



## KronoDesk™ Administration Guide

Version 1.0

Inflectra Corporation

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## 1. Introduction

KronoDesk™ is an integrated customer support system that includes help desk ticketing, customer support forums and an online knowledge base in a single user interface.

KronoDesk™ includes a powerful and flexible help desk ticketing system that can be quickly and easily tailored to meet your support needs. With support for custom fields and workflows you can create different support processes for your different products.

KronoDesk™ provides a knowledge base and online support forums, making your customers more self-sufficient with routine issues so that your support personnel can focus their time on the critical issues and complex enquiries.

This administration guide outlines how to setup a working installation of KronoDesk™, and how to perform routine administrative tasks.

It assumes a basic understanding of how to setup and administer a Windows Server®, or Windows® workstation, and also assumes that you have access to a valid Administrator level account.

For information on how to use the features of KronoDesk™, please refer to the *KronoDesk™ User Manual* instead.

## 2. Installing KronoDesk™

This section outlines how to prepare your system for installation of KronoDesk™, how to actually install the software using the provided installation package, and finally how to ensure that your web-server is correctly configured to ensure secure operation.

The first sub-section will outline what hardware and software configurations are supported and the exact installation sequence for Windows 2012, 2008, 2003, 8, 7, Vista and Windows XP. The second sub-section will explain how to load the KronoDesk™ software onto the server, and discuss common problems and solutions.

The minimum hardware and software requirements for running the KronoDesk™ system are:

Requirement	Minimum Specification
<b>Processor:</b>	Intel® or AMD® x86 or x64 compatible processor
<b>Memory:</b>	2 GB, 4 GB recommended
<b>Operating System:</b>	Windows Server 2012 (recommended) Windows Server 2008 (recommended) Windows Server 2003 Windows 8 Windows 7 Windows Vista* Windows XP Professional*
<b>Service Packs:</b>	Windows Server 2003 SP2 Windows Vista SP2* Windows XP Professional SP3*
<b>Database:</b>	Microsoft SQL Server 2012 Microsoft SQL Server 2012 Express Edition Microsoft SQL Server 2008 Microsoft SQL Server 2008 Express Edition Microsoft SQL Server 2005 Microsoft SQL Server 2005 Express Edition
<b>Web Server:</b>	Internet Information Services (IIS) 5.1 or higher ASP.NET Web Extensions 4.0 or higher
<b>Web Browser:</b>	Internet Explorer 7.0+ Mozilla Firefox 2.0+ Opera 9.0+ Google Chrome 0.4+ Apple Safari 3.0+
<b>Other Components:</b>	Java Plug-In 1.6 (for screenshot capture applet)

\*Note that KronoDesk™ can be loaded onto either Windows Server or Professional editions, provided that the IIS web-server is installed and that SQL Server is available as a database engine. However Windows Vista (except Ultimate edition) and Windows XP Professional can only support a maximum of 5 concurrent user web sessions. In general unless there are only going to be a couple of client machines hitting the server, we recommend using Windows Server 2003 or 2008.

## 2.1. System Prerequisites

Assuming that you have already installed the appropriate version of Microsoft Windows onto your computer (or that has been pre-installed for you), you need to then make sure that the various prerequisites have been correctly added to your installation before trying to install KronoDesk™. The KronoDesk™ installer will check to ensure that the various prerequisites are in place, and will abort the installation if any are missing, indicating to you what action needs to be taken.

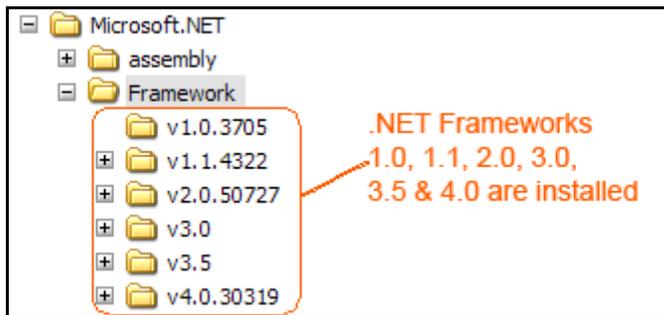
We recommend that you install / configure the prerequisites in the following order:

- Install the .NET Framework v4.0
- Install SQL Server 2012, 2008 or 2005
- Install Internet Explorer 8.0 or 9.0
- Ensure that IIS is installed
- Ensure that ASP.NET 4.0 is enabled

### 2.1.1. Install the .NET Framework v4.0

On Windows Vista, Windows 7 and Windows 2008 Server installations, Microsoft .NET Framework v4.0 is usually installed as part of the factory configuration, whereas on earlier operating systems, you might need to manually add the .NET 4.0 components to the factory configuration.

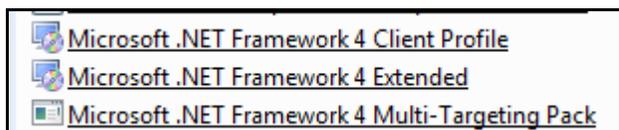
To see which version of the Microsoft .NET framework installed, open up Windows Explorer® and navigate to C:\WINDOWS\Microsoft.NET\Framework and then the subfolders listed will indicate which version(s) of the framework you have installed:



To install the .NET Framework, launch Internet Explorer and enter the URL:

<https://www.inflectra.com/CustomArea>. Once you have logged-in to the customer area, under the “My Downloads” section there will be hyperlinks to download and install the appropriate version of the .NET Framework (version 4.0 at time of writing). Click on the option to download and install the .NET Framework, and follow the instructions provided. Once you have completed the install, verify that the installation was successful by looking in the “Administrative Tools” folder as illustrated above. You also need to make sure that .NET 4.0 has been installed if necessary.

Please make sure that the **Full .NET 4.0 Framework** is installed and not just the **.NET 4.0 Client Profile**. You can check which is installed by going to Start > Control Panel > Programs & Features and then looking for the different .NET 4.0 Framework components that are installed:



If you only see the “Microsoft .NET Framework 4 Client Profile” and not the “Microsoft .NET Framework 4 Extended”, then you need to install the additional .NET 4.0 components that are needed for server-based applications such as KronoDesk to run.

### 2.1.2. Install SQL Server 2012, 2008 or 2005

Install the appropriate version of the database software, following the instructions provided with the installation. We recommend SQL Server 2012/2008® Express Edition® for most users. This free version of SQL Server will offer sufficient performance for most installations and can be easily downloaded from either the customer area of our website or directly from the Microsoft® web-site at <http://www.microsoft.com/express/sql>.

### 2.1.3. Install Internet Explorer

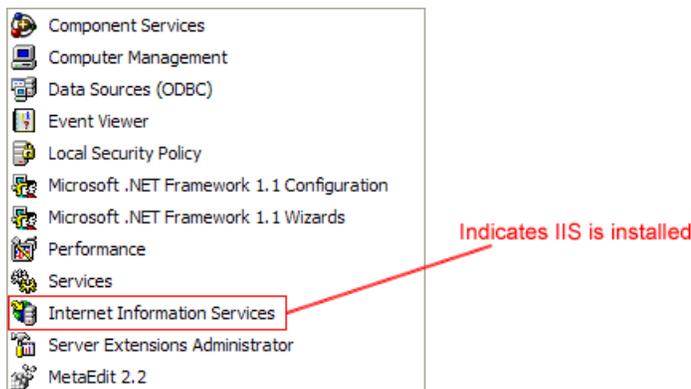
Install the appropriate version of the browser (we recommend 8.0 or 9.0), following the instructions provided with the installation. You are free to use Internet Explorer, Mozilla Firefox, Apple Safari, Google Chrome or Opera with KronoDesk™. Other browsers (Netscape, Konqueror, etc.) may work with KronoDesk™, but they have not been exhaustively tested for compatibility by Inflectra®.

### 2.1.4. Ensure that IIS is installed

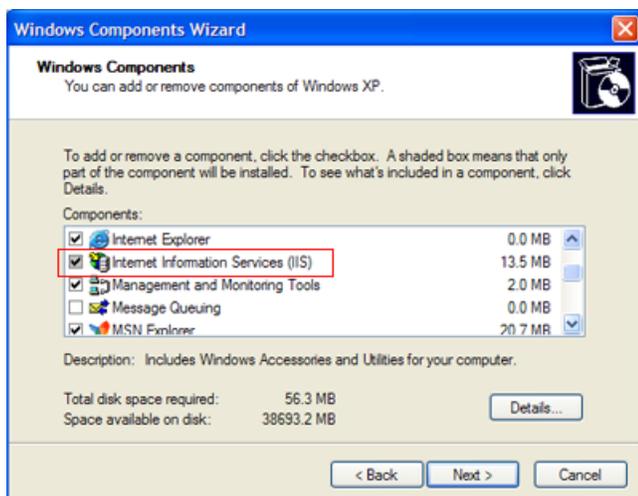
On Windows Server installations, IIS is usually installed as part of the factory configuration, whereas on Windows Vista and XP installations, you typically need to manually add the components to the factory configuration. The steps that you need to take to verify its installation are listed below for each operating system:

#### a) Windows XP or 2003 Server

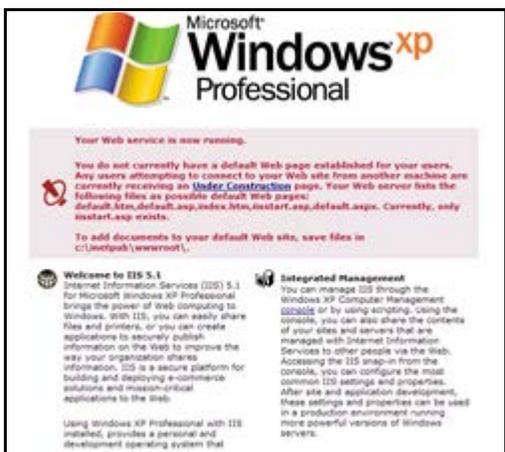
To check if you have IIS installed, click Start > Control Panel > Administrative Tools. Under the “Administrative Tools folder”, you should see an icon for “Internet Information Services”. If you don’t see this icon, then it means that you need to add IIS to your computer:



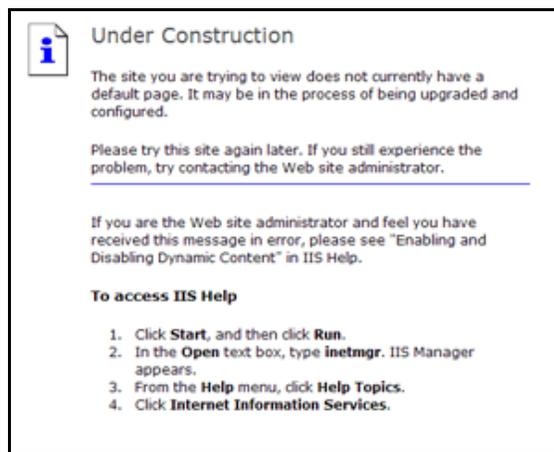
To install IIS, you need to click Start > Control Panel > Add or Remove Programs, then choose the option to “Add / Remove Windows Components” as illustrated below:



Check the box marked either “**Internet Information Services (IIS)**” or “**Application Server**”, and click the <Next> button to install the missing Windows components. Once the installation has completed, IIS will now be installed on your system. To verify that this is the case, type <http://localhost> into the address bar of Internet Explorer on your computer. You should see a screen displaying the initial IIS startup page:



Windows XP IIS Default Page



Windows 2003 Server IIS Default Page

If you don't see this page, but instead see an IIS error page (e.g. Internal Server Error 500), please refer to *Appendix A – Troubleshooting IIS* to fix your IIS installation before following the rest of this installation guide.

On Windows 2003 Server you may also need to go into the Web Service Extensions folder and make sure that ASP.NET 4.0 is marked as 'Allowed'. If you receive an HTTP 404 (Page Not Found) error when running KronoDesk™ then it usually means that ASP.NET 4.0 is marked as Prohibited.

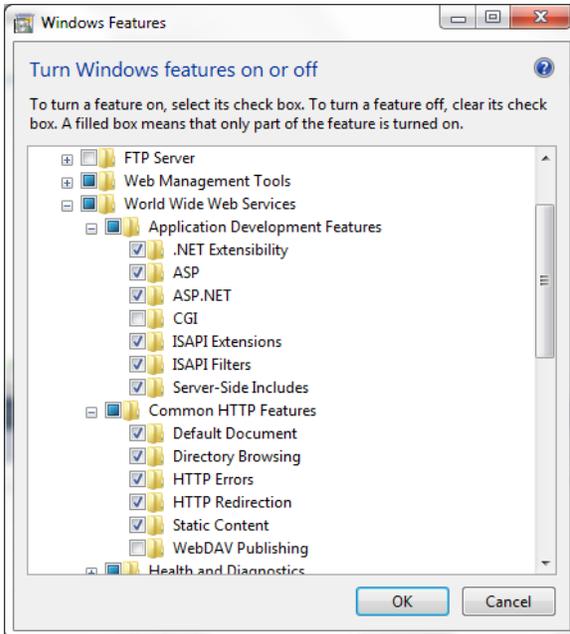
### **b) Windows 8, 7, Vista or Windows Server 2012, 2008**

To check if you have IIS installed, click Start > Control Panel > Administrative Tools. Under the “Administrative Tools folder”, you should see an icon for “Internet Information Services (IIS) Manager”. If you don't see this icon, then it means that you need to add IIS to your computer:

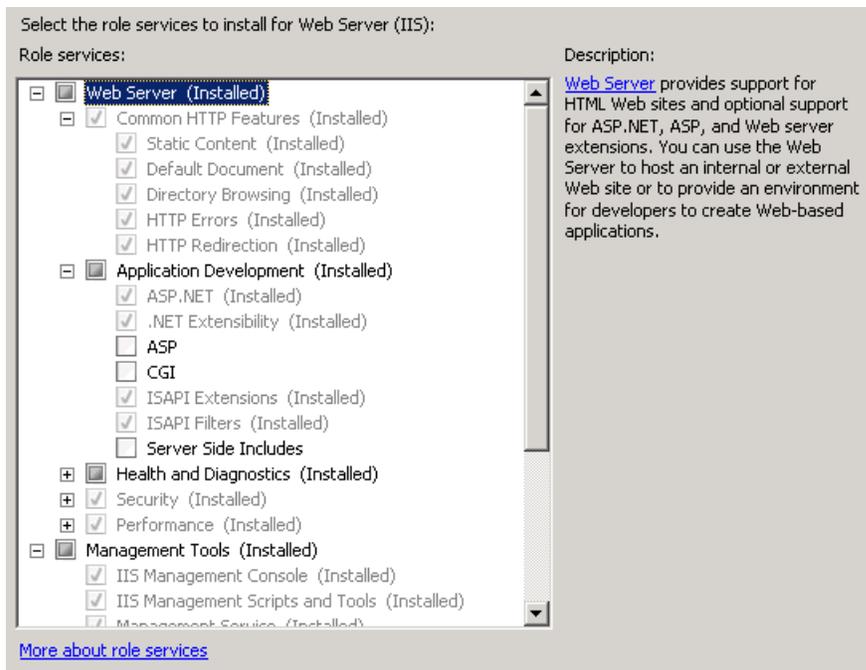


Indicates that IIS is installed

On **Windows 8, 7 or Vista**, to install IIS, you need to click Start > Control Panel > Programs and Features, then choose the option to “Turn Windows features on or off”. This will bring up the list of features and roles that can be configured on the server:



On **Windows Server 2012 or 2008**, you need to click on Server Manager, then under the “Roles” heading, choose the option to “Add Role” followed by selecting the new role “Web Server / IIS”. Then click “Next” to bring up the role configuration screen:



Make sure that the following features are enabled:

- ▶ Common HTTP Features
  - ▷ Static Content
  - ▷ Default Document
  - ▷ HTTP Errors
  - ▷ HTTP Redirection
- ▶ Application Development
  - ▷ ASP.NET
  - ▷ .NET Extensibility
  - ▷ ISAPI Extensions
  - ▷ ISAPI Filters
- ▶ Management Tools
  - ▷ IIS Management Console
  - ▷ IIS Management Service

To verify that this IIS is now installed, type <http://localhost> into the address bar of Internet Explorer on your computer. You should see a screen displaying the initial IIS startup page:

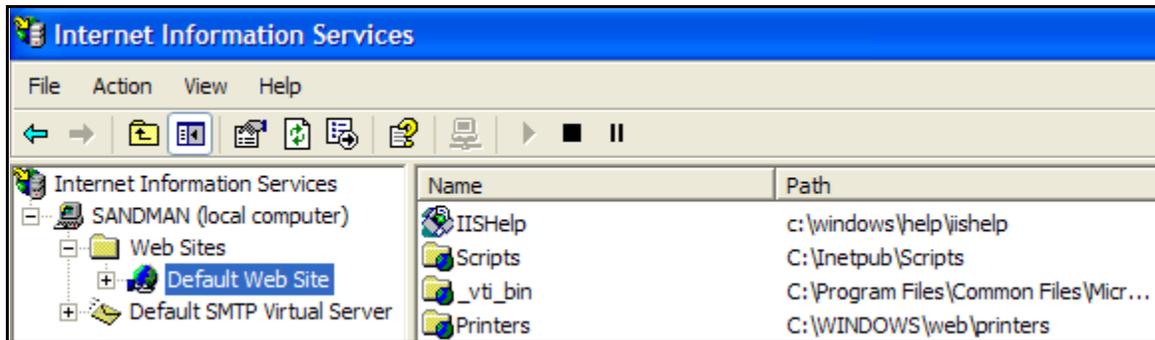


**2.1.5. Ensure that ASP.NET is installed**

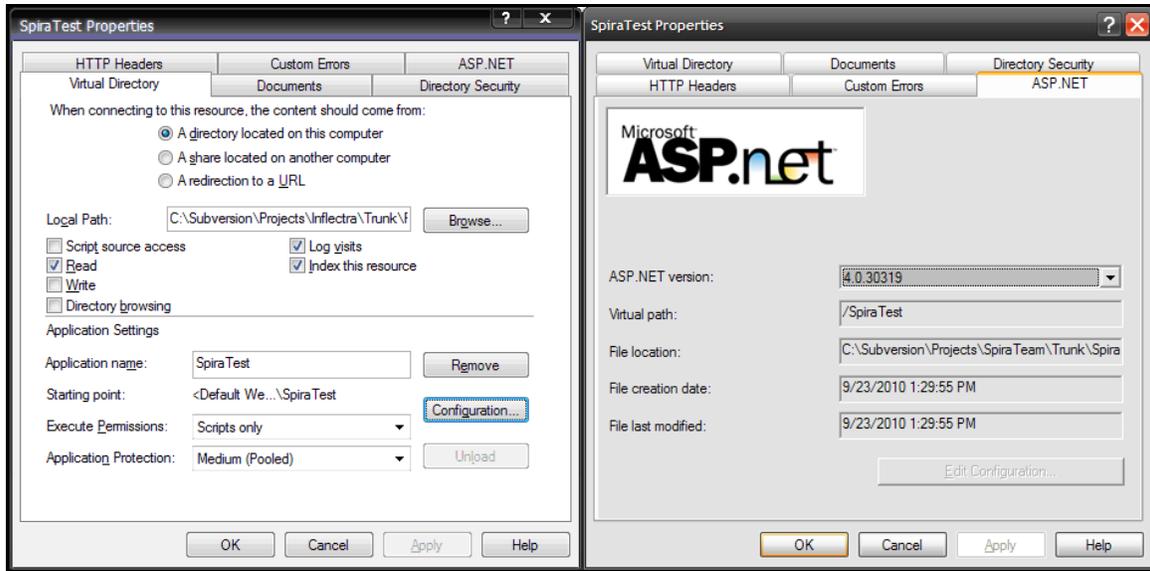
Now that you have both IIS and .NET installed, you need to make sure that the Active Server Pages (ASP.NET) components that allow IIS to access the .NET framework have been correctly configured. If you installed .NET *after* IIS then ASP.NET is typically configured for you, but if you installed IIS afterwards, then further manual steps may be necessary. The settings are different depending on which version of Windows you are using:

**a) Windows XP or 2003 Server**

To verify that ASP.NET has been correctly configured, click on Start > Control Panel > Administrative Tools > Internet Information Services to launch the IIS administrative console:

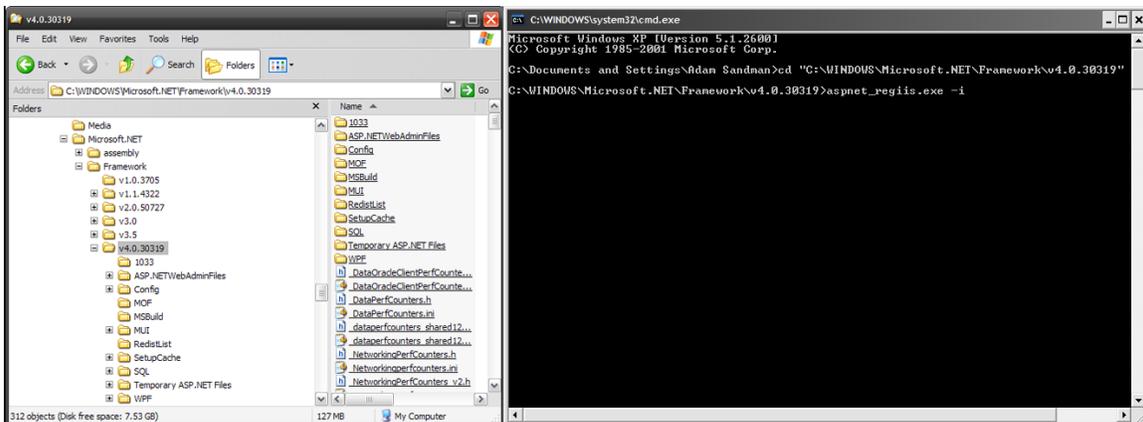


Expand the name of the web-server (marked as local computer), expand the “Web Sites” folder, right-click on “Default Web Site” and choose the “Properties” link. This will bring up the IIS configuration dialog-box with the ‘Virtual Directory’ tab highlighted. Then click on the ‘ASP.NET’ tab if it is listed:



If ASP.NET 4.0 is correctly configured you will see the ASP.NET tab, and it will list the ASP.NET version as being '4.0.30319' as illustrated above. If you don't see this tab, you either don't have ASP.NET configured, or you have an earlier version of ASP.NET (v1.1 or v2.0) configured.

To configure ASP.NET 4.0 for an existing IIS website, you need to open up Windows Explorer and navigate to the folder containing the .NET Framework. So, for example, if you have .NET Framework v4.0 installed, you would navigate to **C:\WINDOWS\Microsoft.NET\Framework\v4.0.30319**. Now, you need to open up a Windows command prompt by clicking Start > Programs > Accessories > Command Prompt. This will open up the command prompt window:

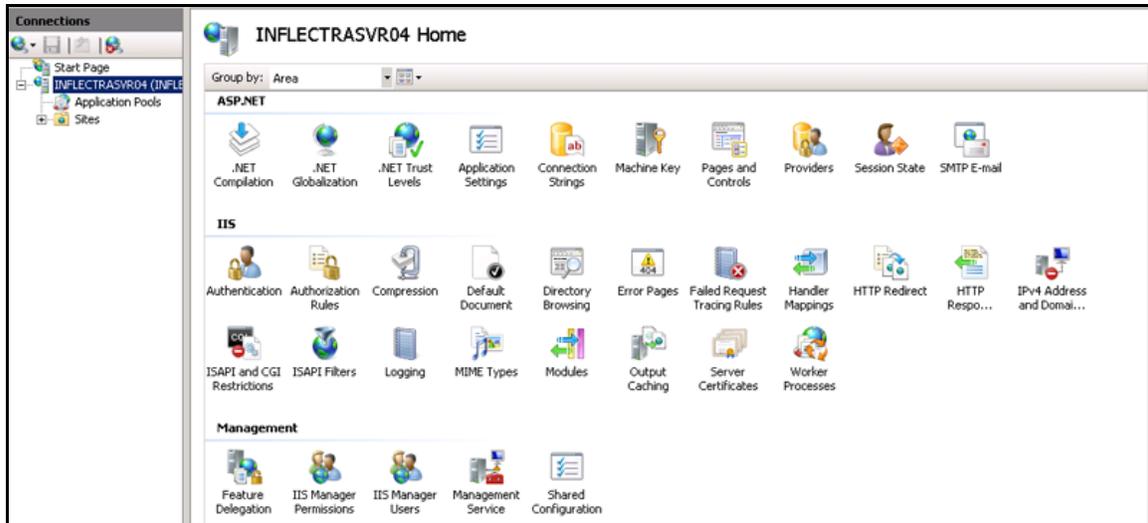


Now change the directory in the command window to the folder name in windows explorer (i.e. type **cd C:\WINDOWS\Microsoft.NET\Framework\v4.0.30319** where the version number matches the version number of the framework you have installed). Once you have changed the directory to the appropriate folder, simply type **aspnet\_regiis.exe -i** to configure ASP.NET. You can now verify that ASP.NET has been installed by checking the IIS management console (as described above).

*For 64-bit versions of Windows, please use C:\WINDOWS\Microsoft.NET\Framework64\v4.0.30319*

### **b) Windows Vista, 7 or 2008 Server**

To verify that ASP.NET has been correctly configured, click on Start > Control Panel > Administrative Tools > Internet Information Services (IIS) Manager to launch the IIS administrative console:



You should see a section called “ASP.NET” occupying the top third of the IIS screen. If not, then you need to go back to section 2.1.3 and make sure that you chose the option to install ASP.NET when installing IIS.

## 2.2. Installing the Software

Now that all the prerequisites have been correctly installed, you are now ready to install KronoDesk™ onto your system. To perform the installation, you will need the installation package downloaded from the Inflectra® website, the name of the organization that the software is licensed to, and the actual license key code which will be available in the customer area of the Inflectra® website.

To start the installation, double-click on the KronoDesk™ installation package (it will have a filename of the form `KronoDesk-v1.x.x.x.msi`), and the Windows Installer will display the following dialog box:

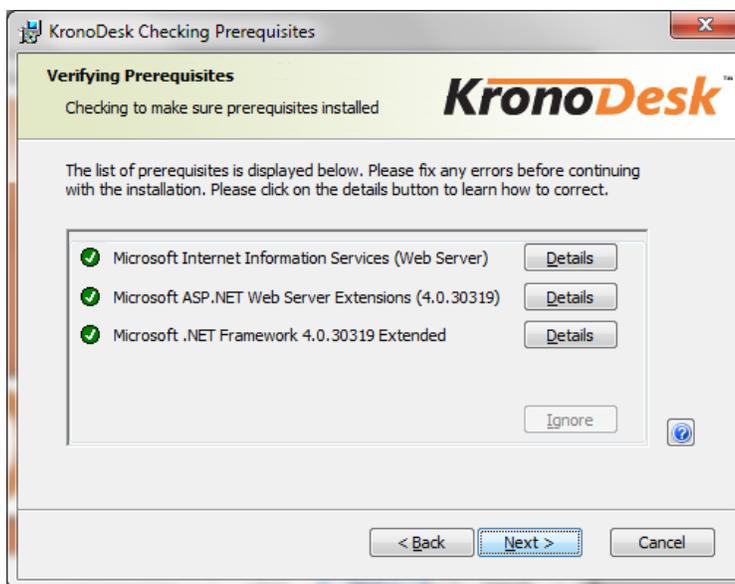


If you are upgrading from an earlier version of KronoDesk™, the dialog box will be similar except that it will instead let you know that you are upgrading from an earlier version to the current one:



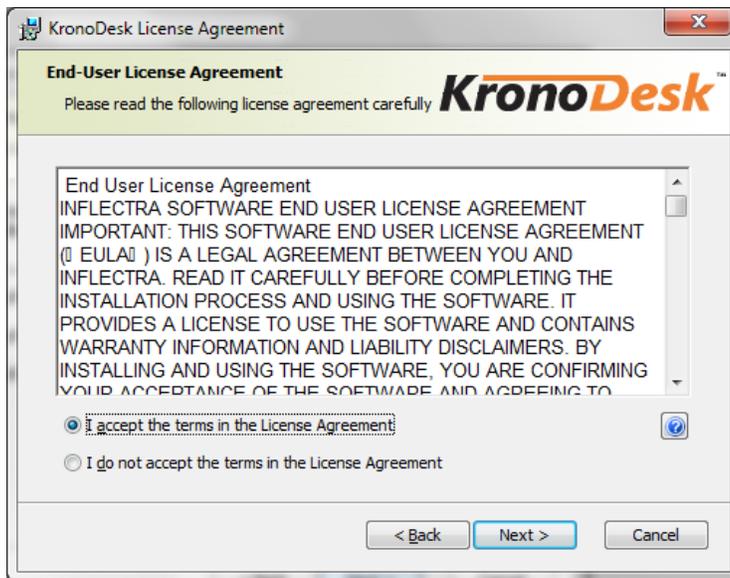
In this instance the installer will update the program files on your computer and migrate your data into the new version seamlessly. If for any reason you **don't see the upgrade message** and you have an existing installation, don't continue, but instead **contact Inflectra® customer support first**. This will ensure that your existing data is not overwritten by a clean install.

In either case, click the <Next> button to start the installation wizard which will gather information from you regarding how you want to setup the system, before actually installing the web-server files and database components. The next page of the installation wizard will display a list of all the required prerequisites and whether the installer could find them or not:



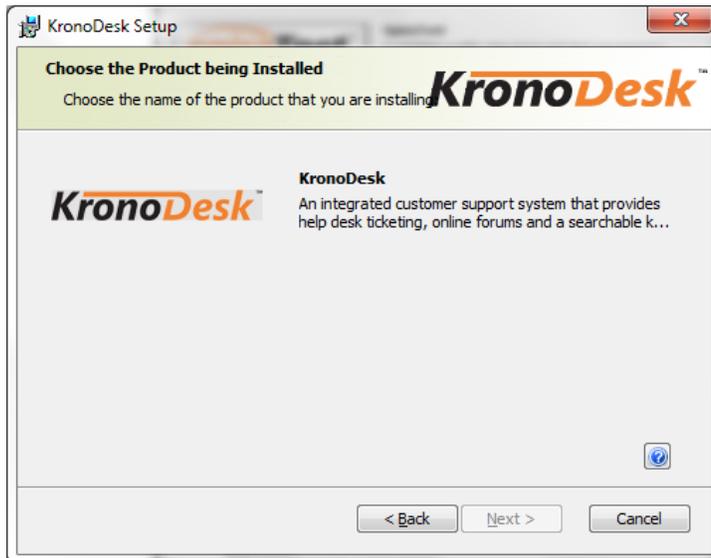
If any of the prerequisites were not correctly installed, the installer will display a red cross icon next to the missing component(s). If this happens, please refer to section 2.1 for installation of any prerequisites. If for any reason you have the prerequisite installed but the installer was not able to find it (this can occasionally happen on certain environments), click the <Ignore> button to proceed with the installation.

Once the prerequisites have been correctly installed, clicking <Next> will bring you to the next page in the installation wizard:



The next screen in the installation wizard outlines the KronoDesk™ End User License Agreement (EULA). Please read this carefully as it describes the legal contract between you – the user of the software – and Inflectra® Corporation, the developer and publisher. Once you have read the agreement and understood your rights and obligations, select the radio button marked “I accept the terms in the License Agreement” and click the <Next> button.

The following screen will be displayed:



Click on the KronoDesk™ button to confirm that you want to install KronoDesk. Once you have done this, the following screen will be displayed:



You need to enter your full name, the **organization that was issued the software license**, and finally the full hexadecimal license key that was provided with the software. Once you click <Next>, the installer will verify that all three were entered, and that the license key matches the product being installed and that it matches the organization name. The installer will warn you of any discrepancies, but will allow you to proceed; however after installation, the system will not operate until a correct license key is entered.

If for any reason you are unable to get the provided license key to work, please contact Inflectra<sup>®</sup> customer support immediately and they will resolve the issue.

After clicking <Next>, you will be given the choice of installation to perform:

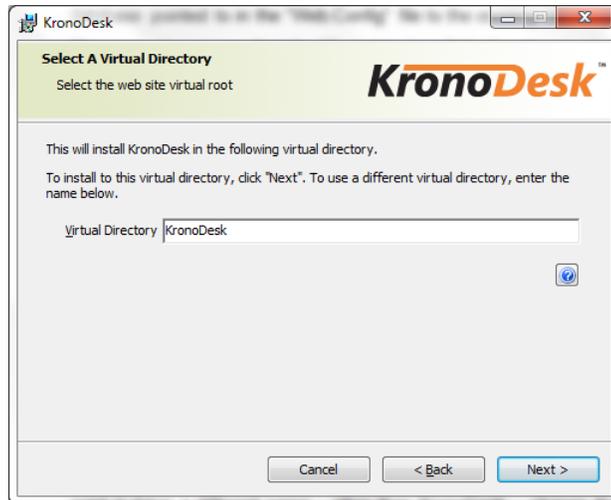


By default, the installer will install all of the KronoDesk™ features onto the target system, so we recommend choosing “Complete Installation”, which will both install the complete system – application and database. For advanced users who want to change the folder to which the system is installed (by default it is C:\Program Files\KronoDesk), change the name of the database created (by default it will be KronoDesk) or to prevent the installation of the optional web-services data integration modules, you can choose the “Custom Installation” option, which allows you to change those settings prior to installation.

The “Application Only” installation is useful when you need to move the application to a different server, but want to leave the database installed on the same server. In this case you can use the “Application

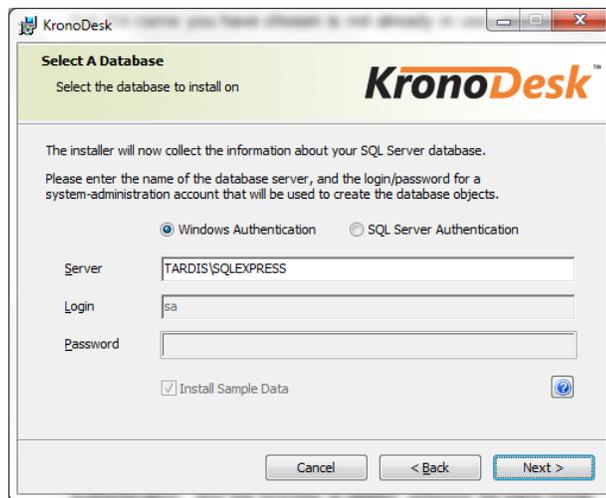
Only” installation on the new server, and once the installation is completed, change the name of the database pointed to in the “Web.Config” file to the existing database server.

This manual assumes that the “Complete Installation” option is chosen, in which case the following screen is displayed:



This screen allows you to change the name of the web-site URL that will be user to access the system. By default, users would need to type into their browsers: <http://<server name>/KronoDesk>. Should you want to have a different name – other than KronoDesk – change the name in the Virtual Directory box, otherwise simply accept the default name and click <Next>. Note: The installer will check to make sure that the name you have chosen is not already in use, and will warn you if it is.

Upon clicking <Next>, you will be taken the database connection screen:



You can connect to the SQL Server database using either Windows Authentication or SQL Server Authentication, and the process is slightly different for each mode:

### 2.2.1. Windows Authentication

This is the easiest option when the application and database will be residing on the *same* server. In this case, choose the “Windows Authentication” option and the Login/Password boxes will be disabled. In this case, the installer will connect to the database using your current Windows login to create the application database objects, and KronoDesk™ will connect to the database during normal operation using either the

ASPNET or NETWORK SERVICE Windows accounts (it depends on the version of the operating system).

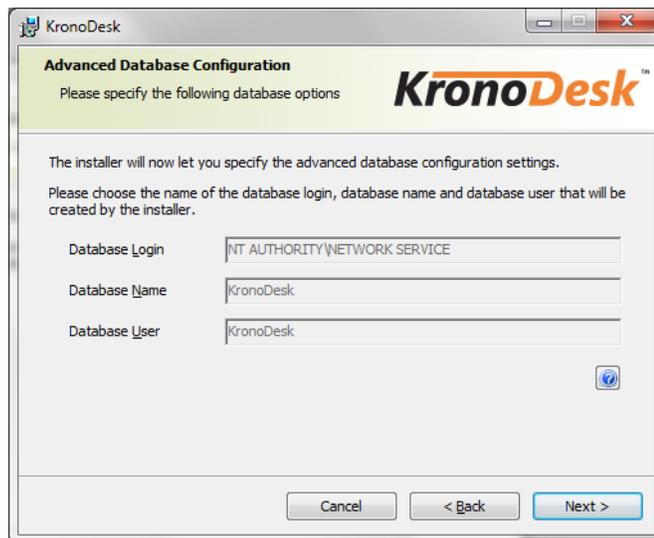
### 2.2.2. SQL Server Authentication

This is the easiest option when the application and databases will be residing on *different* servers across the network. In this case, choose “SQL Server Authentication” and provide a SQL Server Login that has Database Owner (DB-Owner) permissions – e.g. the built in System Administrator (SA) account. The installer will use this DB-Owner account to create the database objects, and KronoDesk™ will use a special login (called KronoDesk by default) for normal application operations.

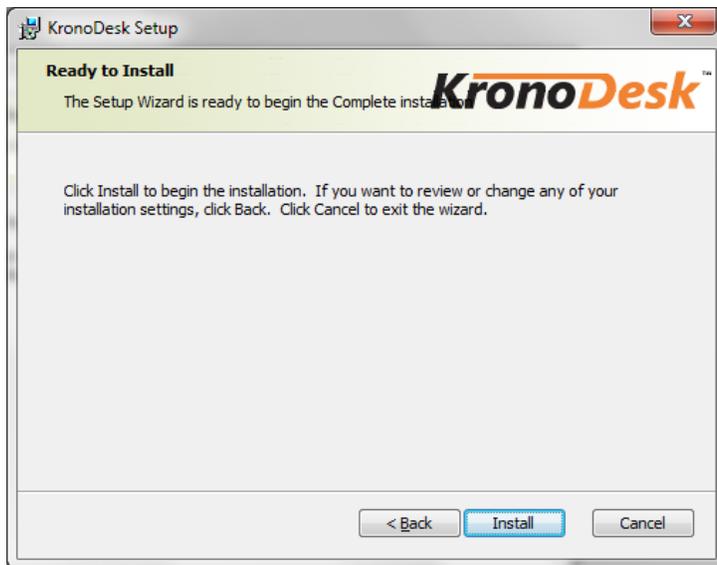
For either mode, in the “Server” box, you need to enter the name of the Microsoft SQL Server instance that is running on your system; the installer will default it to the hostname of the server (which in many cases will be correct). The easiest way to find out the database server name is to open up the SQL Server Administrative console (typically by clicking Start > Programs > Microsoft SQL Server > Enterprise Manager) and look for the name of the server.

For SQL Server 2005/2008/2012 Express edition installations, the Server name is usually the name of your computer followed by “\SQLEXPRESS”, so for example, if your computer is called MyComputer, the server name would be MyComputer\SQLEXPRESS. Omitting the second part (called the instance name) would lead to a “host not found” error.

Once you have entered the various pieces of information, click <Next>. The installer will attempt to connect to the database using the provided information, and it will display an error message if any of the information is incorrect. Assuming the information is correct, the following screen will be displayed:

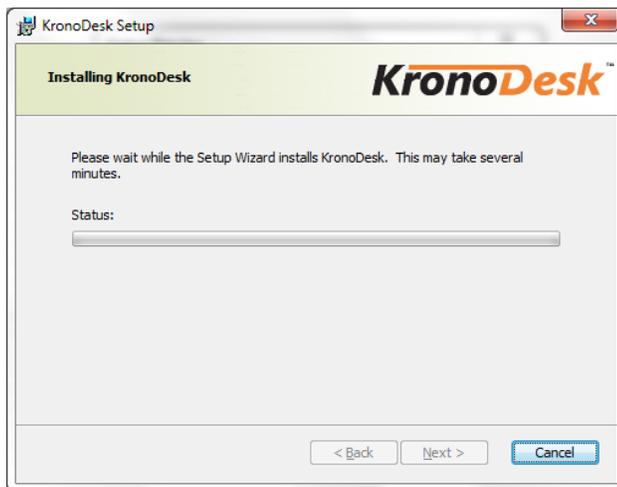


This page lets you customize the name of the database login, database name and database user that the application will create. If you chose the “Custom Installation”, then the fields will be editable, otherwise they will be read-only. Also if you chose “Windows Authentication” then the Database Login field will be set to the built-in Windows account associated with ASP.NET for the specific operating system being installed on (and cannot be changed). Once you have reviewed this page and made any changes, you should click <Next> to proceed:



Click the <Install> button to actually begin the process of installing KronoDesk™ onto your system. If you are installing KronoDesk™ onto Windows Vista, then you will first be prompted by the Windows User Access Control (UAC) security system to confirm that you want to install a new piece of software. Click the option that confirms you want to proceed with the install.

The installer will then display a progress bar that gradually fills as the installation proceeds:



Once the installation is complete, the following message will be displayed:



Congratulations! You have successfully installed KronoDesk™ onto your system. If you type <http://localhost/KronoDesk> into your browser you should see the KronoDesk™ home page, as illustrated in the *KronoDesk™ User Manual*. If for any reason you don't see the home page, please refer to *Appendix A – Troubleshooting IIS* or contact Inflectra® Technical Support using one of the methods described at our website <http://www.inflectra.com/Support>.

The default login/password for accessing KronoDesk is:

- Login: administrator
- Password: PleaseChange

### 2.3. Security Considerations

The Microsoft Internet Information Services (IIS) web-server and SQL Server database are powerful tools to managing web-based applications. However it is important to make sure that they are correctly secured to prevent unauthorized access to applications being hosted on them. This is a fast changing field and beyond the scope of this guide to address, however we recommend reading the following article for details on how to secure IIS:

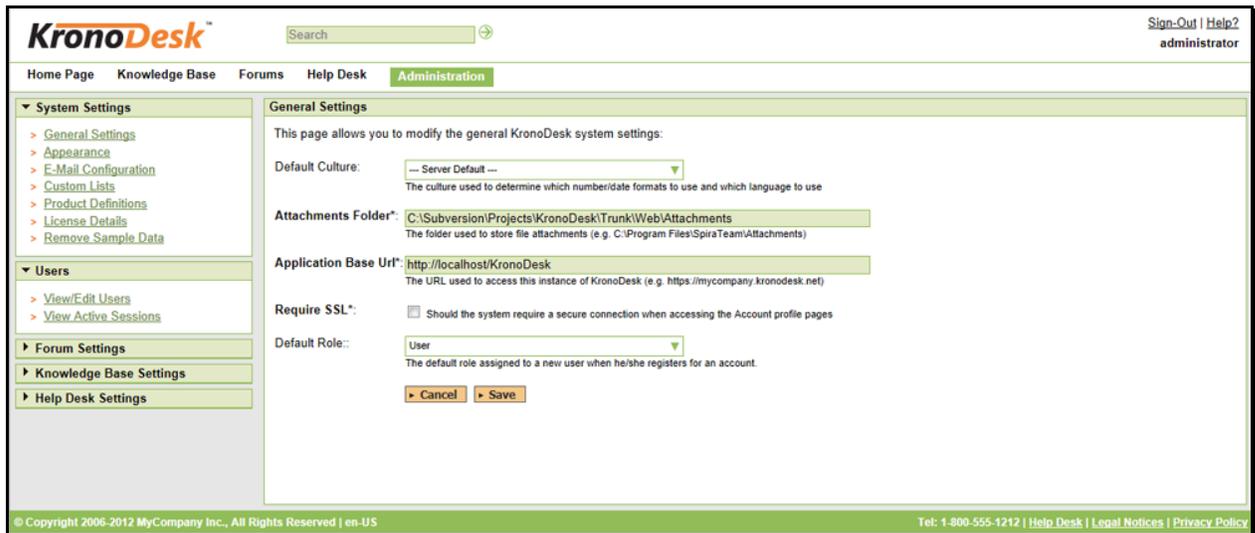
[http://www.windowsecurity.com/articles/Installing\\_Securing\\_IIS\\_Servers\\_Part1.html](http://www.windowsecurity.com/articles/Installing_Securing_IIS_Servers_Part1.html)

In addition to the steps outlined in this article, it is important to note that by default, all web pages served by IIS using the HTTP protocol are unencrypted, and as such, the usernames and passwords used by KronoDesk™ to log into the application can be read by network sniffing tools. If you are using KronoDesk™ purely within an intranet environment, this may not be an issue. However if you are externally hosting KronoDesk™ onto a publicly accessible website, we recommend installing a Secure Sockets Layer (SSL) encryption certificate, and restricting all web-traffic to the secure HTTPS protocol instead. For details on how to perform this task, please refer to *Appendix B - Installing an SSL Certificate*.

### 3. System Administration

Now that you have successfully installed KronoDesk™, this section of the guide outlines how to perform the typical system-wide administrative tasks necessary for setting up projects in the system, managing users and verifying the license information. To perform these tasks, you need to login to the system with a user that is a member of the “Administrator” role. The special “administrator” login is created by the installer for this very purpose. You should initially login to KronoDesk™ with the username `administrator`, and the password `PleaseChange`. It is recommend that this password be changed as soon as possible to something that is secure yet memorable by clicking on the “User Profile” link – see the KronoDesk™ User Manual for more details.

Once you have logged in as an Administrator, you need to click the “Administration” link in the main navigation bar. This will display the Administration home page:



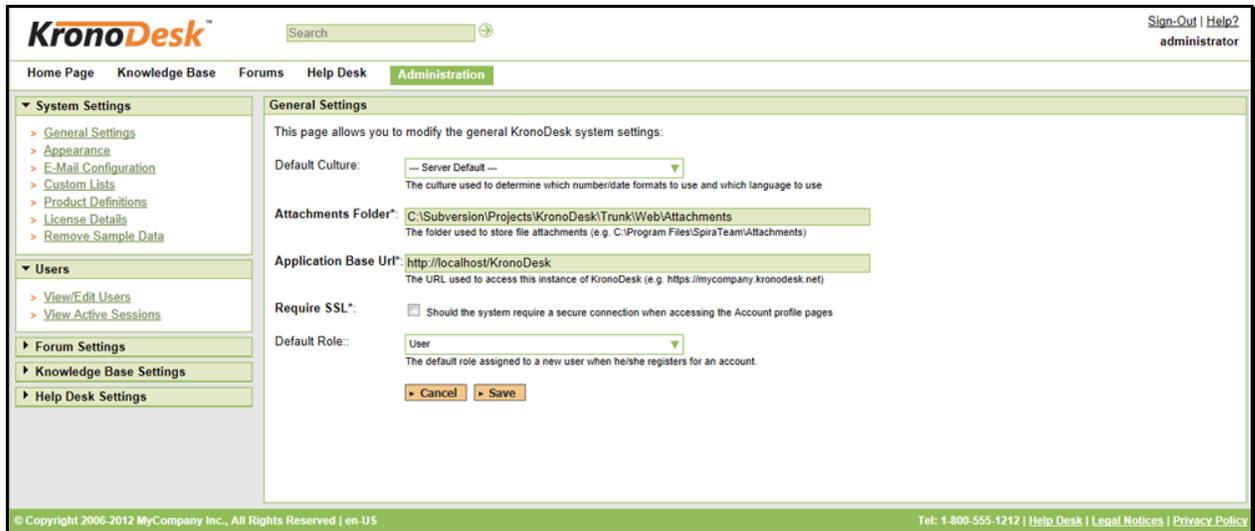
The page displays a list of the various administration settings pages categorized by the part of the application they relate to. You can expand and collapse the administration group by clicking on the green header bar. By default, the administration home page will display the System Settings > General Settings page described in section 3.1.1 below. Each of the other administration settings pages is described separately below.

### 3.1. System Settings

This section contains all of the application-wide settings that affect the entire system, rather than a specific module. The only exception is that the settings related to authentication and user management are in their own separate group “User Settings”.

#### 3.1.1. General Settings

The General Settings page is used to set the general application-wide settings that affect the overall application and are used to ensure that the application matches your environment. In the current version, you can specify the default language, specify the base URL, configure the folder used to store document attachments and also specify whether certain parts of the application should require a secure connection.



The screenshot shows the KronoDesk Administration interface. The top navigation bar includes 'Home Page', 'Knowledge Base', 'Forums', 'Help Desk', and 'Administration'. The 'Administration' section is expanded, showing 'System Settings' (General Settings, Appearance, E-Mail Configuration, Custom Lists, Product Definitions, License Details, Remove Sample Data) and 'Users' (View/Edit Users, View Active Sessions). The 'General Settings' page is active, displaying the following fields:

- Default Culture:** A dropdown menu set to '--- Server Default ---'. Below it, a note states: 'The culture used to determine which number/date formats to use and which language to use'.
- Attachments Folder:** A text box containing 'C:\Subversion\Projects\KronoDesk\Trunk\Web\Attachments'. Below it, a note states: 'The folder used to store file attachments (e.g. C:\Program Files\SpiraTeam\Attachments)'.
- Application Base Url:** A text box containing 'http://localhost/KronoDesk'. Below it, a note states: 'The URL used to access this instance of KronoDesk (e.g. https://mycompany.kronodesk.net)'.
- Require SSL\*:** A checkbox that is currently unchecked. Below it, a note states: 'Should the system require a secure connection when accessing the Account profile pages'.
- Default Role:** A dropdown menu set to 'User'. Below it, a note states: 'The default role assigned to a new user when he/she registers for an account'.

At the bottom of the form are 'Cancel' and 'Save' buttons. The footer of the page contains copyright information and contact details.

This page lets you specify the following values:

- **Default Culture** - KronoDesk can display information in a variety of different languages (assuming that the appropriate language packs have been installed) and number formats. By default, KronoDesk will use the regional settings (language and number formats) of the operating system it has been installed on. However, you can override this default by choosing the appropriate culture from the list of options displayed in the drop-down list. *Note: The list of culture options does not reflect the available language packs, so in some cases, the setting will only change the number formats.*
- **Attachments Folder** - By default when KronoDesk is installed, the document attachments uploaded in the system get stored inside the `C:\Program Files\KronoDesk\Attachments` folder located inside the main KronoDesk installation root. However you may want to have the documents stored on a remotely mounted drive or on a different hard disk partition. In which case you can simply change the folder pointed to in the text-box illustrated above and then click [Save] to commit the change.
- **Application Base URL** - This is the URL that your users use to access the system. Do not put the `/Login.aspx` or any other page here, as this URL is used to generate links to different pages in the application. This setting is primarily used in email notifications and RSS feeds to specify the URL of the application.
- **Require SSL** – When this is selected, the application will require a secure connection when accessing the Account Profile pages. This is useful if you want to run the site using an unencrypted connection (to maximize performance) but want to require a secure connection for

the login pages where a user will have to enter a password. Using this option requires that you have a Secure Sockets Layer (SSL) certificate installed on your web server.

- **Default Role** – When a new user registers to access your instance of KronoDesk you have an option of assigning them a default role in the system. *By default the system will assign all users to the basic “User” role.* This role is allowed to read knowledge base articles, read forum posts, post new forum messages and reply to existing forum messages.

However this role is not allowed to submit help desk tickets. If you want all your users to be able to send help desk tickets without first requiring an administrator to approve them, you should switch the default role to “Customer”. *This will allow all new users to automatically submit help desk tickets by default.*

### 3.1.2. Appearance

The Appearance page is used to customize the information displayed in KronoDesk so that it is appropriate for your organization. It also allows you to change the application logo so that it displays your company’s name instead of “KronoDesk”.

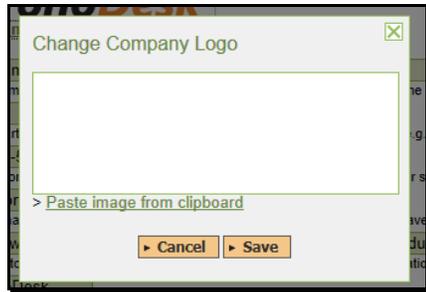
The screenshot shows the KronoDesk Administration interface. The top navigation bar includes 'Home Page', 'Knowledge Base', 'Forums', 'Help Desk', and 'Administration'. The left sidebar lists 'System Settings' (General Settings, Appearance, E-Mail Configuration, Custom Lists, Product Definitions, License Details, Remove Sample Data), 'Users' (View/Edit Users, View Active Sessions), 'Forum Settings', 'Knowledge Base Settings', and 'Help Desk Settings'. The main content area is titled 'Appearance' and contains the following sections:

- Company Information:** Company Logo\* (KronoDesk logo with a 'Change' link), Company Name\* (MyCompany Inc.), Copyright Year\* (2006), Contact Phone Number\* (1-800-555-1212), Email Address\* (support@mycompany.com), RSS Feed (http://www.inflectra.com/Feeds/Atom.aspx?ContentType=ProductNews\_CompanyNe), and Title Prefix\* (KronoDesk).
- Hyperlinks:** Useful Link #1, #2, and #3 (all pointing to http://www.mycompany.com/link1, link2, and link3 respectively); Footer Link #1 (Help Desk, ~/Ticket/List.aspx), Footer Link #2 (Legal Notices, http://www.mycompany.com/legalnotices), and Footer Link #3 (Privacy Policy, http://www.mycompany.com/privacypolicy).

At the bottom of the form are 'Cancel' and 'Save' buttons.

This page lets you specify the following values:

- **Company Logo** – You can change the logo displayed in the application to match your company name. To make the change you just need to click on the “Change” link which brings up the following dialog box:



Simply copy the image into the Windows clipboard and click the “Paste image from the clipboard” hyperlink to paste the image into KronoDesk. Then click “Save” to close the dialog box and accept the new logo.

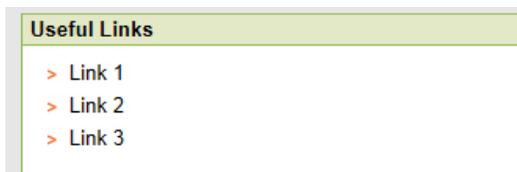
- **Company Name** – This field is used to change the name of the company that is displayed in the application footer:

© Copyright 2006-2012 MyCompany Inc., All Rights Reserved | en-US

- **Copyright Year** – This field is used to change the copyright year to match the starting year of your company’s website copyright.
- **Contact Phone Number** – This field is used to specify the phone number that should be displayed on the application footer:

Tel: 1-800-555-1212 |

- **Email Address** – this field is used to specify the email address displayed on various pages within the application. We recommend that you set this to match your primary support email address (e.g. [support@mycompany.com](mailto:support@mycompany.com) or [info@mycompany.com](mailto:info@mycompany.com)).
- **RSS Feed** – The application home page will optionally display a list of recent news headlines from your company’s newsfeed. To enable this functionality, simply enter the URL for your company’s RSS newsfeed into this text box and it will automatically enable the home page widget and tell it to display news items from your newsfeed.
- **Title Prefix** – All of the web pages in KronoDesk prefix the title of the page with the application name (e.g. “KronoDesk | Help Desk” or “KronoDesk | Support Forums”). This setting allows you to choose the text displayed in the prefix. We recommend we set it to your company’s name. That way, web pages will be displayed using this name (e.g. “MyCompany | Help Desk”).
- **Hyperlinks (Useful Link #1 - #3)** – These three hyperlinks are displayed in the “Useful Links” section of the Customer Homepage:

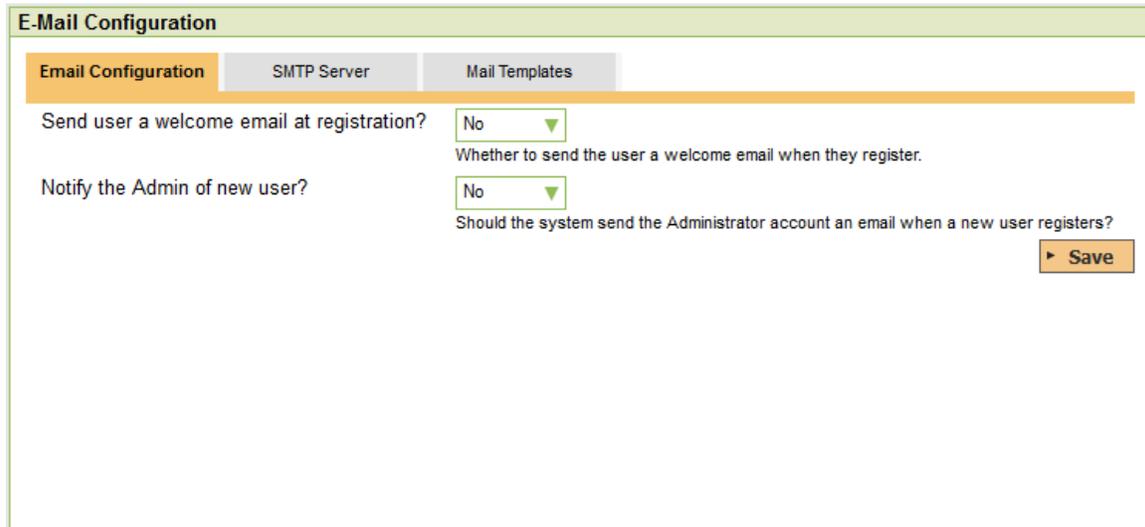


- **Hyperlinks (Footer Link #1 - #3)** – These three hyperlinks are displayed in the footer of the application and can be customized to point to important pages on your website that your customers frequently access (e.g. Support Policy, Privacy Policy, Legal Notices, etc.):

### 3.1.3. Email Configuration

#### 3.1.3.1. General Email Configuration

This page allows basic often-used email settings. The page has two items:



The screenshot shows a web interface titled "E-Mail Configuration". It has three tabs: "Email Configuration" (selected), "SMTP Server", and "Mail Templates". Below the tabs, there are two configuration items:

- Send user a welcome email at registration?** A dropdown menu is set to "No". Below it, the text reads: "Whether to send the user a welcome email when they register."
- Notify the Admin of new user?** A dropdown menu is set to "No". Below it, the text reads: "Should the system send the Administrator account an email when a new user registers?"

A "Save" button is located at the bottom right of the configuration area.

The two options enable sending the new registered user a welcome email when they sign up for an account, and sending the admin a copy of the welcome message when new users sign up.

#### 3.1.3.2 SMTP Server Setup

This page allows for setting up KronoDesk to communicate with your SMTP Server. The fields available and their usage are:

### E-Mail Configuration

Allow Outgoing Emails?    
If disabled, no email messages will be sent out from the system to users.

From Email Address:  Display Name:    
All emails sent will be from this email address and display name.

Reply-To Email Address:  Display Name:    
All emails sent will have the Reply-To header. This will not affect application handling of incoming emails.

Allow HTML Emails?    
This sets whether users are allowed to opt-in to receiving HTML-Formatted Emails.

Force Email Control?    
Enabling this will disallow users from receiving announcement emails from the system.

Use IIS Mail Server Settings?    
If enabled, the application will use the built-in IIS settings for the SMTP server.

SMTP Server Hostname:  Port:    
The SMTP server address and port number for the system to send outgoing emails.

Use SSL Connection?    
The SMTP server address and port number for the system to send outgoing emails.

SMTP Server UserID:    
Username to use to authenticate with the SMTP server.

SMTP Server Password:    
Password to use to authenticate with the SMTP server.

- **Allow Outgoing Emails:** If set to 'No', the system will not send out ANY emails.
- **From Email Address / Display Name:** The address and name you want outgoing emails to be sent from.
- **Reply-To Email Address / Display Name:** The address and name you want outgoing emails to have in their 'Reply-To' header.
- **Allow HTML Emails:** If set to yes, emails going out can contain HTML elements for rich-text emails. If set to no, emails will be marked as being plain text.
- **Force Email Control:** Not used at this time. If set to 'No', users will have the ability to enable to disable receiving of emails from the system. If set to 'Yes', users will not be able to specify their preference.
- **Use IIS Mail Server Settings:** If set to 'No', you must define your SMTP server information below. If set to 'Yes', the application will use the defined IIS virtual server settings.
- **SMTP Server Hostname / Port:** The DNS or IP address of the SMTP server, and the port that it accepts incoming mail on.
- **Use SSL Connection:** Whether or not the SMTP server requires an SSL connection.
- **SMTP Server UserID / Password:** The username or password to log onto the SMTP server with. If no username or password is required, enter in 'anonymous' in both fields.

### 3.1.3.3 Email Templates

This tab allows you to customize the email templates that are sent out:

**E-Mail Configuration**

Email Configuration   SMTP Server   **Mail Templates**

Select Template to Edit: Forums: Subscription

Select Template to Edit: Forum/Topic Subscription Notice

Sent when a user is to be notified of a change to an item in a forum or thread that they are subscribed to.

-- Font --   -- Size --   **B**   *I*   U   |   [List Icons]   |   [Text Icons]   |   [Link Icon]   [Image Icon]   [Table Icon]   [Code Icon]

Hello \${UserID},

You are receiving this notification because you are watching the topic or forum "\${ForumThreadUpdatedName}". This topic received a reply or is new since your last visit. You can use the following link to view the replies made.

`\${ForumThreadUpdatedUrl}`

To view all forums and topics, you can visit:  
`\${ForumUrl}`

And to visit the Knowledgebase articles, please visit:  
`\${KBUrl}`

To modify a template, you need to select which template you wish to edit. Once you select the template, the page will reload and display the selected template. The subject line is used in all emails sent with this template – note that some templates do not have a subject defined, and in this case the field will be hidden.

If you have HTML enabled in emails, you will get the rich-text editor. With this editor, you can link to external images, but cannot send any images as attachments.

If you have HTML disabled, you will get a standard textbox to enter in and modify the template.

Underneath the template is a table listing all the tokens available for the selected template:

Name	Token	Description	Name	Token	Description
User's ID	`\${UserID}`	The user's login ID.	User's Name	`\${UserName}`	The user's full registered name.
User's Password	`\${Password}`	The user's current (or new) password.	Login URL	`\${LoginURL}`	The system's user login address.
Forum URL	`\${ForumURL}`	The base URL for the application's forums.	KB URL	`\${KBURL}`	The base URL for the application's Knowledgebase.
Site URL	`\${SiteURL}`	The base site's URL.	Site Name	`\${SiteName}`	The name of the website from General Configuration.
Company Name	`\${CompanyName}`	Company name from General Configuration.	Copyright Year	`\${CopyrightYear}`	Copyright Year from General Configuration.
Contact Phone	`\${ContactPhone}`	Contact Phone from the General Configuration.	Contact Email	`\${ContactEmail}`	Contact EMail from the General Configuration.
Useful Link #1	`\${UsefulLink1}`	Useful Link #1 from General Configuration.	Useful Link #2	`\${UsefulLink2}`	Useful Link #2 from General Configuration.
Useful Link #3	`\${UsefulLink3}`	Useful Link #3 from General Configuration.	Useful Link #1 URL	`\${UsefulLink1URL}`	Useful Link #1 from General Configuration, URL only.
Useful Link #2 URL	`\${UsefulLink2URL}`	Useful Link #2 from General Configuration, URL only.	Useful Link #3 URL	`\${UsefulLink3URL}`	Useful Link #3 from General Configuration, URL only.
Footer Link #1	`\${FooterLink1}`	Footer Link #1 from General Configuration.	Footer Link #2	`\${FooterLink2}`	Footer Link #2 from General Configuration.
Footer Link #3	`\${FooterLink3}`	Footer Link #3 from General Configuration.	Footer Link #1 URL	`\${FooterLink1URL}`	Footer Link #1 from General Configuration, URL only.
Footer Link #2 URL	`\${FooterLink2URL}`	Footer Link #2 from General Configuration, URL only.	Footer Link #3 URL	`\${FooterLink3URL}`	Footer Link #3 from General Configuration, URL only.
To User Email	`\${to_email}`	The email address of the user the email is sent to.	To User Name	`\${to_name}`	The full name of the user the email is sent to.

► Save

Clicking the token string will automatically insert it into the text editor for the template, or they can be manually typed in. Not all tokens work for all template types – any unknown templates will not be translated and will be sent in the recipient's email. Most tokens can be put in the subject line as well, but beware of putting some tokens in as it can make emails unreadable if the subject line is too long.

### 3.1.4. Custom Lists

Custom Lists at this time are used in [Custom Property](#) definitions. The main custom property list screen is as follows:

Custom Lists			
List #	List Name	# Options	Actions
[CL:1]	Operating Systems	8	<a href="#">Edit Values</a>   <a href="#">Remove</a>
[CL:2]	Web Browsers	8	<a href="#">Edit Values</a>   <a href="#">Remove</a>
			<a href="#">Add List</a>

[Save](#)

The table shows all defined custom lists and their information. The Custom List ID, the name of the list, how many selectable options it has, and then actions you can perform on the list – Edit the Values, Remove (delete) the list, or add a new list. Lists must have a unique name.

When creating or editing a list, the following screen is displayed:

Custom List Values		
<a href="#">&lt;&lt; Back To Custom Lists</a>		
List Name:	<input type="text" value="Web Browsers"/>	
List Description:	<input type="text" value="List of web browsers"/>	
List Value #	Value	Actions
[CV:9]	<input type="text" value="Internet Explorer 7.0"/>	<a href="#">Remove</a>
[CV:10]	<input type="text" value="Internet Explorer 8.0"/>	<a href="#">Remove</a>
[CV:11]	<input type="text" value="Internet Explorer 9.0"/>	<a href="#">Remove</a>
[CV:12]	<input type="text" value="Firefox 3.0+"/>	<a href="#">Remove</a>
[CV:13]	<input type="text" value="Safari 3.0+"/>	<a href="#">Remove</a>
[CV:14]	<input type="text" value="Chrome 5.0+"/>	<a href="#">Remove</a>
[CV:15]	<input type="text" value="Opera 9.0+"/>	<a href="#">Remove</a>
[CV:16]	<input type="text" value="Other"/>	<a href="#">Remove</a>
		<a href="#">Add Value</a>

[Save](#)

The list name and description are for identification purposes only, and are not visible to other users in the application. Each list item must have a unique name, if you try to add a duplicate or empty value, an error will be thrown. Click the 'Save' button to save your values, and use the link at top to return to the main Custom List page.

### 3.1.5. Product Definitions

Products are used throughout the system in various ways. For tickets and in the knowledgebase, they are used to classify and for organization, and to help the user find information they need to help them. The screen for editing and creating products is:

**Product Definitions**

This is a list of all defined products in the system. Artifacts like Articles and Tickets can be assigned to a product for filtering and reporting. You can add a new product by clicking the 'Add' button. To remove a product, blank out the name or click the 'Remove' button. Removing a product does not delete associated artifacts. The token can be three characters, and must be unique per product.

Prod ID	Token	Display Name	Description	Workflow	
[PR-1]	LCS	Library Catalog System	Issues related to the main Library Catalog System application.	Default Workflow ▼	<a href="#">Remove</a>
[PR-2]	BIS	Book Inventory System	Issues related to the main Book Inventory System application.	Default Workflow ▼	<a href="#">Remove</a>
[PR-3]	WEB	Library Web Portal	Issues related to the main Library Web Portal application.	Default Workflow ▼	<a href="#">Remove</a>
<a href="#">Add new Product</a>					<a href="#">Save</a>

The fields are used as follows:

- **Token:** Not used at this time, however, each product must have a unique token ID.
- **Display Name:** This is what the product will display to users when selecting or researching a product.
- **Description:** This is a short description for internal use to describe the product.
- **Workflow:** This is the selected workflow for Tickets assigned to this product. See [Workflows](#), below.

### 3.1.6. License Details

The license details page displays the information about the installed license for the particular instance of KronoDesk™ being used. The information displayed includes: the product name, the license version (e.g. v1.0.0.0), type of license in effect (x-user fixed, x-user concurrent, demonstration, enterprise, etc.), the organization that the license belongs to, the actual license key code and finally the number of agent-users concurrently logged-in. This last piece of information is useful as it helps administrators track down how many agent licenses are currently in use.

A sample page is illustrated below:

**License Details**

The following license information is currently being used by the system. You can update the license by entering the organization and license key:

**Licensed Product\*:** KronoDesk  
**License Version #\*:** v1.0.0.0  
**License Type\*:** Enterprise License  
**# Concurrent Users\*:** 1 Active ([View Active Sessions](#))  
**Expiration\*:** n/a  
**Organization\*:**   
**License Key\*:**

**Note:** The license key and organization name must match that found in your [Customer Home Page](#).  
 If you do not already have a license for the software, you can [purchase one](#) online today.

[Cancel](#) [Save](#)

To change the license key used by the system (for example, if to upgrade from Trial edition to Standard edition), you do **not** need to reinstall KronoDesk. All you need to do is simply change the information in

the **organization** and **license key** text-boxes to match the license key and organization name found in the customer area of our website (<http://www.inflectra.com/CustomerArea>) and click the <Update> button.

If there is an issue with the license key (e.g. a trial version that is passed its expiration date, or where the license key doesn't match the organization name) an error will be displayed describing the specific issue with the information you entered. If you are unable to get the system to work with the license key information, please contact Inflectra® customer support at: [support@inflectra.com](mailto:support@inflectra.com).

### 3.1.7. Remove Sample Data

This administration link is only available while the system still has sample data in it. This administration option will remove all data that was added in at installation, with the following guidelines:

- **Users:** All users between ID 2 and ID 11 will be removed. The main Administrator account, and any users created after installation will remain.
- **Tickets:** All tickets created at installation will remain, except for the first 28 tickets which were installed
- **Ticket Statuses, Priorities, Resolutions, and Types:** All these will be removed, unless any are used in tickets that were created after installation.
- **Custom Property:** All custom property definitions for Tickets will be removed.
- **Attachments:** All attachments created at installation will be removed.
- **Articles:** Articles 1 to 28 will be removed.
- **Products:** All predefined products will be removed, unless they are in use by any tickets not removed.
- **Categories:** Categories 1 through 4 will be removed, including all forums and threads contained therein, even if they were added after installation.

This can only be run once, and cannot be undone without reinstalling the entire application, so please **use with caution!**

## 3.2. Users

This section contains all of the settings related to viewing and managing users in the system. Currently it allows an administrator to view the list of users and modify a user's profile as well as see a list of active sessions.

### 3.2.1. View/Edit Users

This page will display a list of users (both active and inactive) currently configured in the system:

View/Edit Users							
The following users have been created in the system. To edit an existing user, click on the User's name:							
Displaying 1 - 10 out of 10 Users						<a href="#">Apply Filter</a>   <a href="#">Clear Filter</a>	
First Name ▲▼	Login ▲▼	Email Address ▲▼	Active? ▲▼	Approved? ▲▼	Locked Out? ▲▼	Last Login ▲▼	User ID# ▲▼
<a href="#">Amy E Cribbins</a>	amycribbins	donotreply@kronodesk.net	-- Any -- ▼	-- Any -- ▼	-- Any -- ▼		10
<a href="#">Bernard P Tyler</a>	bernardtyler	donotreply@kronodesk.net	Y	Y	N		8
<a href="#">Donna W Harkness</a>	donnaaharkness	donotreply@kronodesk.net	Y	Y	N		3
<a href="#">Henry J Cooper</a>	henrycooper	donotreply@kronodesk.net	Y	Y	N		9
<a href="#">Jack Van Stanten</a>	jackvanstanten	donotreply@kronodesk.net	Y	Y	N	6-Jun-2012	4
<a href="#">Martha Noble</a>	marthanoble	donotreply@kronodesk.net	Y	Y	N		7
<a href="#">Ricky Pond</a>	rickypond	donotreply@kronodesk.net	Y	Y	N	31-Dec-2010	2
<a href="#">Rory Jones</a>	roryjones	donotreply@kronodesk.net	Y	Y	N		6
<a href="#">Rose T Smith</a>	rosesmith	donotreply@kronodesk.net	Y	Y	N		5
<a href="#">System Administrator</a>	administrator	donotreply@kronodesk.net	Y	Y	N	6-Jun-2012	1

Show 15 rows per page

Displaying page 1 of 1

The users are listed with their name, login, email address, active flag, approved status, whether they are currently locked out (for incorrectly entering their password too many times), the date they last logged-in and their user id. You can sort or filter the user list by any of the fields by clicking on the header arrow or using the appropriate control in the filter row. To view the details of a specific user, simply click on their name which is a hyperlink:

Edit User Details	
Please update the user's information below:	
<b>Account Information</b>	
Login*:	<input type="text" value="rickypond"/>
Email Address*:	<input type="text" value="donotreply@kronodesk.net"/>
First Name*:	<input type="text" value="Ricky"/>
Last Name*:	<input type="text" value="Pond"/>
Middle Initial:	<input type="text"/>
Comment:	<input type="text"/>
RSS Token:	<input type="text" value="[{CC6F494D-CE6A-4B22-A1EC-F7A6A5395900}]"/> > <a href="#">Generate New Token</a>
Password:	<input type="password"/> <small>Only enter in the new password if you mean to change it. Otherwise, leave blank. Passwords are required to be a minimum of 6 characters in length.</small>
Question:	<input type="text" value="What is 1+1?"/>
Answer:	<input type="text"/> <small>Leave the Password Answer field empty if you do not want to change it.</small>
Roles:	<input type="text" value="Manager"/>
Spira Api Key:	<input type="text"/> <input type="button" value="Test"/> <small>A valid RSS Token used to access your instance of Spira. Each Spira user has an RSS token configured in his/her profile.</small>
Active?*	<input type="text" value="Yes"/>
Approved?*	<input type="text" value="Yes"/>
Locked Out?*	<input type="text" value="No"/>
Last Login:	12/31/2010 7:00:00 PM
Last Locked Out:	-
Last Activity:	-
Password Last Changed:	-
<input type="button" value="Update User"/> <input type="button" value="Cancel"/>	

You can update the following fields on this page:

- **Login** – the username that the user has in the system. This has to be unique.
- **Email Address** – a valid email address that notifications will be sent to.
- **First Name** – the user's first name
- **Last Name** – the user's last name
- **Middle Initial** – the user's middle initial (if applicable)
- **RSS Token** – used to allow the user to view secure KronoDesk RSS newsfeeds from outside the system
- **Password** – if you want to change the user's password, you can enter it in the text box. If you don't want to change the password, you can leave this blank.
- **Password Question/Answer** – if you want to change the user's challenge question/answer, enter a question that only they will know the answer to, together with the matching answer to that question. If you don't want to change the question/answer, you can leave these blank.
- **Roles** – this displays a list of the available roles in the system, with the ones that the user belongs to selected. You can change the roles by selecting them in the dropdown list.
- **Spira Api Key** – you need to enter the SpiraTeam RSS token for the user so that the user can view SpiraTeam incidents linked to a specific KronoDesk help desk ticket.
- **Active?** – Used to specify whether this user account is active or not.
- **Approved?** – Used to specify whether this user account is approved or not. Currently all users in the system are created with approved accounts.
- **Locked?** – Used to specify whether this user account is temporarily locked due to the user making too many incorrect login attempts.

Once you are satisfied with the changes, you can click [Update User] to commit the changes. If there are any validation errors, they will be displayed, otherwise the system will display a confirmation box.

The following roles exist in the system and can be used when assigned permissions to users:

- **Administrator** – the most powerful role in the system, they can view, create, modify and delete all artifacts in the system (articles, tickets, forums, threads, replies) as well as access the administration section where they can change all application-wide settings.
- **Manager** – this role can view, create, modify and delete all artifacts in the system (articles, tickets, forums, threads, replies). This role cannot access the Administration section
- **Employee** – this role can view everything in the non-administration section of the application. This role can view, modify and create tickets, articles, threads and replies. It cannot delete items in the system.
- **Customer** – this role can view all articles and forums, can submit new threads, reply to existing threads, can log help desk tickets and view/modify tickets that they opened only.
- **User** – this role can view all articles and forums, can submit new threads, and reply to existing threads. This role does not have any access to the help desk ticketing section of the application.

There are several sample users that are installed with the system, they have the following login/passwords and roles:

Login	Full Name	Password	Active	Role
administrator	System Administrator	PleaseChange	Yes	Administrator
rickypond	Ricky Pond	PleaseChange	Yes	Manager
donnaHarkness	Donna Harkness	PleaseChange	Yes	Employee
jackvanstanten	Jack Van Stanten	PleaseChange	Yes	Employee
rosesmith	Rose Smith	PleaseChange	Yes	Customer
roryjones	Rory Jones	PleaseChange	Yes	Customer
marthanoble	Martha Noble	PleaseChange	Yes	Customer
bernardtyler	Bernard Tyler	PleaseChange	Yes	Customer
henrycooper	Henry Cooper	PleaseChange	Yes	User
amycribbins	Amy Cribbins	PleaseChange	No	User

### 3.2.2. View Active Sessions

Often an administrator of the system will want to know how many users are currently logged into the system, especially on installations licensed by concurrent-user. Clicking on the 'Active User Sessions' administration option will display a list of all the users who currently have active sessions in the system:

Active Sessions							
The following users currently have active sessions on this instance of KronoDesk:							
Login	Full Name	Session ID	Uses License	Interface	Last Logon	User #	Operations
administrator	System Administrator	zs1j3fflwdbh1fqdorj52ms	True	Web Application	6/4/2012 3:16:07 PM	1	> <a href="#">End Session</a>
To end a user's session, please click on the appropriate 'End Session' link above.							

Each user is displayed along with their user ID, whether they're connected through the application or via a third-party add-on, the date they last logged-in, and whether they are being counted as concurrent-user from a licensing perspective. With a concurrent-user license, KronoDesk allows an unlimited number of general user sessions, but only a certain number of customer service agent user sessions.

The administrator is able to forcibly end a user's session using the 'End Session' link to the right of their name. Clicking this link will result in that user being logged out when they try and perform an operation in the system. **Warning:** You should make sure that the user is not actively using the system to prevent any unsaved data being lost.



### 3.3.2. Categories & Forums

This page lets administrators manage the different categories and forums used in the KronoDesk customer support forums. The customer forums are divided up into categories and each category has a set of forums. Typically the forum categories are associated with a particular product or service, although there may be some general categories that are product agnostic.

Id	Uri Token	Display Name	Description	Product	Active?	Position	
1	library-catalog	Library Catalog Forums > View Forums (3)	These forums provide help and support on the library catalog system that was	Library Catalog System	<input checked="" type="checkbox"/>	1	> Remove
2	book-inventory	Book Inventory Forums > View Forums (3)	These forums provide help and support on the book inventory system that was	Book Inventory System	<input checked="" type="checkbox"/>	2	> Remove
3	web-portal	Web Portal Forums > View Forums (2)	These forums provide help and support on the web portal that was developed to allow	Library Web Portal	<input checked="" type="checkbox"/>	3	> Remove
4	other	Other > View Forums (2)	These forums are for discussions not specific to any of the products in the other	-- None --	<input checked="" type="checkbox"/>	4	> Remove
							> Add New Category

When you first open this page, the system will list all the forum categories already in the system. You can use this page to perform the following operations:

- **Modify an Existing Category** – to do this, you simply need to update the URL-Token, Display Name, Description, Product, Active flag and Position value for the category and click [Save].
  - **URL Token** – This is the URL segment that will be used to create the hyperlink to access this forum category (e.g. <http://myserver/KronoDesk/Forum/url-token.aspx>). Url Tokens have to be unique and can only contain alphanumeric characters and hyphens.
  - **Display Name** – This is the name of the category that will be displayed in the category details page.
  - **Description** – This is the long description of the category that will be displayed in the category details page.
  - **Product** – If the category is related to a specific product, you should select the product.
  - **Active** – This should be checked if you want the category to be visible within the application. Old categories that are no longer in use should be made inactive.
  - **Position** – This should be used to specify the order of the categories.
- **Create a New Category** – to this, you simply need to click on the “Add New Category” hyperlink in the bottom row and then enter the new category information and click [Save].
- **Delete an Existing Category** – to do this, simply click on the “Remove” hyperlink next to the category. You will be asked to confirm the deletion, after which the category will be deleted from the system. *Note: If you delete a forum category, the system will delete all the forums, threads and message contained within that category.*

To view the list of forums associated with a particular category, you should click on the “View Forums” link that will display the appropriate list of forums:

**System Settings**

- > General Settings
- > Appearance
- > E-Mail Configuration
- > Custom Lists
- > Product Definitions
- > License Details
- > Remove Sample Data

**Users**

**Forum Settings**

- > Appearance
- > Categories & Forums

**Knowledge Base Settings**

**Help Desk Settings**

**Categories & Forums > Library Catalog Forums**

<< Back to Category List

These are all the available forums defined for the 'Library Catalog Forums' category. To add a new forum, click the 'Add' link. To remove a forum, remove the name or click the 'Remove' link.

Id	Uri Token	Display Name	Description	Active?	Category	Position	
1	issues-and-questions	Library Catalog Issues & Question	General discussions surrounding the use of the Library Catalog product. This	<input checked="" type="checkbox"/>	Library Catalog Forums	1	> Remove
2	enhancement-suggestion	Library Catalog Enhancement Sug	Discuss ideas and suggestions for customising and extending the Library	<input checked="" type="checkbox"/>	Library Catalog Forums	2	> Remove
3	best-practices	Library Catalog Best Practices	Discussions of best practices for using the Library Catalog product in specific situations /	<input checked="" type="checkbox"/>	Library Catalog Forums	3	> Remove
							> Add Forum

You can use this page to manage the various forums in the category:

- **Modify an Existing Forum** – to do this, you simply need to update the URL-Token, Display Name, Description, Active flag and Position value for the forum and click [Save].
  - **URL Token** – This is the URL segment that will be used to create the hyperlink to access this forum (e.g. <http://myserver/KronoDesk/Forum/category/url-token.aspx>). Uri Tokens have to be unique for the specific category and can only contain alphanumeric characters and hyphens.
  - **Display Name** – This is the name of the forum that will be displayed in the forum details page.
  - **Description** – This is the long description of the forum that will be displayed in the forum details page.
  - **Active** – This should be checked if you want the forum to be visible within the application. Old forum that are no longer in use should be made inactive.
  - **Position** – This should be used to specify the order of the forums in the category.
- **Create a New Forum** – to this, you simply need to click on the “Add Forum” hyperlink in the bottom row and then enter the new forum information and click [Save].
- **Delete an Existing Forum** – to do this, simply click on the “Remove” hyperlink next to the forum. You will be asked to confirm the deletion, after which the forum will be deleted from the system. *Note: If you delete a forum, the system will delete all the threads and message contained within that forum.*

### 3.4. Knowledge Base Settings

This section contains all of the settings that affect the online knowledge base part of the application.

#### 3.4.1. Article Categories

This page lets administrators manage the different article categories used in the KronoDesk online knowledge base. Each article in the knowledge base is assigned to one or more article category which is used to make finding information easier. Typically the article categories are associated with a particular product or service, although there may be some general categories that are product agnostic.

Id	Uri Token	Display Name	Description	Parent Category	Product	Active?	
2	book-inventory	Book Inventory Articles	Contains knowledge base articles related to the book inventory system that was	-- None --	Book Inventory Syste	<input checked="" type="checkbox"/>	> Remove
1	library-catalog	Library Catalog Articles	Contains knowledge base articles related to the library catalog system that was	-- None --	Library Catalog Syst	<input checked="" type="checkbox"/>	> Remove
4	misc	Misc Articles	Contains knowledge base articles not related to specific products or services.	-- None --	-- None --	<input checked="" type="checkbox"/>	> Remove
3	web-portal	Web Portal Articles	Contains knowledge base articles related to the web portal that was developed to	-- None --	Library Web Portal	<input checked="" type="checkbox"/>	> Remove
6	library-catalog-ne	Library Catalog News Arti	Contains news knowledge base articles related to the library catalog system that	Library Catalog Articl	Library Catalog Syst	<input checked="" type="checkbox"/>	> Remove
5	library-catalog-te	Library Catalog Technical	Contains technical knowledge base articles related to the library catalog system that	Library Catalog Articl	Library Catalog Syst	<input checked="" type="checkbox"/>	> Remove
8	book-inventory-ni	Book Inventory News Arti	Contains news knowledge base articles related to the book inventory system that	Book Inventory Articl	Book Inventory Syst	<input checked="" type="checkbox"/>	> Remove
7	book-inventory-te	Book Inventory Technical	Contains technical knowledge base articles related to the book inventory system that	Book Inventory Articl	Book Inventory Syst	<input checked="" type="checkbox"/>	> Remove

When you first open this page, the system will list all the article categories already in the system. You can use this page to perform the following operations:

- **Modify an Existing Category** – to do this, you simply need to update the URL-Token, Display Name, Description, Parent Category, Product and Active flag value for the category and click [Save].
  - **URL Token** – This is the URL segment that will be used to create the hyperlink to access this forum category (e.g. <http://myserver/KronoDesk/KnowledgeBase/url-token/List.aspx>). Url Tokens have to be unique and can only contain alphanumeric characters and hyphens.
  - **Display Name** – This is the name of the category that will be displayed in the category details page.
  - **Description** – This is the long description of the category that will be displayed in the category details page.
  - **Parent Category** – If this is a top-level category, you should leave it set to “None”, otherwise you need to set this to the name of the existing article category that the category will be listed under.
  - **Product** – If the category is related to a specific product, you should select the product.
  - **Active** – This should be checked if you want the category to be visible within the application. Old categories that are no longer in use should be made inactive.

- **Create a New Category** – to this, you simply need to click on the “Add New Category” hyperlink in the bottom row and then enter the new category information and click [Save].
- **Delete an Existing Category** – to do this, simply click on the “Remove” hyperlink next to the category. You will be asked to confirm the deletion, after which the category will be deleted from the system. *Note: If you delete an article category, the system will delete all the child categories and articles contained within that category.*

### 3.5. Help Desk Settings

This section contains all of the settings that affect the help desk ticketing part of the application.

#### 3.5.1. Custom Properties

Tickets in the Help Desk system can have up to 20 custom properties. There are different types of custom properties allowed:

- **Text:** Normal or Rich-Text field.
- **Integer:** Whole-Number entry.
- **Decimal:** Fractional number entry (currency, etc.)
- **Boolean:** Simple yes/no (on/off) checkbox.
- **Date:** Date selector.
- **List:** Custom List selector.
- **Multi-List:** Custom List selector that allows multiple values.
- **User:** List of assignable users.

Each custom property can have optional settings applied to it. Optional settings are as follows. (Note that not all settings are allowed for all property types.)

- **Default:** The default value when a new ticket is opened up.
- **Allow Empty:** Whether or not an empty value is allowed.
- **Precision:** (Decimal Only) How many decimal places is allowed (or the value is rounded to).
- **Minimum Value:** The minimum value allowed.
- **Maximum Value:** The maximum value allowed.
- **Minimum Length:** The minimum length of the data required in the field.
- **Maximum Length:** The maximum length of the data allowed in the field.
- **Rich Text:** Whether or not the text field allows HTML or not.
- **Custom List:** The defined Custom List for the field that users can select from.

**Important:** Note that setting 'Allow Empty' to No will override any [Workflow](#) step definitions, and will always require a value to be entered in, even if the workflow is configured to have the field disabled!

Going to the main page, you will see a list of custom properties defined for Tickets:

**Help Desk Settings**

Below are the custom properties currently defined for support tickets. All defined custom properties will appear under the 'Custom Properties' header on the ticket details page.

Field #	Property Name	Type	Actions
1	Operating System	List	<a href="#">Edit Definition</a>   <a href="#">Remove</a>
2	Browsers Affected	MultiList	<a href="#">Edit Definition</a>   <a href="#">Remove</a>
3	Other Information	Text	<a href="#">Edit Definition</a>   <a href="#">Remove</a>
4	Notes	Text	<a href="#">Edit Definition</a>   <a href="#">Remove</a>
5	Hosted System?	Boolean	<a href="#">Edit Definition</a>   <a href="#">Remove</a>
6	Target Date	Date	<a href="#">Edit Definition</a>   <a href="#">Remove</a>
7	Reviewed By	User	<a href="#">Edit Definition</a>   <a href="#">Remove</a>
8	Phone Extension	Integer	<a href="#">Edit Definition</a>   <a href="#">Remove</a>
9	Response Time (mins)	Decimal	<a href="#">Edit Definition</a>   <a href="#">Remove</a>
10			<a href="#">Edit Definition</a>   <a href="#">Remove</a>
11			<a href="#">Edit Definition</a>   <a href="#">Remove</a>
12			<a href="#">Edit Definition</a>   <a href="#">Remove</a>
13			<a href="#">Edit Definition</a>   <a href="#">Remove</a>
14			<a href="#">Edit Definition</a>   <a href="#">Remove</a>
15			<a href="#">Edit Definition</a>   <a href="#">Remove</a>
16			<a href="#">Edit Definition</a>   <a href="#">Remove</a>
17			<a href="#">Edit Definition</a>   <a href="#">Remove</a>
18			<a href="#">Edit Definition</a>   <a href="#">Remove</a>
19			<a href="#">Edit Definition</a>   <a href="#">Remove</a>
20			<a href="#">Edit Definition</a>   <a href="#">Remove</a>

To edit a definition, click the Edit Definition link on a property, and you will get a popup:

**Custom Property #1 Definition** ✕

**Definition** | Options

Alias:

Type:

Custom List:

The fields visible will vary depending on the type of custom property you have selected, but every custom property will need to have an Alias and a Type. The Alias is what is shown to the user when viewing or editing the ticket. The type is the type of data the ticket allows.

Under the Options tab will be available options that can be set for the custom property.

When finished, click the 'Save' button and you will be returned to the Custom Property list.

**Important:** When changing a custom property's type or removing a custom property, the data is not actually removed from the ticket. Therefore, if you change a custom property of a date into a text, the field will display the old date value until it is changed by the user.

### 3.5.2. Ticket Statuses

Ticket statuses can be edited using the grid that displays all defined statuses.

**Help Desk Settings**

Below are statuses that are defined in the system for tickets. Statuses that are marked as 'Open' indicate the ticket is still being worked on or resolved. The default status is the first status a ticket will be upon opening.

Status ID	Display Name	Is Open?	Default?	
[TS:1]	Open	<input checked="" type="checkbox"/>	<input checked="" type="radio"/>	<a href="#">Remove</a>
[TS:2]	Assigned	<input checked="" type="checkbox"/>	<input type="radio"/>	<a href="#">Remove</a>
[TS:3]	Waiting on Customer	<input checked="" type="checkbox"/>	<input type="radio"/>	<a href="#">Remove</a>
[TS:4]	Waiting on Development	<input checked="" type="checkbox"/>	<input type="radio"/>	<a href="#">Remove</a>
[TS:5]	Closed	<input type="checkbox"/>	<input type="radio"/>	<a href="#">Remove</a>
[TS:6]	Duplicate	<input type="checkbox"/>	<input type="radio"/>	<a href="#">Remove</a>
[TS:7]	Non-Issue	<input type="checkbox"/>	<input type="radio"/>	<a href="#">Remove</a>
				<a href="#">Add New Status</a>

All statuses must have a display name, which is viewed by the user editing or viewing the ticket. The other fields are:

- **Is Open?:** Whether this status is considered as open or active. If this is not checked, tickets with this status are considered Closed.
- **Default?:** The status selected as the default is the status that new tickets are opened as.

To add a new Status, click the Add New Status link – a new row will be inserted into the table where you can save the new status.

To remove a status, click the Remove link. Any tickets with a status that has been removed will stay that status, until the next time a user edits the ticket.

In addition to this screen that lets you edit the ticket statuses, if you click on the “Advanced” option in the left hand navigation, it will bring up the screen that lets you specify some additional status change rules:

- ▶ System Settings
- ▶ Users
- ▶ Forum Settings
- ▶ Knowledge Base Settings
- ▼ Help Desk Settings
  - > Custom Properties
  - > Ticket Statuses
    - > (Advanced)
  - > Ticket Types
  - > Ticket Priorities
  - > Ticket Resolutions
  - > Workflows
  - > Spira Integration

**Help Desk Settings**

**Ticket Statuses (Advanced)**

When a customer adds a note to a help desk ticket that is in a closed status, the system will automatically switch the ticket to the following status:  
Default Open Status:

When an employee bulk-assigns a ticket to themselves or another person using the ticket list page, the system will automatically change the status of the ticket to the following status:  
Default Assigned Status:

There are two options you can configure:

1. **The Default Open Status** – this allows you to specify the status that a ticket will be automatically switched to when a new note is added by the person who originally opened the ticket. This is

useful when a customer accesses one of their existing tickets that's in a closed status but forgets to change the status back to an open status. This ensures that such tickets do not get forgotten about.

2. **The Default Assigned Status** – this allows you to specify the status that a ticket will be automatically switched to when you use the bulk assign tools on the main Help Desk page. For example five new tickets arrive and you select them and choose the option to “Assign Tickets to Me”. When they are assigned in this way, the system will automatically change their status to the default assigned status option (if specified).

### 3.5.3. Ticket Types

The Ticket Type page defines values allowed for the standard Type field for tickets. Types must have a unique display name, which is what the user sees when they view or edit a type.

Type ID	Display Name	
[TT-1]	Sales	<a href="#">Remove</a>
[TT-2]	Support	<a href="#">Remove</a>
		<a href="#">Add New Type</a>

To add a new type, click the Add New Type link, and fill out the new empty row.

To remove a type, click the Remove button to the right of the defined type. Note that any tickets assigned to a type that is removed will retain their type, until the next time a user tries to edit the ticket.

### 3.5.4. Ticket Priorities

The Ticket Priorities page defines values allowed for the standard Priority field. Like types, priorities must have a unique name.

Priority ID	Display Name	
[TP-1]	1 - Critical	<a href="#">Remove</a>
[TP-2]	2 - High	<a href="#">Remove</a>
[TP-3]	3 - Medium	<a href="#">Remove</a>
[TP-4]	4 - Low	<a href="#">Remove</a>
		<a href="#">Add New Priority</a>

To add a new priority, click the Add New Priority link, and fill out the new empty row.

To remove a priority, click the Remove button to the right of the priority. Note that any tickets assigned to a priority that is removed will retain their value, until the next time a user tries to edit the ticket.

### 3.5.5. Ticket Resolutions

**Help Desk Settings**

These are all the available resolutions. A resolution is meant to be a final status of the ticket, such as "Verified Bug", "User Error" or "RMA Created". To add a new resolution, click the 'Add' link. To remove one, remove the name or click the 'Remove' link.

Res ID	Display Name	Description	
[TR:1]	Customer Issue - Network	The issue was on the customer's side, affected by the network.	<a href="#">Remove</a>
[TR:2]	Customer Issue - Configuration	There was a mis-configuration in the application.	<a href="#">Remove</a>
[TR:3]	Customer Issue - Hardware	There was a hardware failure.	<a href="#">Remove</a>

The Ticket Resolutions page defines values allowed for the standard Resolution field. Like types and priorities, resolutions must have a unique name. The description is used internally, and should just contain a short summary of the meaning of the resolution.

To add a new resolution, click the Add New Resolution link, and fill out the new empty row.

To remove a resolution, click the Remove button to the right of the resolution. Note that any tickets assigned to a resolution that is removed will retain their value, until the next time a user tries to edit the ticket.

### 3.5.6. Spira Integration

When customer support agents work on tickets received from customers, they may find that the issue is actually a product defect rather than a customer support matter. In which case, they can take advantage of the built-in integration with SpiraTeam® - Inflectra's award winning Application Lifecycle Management (ALM) solution that has a powerful product incident management system.

KronoDesk™ has the ability to connect to an instance of SpiraTeam® and add new product incidents into the system that are linked to the originating KronoDesk Ticket. That allows customer service agents to monitor the status of the associated product incidents and inform customers when the appropriate patches or fixes are available to correct the problem.

This screen allows the administrator to setup the connection between SpiraTeam and KronoDesk.

**System Settings**

- System Settings
- Users
- Forum Settings
- Knowledge Base Settings
- Help Desk Settings**
  - Custom Properties
  - Ticket Statuses
  - Ticket Types
  - Ticket Priorities
  - Ticket Resolutions
  - Workflows
  - Spira Integration

**Spira Integration**

This page lets you configure the integration with Spira so that you can create Spira incidents from KronoDesk tickets and view the list of associated incidents with each ticket.

Spira URL\*:   
The URL to your instance of SpiraTest, SpiraPlan or SpiraTeam (e.g. http://myserver/SpiraTest or https://mycompany.spiraservice.net)

Api Key:    
A valid RSS Token used to access your instance of Spira. Each Spira user has an RSS token configured in his/her profile.

You should enter the URL that your users use to access their instance of SpiraTest, SpiraPlan or SpiraTeam (including the HTTP or HTTPS prefix) together with the SpiraTeam RSS Token for a valid SpiraTeam user. This RSS Token is used to verify the connection.

Once you have entered the information, you should click the [Test] button to verify that the URL is accessible. If there are connectivity issues, an error will be displayed, otherwise a green confirmation message will appear. Once the connection information has been successfully verified, you need to click the [Save] button to save the connection settings in the system.

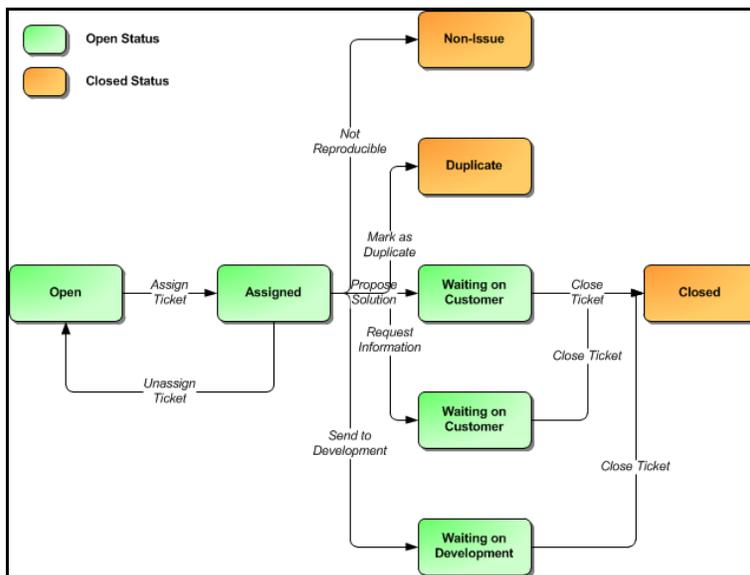
### 3.6. Workflows

This section displays a list of the defined ticket workflows in the system. A workflow is a predefined sequence of ticket statuses linked together by “workflow transitions” to enable a newly created ticket to be reviewed, prioritized, assigned, resolved and closed, as well as to handle exception cases such as the case of a duplicate or non-reproducible ticket. The initial workflow list screen when you first use the system is illustrated below:

Workflows				
There are the various workflows available in the system. To add a new workflow, click the Add button, to edit an existing workflow, click on the Steps hyperlink.				
Workflow Name	Default	Active	Workflow #	Operations
Default Workflow	<input checked="" type="radio"/>	Yes ▾	1	<a href="#">Steps</a>   <a href="#">Copy</a>   <a href="#">Delete</a>
<input type="button" value="Cancel"/> <input type="button" value="Save"/> <input type="button" value="Add Workflow"/>				

To modify the name, default status, and/or active flags, simply change the values in the appropriate text-box, radio-button or drop-down list and click the [Save] button. To add a new workflow, simply click the [Add Workflow] button and a new workflow will be created with the standard KronoDesk steps and transitions.

You can have as many workflows as you like in a project, but only one can be marked as the default. Each KronoDesk product is assigned to a workflow; this allows you to have support tickets for different products follow different paths from creation to closure. However when a new product is created, it will be initially associated with the default workflow. The steps and transitions that make up the default workflow are illustrated in the diagram below:



Note: You can only assign an active workflow to a KronoDesk product, and similarly you cannot make a workflow inactive that is currently linked to at least one product. This is important as all products need to be linked to an active workflow at all times.

### 3.6.1. Edit Workflow Details

Clicking on the <Steps> button of an inactive workflow brings up the following screen that lists all the workflow steps and workflow transitions that comprise the workflow:

Workflows > Default Workflow			
<a href="#">&lt;&lt; Back to Workflow List</a>			
This displays all the ticket status steps for this particular workflow:			
Step Name	Transitions	Status Id	Operations
<a href="#">Open (Default)</a>	<a href="#">Assign Ticket (Delete)</a> >> Assigned	1	> <a href="#">Add Transition</a>
<a href="#">Assigned</a>	<a href="#">Unassign Ticket (Delete)</a> >> Open  <a href="#">Propose Solution (Delete)</a> >> Waiting on Customer <a href="#">Request More Information (Delete)</a> >> Waiting on Customer  <a href="#">Send to Development (Delete)</a> >> Waiting on Development <a href="#">Mark as Duplicate (Delete)</a> >> Duplicate <a href="#">Not Reproducible (Delete)</a> >> Non-Issue	2	> <a href="#">Add Transition</a>
<a href="#">Waiting on Customer</a>	<a href="#">Return to Support (Delete)</a> >> Assigned  <a href="#">Close Ticket (Delete)</a> >> Closed	3	> <a href="#">Add Transition</a>
<a href="#">Waiting on Development</a>	<a href="#">Reassign to Support (Delete)</a> >> Assigned  <a href="#">Close Ticket (Delete)</a> >> Closed	4	> <a href="#">Add Transition</a>
<a href="#">Closed</a>	<a href="#">Reopen Ticket (Delete)</a> >> Assigned	5	> <a href="#">Add Transition</a>
<a href="#">Duplicate</a>	<a href="#">Return to Support (Delete)</a> >> Assigned  <a href="#">Close Ticket (Delete)</a> >> Closed	6	> <a href="#">Add Transition</a>
<a href="#">Non-Issue</a>	<a href="#">Return to Support (Delete)</a> >> Assigned  <a href="#">Close Ticket (Delete)</a> >> Closed	7	> <a href="#">Add Transition</a>

This page lists in the left-most column all the various incident statuses defined in the system. The next column lists all the possible transitions that can occur *from that status*. In addition, with each transition is listed the name of the resulting *destination status* that the transition leads to. E.g. from the assigned status, depending on your role (see later) you can move the ticket to either Open, Waiting On Customer, Waiting on Development, Duplicate and Non-Issue depending on which transition the user takes.

Clicking on the name of a step or transition takes you to the appropriate details page (see below) where you can set the properties of the step or transition respectively. To delete an existing transition, simply click the <Delete> button after the transition name, and to add a new transition, click the <Add Transition> button in the Operations column.

### 3.6.2. Edit Workflow Transition

When you click on the transition name link from the previous screen, you are taken to the workflow transition details screen:

Workflows > Default Workflow > Transition: Propose Solution

[<< Back to Workflow Steps List](#)

Assigned (2) > **Propose Solution (3)** > Waiting on Customer (3)

### Conditions

The following users / roles are allowed to execute this transition:

Condition Type	Condition Data
The opener of the Ticket can execute:	No ▼
The assignee of the Ticket can execute:	Yes ▼
Users with the specified roles can execute:	Administrator: <input checked="" type="checkbox"/> Customer: <input type="checkbox"/> Employee: <input type="checkbox"/> Manager: <input checked="" type="checkbox"/> User: <input type="checkbox"/>

[▶ Save](#)

### Notifications

The following users / roles are notified by email when this transition is executed:

Notification Type	Notification Data
The opener of the Ticket is notified:	Yes ▼
The assignee of the Ticket is notified:	No ▼
Users with the specified roles are notified:	Administrator: <input type="checkbox"/> Customer: <input type="checkbox"/> Employee: <input type="checkbox"/> Manager: <input type="checkbox"/> User: <input type="checkbox"/>

[▶ Save](#)

The top part of the screen is the “workflow browser” which illustrates how the transition relates to the workflow as a whole. It displays the current transition in the middle, with the originating and destination steps listed to either side. Clicking on either ticket status name will take you to the appropriate workflow step details page. This allows you to click through the whole workflow from start to finish without having to return to the workflow details page.

Each transition has a series of conditions which need to be satisfied for a user to actually execute the transition (i.e. move the ticket from the originating status to the destination status) and a set of notification rules that allow you to specify who should get an email notification if the transition is executed. Both the conditions and notifications allow you to set three types of user role:

- The opener of the ticket can be allowed to execute the transition, and/or be notified when the transition occurs. For example, when a ticket is marked as Waiting on Customer, the opener should be the only one who’s allowed to move it to Closed. Similarly when an incident is moved from Assigned to Waiting on Customer, the opener should probably be notified so that he knows to log in and verify that it has been resolved satisfactorily.
- The assignee of the ticket can be allowed to execute the transition, and/or be notified when the transition occurs. For example, when a ticket is marked as Assigned, the assigned agent should be the only one who’s allowed to move it to Waiting on Customer. Similarly when a ticket is moved from Open to Assigned, the assignee should probably be notified so that he knows to log in and begin resolving the ticket.

- A user with a specified role can be allowed to execute the transition, and/or be notified when the transition occurs regardless of whether they are the opener or assignee. For example a user with role “Manager” might want the power to close all tickets regardless of assignee status, and might also want to be notified when any ticket is marked as Non-Issue.

You can set any of these conditions by changing the drop-down list and/or check-boxes and clicking the appropriate <Save> button.

### 3.6.3. Edit Workflow Step

When you click on the ticket status name link from either of the previous screens, you are taken to the workflow step details screen:

**Workflows > Default Workflow > Step: Assigned**

<< Back to Workflow Steps List

Assign Ticket (1) > > Unassign Ticket (2)

Return to Support (8) > > Propose Solution (3)

Reassign to Support (10) > Assigned (2) > Request More Information (4)

Reopen Ticket (12) > > Send to Development (5)

Return to Support (13) > > Mark as Duplicate (6)

Return to Support (15) > > Not Reproducible (7)

**Ticket Standard Fields**

The following Ticket standard fields are hidden/disabled/required at this step in the workflow:

Field Name	Hidden	Disabled	Required
Last Accessed On	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assignee	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Closed Date	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Concurrency Date	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Created Date	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Summary	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Deleted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Last Updated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ticket Note	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Opener	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Priority	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Product	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Resolution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Status	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ID	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Type	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Ticket Custom Properties**

The following Ticket custom properties are hidden/disabled/required at this step in the workflow:

Name	Type	Hidden	Disabled	Required
Operating System	List	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Browsers Affected	MultiList	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other Information	Text	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Notes	Text	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hosted System?	Boolean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Target Date	Date	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reviewed By	User	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Phone Extension	Integer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Response Time (mins)	Decimal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Save

The top part of the screen is the “workflow browser” which illustrates how the step relates to the workflow as a whole. It displays the current ticket status in the middle, with the possible originating and destination transitions listed to either side. Clicking on either workflow transition name will take you to the appropriate workflow transition details page. This allows you to click through the whole workflow from start to finish without having to return to the workflow details page.

This page allows you to define the behavior of the various ticket fields (i.e. those that are a standard part of KronoDesk such as Priority) and ticket custom properties for this particular step in the workflow. You can set each of the fields/custom properties as being hidden, disabled, and/or required for each step in the workflow. Note that you cannot set a field/property as being required and disabled since this would prevent a user from ever updating the ticket. For example, when a ticket is in the Open status, you might make the assignee field inactive (since the opener shouldn’t need to know who will ultimately work on it), when it gets to the Assigned status, you might make the field enabled and required. This allows you to tailor the information gathered to the appropriate place in the workflow.

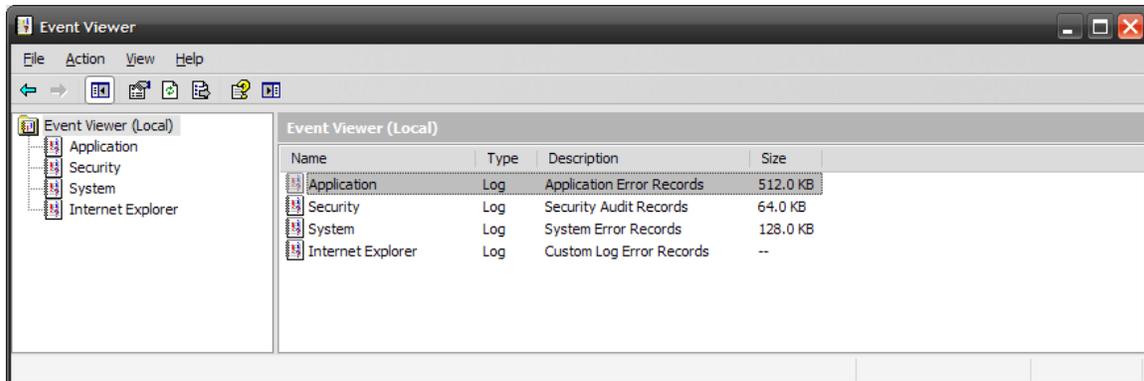
To actually make these changes, all you need to do is select the appropriate checkboxes in the list of fields and custom properties and click the corresponding <Save> button.

## 4. Appendices

### 4.1. Appendix A – Troubleshooting

If you receive the dreaded “IIS 500 Internal Error” or the “Server Application Not Available” webpage when you try and access KronoDesk™ for the first time, there can be a myriad of causes. However a good first place to look for the cause is inside the Windows Event Viewer, which stores all errors raised in the system.

To open the Event Viewer, click Start > Settings > Control Panel > Administrative Tools > Event Viewer. This will open up the event viewer:



Click on the Application and System folders in turn and look for errors raised by “MSSQLSERVER”, “KronoDesk”, “DCOM”, “ASPNET” or “IIS”. Click on the error message, and copy the text of the message into a text editor (e.g. Notepad).

Before contacting Inflectra® customer support with the specific error message, here are a couple of common causes for the above errors together with the appropriate resolutions:

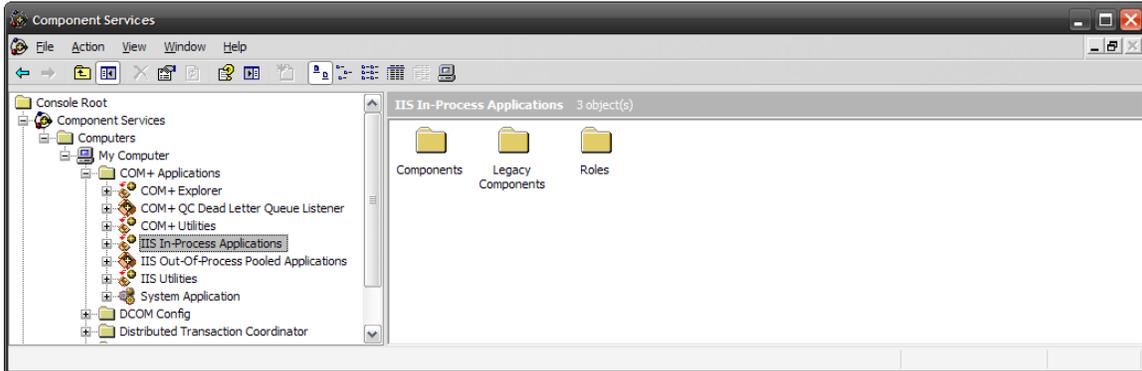
- **The ASP.NET process account has been disabled**  
Go to Start > Control Panel > Administrative Tools > Computer Management and launch the Windows computer management console. Expand Local Users and Groups > Users and then double-click on the 'ASPNET' account. Make sure that the ASPNET user is not disabled. If you are using Windows 2003 or 2008 Server the ASPNET user is set per-application pool and typically is set to the built-in NETWORKSERVICE account, so this won't apply.
- **The ASP.NET process account does not have sufficient permissions**  
Right-click on the C:\WINDOWS\Microsoft.NET\Framework\v4.0.30319 folder (and any other versions of .NET that are listed) and make sure that the ASPNET, NETWORKSERVICE and LOCALSERVICE accounts are all listed with Full Control. If that doesn't fit the issue and you are using Windows 2003 or 2008 Server, open up the IIS manager and right-click on the Application Pool that KronoDesk™ is running under and make sure that the identity listed has Full Control permissions on the same folders.
- **The Windows Event Log is full**  
Open up the Application and System event logs, right-click on the log name and choose Properties. Make sure that both are set to “overwrite events as needed”. If they are not set to overwrite as needed, change the setting then manually clear both logs.

If the resolutions above were not able to resolve the issue, please send an email to [support@inflectra.com](mailto:support@inflectra.com) and include the error message from both the web page and the Windows Event Logs.

#### 4.1.1. Missing MSDTC Issue

There is one common error that has been found with installations where Microsoft SQL Server was installed *after* IIS was installed. This typically affects only Windows XP Professional, but could occur in other situations. What happens is that the SQL Server installation inadvertently removes the *Microsoft Distributed Transaction Coordinator* (MSDTC) service from the system during the installation.

To determine if this is indeed the cause of the observed error, you need to click on Start > Settings > Control Panel > Administrative Tools > Component Services:

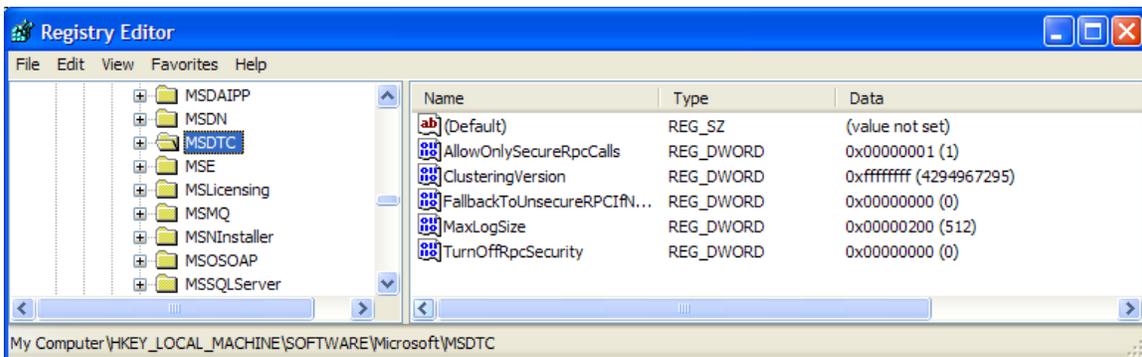


Once the window has opened, expand the folders marked “Component Services”, “Computers”, “My Computer” and “COM+ Applications” in turn. If the window opens correctly and displays the information illustrated above, then your IIS 500 error is being caused by something else.

However if you receive an error message that indicates an inability to connect with the “Distributed Transaction Coordinator”, then you have to fix the MSDTC service to enable IIS and ASP.NET to operate properly.

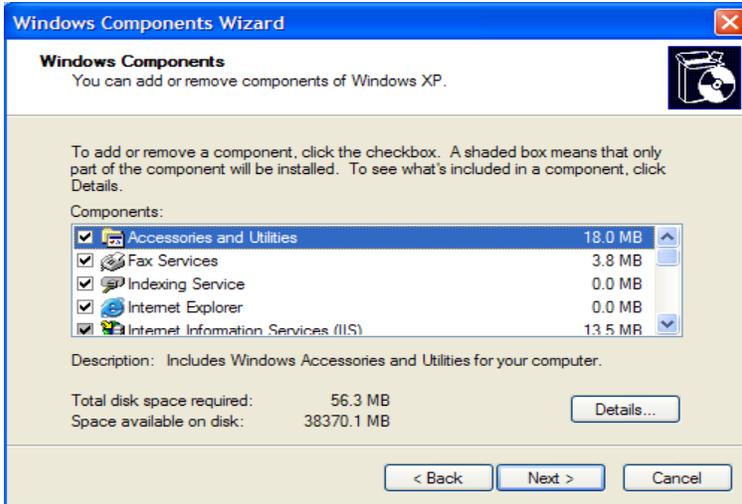
To fix the issue, you need to make changes to the Windows System Registry (hereafter referred to as “the registry”). This is a process that should **not** be attempted by novice users, since any incorrect changes can completely wreck the Windows installation, requiring a complete reinstallation of the operating system.

To open the registry, click Start > Run, and type “Regedit.exe” into the dialog box, and the registry will open:



Expand the folders marked “My Computer”, “HKEY\_LOCAL\_MACHINE”, “SOFTWARE” and “Microsoft” in turn and navigate to the folder marked “MSDTC”. Click the <Delete> button on your keyboard, and click <OK> on the confirmation box. Now close the registry editor.

Now you need to click on Start > Settings > Control Panel > Add or Remove Programs and click on the tab marked “Add/Remove Windows Components”:



Don't change any of the selected components, but instead simply click the <Next> button. The Windows installer will detect that the MSDTC is missing (due to the registry change you made) and will now reinstall it correctly. Once this has finished, reboot the system and you should now be able to access ASP and ASP.NET applications from within IIS.

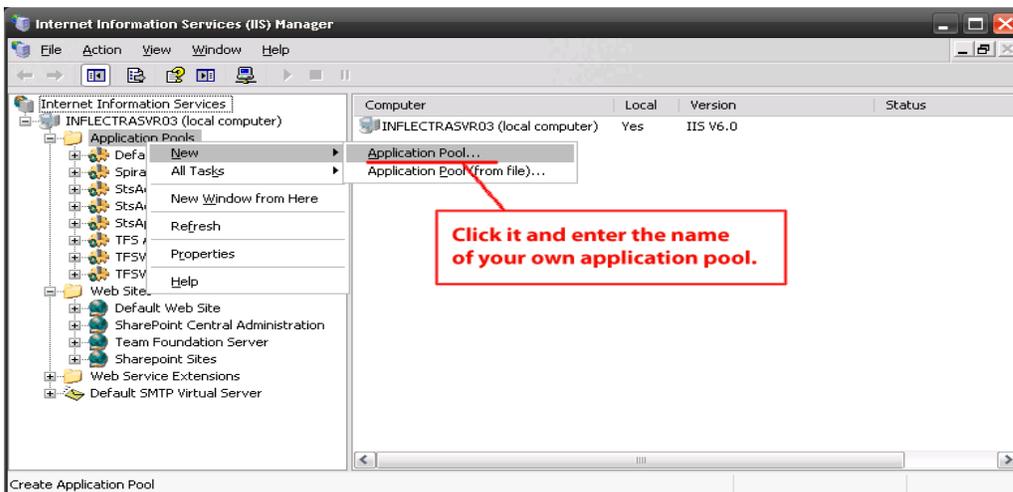
#### 4.1.2. Application Session Pooling Issues (Windows 2003)

This issue can affect Windows Server 2003 using IIS 6.0. Since the 6.0 release of IIS, there is the ability to separate the web-server into different "Application Pools". Sometimes, web hosting companies will host multiple websites in the same application pool (which we do not recommend). When resources are maxed out for an application pool IIS 6 starts to recycle these sites causing application variables to be lost for those recycled sites. *By default, KronoDesk installs on these operating systems in its own application pool.*

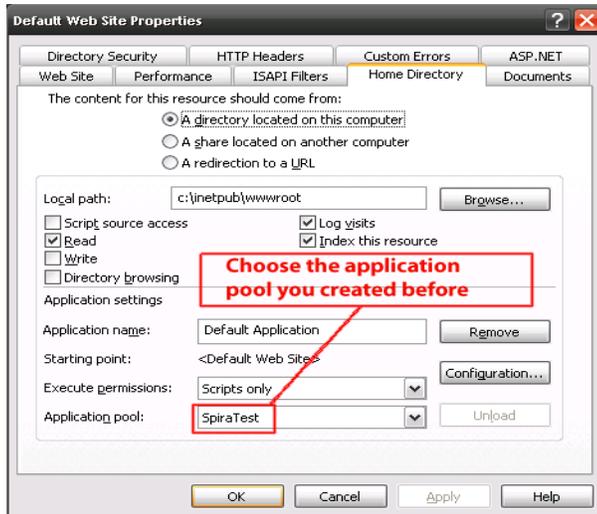
***If you are experiencing application/session loss symptoms*** then we recommend asking your web hosting company to verify that your instance of KronoDesk is running in its own application pool with all recycling options disabled and the recycle worker process set to recycle only once during the day at a set time.

To make these changes yourself, you need to follow these steps:

- 1) Add new application pool for "KronoDesk" if one does not already exist:



- 2) Next, choose your own application pool in the KronoDesk web site properties:



Click <OK> and you should now find that the issues with sessions disappearing has been corrected.

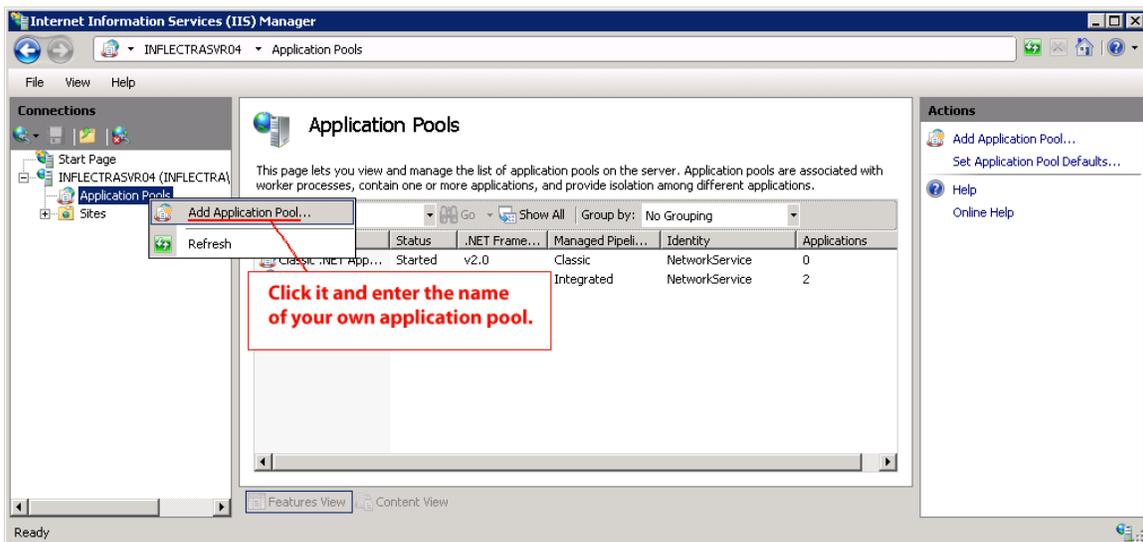
#### 4.1.3. Application Session Pooling Issues (Windows Vista, 7 or 2008)

This issue can affect Windows Vista, 7 or Server 2008 using IIS 7.0. Since the 6.0 release of IIS, there is the ability to separate the web-server into different “Application Pools”. Sometimes, web hosting companies will host multiple websites in the same application pool (which we do not recommend). When resources are maxed out for an application pool IIS 7 starts to recycle these sites causing application variables to be lost for those recycled sites. *By default, KronoDesk installs on these operating systems in its own application pool.*

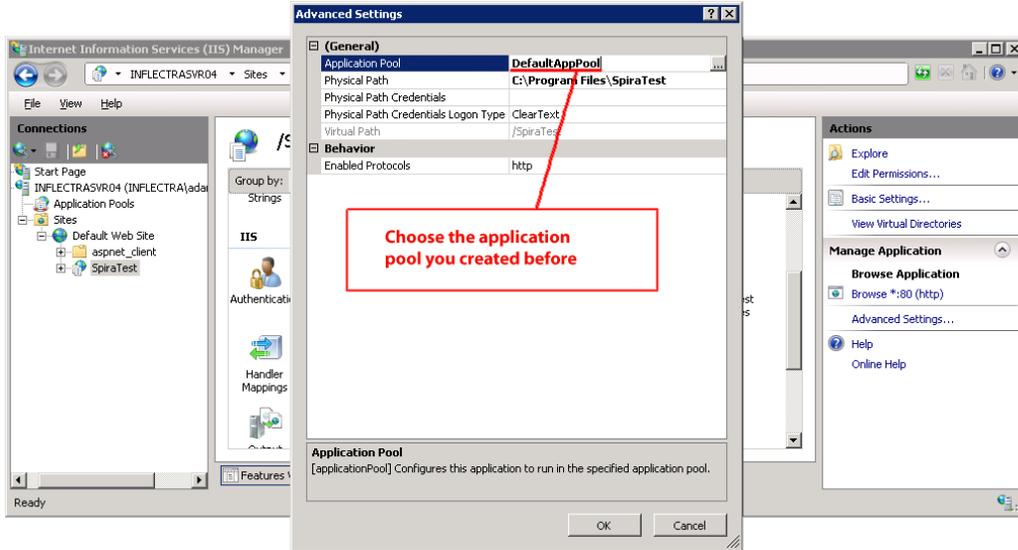
***If you are experiencing application/session loss symptoms*** then we recommend asking your web hosting company to verify that your instance of KronoDesk is running in its own application pool with all recycling options disabled and the recycle worker process set to recycle only once during the day at a set time.

To make these changes yourself, you need to follow these steps:

Add new application pool for “KronoDesk” (if one does not already exist) and make sure it is set to use the .NET Framework v4.0 and the “Integrated Pipeline”:



Next, choose your own application pool in the KronoDesk web site properties:



## 4.2. Appendix B – Using with SSL

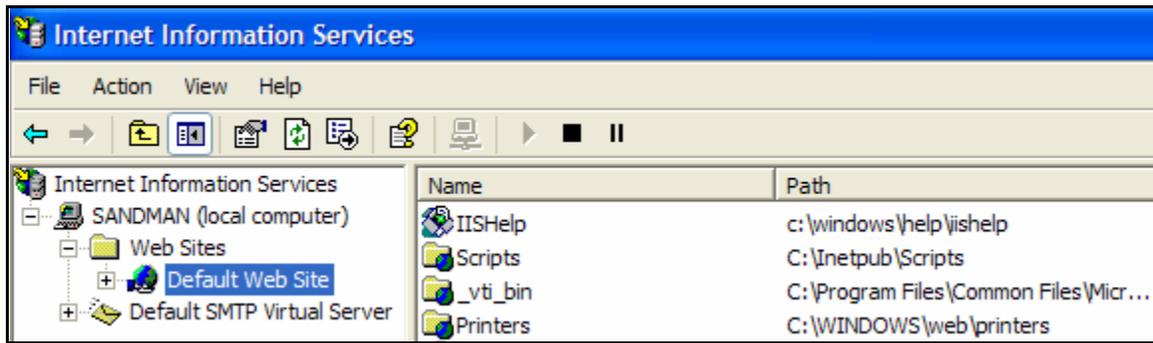
This section outlines how you can install a Secure Sockets Layer (SSL) certificate onto IIS to allow users to access KronoDesk™ via an encrypted protocol, so that usernames, passwords and sensitive project data cannot be “sniffed” across the network. This is especially important if your web-server is being accessed across the Internet.

This section assumes that you already have a Certificate Authority (CA) available to generate an SSL certificate for you. This can either be a third-party provider (e.g. Verisign) or a tool used to generate “self certificates” that can be used internally to your organization (e.g. the IIS Certificate Server that ships with Windows Server 2003 or 2008). For more information on the differences between these two options, please read the following documents:

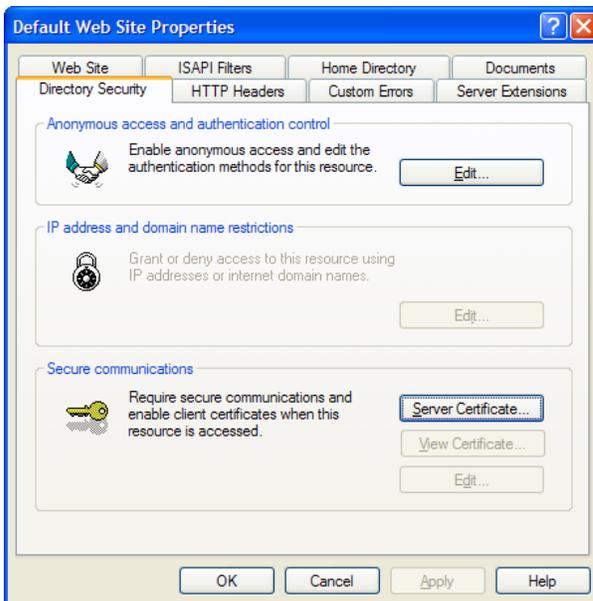
<http://www.microsoft.com/technet/prodtechnol/WindowsServer2003/Library/IIS/8d3bb71a-0a7f-443f-8084-908d0dab9caa.msp?mfr=true> (installing self or third-party certificate on Windows Server 2003)

<http://www.somacn.com/p42.php> (installing self-certificate on Windows XP)

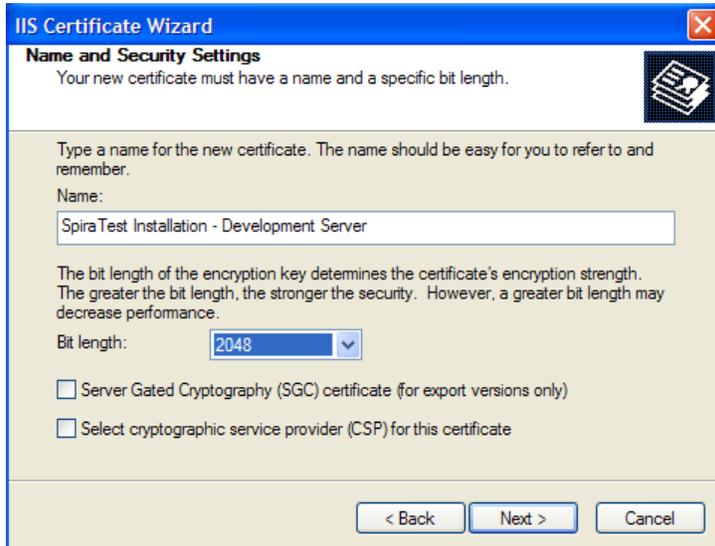
Once you have decided how you will generate the certificate, you next need to generate the request for the certificate from your web server. First, click Start > Settings > Control Panel > Administrative Tools > Internet Information Services to bring up the IIS management console:



Now, right-click on the “Default Web Site” and choose “Properties”, then click the “Directory Security” tab:



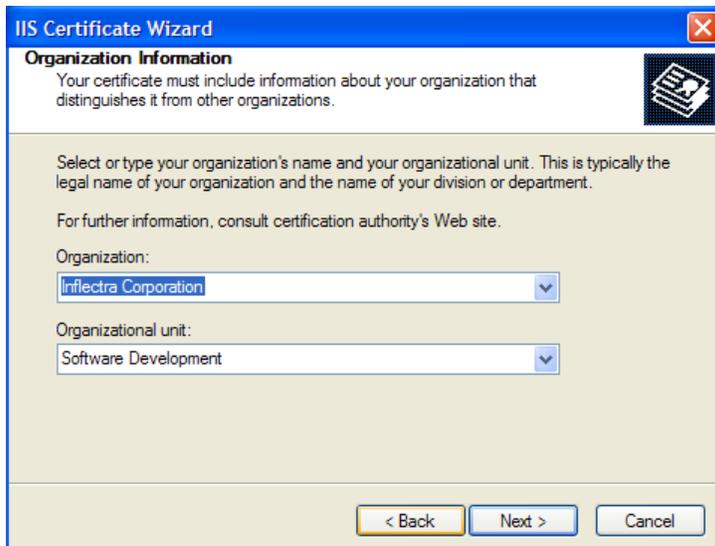
Now, click the button marked “Server Certificate”, click <Next> and choose the option marked “Create a new certificate”, and click <Next>. You can then choose to either prepare the certificate request and sent it later, or to send the certificate request immediately to an online CA. If you are using a third-party CA and are connected to the Internet choose the second option, otherwise choose the first option.



The screenshot shows the 'IIS Certificate Wizard' dialog box, titled 'Name and Security Settings'. The main text reads: 'Your new certificate must have a name and a specific bit length.' Below this, there is a text box for 'Name' containing 'SpiraTest Installation - Development Server'. A note states: 'Type a name for the new certificate. The name should be easy for you to refer to and remember.' Below the name field is a 'Bit length' dropdown menu set to '2048'. A note explains: 'The bit length of the encryption key determines the certificate's encryption strength. The greater the bit length, the stronger the security. However, a greater bit length may decrease performance.' There are two unchecked checkboxes: 'Server Gated Cryptography (SGC) certificate (for export versions only)' and 'Select cryptographic service provider (CSP) for this certificate'. At the bottom are buttons for '< Back', 'Next >', and 'Cancel'.

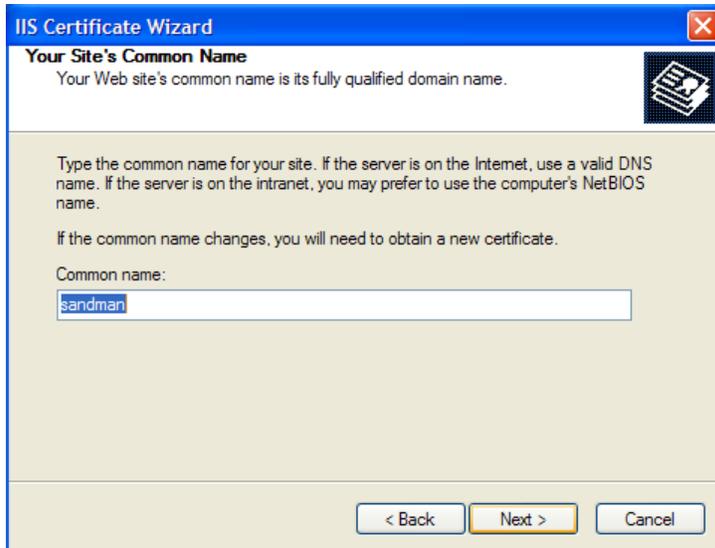
Enter the name for the certificate, typically this will contain the name of the organization, purpose of the certificate and any other pertinent information that will help you distinguish it.

You should choose a bit-length of at least 2048 bits, and leave the other options unchecked unless you are using the server outside of the United States, in which case you will need to choose the “Server Gated Cryptography (SGA)” option. Click the <Next> button when you are finished.

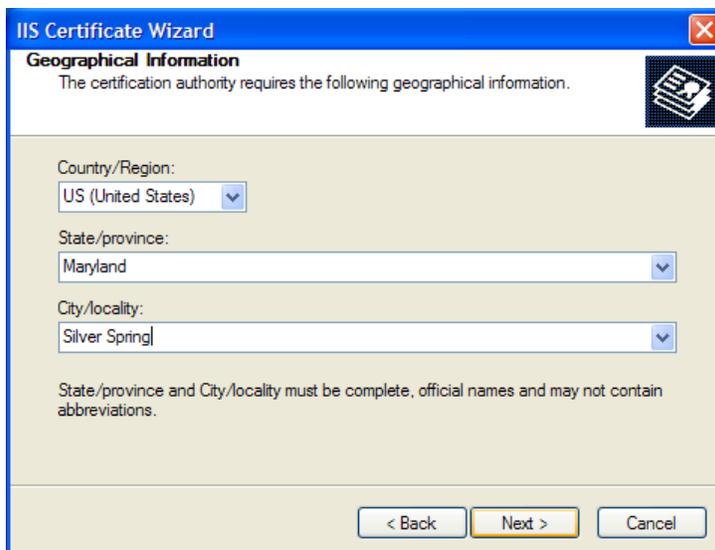


The screenshot shows the 'IIS Certificate Wizard' dialog box, titled 'Organization Information'. The main text reads: 'Your certificate must include information about your organization that distinguishes it from other organizations.' Below this, there is a text box for 'Organization' containing 'Inflectra Corporation' and a text box for 'Organizational unit' containing 'Software Development'. A note states: 'Select or type your organization's name and your organizational unit. This is typically the legal name of your organization and the name of your division or department.' Below the text boxes is a note: 'For further information, consult certification authority's Web site.' At the bottom are buttons for '< Back', 'Next >', and 'Cancel'.

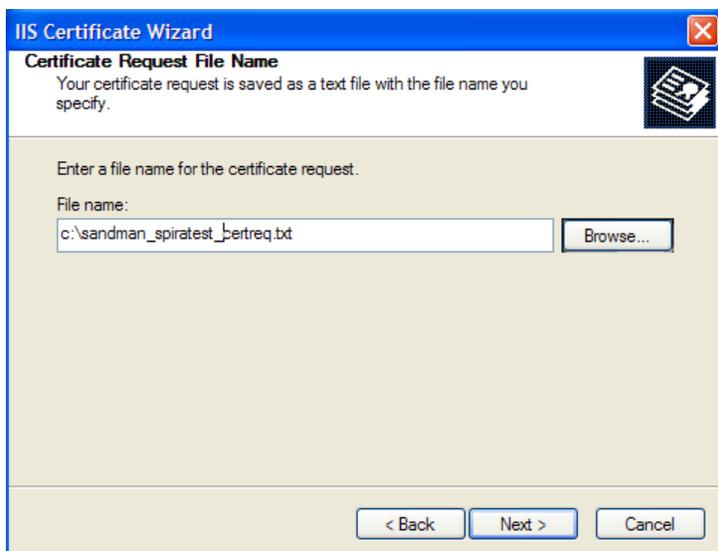
Now enter the organization and organizational unit name that best describes who is requesting the certificate. Click <Next> when you are finished.



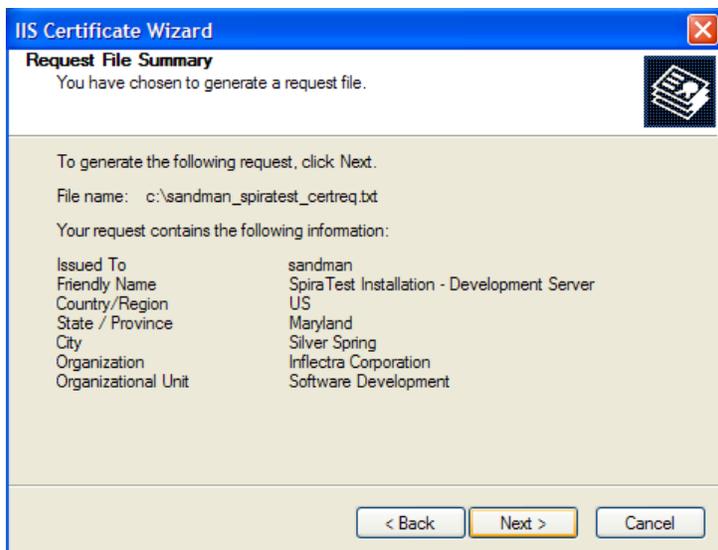
Next enter the “common name” for the web site that will be using the certificate. For a website that will be accessed across the Internet, this should be the fully qualified domain name (e.g. [www.mysite.com](http://www.mysite.com)), whereas for a website that is limited to a local intranet, the computer name will suffice (e.g. myhost). Click <Next> when you are finished.



Next enter the country / region, state / province and city / locality that best describe where the web-server will operate or where the organizational entity resides. Once you are finished, click <Next>.



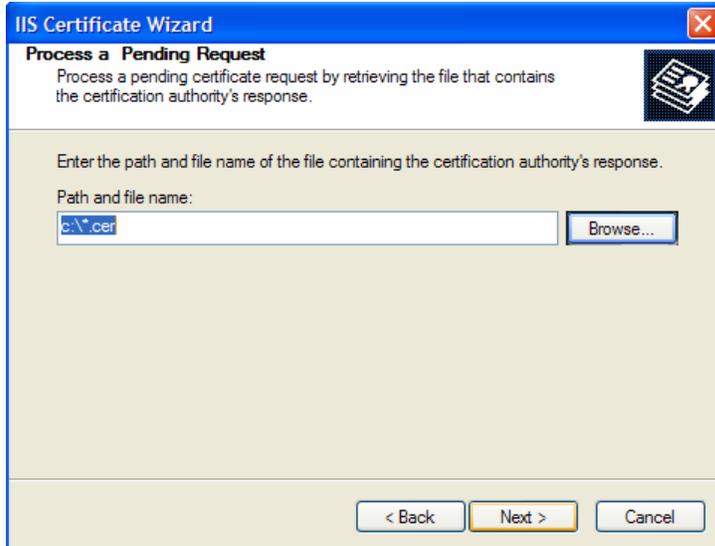
Next, enter the filename that you want to use for the *certificate request file*. This is the file that you will send to the Certificate Authority (CA) to request an SSL certificate. This filename should be memorable and describe what the certificate is for. The file extension should be `.txt`. Click <Next> once you have finished entering the filename.



Finally, you will get a confirmation screen that verifies the information you have entered. If you want to make changes, click the <Back> button, otherwise click <Next> to actually generate the certificate. Once finished, you will now have the certificate request file that you can send to the Certificate Authority (CA) to process your request.

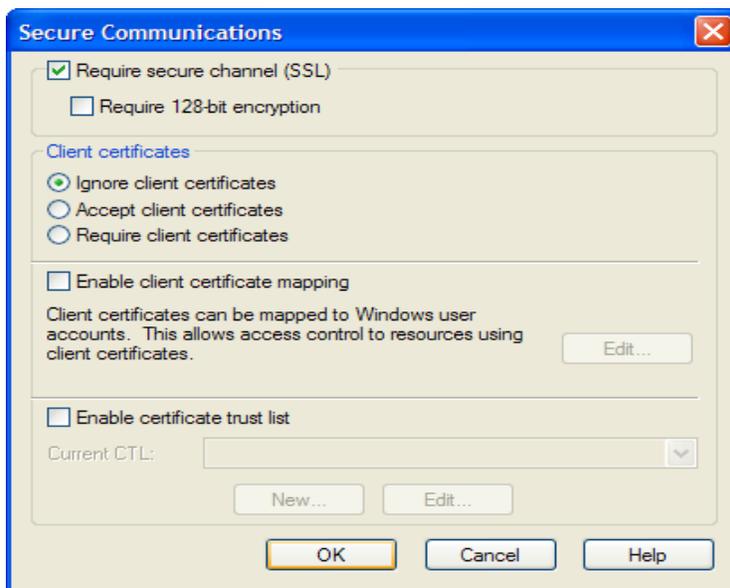
Once the CA has processed your request, they will send back the actual SSL certificate that you can install onto your web-server. The next steps will describe how to install the certificate once you receive it back from the CA.

Once you have received the SSL certificate back from the CA, save the file onto your hard-disk with the file-extension .cer. Now open up the IIS management console (as described above), right-click on the “Default Web Site” icon and choose “Properties”. Now select the “Directory Security” tab, and click the button marked <Server Certificate> under the heading “Secure Communications”. When the dialog box appears, choose the second option – to process an existing request. This will bring up the following dialog box:



Now, browse to the place on your hard disk where you saved the SSL certificate (with extension .cer) and select the file you saved. Click <Next> to load the certificate. Once the certificate has been loaded, all that remains is to tell IIS to require a secure HTTPS connection, so that users don't attempt to access the website over the unencrypted HTTP protocol.

From the IIS properties dialog box, click the button marked <Edit> under the “Secure Communications” heading:

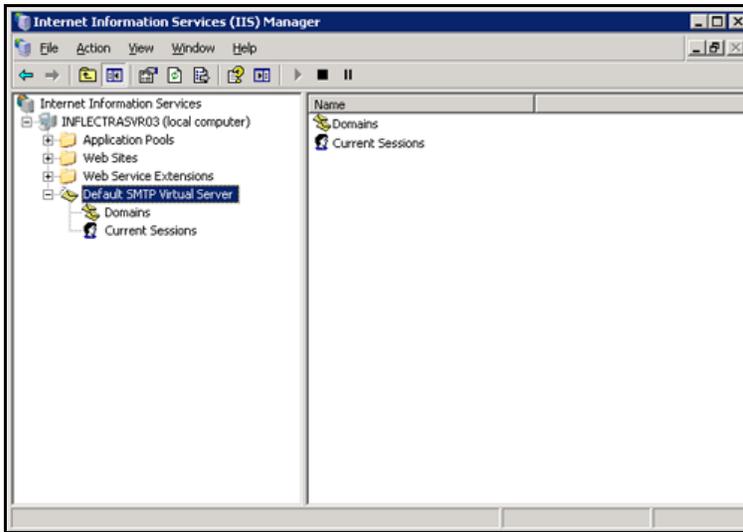


Check the box marked “Require secure channel (SSL)”, and click the <OK> button. You have now successfully configured IIS for secure HTTPS data transmission.

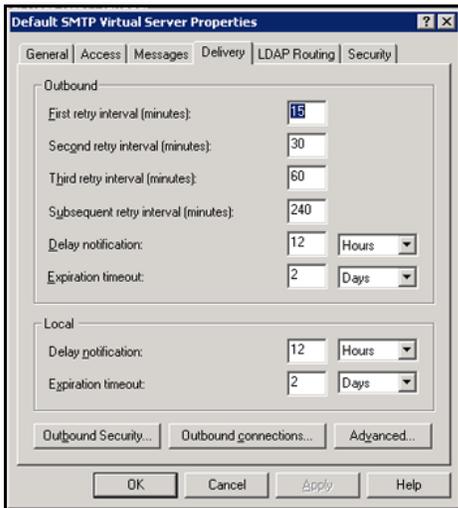
### 4.3. Appendix C – Sending Email through IIS

This section outlines the steps that you need to take to configure your IIS web server to send email notifications from KronoDesk™. Since email configurations can vary greatly between environments, please check with your local IT personnel for the correct settings that should be used. This section assumes that you have an SMTP mail-server available on your network that is capable of relaying the email from the IIS server.

First open up the Internet Information Services (IIS) Manager on your server and expand the Default SMTP Virtual Server node:



Right-click on the “Default SMTP Virtual Server” node and click on “Properties”. Then select the “Delivery” tab on the dialog box that pops-up:



Now, click on the <Advanced> button to bring-up the advanced delivery configuration screen:



In this dialog box, you should enter the following information:

- **Masquerade domain:**  
This is the domain name that you want emails from KronoDesk™ to look like their being sent from. This is typically the domain name of your organization (e.g. mycompany.com)
- **Fully-qualified domain name:**  
This is the fully qualified domain name of the IIS server that KronoDesk™ is installed on (e.g. iisserver.mycompany.com).
- **Smart host:**  
This is the fully qualified domain name of the SMTP mail-server that will actually be used in delivering the emails. (e.g. mail.mycompany.com). You will need to get the name of this from your IT personnel.

Once you have updated the settings, click the various <OK> buttons and you should now see emails being delivered from KronoDesk™. Note: the email address that is used as the 'from address' for all emails generated by KronoDesk™ is the email address stored in the Administrator user's profile. You should edit that user's account and make sure their email address is a valid email address in your environment.

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