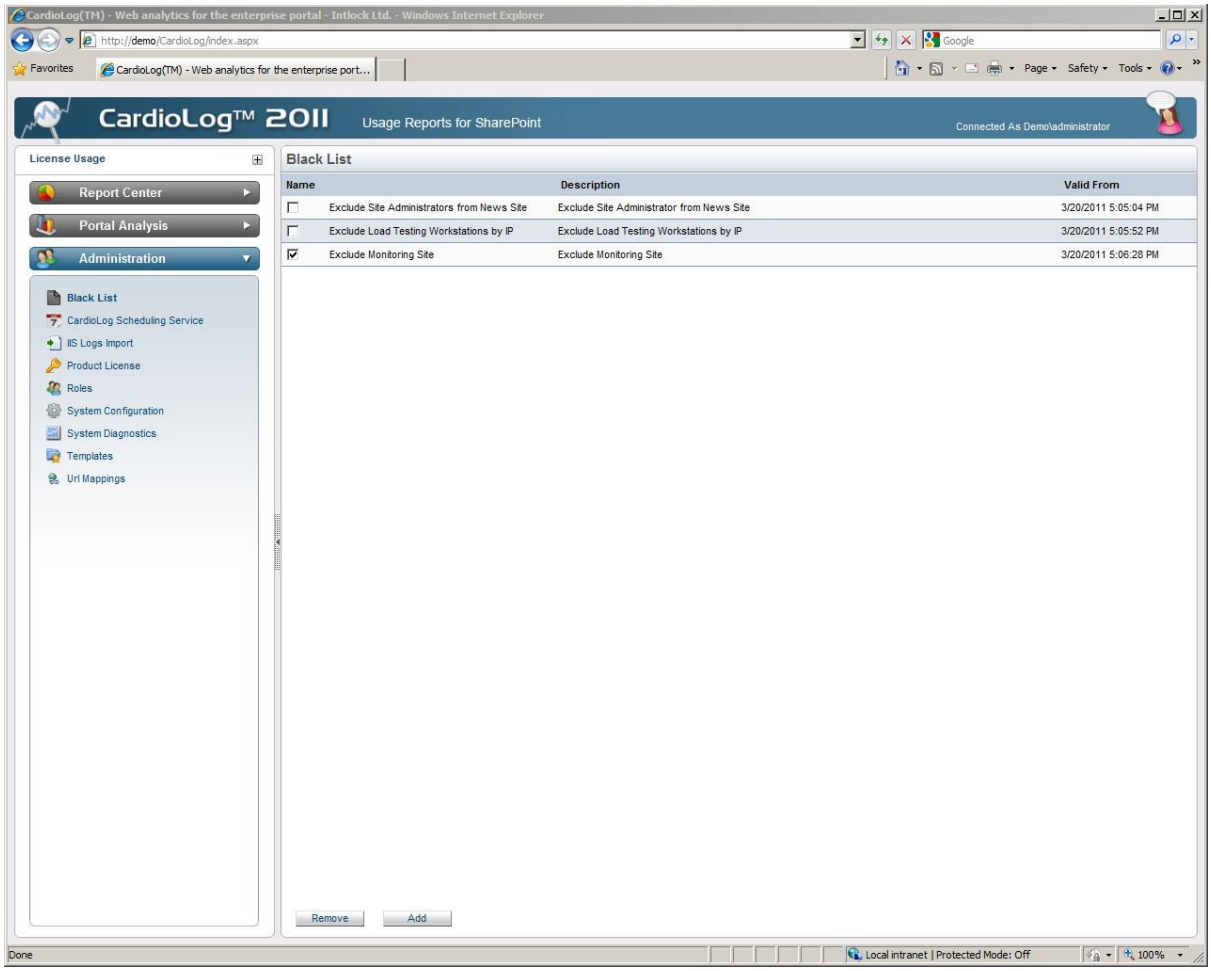
1. In the Navigation pane, under Administration, click **Black List**.
2. In the Central Area, click **Add**.
3. In the Add Rule dialog, enter the **Name** and **Description** fields.
4. In the Add Rule dialog, under **Define more criteria**, select values for the **Field**, **Condition** and **Value** fields (see the next sections in this guide for details on these fields).



Create Rule dialog

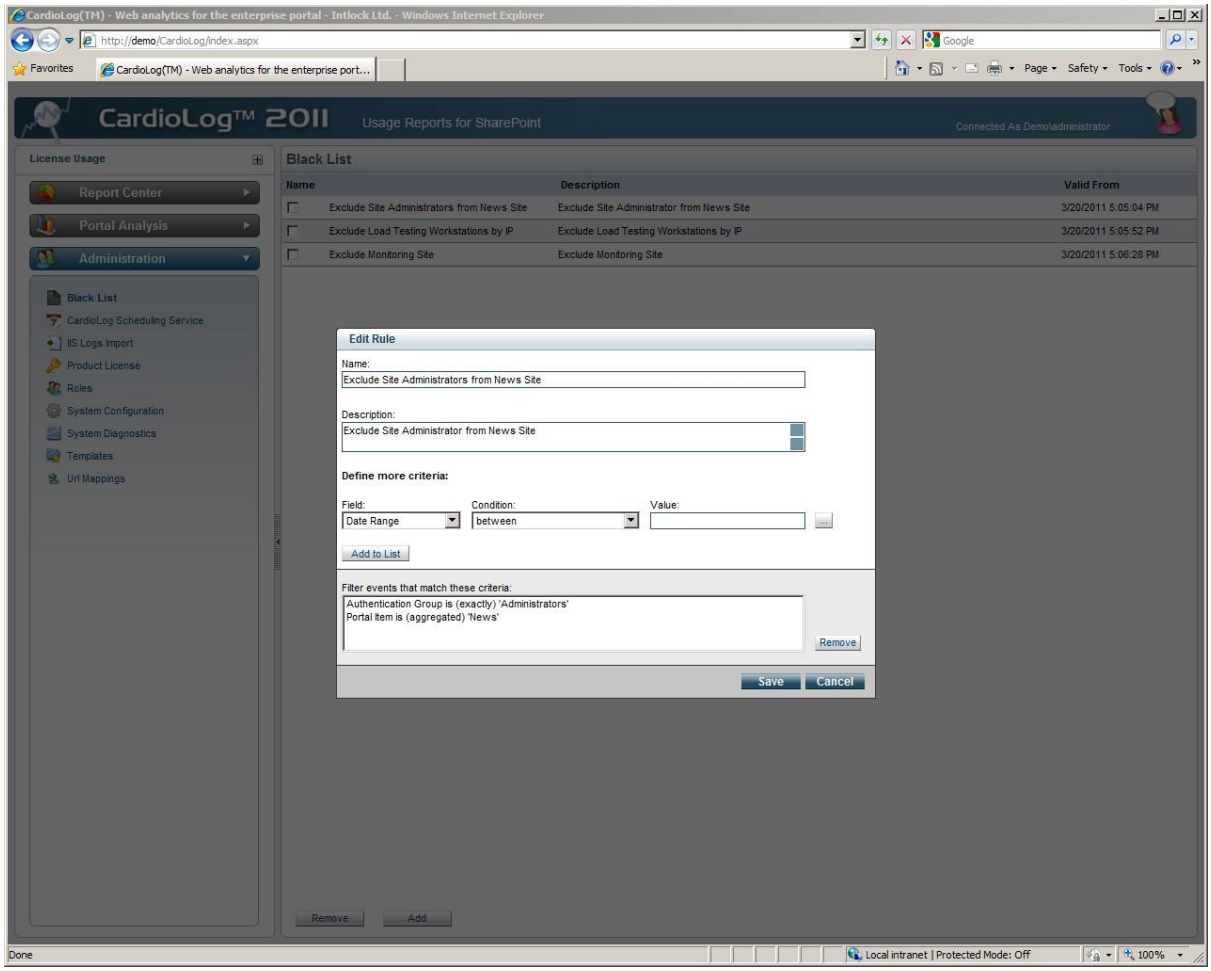
5. Click **Add**.
6. Click **Save**.

7. The new rule is added to the Black List. The **Valid From** Column in the Central Area displays the date from which the rule is applied.
   Note: The rules in the Black List have an OR (1) relationship, while the criteria for a rule have an AND (2) relationship.



Black List dialog

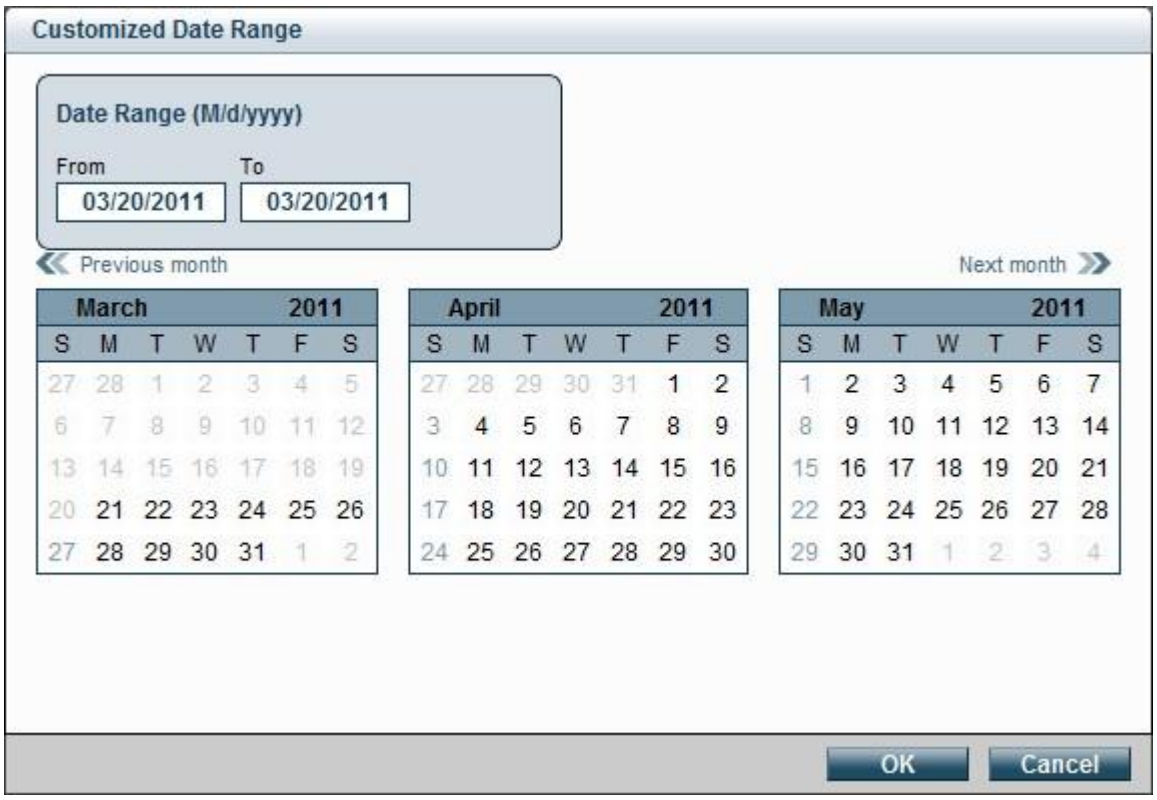
8. To edit a rule, click on it.
9. To delete a rule, select it and click **Remove**.



Edit Rule dialog

7.1.1 How to set a date range criterion for a Black List rule

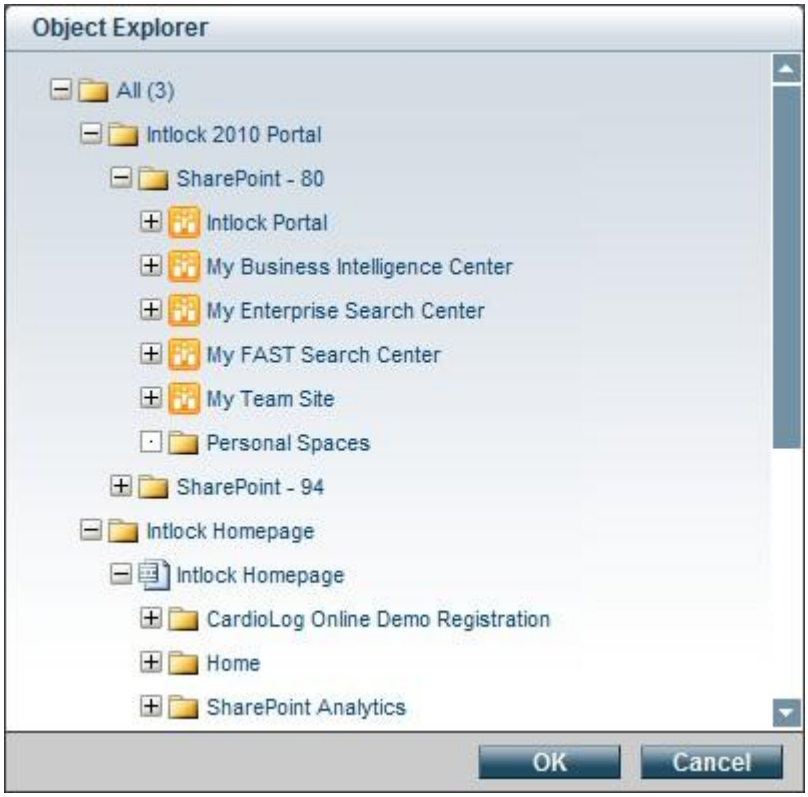
1. In the Add Rule dialog, in the **Field** drop down list, select **Date Range**.
2. Click on Browse (**...**) and select a date range.



Setting a date range criterion for a Black List rule

7.1.2 How to set a source criterion for a Black List rule

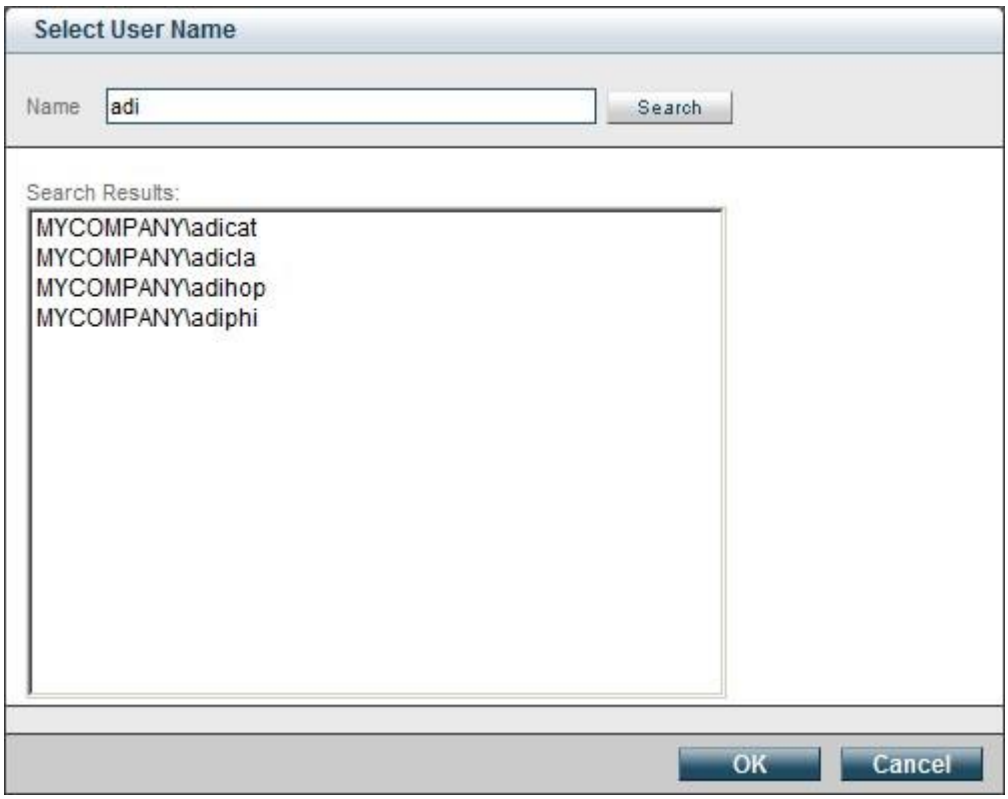
1. In the Add Rule dialog, in the **Field** drop down list, select **Portal Item**.
2. In the **Condition** drop down list, select **is (specific)** to select a specific item or select **is (aggregated)** to include also child items.
3. Click on Browse (**...**) and select the desired item.



Setting a portal item criterion for a Black List rule

7.1.3 How to set a user criterion for a Black List rule

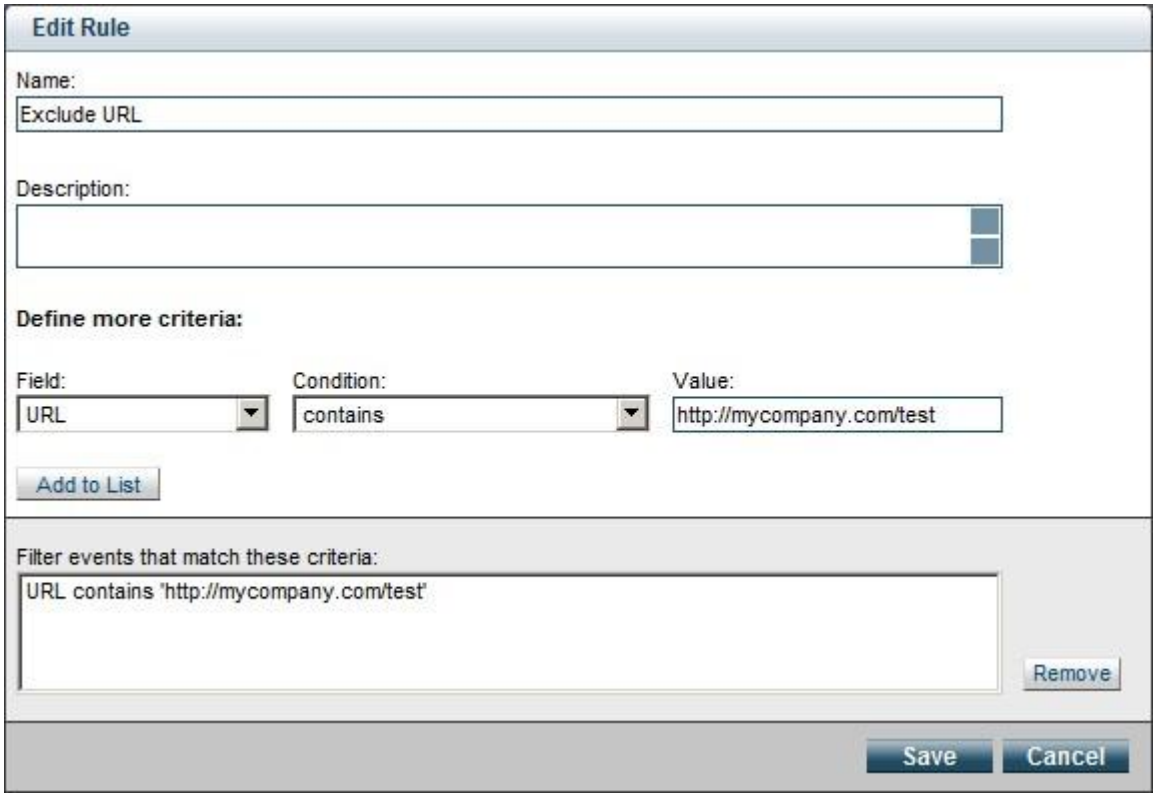
1. In the Add Rule dialog, in the **Field** drop down list, select **User Name** or **Authentication Group**.
2. In the **Condition** drop down list, select the desired condition.
3. Click on Browse (**...**) and select the desired user/group.



Setting a user criterion for a Black List rule

7.1.4 How to set a URL criterion for a Black List rule

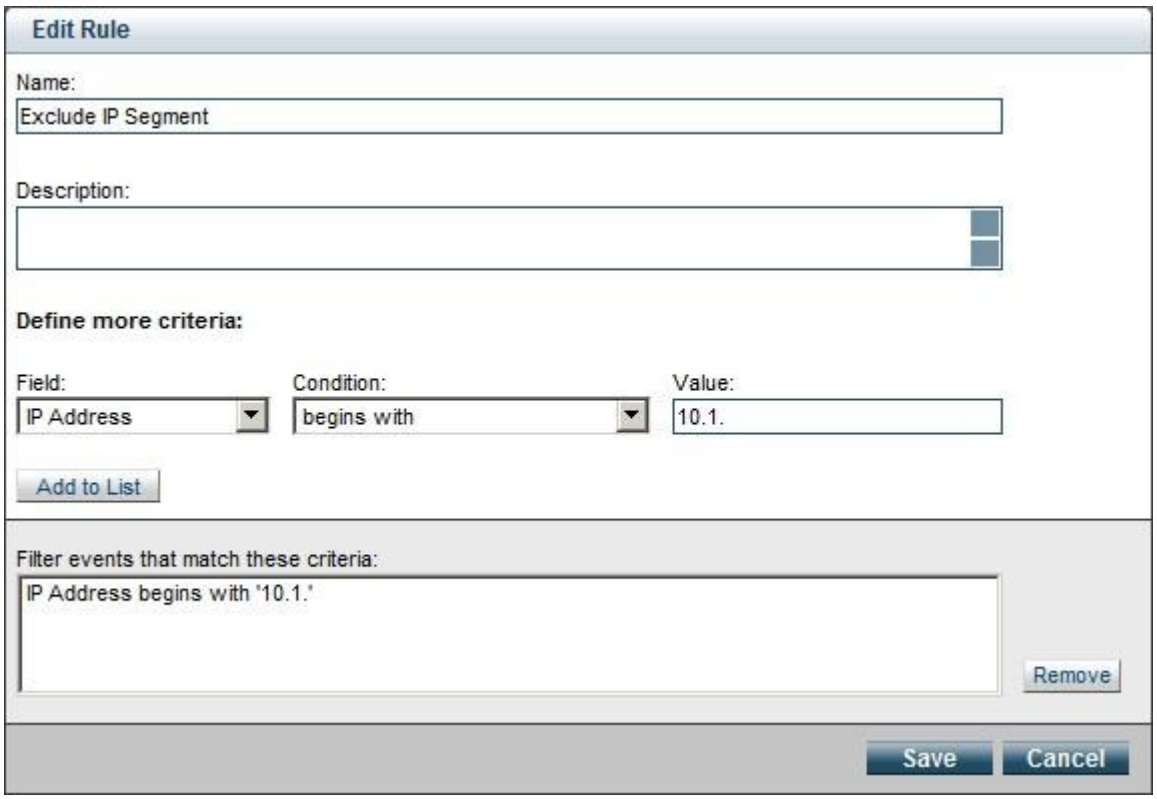
1. In the Add Rule dialog, in the **Field** drop down list, select **URL**.
2. In the **Condition** drop down list, select the desired condition.
3. Enter a URL address in the **Value** text box.



Setting a URL criterion for a Black List rule

7.1.5 How to set an IP Address criterion for a Black List rule

1. In the Add Rule dialog, in the **Field** drop down list, select **IP Address**.
2. In the **Condition** drop down list, select the desired condition.
3. Enter an IP address in the **Value** text box.



Setting an IP Address criterion for a Black List rule

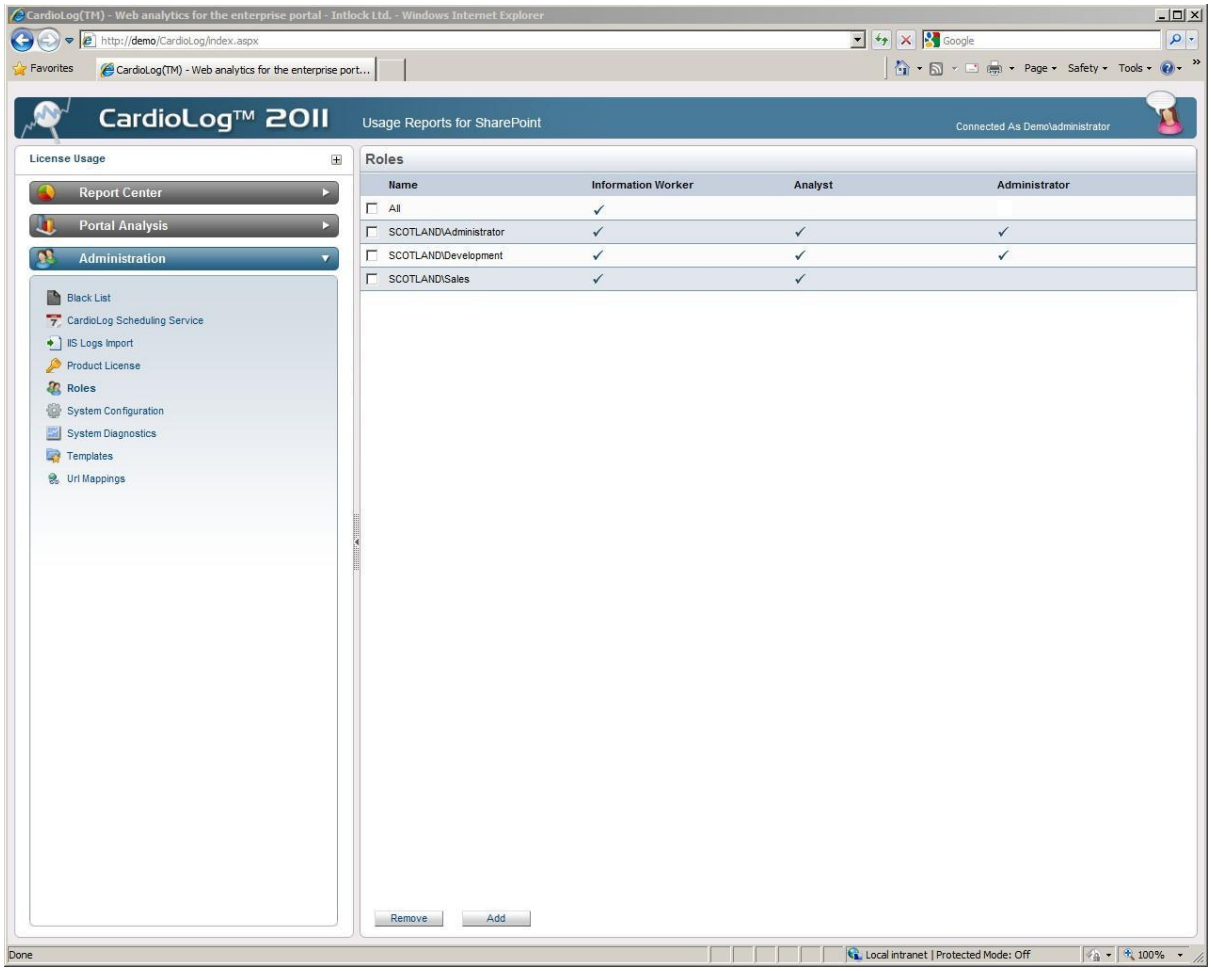
8. System Roles

An administrator can assign roles to users and groups in CardioLog (see role definitions in section 2 of this guide).

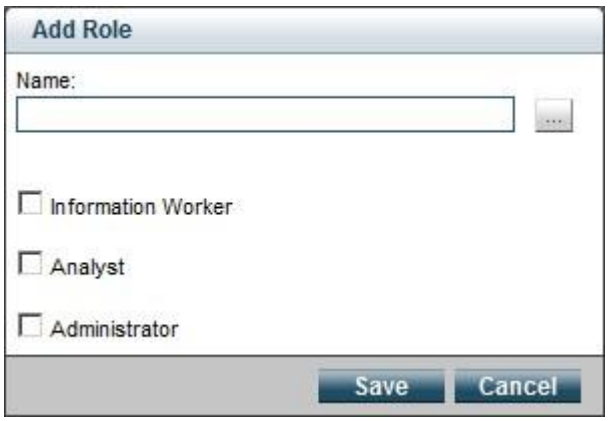
Note: An Administrator role is automatically assigned to the user who installs the product. By default, access to the CardioLog UI is denied for users and groups that are not assigned with a system role - or which are not defined in Active Directory (user names are retrieved by the Active Directory Updates service).

1. In the Navigation pane, under Administration, click **Roles**.
2. In the Central Area, click **Add**.
3. In the Add Role dialog, enter a user/group name in the **Name** text box.
4. While entering the user/group name, click on Browse (**...**) or on Ctrl+K to search for a user/group.
5. Select the check boxes to assign permissions to the user/group.
6. Click **Save**.

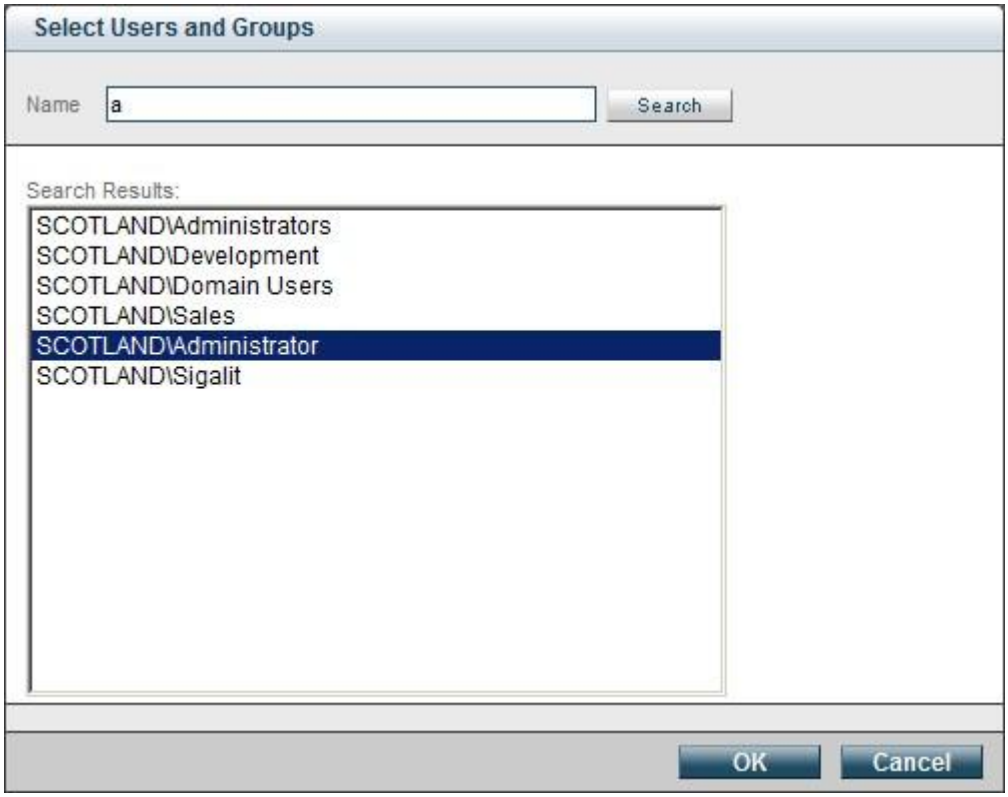
Note: user permissions precede group permissions.



Roles

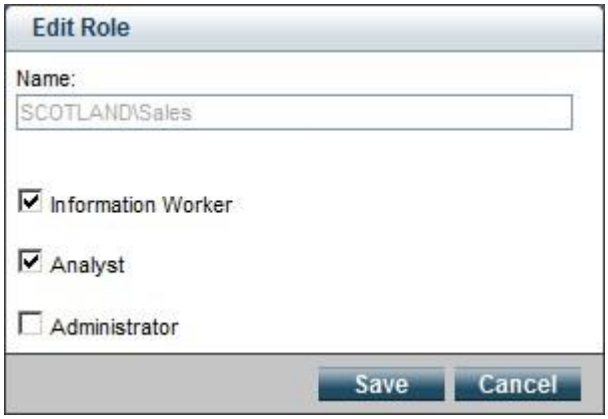


Add Role dialog



Select users and groups

7. To edit a role, click on it.

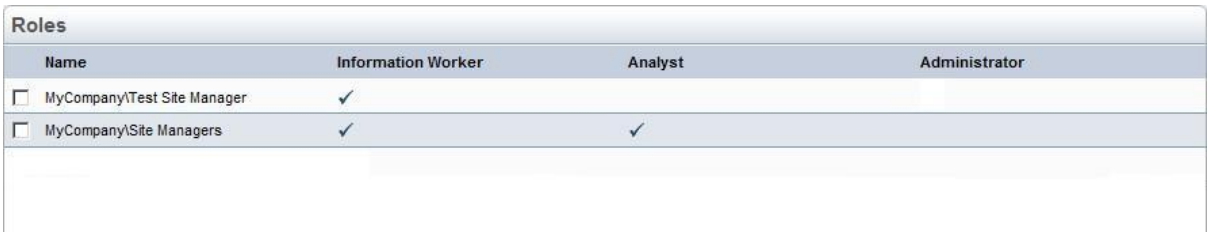


Edit Role dialog

8. To remove a role, select it and click **Remove**.

8.1 Permission Assignment Samples

1. In order to grant permissions for Analysis Center to all users in the MyCompany\Site Managers group – excluding a specific user, set the following permissions:
   - Assign the Analyst and Information Worker roles for the group
   - Assign the Information Worker role for the user (which belongs to the above group)



Permission assignment sample

2. The default group "All" is used to assign roles to all users. To prevent all users from using CardioLog, and to assign a specific group permissions to use the system, set the following permissions:
   - Un-check all roles for the "All" group
   - Check roles for a specific user group

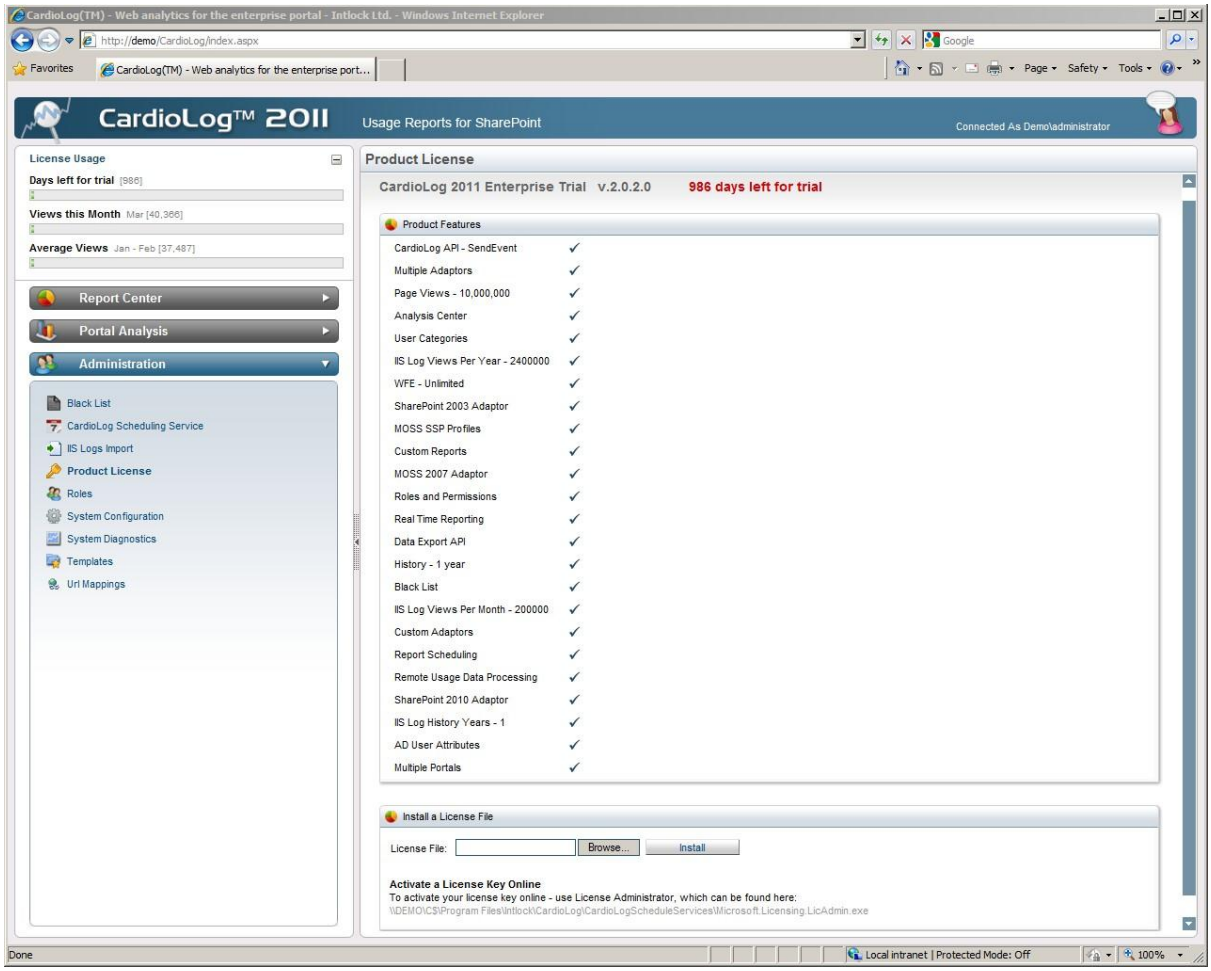
Using the "All" default group to assign permissions to all users in Active Directory

9. Product License

The Product License page provides information about the licensed product components, and enables the installation of new licenses.

9.1 Product Features

1. In the **Administration** pane, click **Product License**.
2. The product features for CardioLog are listed in the **Product Features** table.

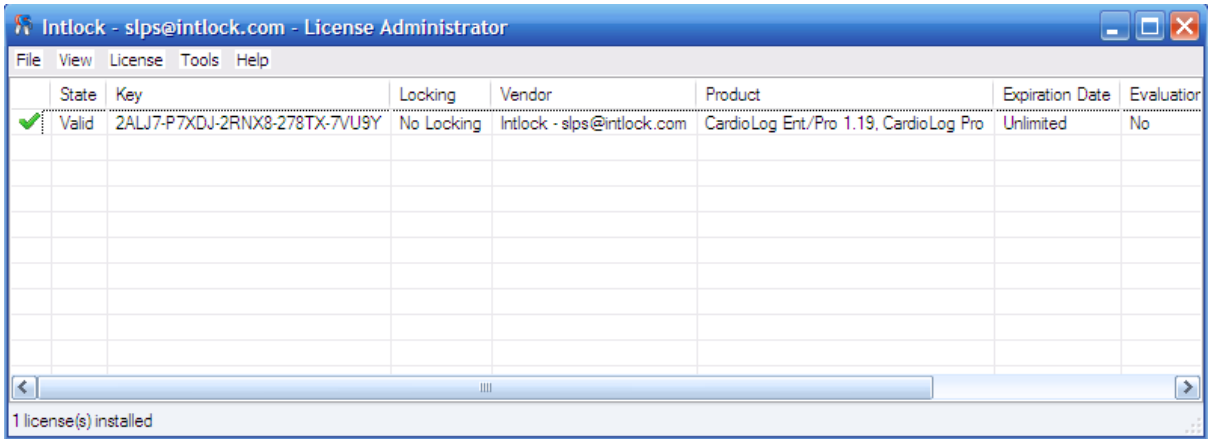


Product License dialog

9.2 Installing Purchased Product Features

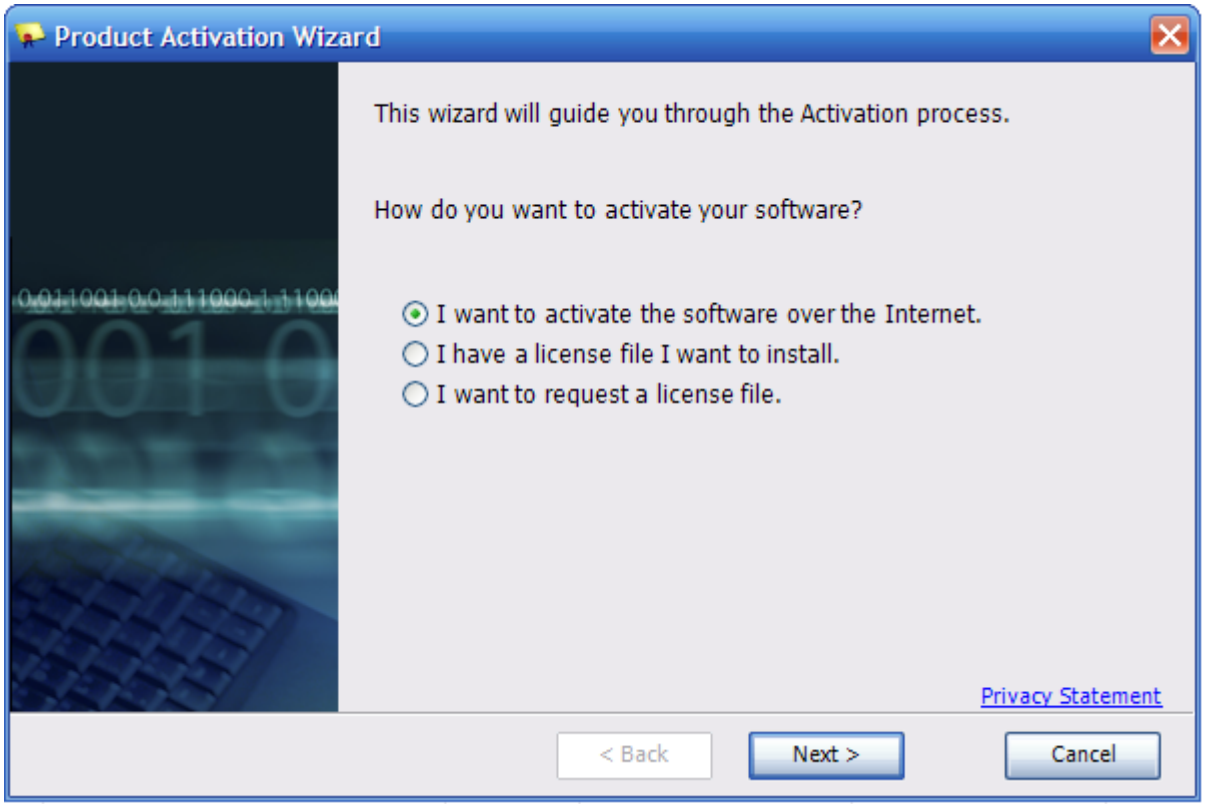
1. In the **Administration** pane, click **Product License**.

2. To Activate your purchased license key, use **License Administrator**, which can be found at <CardioLog Installation Directory>\CardiologScheduleServices\ Microsoft.Licensing.LicAdmin.exe.



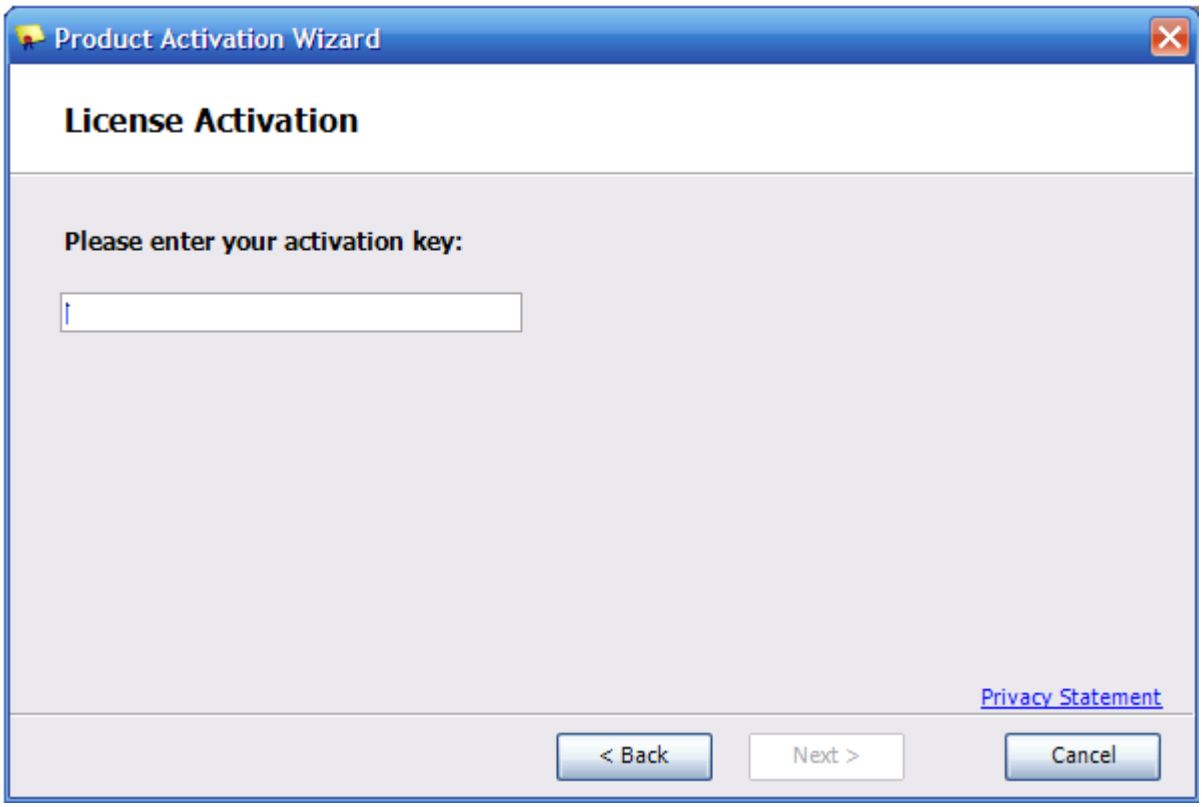
License Administrator dialog

3. In the **File** menu, select **Activation Wizard**.



Activation Wizard dialog

4. Select **I want to activate the software over the Internet** and then click **Next**.
5. In the **License Activation** dialog, enter your activation code and then click **Next**.



License Activation dialog

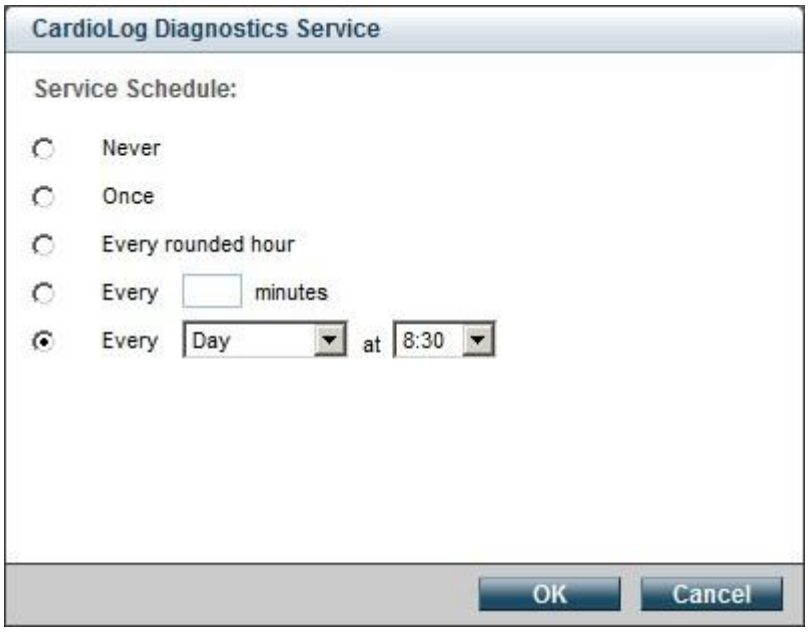
10. System Diagnostics

10.1 CardioLog Diagnostics Service

The CardioLog Diagnostics Service checks the status of the CardioLog Scheduling Service components and tracking agents and sends service errors alerts via e-mail.

10.1.1 How to schedule the CardioLog Diagnostics Service

1. It is highly recommended to schedule the CardioLog Diagnostics Service to run after the CardioLog Scheduling Service components run. By default, the CardioLog Diagnostics Service runs every day at 08:30 AM.
2. In the **Administration** pane, click **System Diagnostics**.
3. In the **Diagnostics Dashboard**, click on **CardioLog Diagnostics Service**.
4. The **CardioLog Diagnostics Service** dialog includes the following fields:
   - **Service Schedule Type** - defines the time interval to run the service component:
     - **Never** – not at any time.
     - **Once** - one time only, once the service is restarted.
     - **Every rounded hour** - every hour, on the hour (Hourly).
     - **Every X minutes** – every X minutes (Interval).
     - **Every Day at HH:MM** - Every day at HH:MM (Daily).
     - **Every Sunday at HH:MM -** Every Sunday at HH:MM. Select the day of the week and the time (Weekly).



CardioLog Diagnostics Service dialog

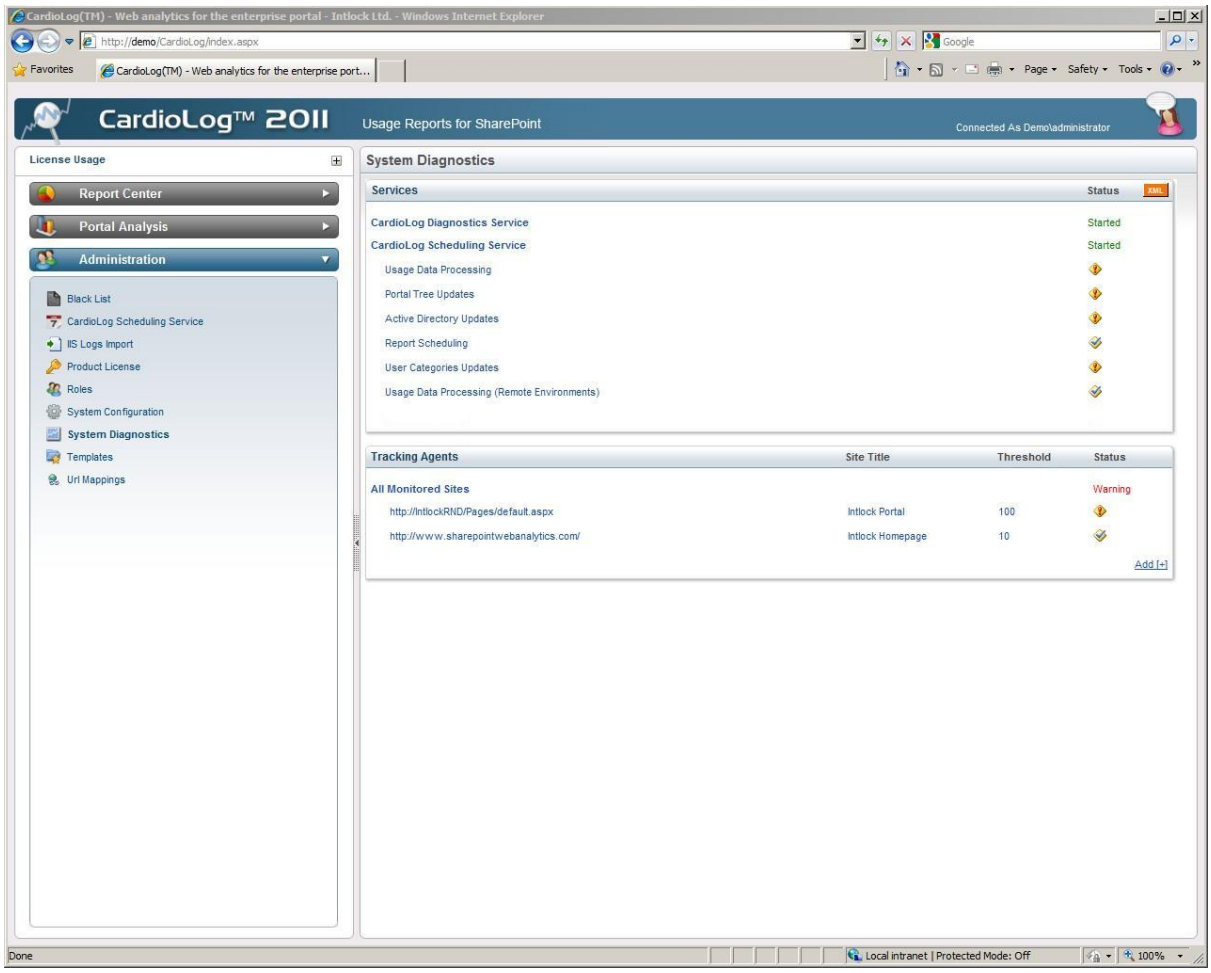
10.2 Starting the CardioLog Diagnostics Service

1. Click on **Start** > **Run** > services.msc
2. Open **CardioLog Diagnostics Service**
3. In the **CardioLog Diagnostics Service** properties window, click **Start** and then **OK**.

10.3 Diagnostics Dashboard

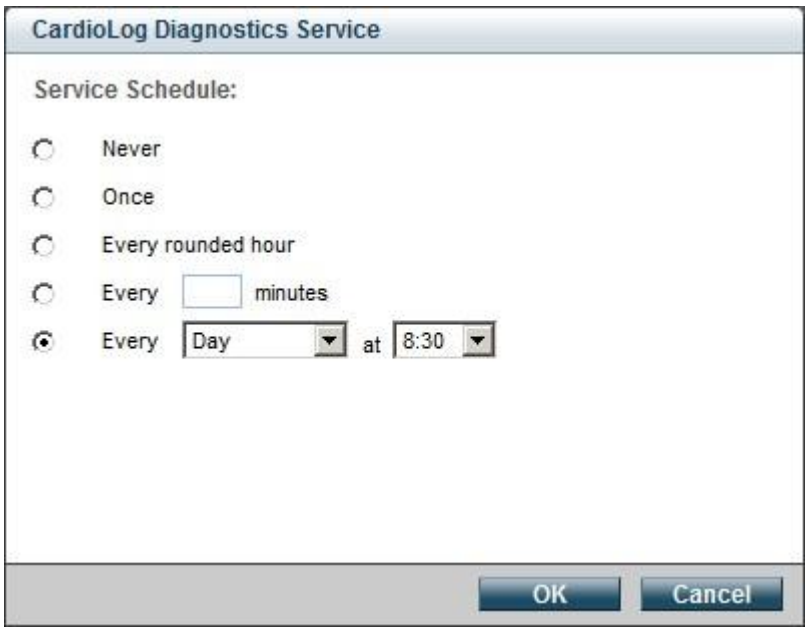
10.3.1 How to view the status of the CardioLog Scheduling Service components

1. In the **Administration** pane, click on **System Diagnostics**.



Diagnostics Dashboard dialog

2. In the **Services** table, click on **CardioLog Diagnostics Service** in order to edit the service schedule type.



CardioLog Diagnostics Service dialog

3. In the **Services** table, click on **CardioLog Scheduling Service** in order to view the status of the service.

CardioLog Scheduling Service Status dialog

4. In the **CardioLog Scheduling Service Status** dialog, check the **Send service error alerts** checkbox - in order to receive service error alerts via e-mail.

5. Click on **Email Alerts Settings** to configure the e-mail settings.
1. In the **Configure Email Settings** dialog, fill out the following fields:
   - **SMTP Mail Server** - A full DNS name for the SMTP Server. *Example: "mycompany.com"*
   - **SMTP User Name, SMTP Password -** these are optional fields, for supplying credentials.
   - **System Administrator e-mail address –** recipients list for service error alerts. Click on the right arrow to select Email addresses.
2. Click **Add** to add the e-mail address to the selected recipients list.
3. Click **Save**, and restart **CardioLog Scheduling Service**.

To configure a secure SMTP server with a non-default port, or the CardioLog reports email sender and subject, edit the following keys in the [CardioLog Installation Folder]\CardioLogSchedulingService\Settings.config file in the <handlersParams> section:

```
<param>
    <handlerId>6</handlerId>
    <name>SMTPMailFrom</name>
    <val><![CDATA[CardioLog_Reports@intlock.com]]></val>
</param>
<param>
    <handlerId>6</handlerId>
    <name>SMTPUseSSL</name>
    <val><![CDATA[0]]></val>
</param>
<param>
    <handlerId>6</handlerId>
    <name>SMTPPort</name>
    <val><![CDATA[25]]></val>
</param>
<param>
    <handlerId>6</handlerId>
    <name>SMTPMailSubject</name>
    <val><![CDATA[CardioLog Report]]></val>
</param>
```

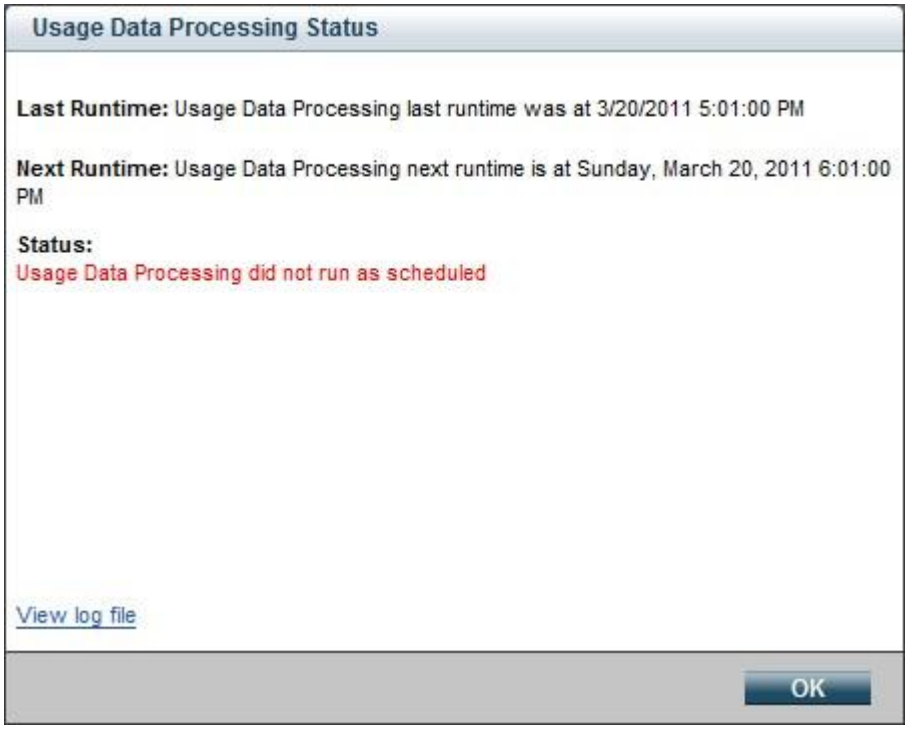
Note that the <handlerId> should be the CardioLogScheduler id in the <handlers> section:

```
<handler>
    <handlerId>6</handlerId>
    <handlerName>CardioLogScheduler</handlerName>
…
```

Configure Email Settings dialog

Select Users and Groups E-mail Address dialog

4. In the **Services** table, click on each service component to view the status of its status.



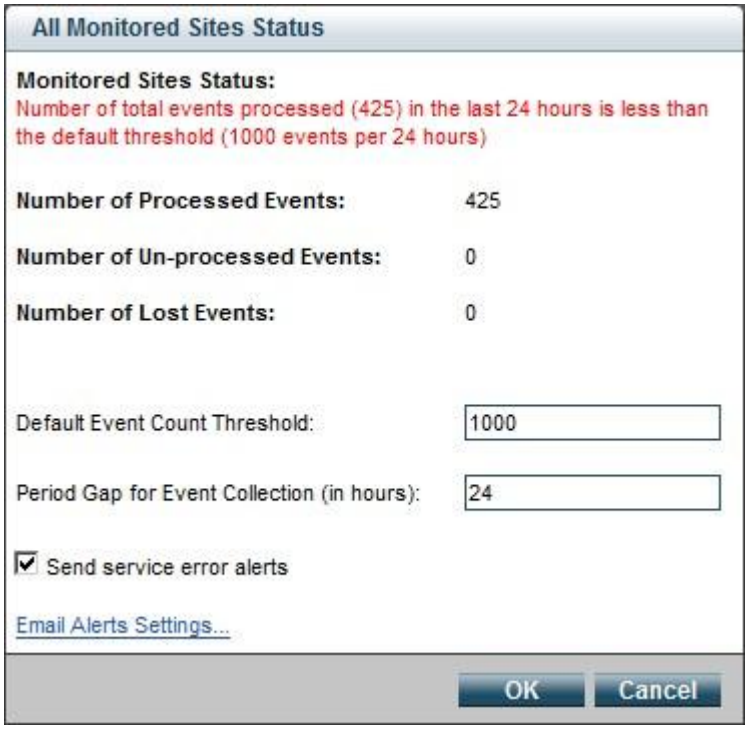
Usage Data Processing Status dialog

5. In the **Service Component** dialog, click on **View log file** to view the service component log file.
6. In the **Services** table, click on **XML** to view the status of all service components - in a single XML web page. This web page can be used by other monitoring systems in your organization as well.

10.3.2 How to view the status of the monitored websites

By default, alerts are sent via e-mail when the event count for all monitored websites is under the threshold. It is recommended to define a threshold for each monitored website - to better isolate usage tracking issue.

1. In the **Administration** pane, click on **System Diagnostics.**
2. In the **Tracking Agents** table, click on **All Monitored Sites** to view the status of all monitored websites.

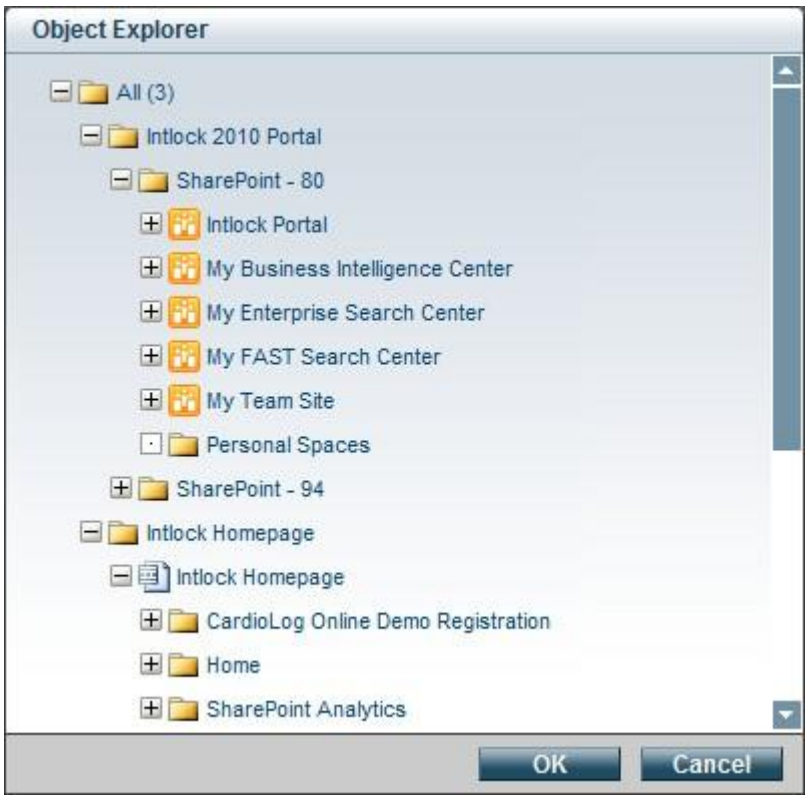


All Monitored Sites Status dialog

3. In the **All Monitored Sites Status** dialog, you can define the **Default Event Count Threshold** and the **Event Count Period (in hours)**.
4. In the **All Monitored Sites Status** dialog, select the **Send service error alerts** in order to get service error alerts via e-mail. These alerts are sent when the event count for all monitored sites is under the threshold.
5. Click on **Email Alerts Settings** to configure the e-mail settings.
6. In the **Tracking Agents** table, click on **Add**.

Add Monitored Site dialog

7. In the **Add Monitored Site** dialog, click on Browse (...) in order to choose a site from the Object Explorer dialog. Enter the default event count threshold for this site in the **Threshold** field.



Choose a site from the Object Explorer dialog

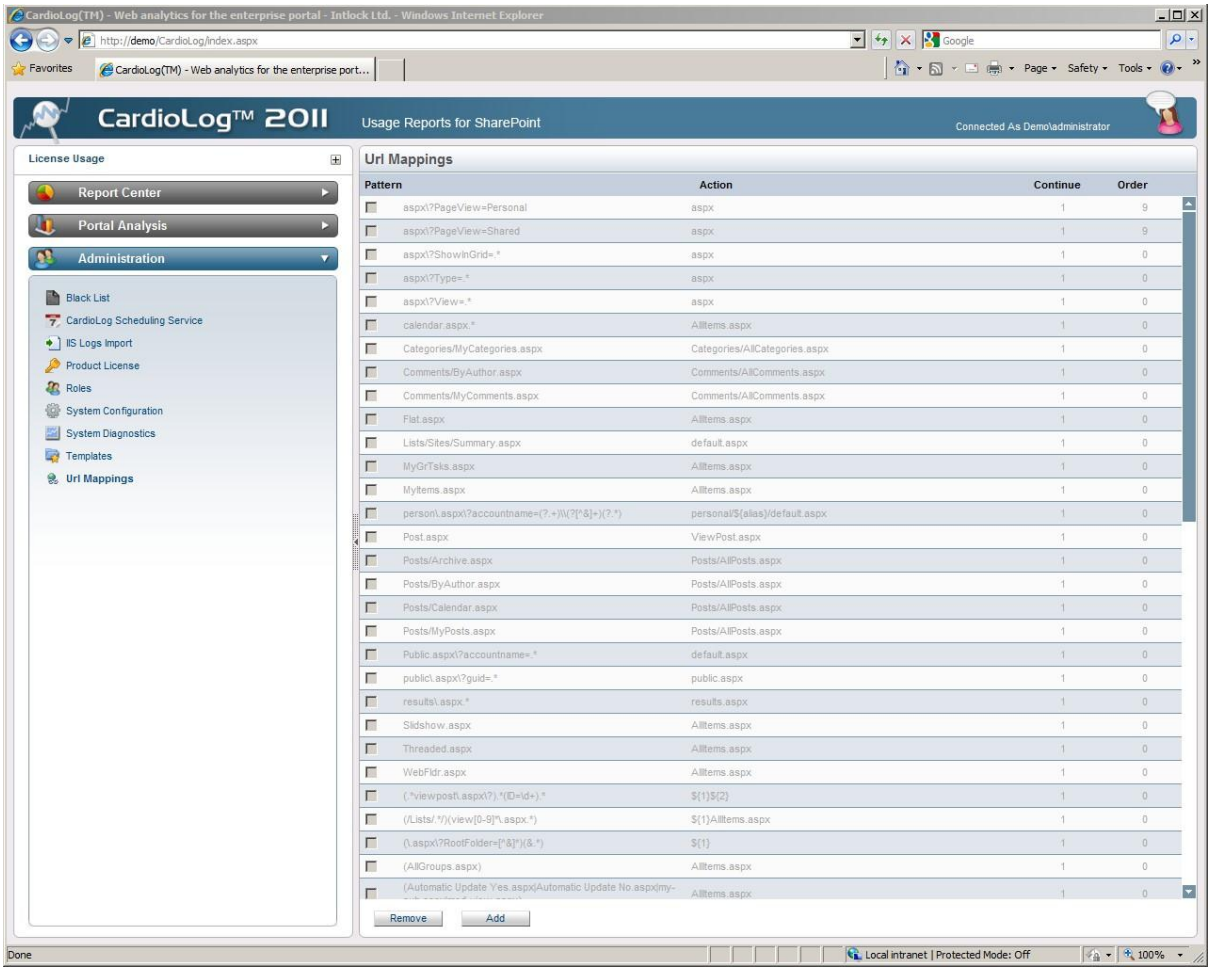
8. In the **Tracking Agents** table, click on each **Monitored Site** in order to edit or delete it.

Edit Monitored Site dialog

11. URL Mappings

The URL Mappings list defines the modifications that should be made to URL address while collecting data from the monitored environments. For instance, views for a page whose URL address includes a list of parameters will be written (after mapping) to the system without the URL parameters.

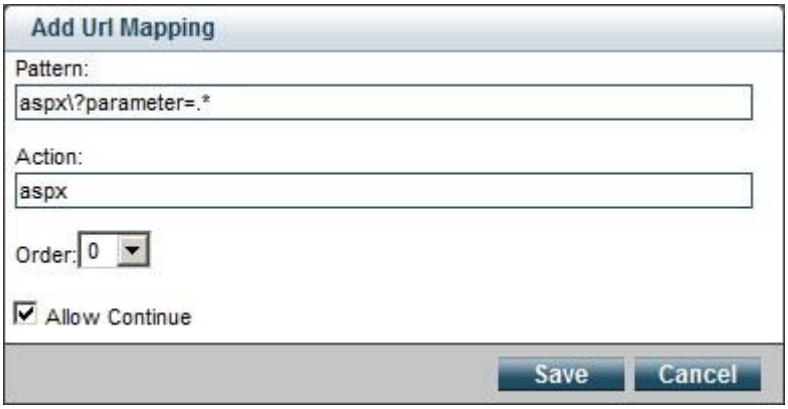
CardioLog ships with a list of default URL mappings (grayed out) for Microsoft SharePoint 2010, Microsoft SharePoint 2007 and Microsoft SharePoint 2003.



The URL Mappings Central Area

1. In the Navigation pane, under Administration, click **URL Mappings**.
2. In the bottom of the Central Area, click **Add.**
3. In the Add URL Mapping dialog, in the **Pattern** text box, enter the string to replace. Use a regular expression format.
4. In the **Action** text box, enter the replacement string.

5. You can set the order of mappings in the **Order** drop down list, and whether to continue with additional mappings - in **Allow Continue**.
6. Click **Save**.



Add URL Mapping dialog

7. To immediately apply the URL mapping, restart IIS on the CardioLog Server.
8. To edit a mapping, in the Central Area - click the mapping, then enter the fields in the Edit URL dialog, and then click **Save**.
9. To delete a mapping, in the Central Area - check the mapping, then click **Remove**.

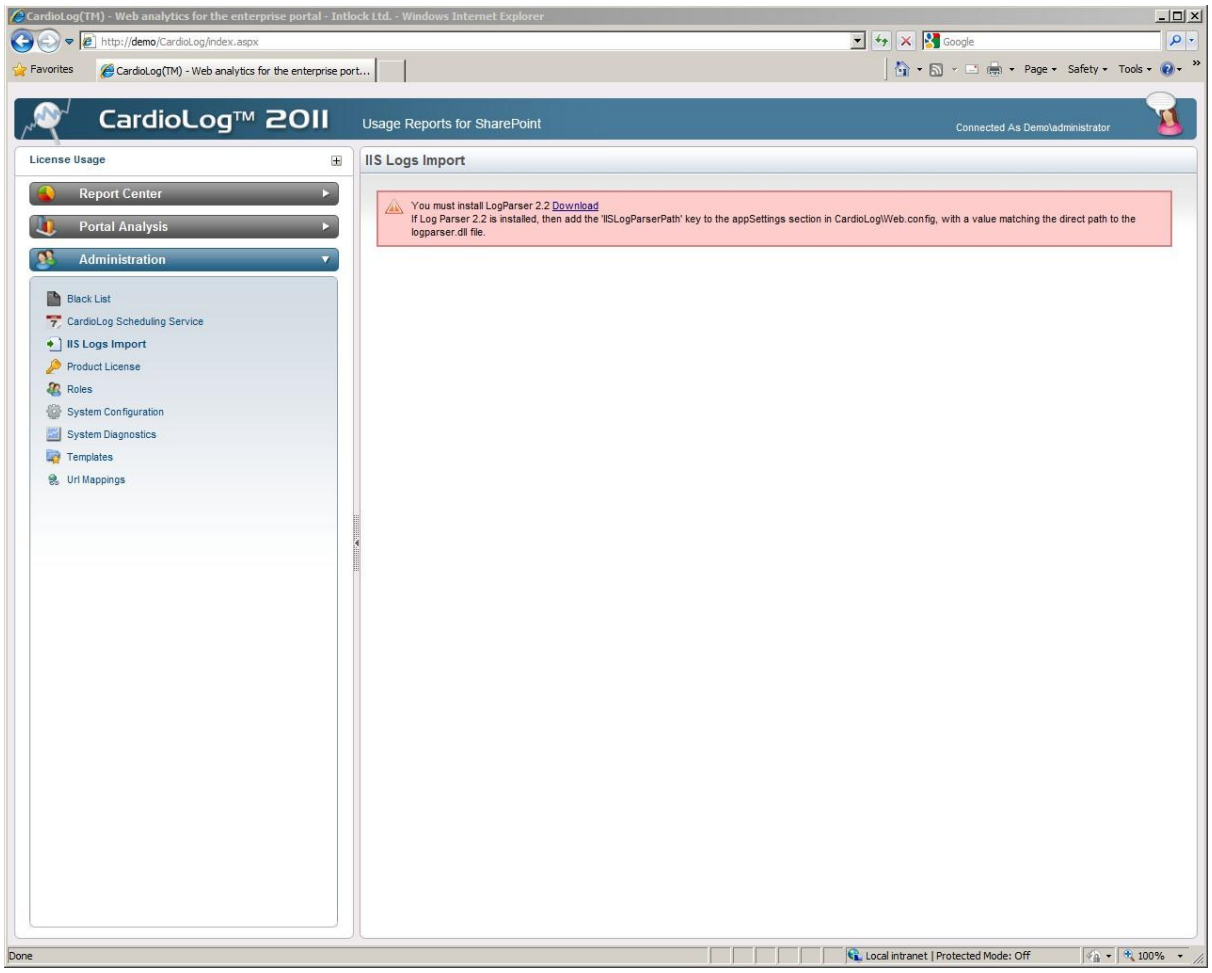
Editing a URL mapping

If the CardioLog installation includes Offsite Environments, then the URL mappings for these environments are also displayed under **URL Mappings** in Administration.

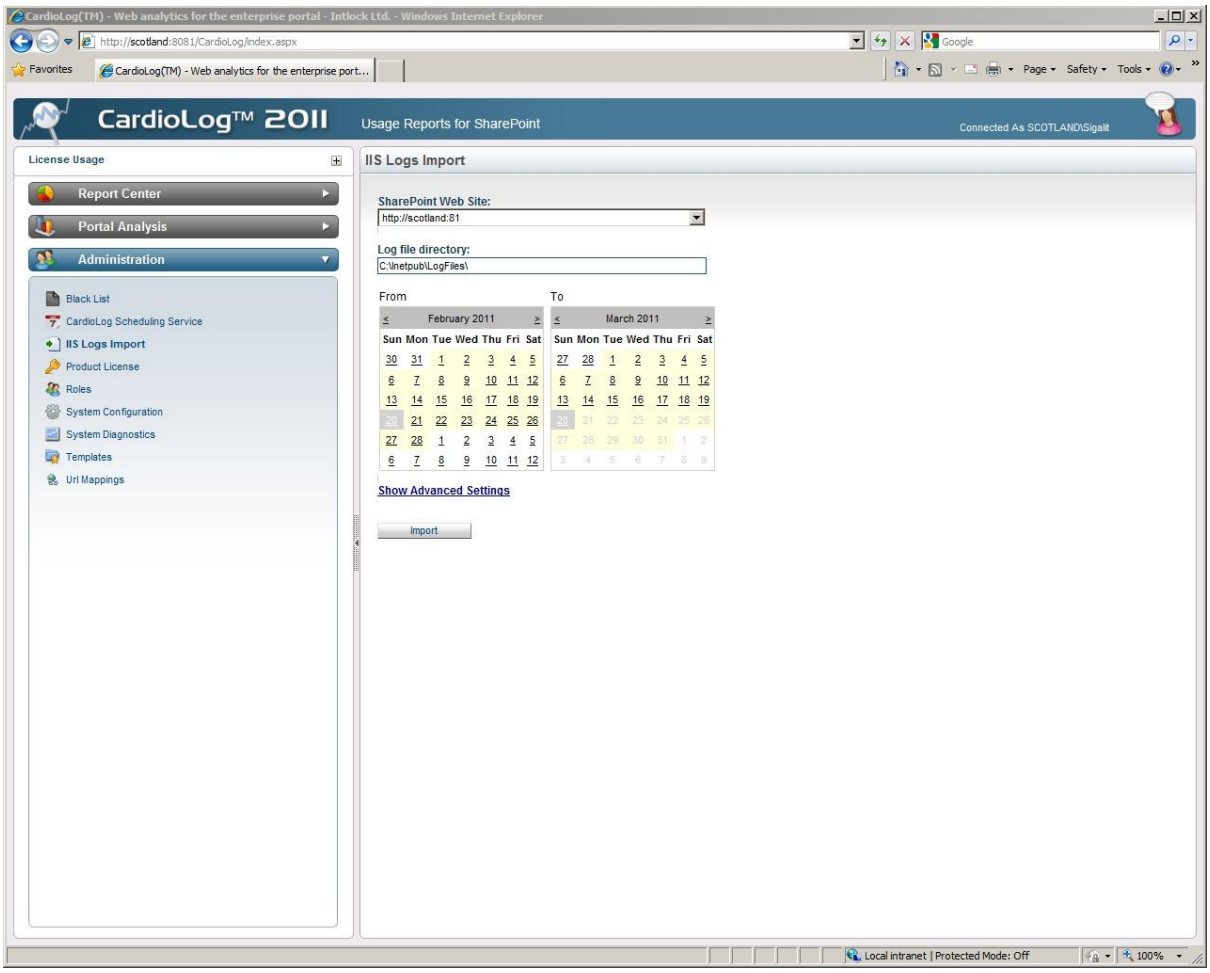
12. IIS Logs Import

The IIS Logs Import feature allows you to gather your existing usage tracking data, dating before the installation of CardioLog by importing this information from IIS logs.

1. In CardioLog application server, run Services.msc and stop CardioLog Scheduling Service.
2. In the **Administration** tab, click **IIS Logs Import** (If you receive an error that you need to install **Log Parser**, download and install it on the main CardioLog Server).

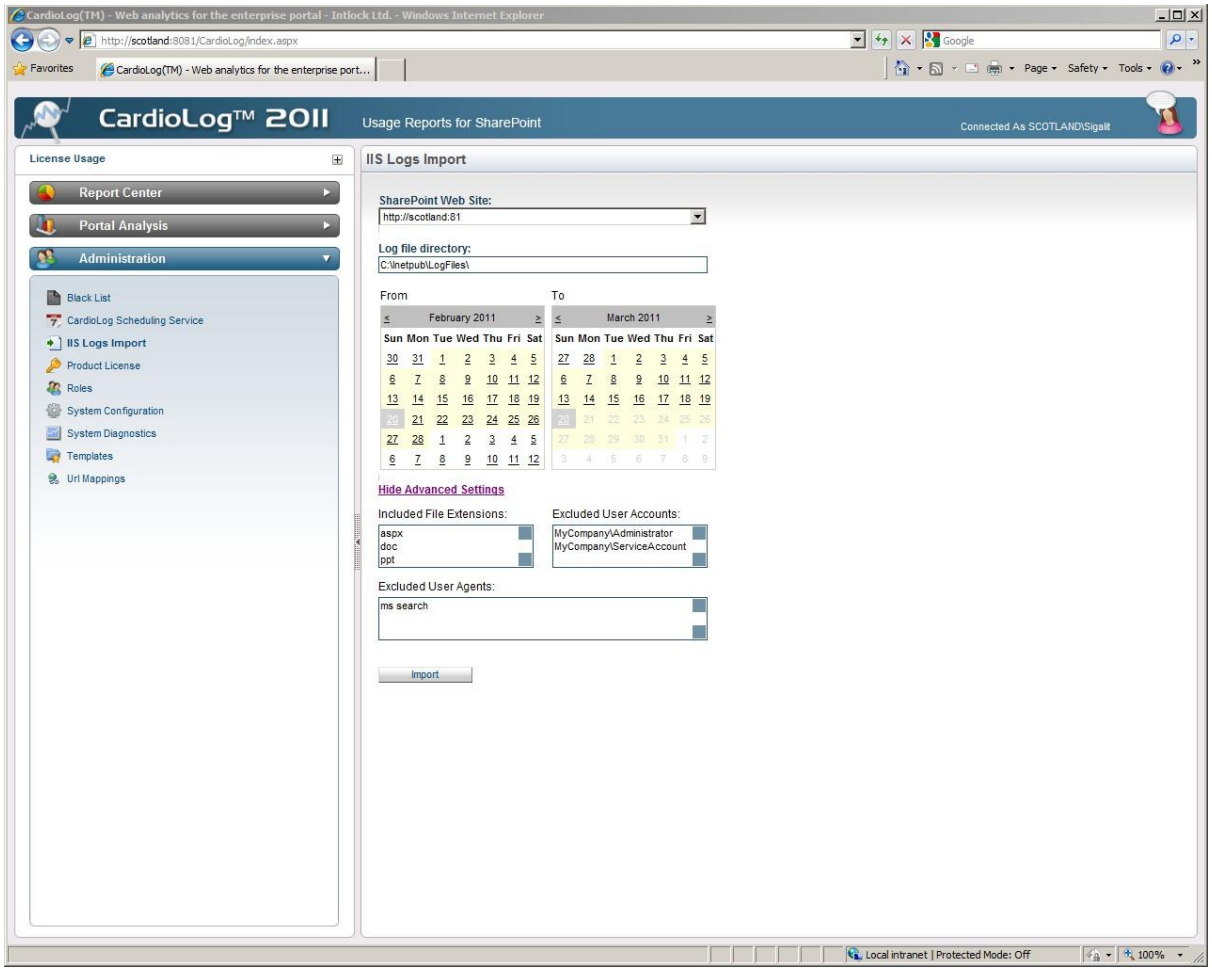


3. Select the web site and the desired date range.
   3.1. Note: Please choose dates prior to the CardioLog installation. Choosing dates subsequent to the CardioLog installation data will result in duplication of usage tracking data.



4. Fill out the directory path of the IIS logs files for the SharePoint web site.
   4.1. You may need to create a network share in order to access your WFE.
   4.2. If you have several WFE's, you will need to repeat steps 1 - 5 for each WFE.

5. Click on **Show Advanced Settings**.
   5.1. Under **Included File Extensions**, add all commonly used file extensions (ex. MS Office documents). Use the **Enter** key as a separator.
   5.2. Under **Excluded User Accounts**, add those SharePoint service accounts that you wish to exclude from the import process. These should be formatted thus: DOMAIN\Username. Use the **Enter** key as a separator.



IIS Logs Import dialog

6. Click the **Import** button to begin importing the usage data from IIS.
7. Once all logs were imported, log in to CardioLog application server, run Services.msc and start CardioLog Scheduling Service.