

# **Worksoft Analyze Installation Guide**

# Worksoft Analyze Installation Guide

## Version 11

© Copyright 2020 by Worksoft, Inc. All rights reserved.

Worksoft is a business name of Worksoft, Inc. Information in this document is subject to change and revision without notice. The software described herein may only be used and copied as outlined in the Software License Agreement. No part of this manual may be reproduced by any means, electronic or mechanical, for any purpose other than the purchaser's personal use, without prior written permission from Worksoft.

Worksoft provides this documentation "as is" without warranty of any kind, either express or implied. Worksoft may revise information in this document without notice and does not represent a commitment on the part of Worksoft, Inc.

Worksoft, Inc. may have patents or pending patent applications covering subject matter in this document. The furnishing of this document does not give you any license to these patents except as expressly provided in any written license agreement from Worksoft, Inc.

## Trademarks

Worksoft Certify® is a registered trademark of Worksoft, Inc.

All other trademarks and trade names mentioned in this guide are the property of their respective owners.



## Table of Contents

<b>Chapter 1 Preparing For Installation</b>	<b>5</b>
Understanding Worksoft Analyze Installation	6
System Requirements	6
Port Requirements	6
Configuring Your Application Server	6
Adding Roles and Features	7
Configuring the Web Server Role (IIS)	12
Configuring Application/Json Mime-Type Compression	14
Enabling IIS Services	16
<b>Chapter 2 Installing and Configuring Worksoft Analyze</b>	<b>17</b>
Worksoft Management Studio	18
Installing Worksoft Analyze	18
Adding Machine Keys	22
Configuring the SQL Server	23
Running Database Migrations	24
Configuring the MongoDB Server	25
Configuring Worksoft Analyze Web API	27
Using HTTPS on Your Application Server	28
Using HTTP on Your Application Server	29
Using a Remote Worksoft Management Studio Instance	29
Updating Worksoft Analyze Windows Service	30
Updating Worksoft Analyze Web Application	30
Configuring Worksoft Analyze Web API	31
<b>Chapter 3 Configuring the Worksoft Management Studio</b>	<b>32</b>
Overview	33
Exploring Worksoft Management Studio	33
Creating Your Worksoft Management Studio Database	35
Registering and Creating a Worksoft Analyze Database	38
Adding Worksoft Analyze Licenses	39

Registering Users .....	41
Configuring Email Service .....	44
Accessing Worksoft Analyze .....	45
<b>Chapter 4 Configuring Multi-Tenant Spaces .....</b>	<b>46</b>
Overview .....	47
Adding Tenants .....	47
Switching Between Tenants .....	48
Adding Users to Tenants .....	49
<b>Chapter 5 Upgrading Worksoft Analyze .....</b>	<b>52</b>
Updating Worksoft Analyze .....	53
<b>Appendix A Worksoft Analyze Silent Installation .....</b>	<b>54</b>
Silent Install .....	54
Installation Log File .....	54
Silent Uninstall .....	54



# Chapter 1      Preparing For Installation

---

## In This Chapter

Understanding Worksoft Analyze Installation .....	6
Configuring Your Application Server .....	6
Enabling IIS Services .....	16

---

---

## Understanding Worksoft Analyze Installation

---

In order to use Worksoft Analyze,™ you need to install the following two applications:

- ◆ Worksoft Management Studio™ - Registers database settings that you intend to use with Worksoft Analyze.  
If you already have Worksoft Management Studio already installed, you can use that version.
- ◆ Worksoft Analyze - Uses a shared repository approach for organizing and promoting collaboration in business process discovery and analysis among users in the enterprise.  
Worksoft Analyze includes the Captures Listing screen that allows the user to view their captures, create documentation, and export documentation.

### System Requirements

Before you begin to install Worksoft Analyze, verify that your environment has the needed system requirements installed. For information about system requirements and planning your environment, see the [Worksoft Help Portal](#).



**Warning:**

A new server must be provisioned for Worksoft Analyze only. Do not install Worksoft Analyze on the same server as other Worksoft products and other applications because of the constraint of bandwidth on the network interface controller (NIC card).

### Port Requirements

Worksoft Analyze requires that you use the following ports when configuring the product:

Component	Port Number
Worksoft Application Server	80
Worksoft Application Server if using HTTPS	443

---

## Configuring Your Application Server

---

In order to transform your application server into a web server, Microsoft® Internet Information Services (IIS) must be installed in order to host Worksoft Web services and Worksoft web applications. After you have installed IIS, you will need to configure the Server Manager.

This chapter will guide you to configuring the minimum requirements for Worksoft Analyze. You may need assistance from your IT administrator.

## Adding Roles and Features

The Server Manager allows you to add specific roles and features to your web server that are required for Worksoft products.

► **To add roles and features to your web server:**

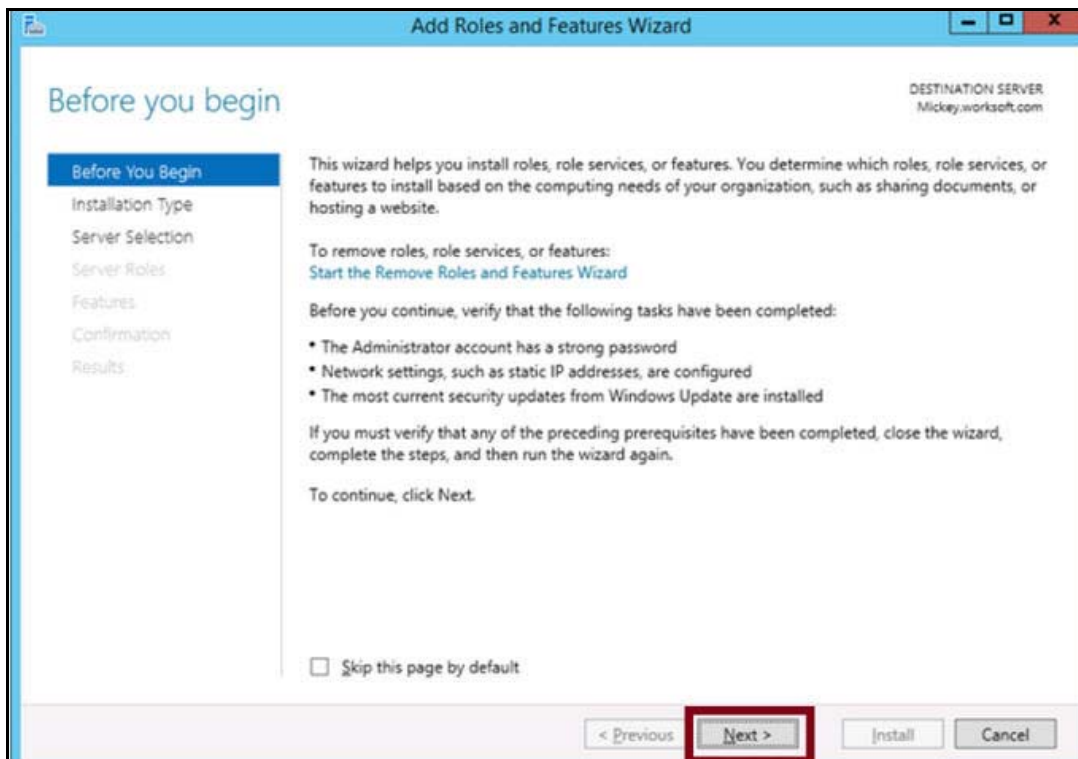
- 1 From the Start menu, select **Administrative Tools > Server Manager**.

The Server Manager opens.

- 2 In the Navigation pane, select **Dashboard**.

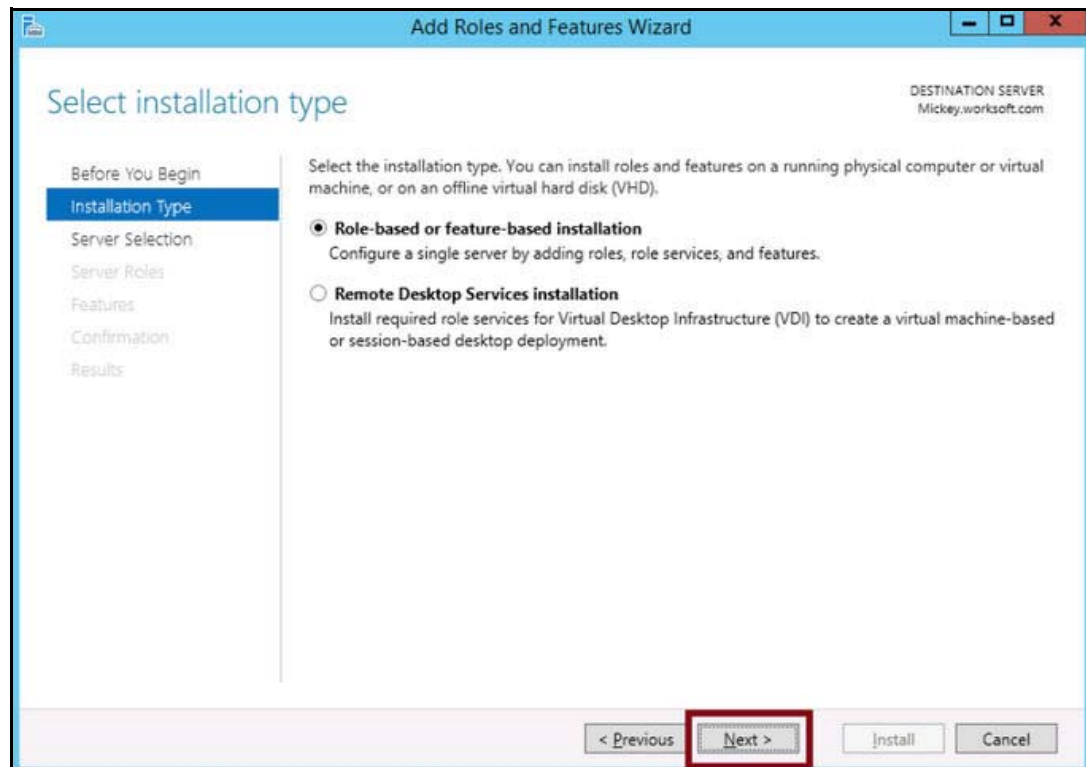
- 3 In the Summary Tasks pane, select **Add Roles and Features**.

The Add Roles Wizard opens.



- 4 Click **Next**.

The Select Installation Type page appears.

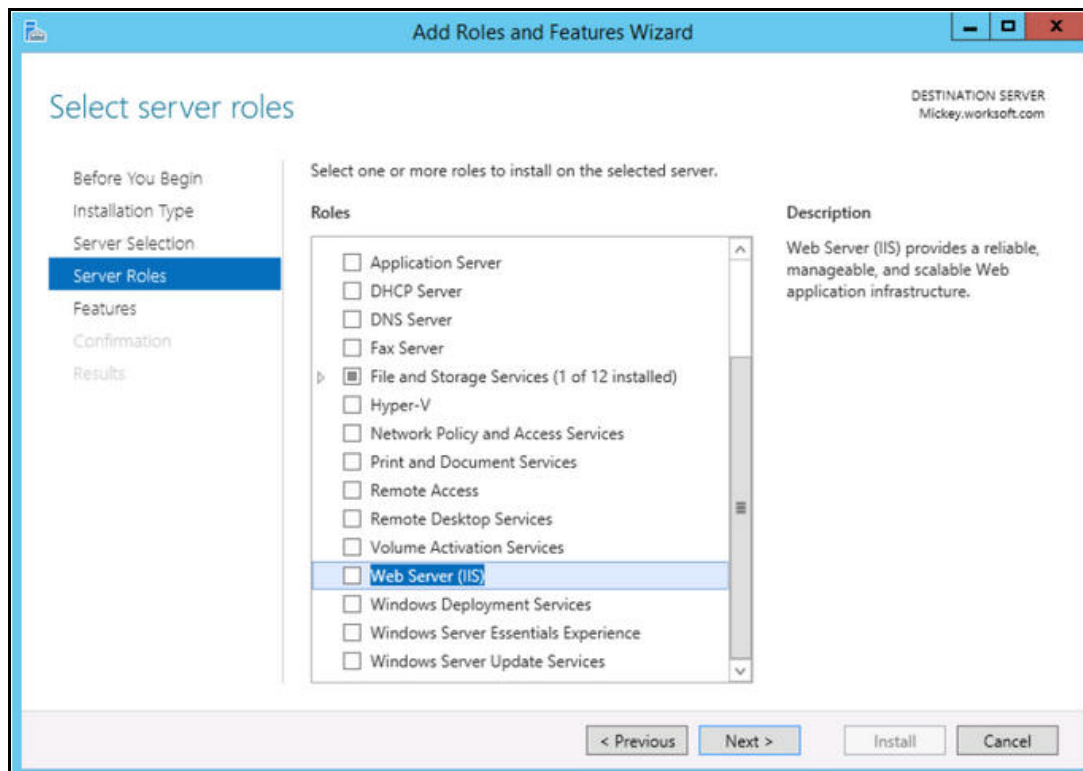


5 Select the **Role-based or feature-based installation** option.

6 Click **Next**.



The Select Server Roles page appears.



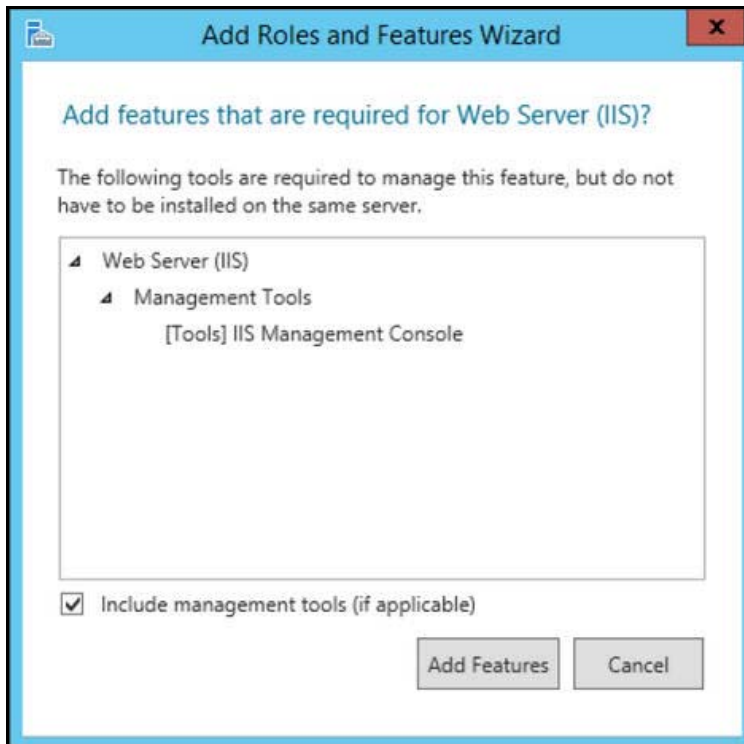
**7** From the Server Roles list, select the following roles:

- **File Services**
- **Web Server (IIS)**

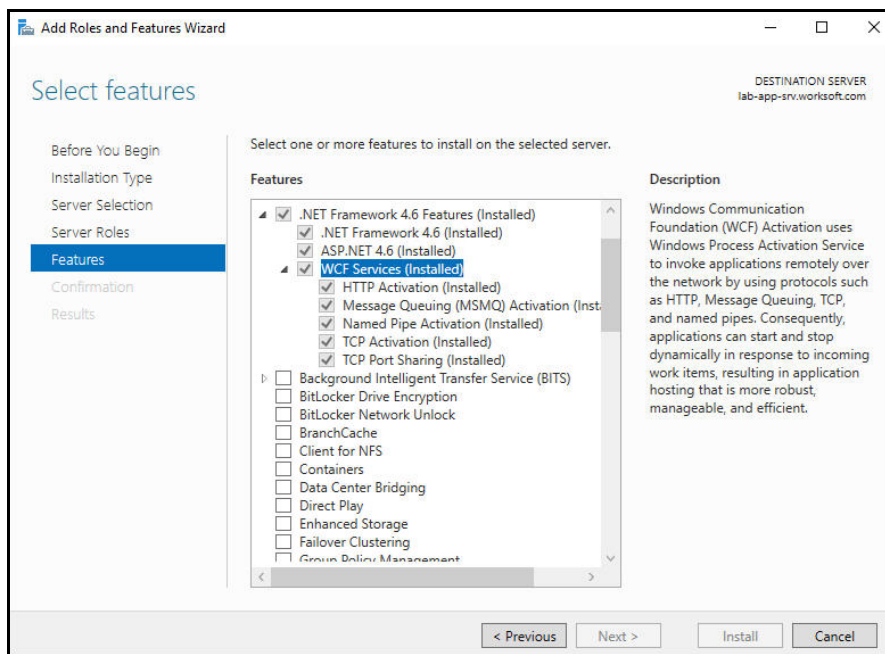
**8** Click **Next**.

After you have added the roles to the web server, you will add features to the web server.

A dialog box appears asking if you want to add features to the web server.

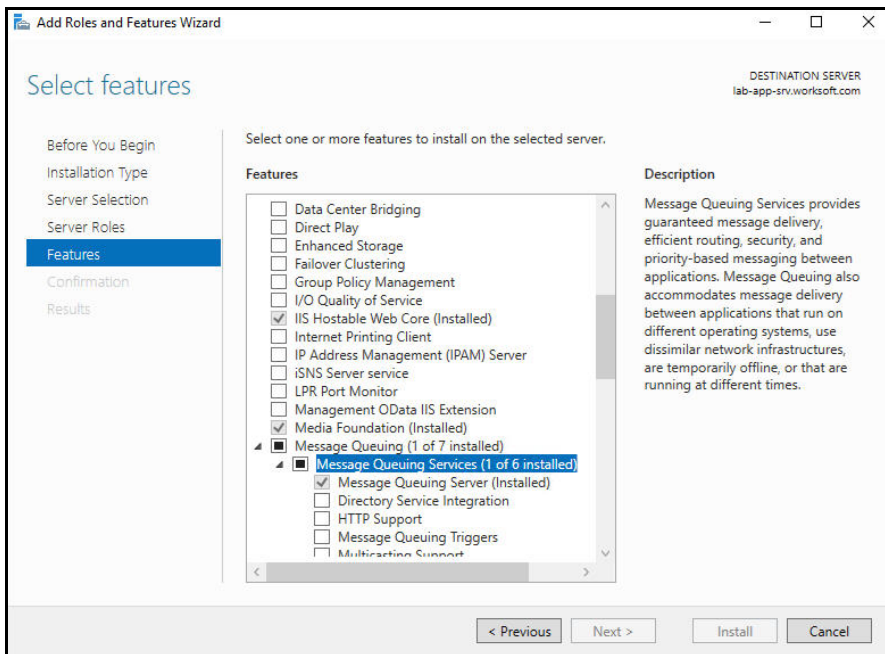


- 9 In the Add Features dialog box, select the **Include Management Tools (if applicable)** option.
- 10 Click **Add Features**.  
The Select Features page appears.
- 11 Select the **.NET Framework 4.6 Features (Installed)** and all of its child nodes.



- 12 Select the **WCF Services (Installed)** and all of its child nodes.

**13 Select IIS Hostable Web Core (Installed) and Media Foundation (Installed).**



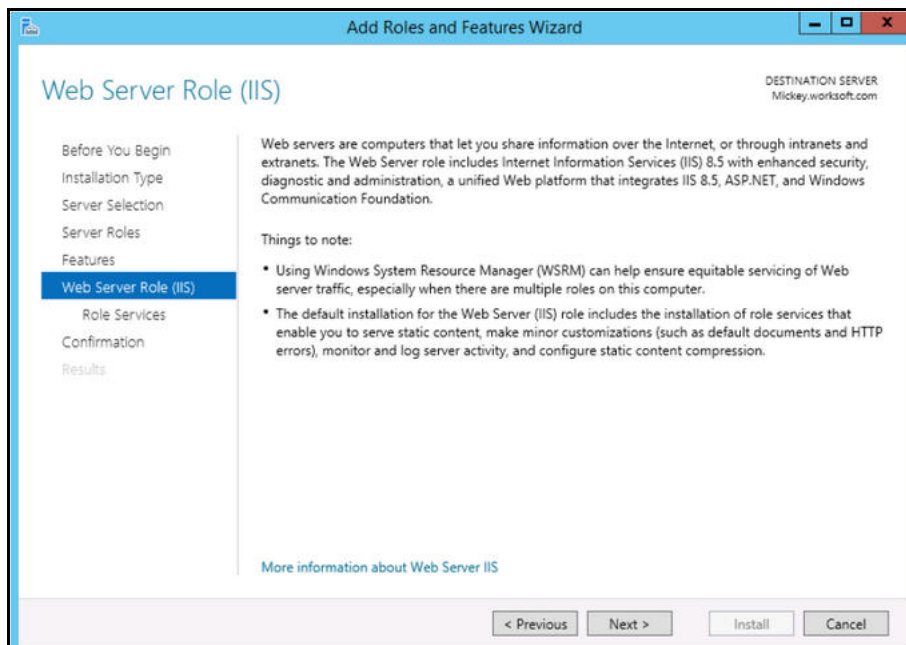
**14 Verify that Message Queuing (1 of 7 installed) and Message Queuing Server (Installed) is enabled.**

**15 Use the scroll bar to verify the Windows Process Activation Service is enabled with the following child nodes:**

- Process Model (Installed)
- Configuration APIs (Installed)

**16 Click Next.**

The Web Server Role (IIS) page appears.

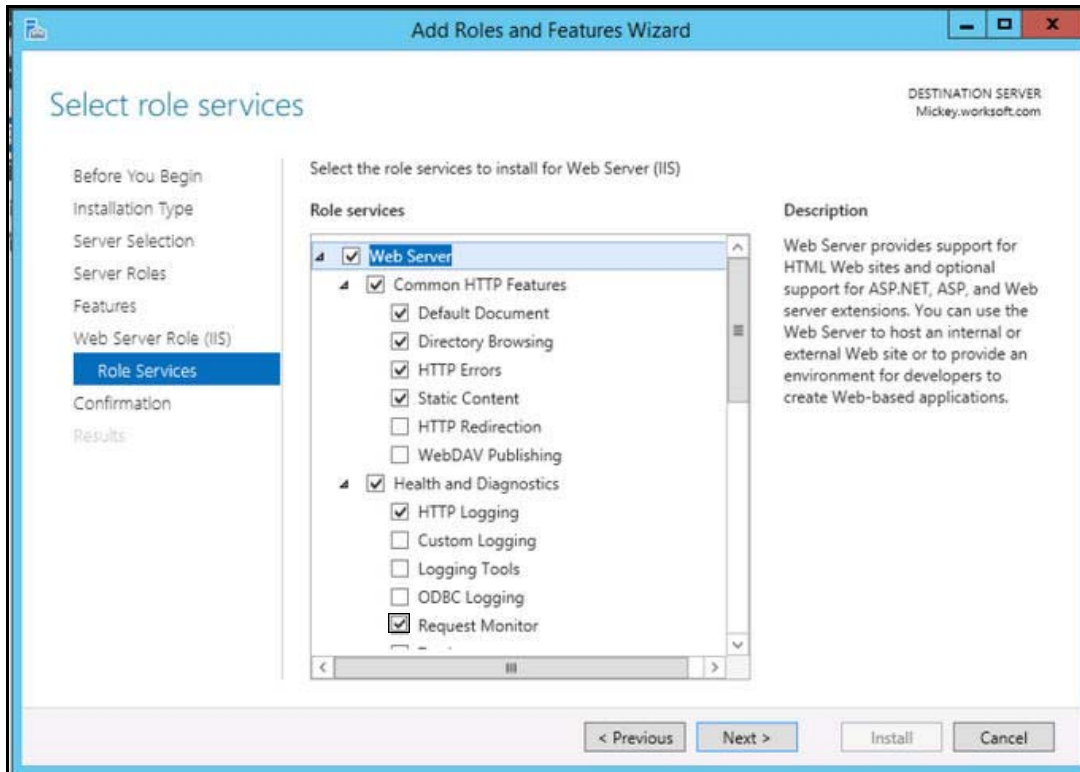


## Configuring the Web Server Role (IIS)

After you have added your roles and features, you will now need to configure the Web Server role (IIS) in the Server Manager.

- 1 Click **Next** on the Web Server Role (IIS) screen.

The Select Role Services page appears.



- 2** In the Role Services list, select the following services. You will need to use the scroll bar to select all of the services.

Node	Child Nodes
Common HTTP Features	Default Document Directory Browsing HTTP Errors Static Content WebDAV - Verify that this option is disabled. Worksoft's RESTful Services will not work correctly if enabled.
Health and Diagnostics	HTTP Logging Request Monitor
Performance	Static Content Compression Dynamic Content Compression
Security	Request Filtering Basic Authentication
Application Development	.NET Extensibility 4.6 Application Initialization ASP ASP.NET 4.6 CGI ISAPI Extensions ISAPI Filters WebSocket Protocol
Management Tools	IIS Management Console IIS Management Scripts and Tools Management Service IIS 6 Management Compatibility and the following child nodes: <ul style="list-style-type: none"> <li>• IIS 6 Metabase Compatibility</li> <li>• IIS 6 Scripting Tools</li> <li>• IIS 6 WMI Compatibility</li> </ul>

- 3** Click **Next**.  
The Confirm Installation Selections page appears.
- 4** Click **Install** to install the role services.

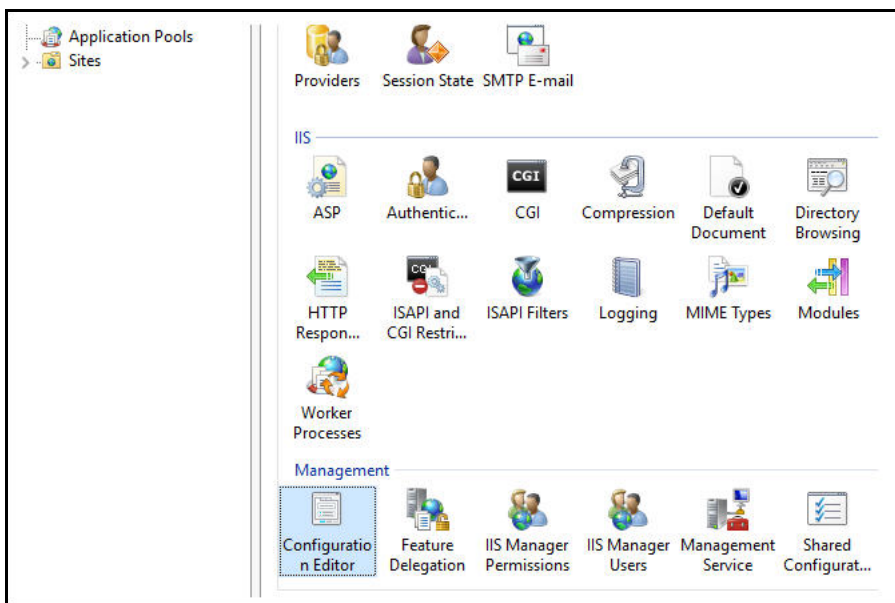
## Configuring Application/Json Mime-Type Compression

After you have enabled dynamic content compression within IIS, you need to verify HTTP Compression for the application/json mime-type. Worksoft Analyze uses dynamic content compression to improve performance.

In order to implement this performance improvement in Analyze, HTTP compression must be enabled for the application/json mime-type. When the Dynamic Content Compression feature is enabled, it will overwrite any previous HTTP compression settings. If the application/json mime-type was already included in the list of allowed dynamic mime-types before the Dynamic Content Compression feature is enabled, it will be removed.

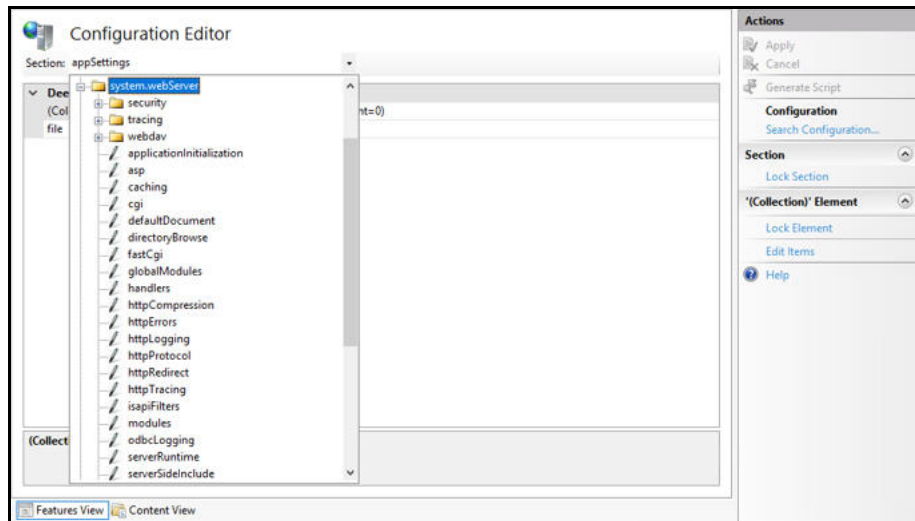
### ► To verify application/json mime-type compression:

- 1 Open **IIS Manager**.
- 2 In the left Navigation pane, click on your server.
- 3 In the Management section, double-click the **Configuration Editor**.

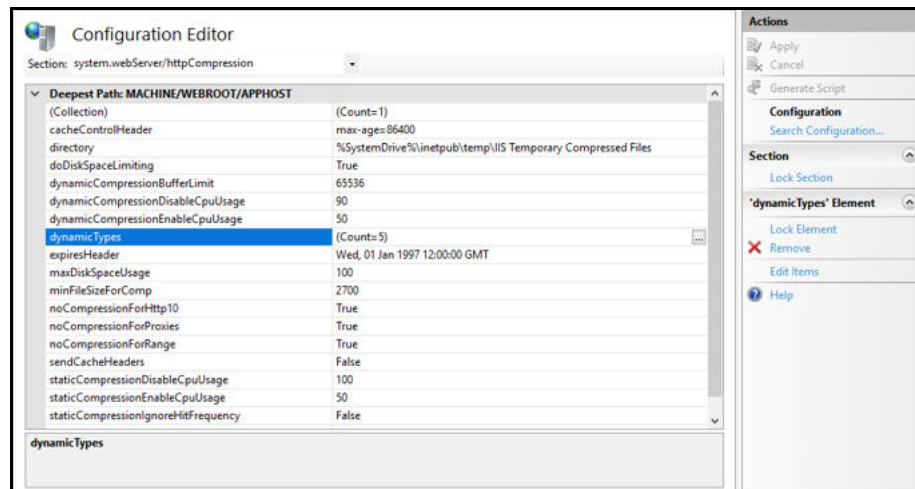


The Configuration Editor opens.

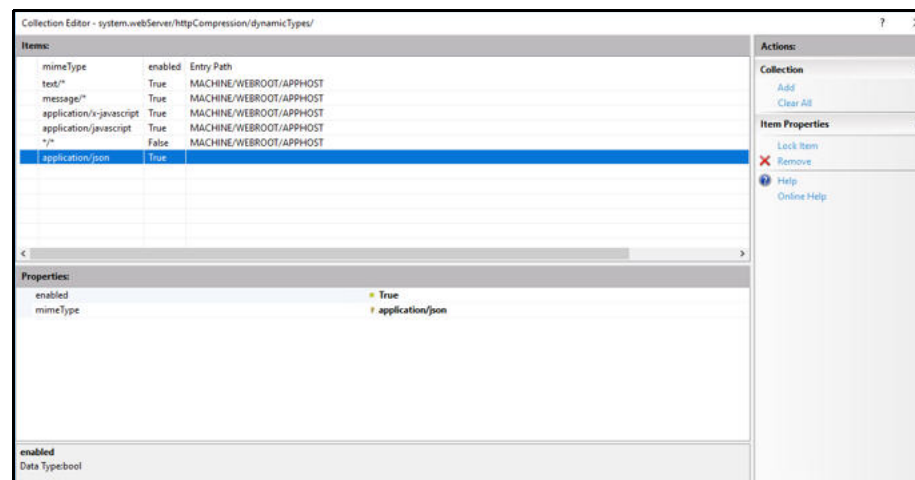
- 4 From the Section drop-down list, select **system.webServer > httpCompression**.



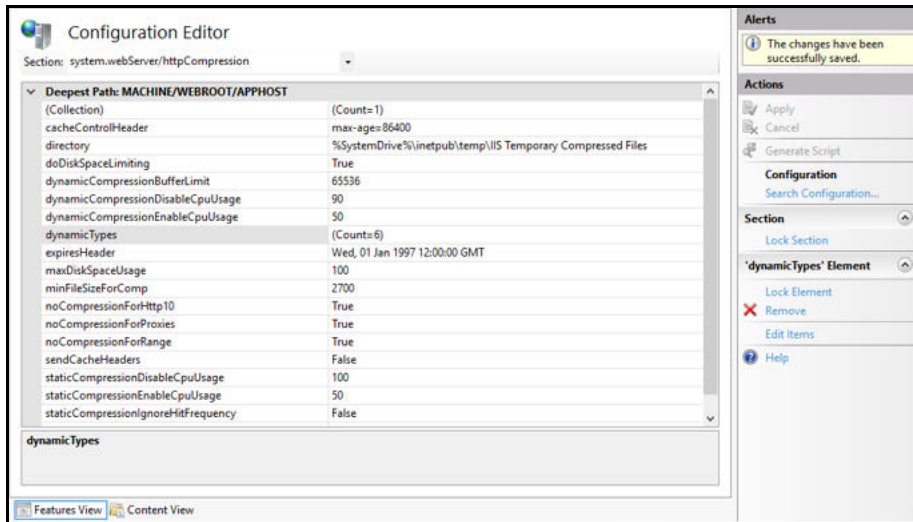
- 5 In the httpCompression section, click the **dynamicTypes**.



- 6 Verify that **application/json** is listed in the dynamic compression mime types. If it is not listed, click the **Add** button in the Collection section to add it.



- 7 After you completed your verification or addition, click the **Close** button  
The Configuration Editor opens.



- 8 Click **Apply** to apply your changes.
- 9 Verify that dynamicTypes lists a count of six.
- 10 Close the editor.

---

## Enabling IIS Services

---

You will now need to verify that several IIS services are enabled.

► **To verify IIS services are enabled:**

- 1 If the Server Manager is not open, select **Administrative Tools > Server Manager** from the Start menu.

The Server Manager opens.

- 2 In the Navigation pane, select **IIS**.
- 3 In the right Services pane, verify that the following services are enabled and running:

- **Application Host Helper Service**
- **IIS Admin Service**
- **Windows Process Activation Service**
- **World Wide Web Publishing Service**

- 4 If any of these window services are not running, you will need to start these services.

To start a service, select the service from the list and click **Start** in the right menu. You are also able to start your services by going to **Administrative Tools > Services** on your machine.





# Chapter 2    Installing and Configuring Worksoft Analyze

---

## In This Chapter

Worksoft Management Studio.....	18
Installing Worksoft Analyze .....	18
Adding Machine Keys .....	22
Configuring the SQL Server .....	23
Configuring the MongoDB Server .....	25
Configuring Worksoft Analyze Web API .....	27
Using HTTPS on Your Application Server .....	28
Using a Remote Worksoft Management Studio Instance .....	29

---

---

## Worksoft Management Studio

---

Before you begin to install Worksoft Analyze, you need to have Worksoft Management Studio installed. Go to the [Worksoft Customer Portal](#) to download Worksoft Management Studio. For specific system requirements and installation guide, see the [Worksoft Help Portal](#).

If you have Worksoft Execution Suite installed, you can use that version of Worksoft Management Studio. Worksoft recommends that you use the remote Worksoft Management Studio instance for Worksoft Analyze if you are using it with Worksoft Execution Suite. For more information, see [“Using a Remote Worksoft Management Studio Instance”](#) on page 29.

---

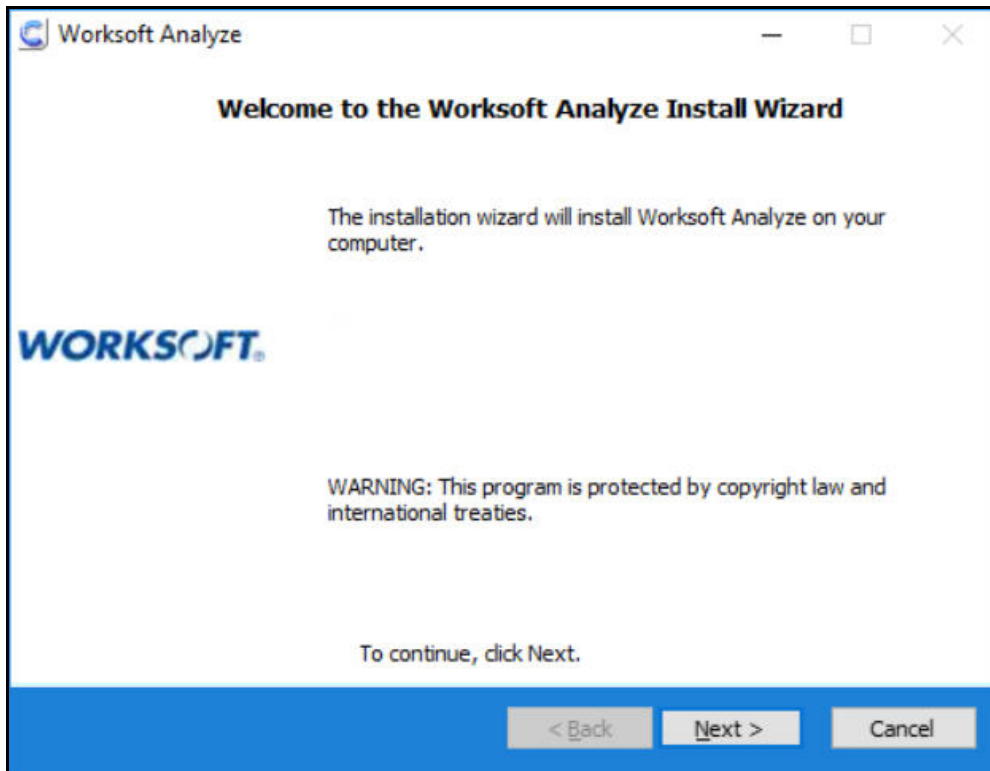
## Installing Worksoft Analyze

---

After you have installed the Worksoft Management Studio, you will now install Worksoft Analyze on your server.

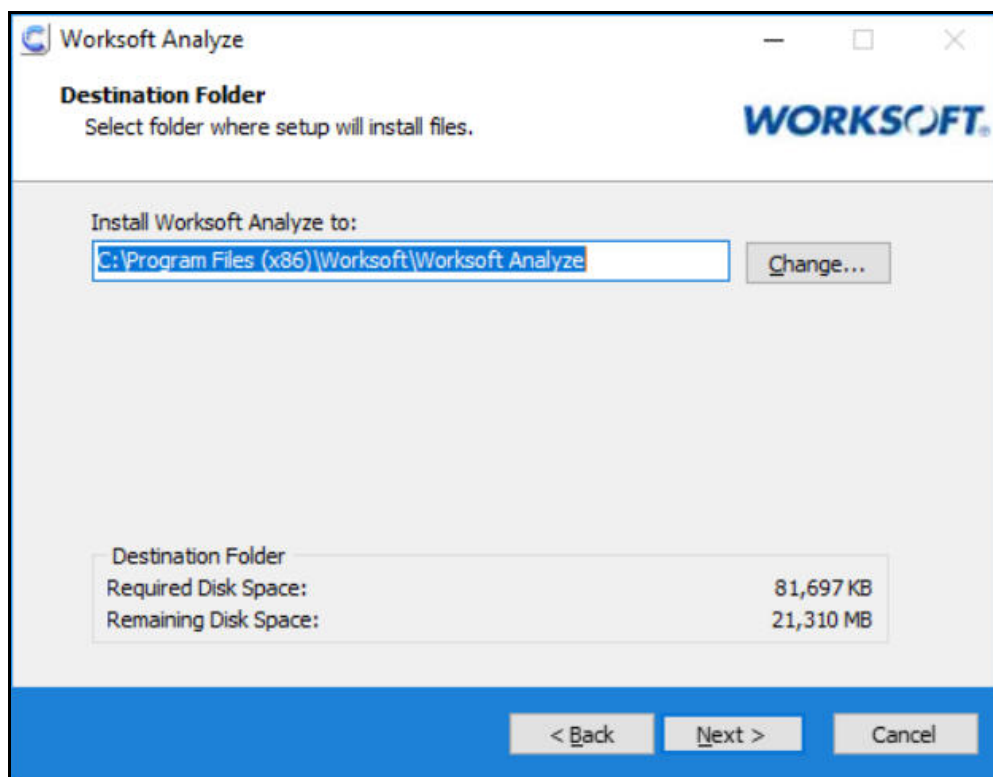
► **To install Worksoft Analyze:**

- 1 In your software distribution folder, double-click the **WorksoftAnalyze.exe** file.  
The Worksoft Analyze Install Wizard opens.



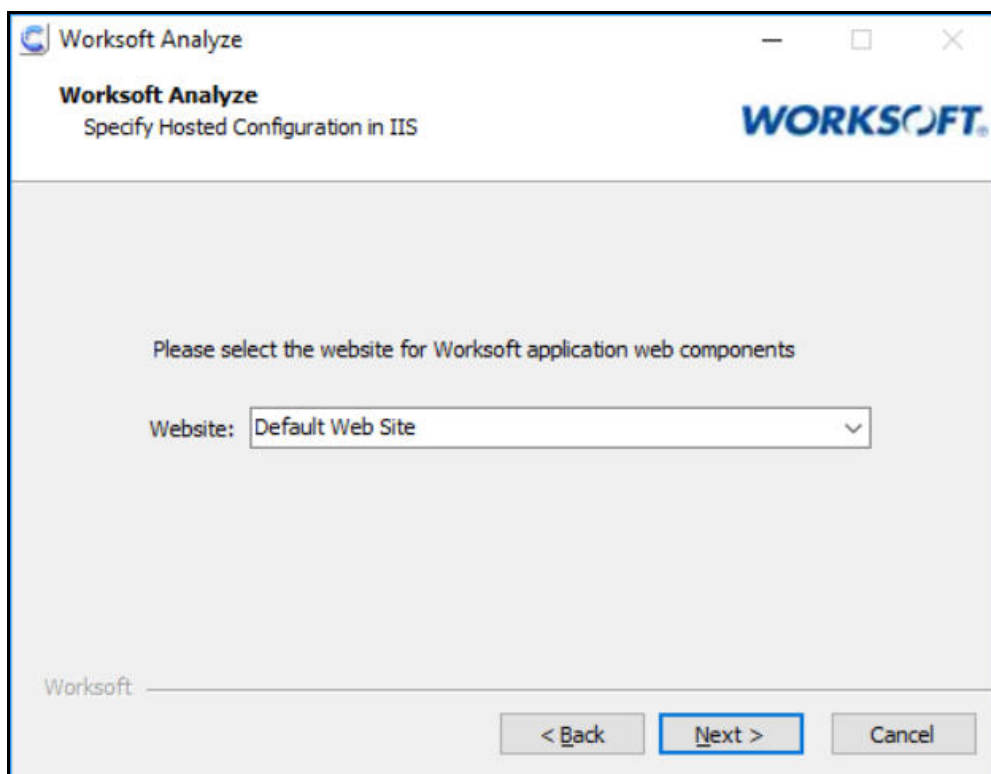
- 2 Click **Next**.

When the system analysis has completed, the Destination Folder page appears.

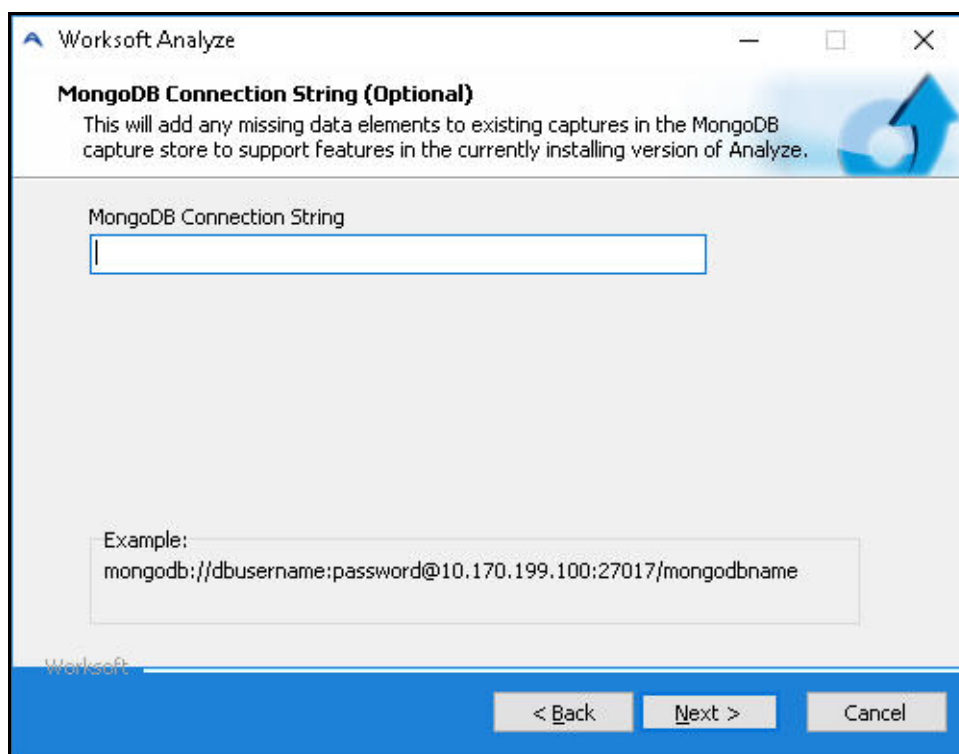


- 3 Accept the default installation folder path and click **Next**.

The Specify Hosted Configuration in IIS page appears.



- 4 If you want to accept Default Web Site as your web site, click **Next**.  
If you have other webs configured in the IIS, select the server from the drop-down list and click **Next**.  
The MongoDB Connection String page appears.



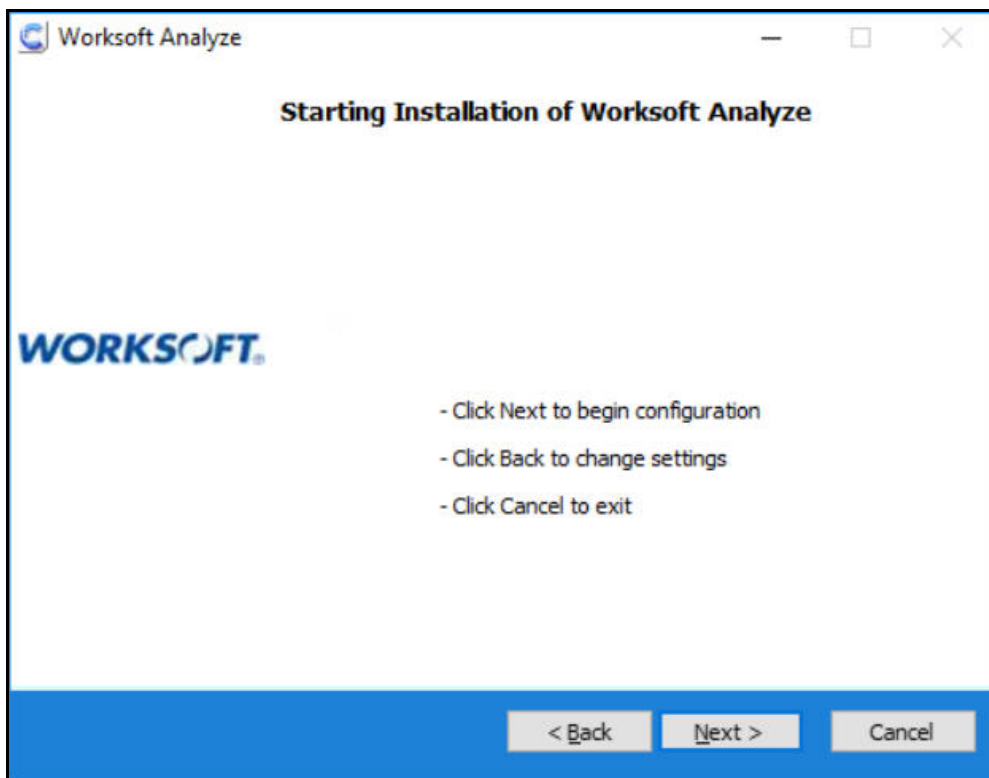
The screenshot shows a Windows-style dialog box titled "Worksoft Analyze". The main heading is "MongoDB Connection String (Optional)". Below the heading, a text description states: "This will add any missing data elements to existing captures in the MongoDB capture store to support features in the currently installing version of Analyze." To the right of this text is a blue circular arrow icon. Below the description is a large text input field labeled "MongoDB Connection String". At the bottom left, there is an "Example:" label followed by the text "mongodb://dbusername:password@10.170.199.100:27017/mongodatabase". At the bottom right, there are three buttons: "< Back", "Next >", and "Cancel". The "Next >" button is highlighted with a blue border. The bottom of the dialog box has a blue bar with the "Worksoft" logo on the left.

5 **For Upgrading Only**

If you are upgrading Worksoft Analyze, type in your database connection string in the MongoDB Connection String field and click **Next**.

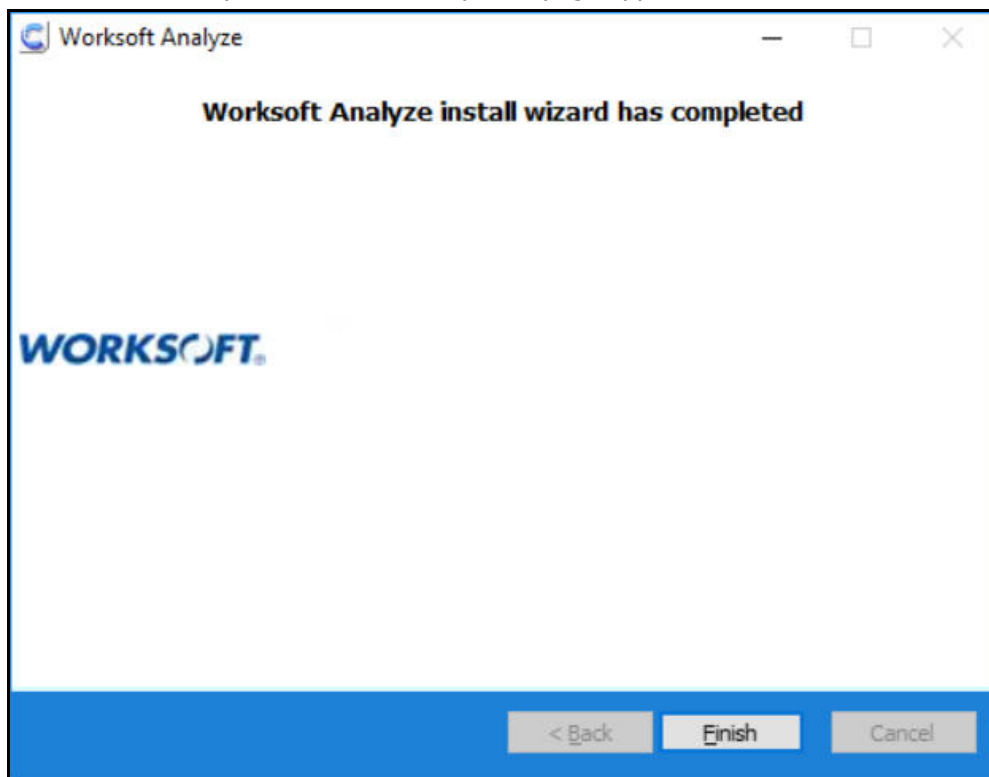
Example: `mongodb://username:password@servername/analyze`

The Starting Installation page appears.



**6** Click **Next**.

The Worksoft Analyze Installation Completed page appears.



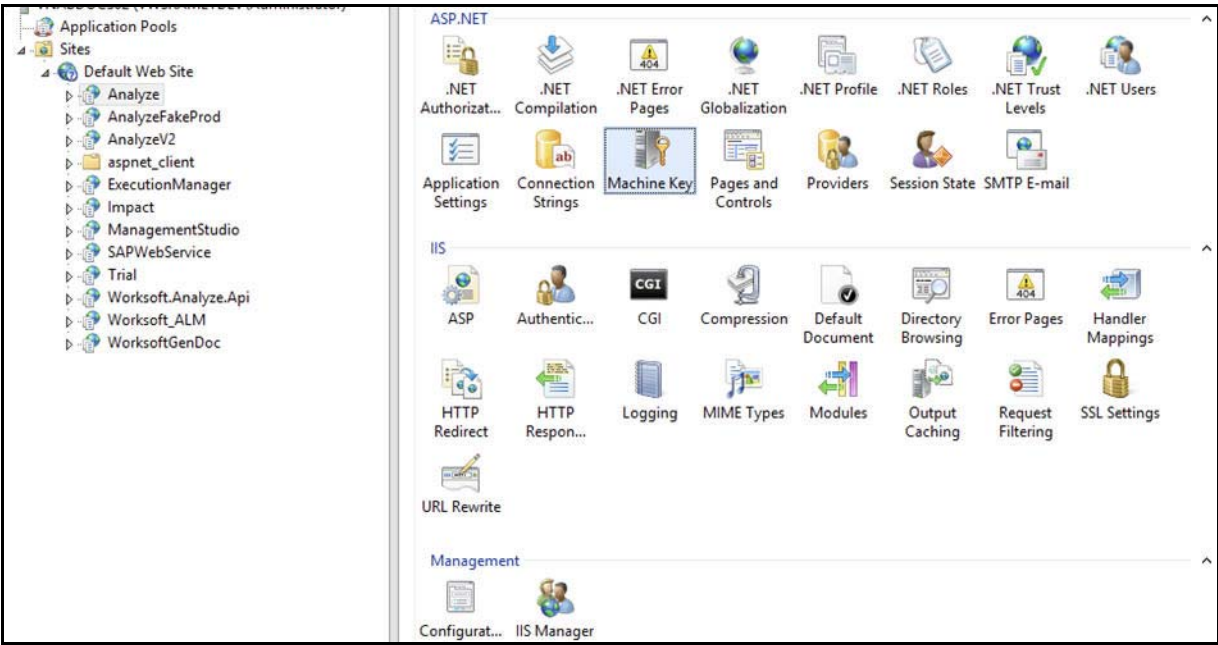
**7** Click **Finish** to complete the installation.

## Adding Machine Keys

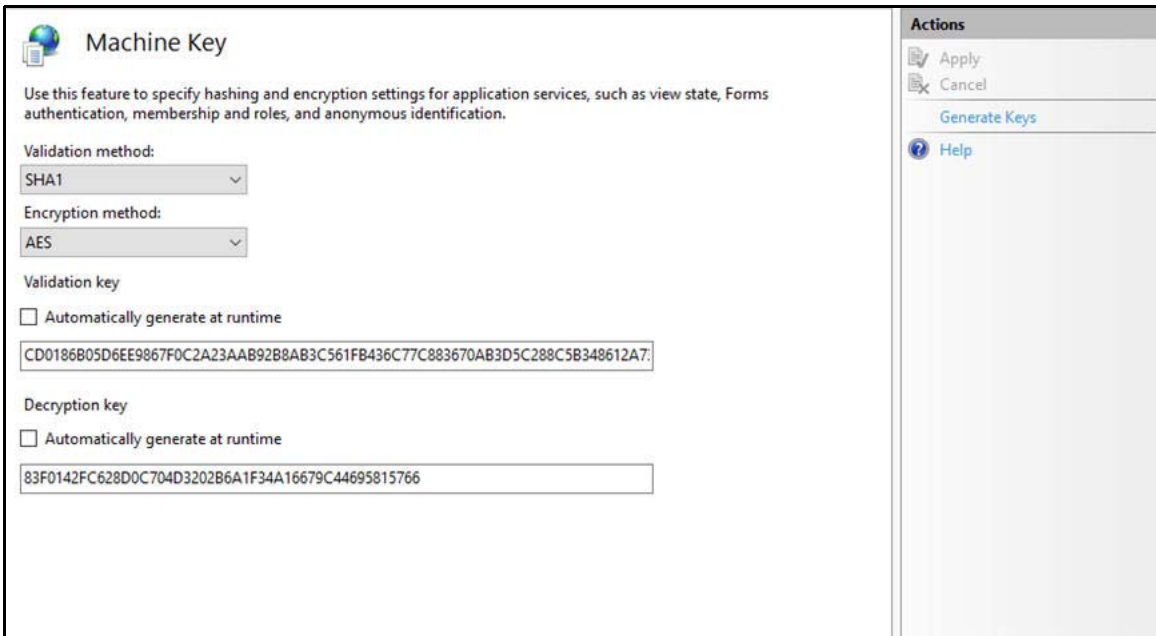
After you verify authentication, you need to add machine keys to the Analyze application and the Worksoft.Analyze.Api application in the IIS Manager.

► **To add machine keys:**

- 1 In the Connections Navigation pane of the IIS Manager, select the **Analyze** application.
- 2 In the ASP.NET section, double-click the **Machine Key** icon.



The Machine Key window opens.



- 3 Verify that the Validation key **Automatically generate at runtime** option is **not** selected.
- 4 Verify that the Decryption key **Automatically generate at runtime** option is **not** selected.
- 5 In the right Actions pane, click **Generate Keys**.  
New Validation and Decryption keys are generated.
- 6 Copy these key values to a text editor, such as Notepad, to be used for Worksoft.Analyze.Api.
- 7 In the right Actions pane, click **Apply**.
- 8 For **Worksoft.Analyze.Api**, verify that the Validation and Decryption keys are not selected.
- 9 Delete the existing Validation and Decryption keys, and paste the newly generated Analyze keys into the correct key fields for the Worksoft.Analyze.Api application.
- 10 In the right Actions pane, click **Apply**.  
You have now completed configuring Worksoft Analyze.
- 11 Close the IIS Manager.



**Note:** All servers in a server farm or load balancer pool should have the same key values for both applications in the IIS Manager. You must copy the Validation key and Decryption key to all the machines in the pool.

---

## Configuring the SQL Server

---

To use Worksoft Analyze, you will need to create and connect to the following two SQL Server databases:

- ◆ **Analyze**  
This database contains activities and variants used to render and visualize your workspaces. You will create and update this database in Worksoft Management Studio. For more information, see ["Registering and Creating a Worksoft Analyze Database" on page 38](#).
- ◆ **AnalyzeSettings**  
This database is for data specific settings. You will need to manually configure the connection string and to run database configurations.

Be sure to verify that your SQL Server meets the system requirements listed in [docs.worksoft.com](https://docs.worksoft.com).

You will also need to create a MongoDB database. For more information, see ["Configuring the MongoDB Server" on page 25](#). The MongoDB database is used to store captures for display in the Captures List.

### ► To configure the connection string for the AnalyzeSettings:

Specify the SQL Server connection string to the database you'd like to use within C:\Program Files (x86)\Worksoft\Worksoft Analyze\Api\web.config.

#### SQL Server Connection String Example:

```
Api
web.config

<connectionStrings>
  <add name="AnalyzeDbConnection"
        connectionString="Server=servername;initial catalog=databaseName;User Id=SomeUser;Password=SomePassword;"
        providerName="System.Data.SqlClient" />
</connectionStrings>
```

**name** must equal "AnalyzeDBConnection"

**connectionString** is unique to your environment and database server

**providerName** will differ based on database engine used:

for Microsoft SQL Server use **providerName="System.Data.SqlClient"**

for PostgreSQL use **providerName="Npgsql"**

**databaseName** = AnalyzeSettings

## Running Database Migrations

Database migrations are used to initially create and update the database schema. Once the SQL Server connection string is configured, use the following command to update the database schema to the latest version.

If your credentials in the connection string gives you permission to create a new database, then the database does not need to exist before running migrations the first time.



**Note:** You must run the script on the server where Worksoft Analyze is installed.

### ► To run database migrations:

- 1 Open PowerShell or the Command Prompt and navigate to the following directory:

C:\Program Files (x86)\Worksoft\Worksoft Analyze\Api\bin

- 2 Run the following command:

```
migrate.exe Worksoft.Analyze.Api.Common.dll Worksoft.Analyze.Api.Common.Migrations.Configuration/
startUpConfigurationFile="..\web.config"
```

The database is created and/or updated.



---

## Configuring the MongoDB Server

---

MongoDB should be installed on the server where Worksoft Analyze is installed. The MongoDB server stores Worksoft Capture processes that are imported by the Worksoft Analyze Automatic Generation Document feature.

► **To configure MongoDB server:**

- 1** From the Start menu, run **services.msc** to open the Windows Services Manager.
- 2** Find the MongoDB service and enable the service.
- 3** Close the Services Manager.
- 4** Open the Windows File Manager and navigate to the following folder:  
`C:\Program Files (x86)\Worksoft\Worksoft Analyze\Database.`
- 5** Copy the **configuremongo.bat** and **addanalyzeusers.js** files and paste them to the MongoDB server in the following folder:  
`C:\Program Files\MongoDB\Server\4.0\bin`  
The **configuremongo.bat** file creates the Analyze database and users.  
The **addanalyzeusers.js** file provides the username and password configurations for the Analyze users.
- 6** Double-click the **configuremongo.bat** file to run it.  
When you run the file, the following occurs:
  - A database named **Analyze** is created.
  - A collection named **Captures** in the Analyze database is created.
  - An administrator user with read and write roles is created in the Analyze database.
  - A user named **analyzeuser** with read and write roles is created in the Analyze database
- 7** Open the Services Manager window.
- 8** Stop the MongoDB service.
- 9** Go to the following directory:  
`C:\Program Files\MongoDB\Server\4.0\bin`

- 10 Open the **mongod.cfg** file in Notepad to edit the settings.

```
1 # mongod.conf
2
3 # for documentation of all options, see:
4 # http://docs.mongodb.org/manual/reference/configuration-options/
5
6 # Where and how to store data.
7 storage:
8   dbPath: C:\Program Files\MongoDB\Server\4.0\data
9   journal:
10     enabled: true
11 # engine:
12 # mmapv1:
13 # wiredTiger:
14
15 # where to write logging data.
16 systemLog:
17   destination: file
18   logAppend: true
19   path: C:\Program Files\MongoDB\Server\4.0\log\mongod.log
20
21 # network interfaces
22 net:
23   port: 27017
24   bindIp: 127.0.0.1
25
26 #processManagement:
27
28 security:
29   authorization: enabled
30
31 #operationProfiling:
32
33 #replication:
34
35 #sharding:
36
37 ## Enterprise-Only Options:
38
39 #auditLog:
40
41 #snmp:
```

If you want to bind to a single IP address, see the [MongoDB reference guide](#).

- 11 Update the Security authorization setting to **enabled**.
- 12 Enable the MongoDB service.

Make note of the MongoDB connection string because it will be needed when running the Worksoft Analyze installer.

**Example:** `mongodb://username:password@servername/analyze`

- 13 Close the Services Manager.



**Note:** To connect to your MongoDB instance, use a product, such as [Robo 3T](#).

---

## Configuring Worksoft Analyze Web API

---

In order to connect with Worksoft Analyze Web API, you need to update the Web.config file in the following directory:

C:\Program Files(x86)\Worksoft\Worksoft Analyze\API\Web.config

► **To update Worksoft Analyze Web API:**

- 1** Open the **Web.config** file in the API folder in Notepad.
- 2** Replace the **MgmtStudioServiceUrl** value with the Worksoft Management Studio URL:  

```
<add key="MgmtStudioServiceUrl" value="http://<server>/ManagementStudio/" />
```

<server> = Worksoft Management Studio URL.
- 3** Replace **MongoUrl** value with the MongoDB connection string:  

```
<add key="MongoUrl" value="mongodb://analyzeUser:password@127.0.0.1:27017/analyze" />
```
- 4** In order to support email notifications, replace **AnalyzeWebApp** to the Worksoft Analyze URL:  

```
<add key="AnalyzeWebApp" value="http://localhost/Analyze/" />
```

If Worksoft Analyze is configured behind a load balancer, and SQL server is being used for the settings, you need to change the **EnableBackplane** value.

If you do not have this configuration, go to **Step 6**.
- 5** Replace the **EnableBackplane** value to true.  

```
<add key="EnableBackplane" value="true"/>
```
- 6** Save the configuration file and close it.

---

## Using HTTPS on Your Application Server

---

In order to import generated Worksoft Analyze Captures into Certify, you need to use HTTPS on your application server and leave the HTTP binding on default port 80. After you have reconfigured the application server to use HTTPS, the port will now default to 443. You will need both ports open.

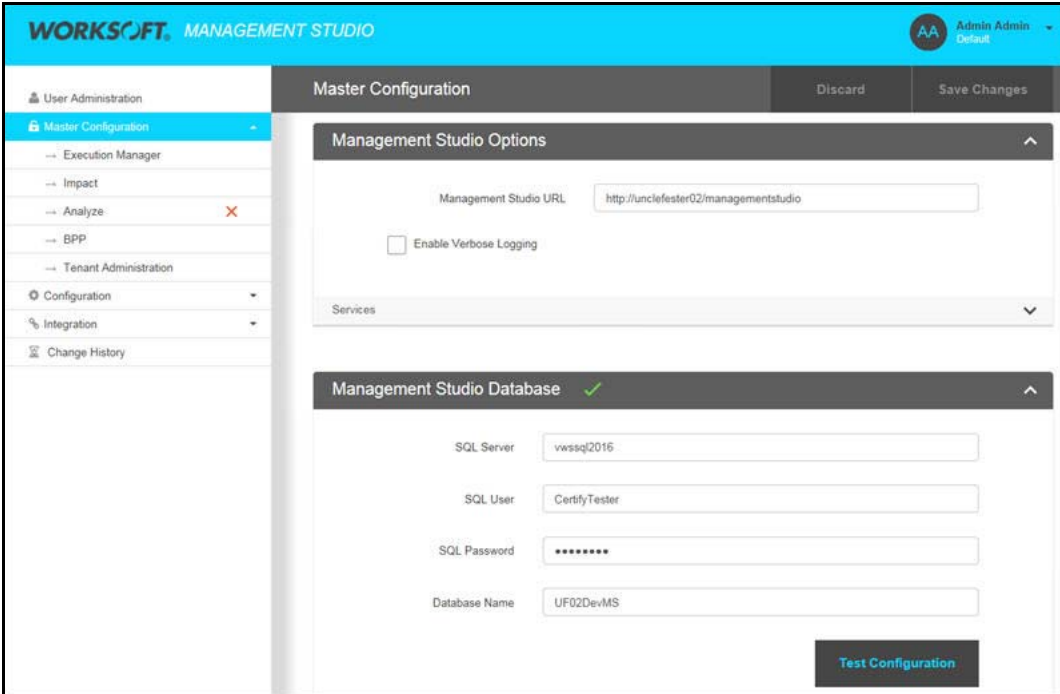
In order to use HTTPS on your application server, you will need to do the following:

- ◆ Request an SSL Certificate from your IT department.
- ◆ Add the certificate to IIS.
- ◆ Add new binding to port 443.
- ◆ Configure your database in the Worksoft Management Studio.
- ◆ Verify your SSL Settings on your application server.

Before you begin your configuration, verify that your application server has been set up and working with HTTP.

► **To configure your database in the Worksoft Management Studio:**

- 1 Open the Worksoft Management Studio on your web server by navigating to the following address:  
**`http://localhost/ManagementStudio`**.
- 2 Click the **Master Configuration** tab.

The screenshot shows the 'WORKSOFT. MANAGEMENT STUDIO' interface. On the left is a navigation menu with options like 'User Administration', 'Master Configuration' (selected), 'Execution Manager', 'Impact', 'Analyze', 'BPP', 'Tenant Administration', 'Configuration', 'Integration', and 'Change History'. The main area is titled 'Master Configuration' and has 'Discard' and 'Save Changes' buttons. It contains two sections: 'Management Studio Options' with a 'Management Studio URL' field (containing 'http://unclefester02/managementstudio') and an 'Enable Verbose Logging' checkbox; and 'Management Studio Database' (marked with a green checkmark) with fields for 'SQL Server' (vwsql2016), 'SQL User' (CertifyTester), 'SQL Password' (masked with dots), and 'Database Name' (UF02DevMS). A 'Test Configuration' button is at the bottom right.

- 3 In the Management Studio URL field, change HTTP to **HTTPS**.  
The URL address must match the address from the Issued To column in the Server Certificates window.  
Example: `https://worksoftMSServer.worksoft.com/managementstudio`
- 4 Click **Save Changes**.
- 5 Close the Worksoft Management Studio.

► **To verify your SSL Settings on your application server:**

- 1 Open the IIS Manager on your application server.
- 2 In the IIS Connections pane, select **Sites > Default Web Site > Management Studio**.
- 3 In the middle pane, double-click **SSL Settings**.
- 4 Verify that the **Require SSL** option is not selected.
- 5 Go back to the IIS Connections pane, and select **Sites > Default Web Site > SAPWebService**.
- 6 In the middle pane, double-click **SSL Settings**.
- 7 Verify that the **Require SSL** option is not selected.
- 8 Close the IIS Manager.

## Using HTTP on Your Application Server

Worksoft recommends that you use HTTPS on your application server. If you do not use HTTPS, then you will need to update the web.config file located in the following directory:

C:\Program Files (x86)\Worksoft\Worksoft Analyze\Web\web.config file

In the configuration file, find the line:

```
<httpCookies httpOnlyCookies="true" requireSSL="true" sameSite="Strict" />
```

Change `requireSSL="true"` to `requireSSL="false"`

Example:

```
<httpCookies httpOnlyCookies="true" requireSSL="false" sameSite="Strict" />
```

---

## Using a Remote Worksoft Management Studio Instance

---

If you are using a remote Worksoft Management Studio instance with Worksoft Analyze, you need to copy over the Analyze database folder to the machine where Management Studio is installed in order for it to create and update Analyze databases. The database folder is located in the following directory:

C:\Program Files (x86)\Worksoft\Worksoft Analyze\Database

Also, configuration files for the following components need to be updated in order for them to connect with the remote Management Studio instance:

- ◆ Worksoft Analyze Windows Service
- ◆ Worksoft Analyze web application
- ◆ Worksoft Analyze Web API

## Updating Worksoft Analyze Windows Service

By configuring the Worksoft Analyze Service configuration file, it will insure that the Worksoft Analyze Windows Service is able to connect and use the remote Management Studio instance. The configuration file is located in the following folder:

```
C:\Program Files (x86)\Worksoft\Worksoft Analyze\Service\
Worksoft.Analyze.Service.exe.config
```

Update the following application setting parameters:

- ◆ Replace the `MgmtStudioServiceUrl` value with the remote Worksoft Management Studio URL:

```
<add key="MgmtStudioServiceUrl" value="http://<server>/ManagementStudio/" />
```

<server> = Name of the Worksoft Application Server where Management Studio is installed.

- ◆ Replace the `SecuritySvcOrProductCBUrl` value.

The value of this setting is sent to Worksoft Management Studio, and it is used to call back to the Worksoft Analyze server to initiate a security handshake.

```
<add key="SecuritySvcOrProductCBUrl" value="net.tcp://localhost:4242/Analyze/
IAnalyzeSecurityCB" />
```

### TCP Connection

If the server where Worksoft Management Studio is installed and it can connect with a TCP connection to the Worksoft Analyze server, then just replace `localhost` with the hostname or IP address of the Worksoft Analyze server.

### HTTP or HTTPS Connection

If the server where Worksoft Management Studio is installed can only connect to the Worksoft Analyze server over HTTP or HTTPS, then change the value to

```
http(s)://<analyzeservername>/Analyze/IAnalyzeSecurityCB
```

Do not set the port for the URL, as you would for Net.TCP. Specifying a port has the potential of causing issues with other services that may run on that port.

## Verifying Settings

Open the log file `C:\worksoft\logs\AnalyzeSvcLogFile.log` on the Worksoft Analyze server and ensure no errors occur while starting Worksoft Analyze Windows Service.

Open the log `C:\worksoft\logs\RegistrationService.log` on the Management Studio server and ensure no errors occur during starting of the Windows Service.

## Updating Worksoft Analyze Web Application

Update the `Web.config` file that is located in the following directory:

```
C:\Program Files (x86)\Worksoft\Worksoft Analyze\Web\Web.config
```

Replace the `MgmtStudioServiceUrl` value with the remote Worksoft Management Studio URL:

```
<add key="MgmtStudioServiceUrl" value="http://<server>/ManagementStudio/" />
```

<server> = Name of the Worksoft Application Server where Management Studio is installed.

## Configuring Worksoft Analyze Web API

In order to connect with Worksoft Analyze Web API, you need to update the Web.config file in the following directory:

C:\Program Files(x86)\Worksoft\Worksoft Analyze\API\Web.config

### ► To update Worksoft Analyze Web API:

- 1 Open the **Web.config** file in the API folder in Notepad.
- 2 Replace the **MgmtStudioServiceUrl** value with the remote Worksoft Management Studio URL:  

```
<add key="MgmtStudioServiceUrl" value="http://<server>/ManagementStudio/" />
```

 <server> = Worksoft Management Studio URL.
- 3 In order to support email notifications, replace **AnalyzeWebApp** to the Worksoft Analyze URL:  

```
<add key="AnalyzeWebApp" value="http://localhost/Analyze/" />
```

 If Worksoft Analyze is configured behind a load balancer, and SQL server is being used for the settings, you need to change the **EnableBackplane** value.  
 If you do not have this configuration, go to **Step 6**.
- 4 Replace the **EnableBackplane** value to true.  

```
<add key="EnableBackplane" value="true"/>
```
- 5 Save the configuration file and close it.



**Note:** Depending on your environment, <server> may need to be specified as a fully qualified domain name (FQDN) instead of a simple server name. To ensure IP changes will not interfere with Analyze operations, do not replace <server> with an IP address.



Chapter 3

Configuring the Worksoft Management Studio

In This Chapter

Overview .....	33
Creating Your Worksoft Management Studio Database .....	35
Registering and Creating a Worksoft Analyze Database .....	38
Adding Worksoft Analyze Licenses .....	39
Registering Users .....	41
Configuring Email Service.....	44
Accessing Worksoft Analyze .....	45



## Overview

On your web server where IIS is installed, you will need to configure your system in the Worksoft Management Studio. The Worksoft Application Server installed the Worksoft Management Studio.

Within the Worksoft Management Studio, you will need to do the following Management Studio configuration tasks:

- ◆ Create a Worksoft Management Studio database
- ◆ Create and register a Worksoft Analyze database
- ◆ Add Worksoft licenses
- ◆ Register users
- ◆ Configure email service

The Management Studio database maintains configuration information used by Worksoft applications and services. Worksoft Analyze leverages information from the Worksoft Management Studio.

## Exploring Worksoft Management Studio

Worksoft Management Studio consists of the following navigation tabs:

Navigation Tab	Description
<b>User Administration</b>	Register users and roles for each product.
<b>Master Configuration</b>	<p>Create the following databases:</p> <ul style="list-style-type: none"> <li>• Management Studio</li> <li>• Execution Manager</li> <li>• Impact</li> <li>• Analyze</li> <li>• BPP</li> </ul> <p>Configure the following:</p> <ul style="list-style-type: none"> <li>• SMTP settings</li> <li>• Maintenance window text</li> <li>• Tenant administration</li> </ul>
<b>Configuration</b>	<ul style="list-style-type: none"> <li>• LDAP Configuration</li> <li>• Execution Manager</li> <li>• Impact</li> <li>• Certify Configuration - Add your Certify databases.</li> <li>• Bookmark Administration - Execution Manager feature</li> <li>• Licenses</li> </ul>

Navigation Tab	Description
<b>Integration</b>	Configure your connections with the following products: <ul style="list-style-type: none"> <li>• ALM integration</li> <li>• Analyze connections</li> <li>• Certify/Analyze integration</li> <li>• SAP systems</li> <li>• Panaya integration</li> </ul>
<b>Change History</b>	Display change history.

When you open Worksoft Management Studio, you will be able to see what part of your configuration requires attention by visual indicators.

Master Configuration	✗
→ Execution Manager	✗
→ Impact	✗
→ Analyze	✗
→ BPP	!
→ Tenant Administration	

Listed below are the visual indicators:

1. A red X means that there is either mandatory missing information or a failure with the current configuration. Each tab provides diagnostic information that will explain what failed and how to resolve the failure.
2. An animated circle means a diagnostic test is being performed to see if the configuration is complete and functional. If the test is successful, the circle will disappear, and if not successful, a red X will show a failure.
3. An exclamation mark means that there is an optional configuration that is available. No configuration has been made in these tabs, and you may want to configure these options in the future.

## Creating Your Worksoft Management Studio Database

The Management Studio database maintains configuration information used by Worksoft applications and services. Worksoft Analyze leverages information from the Worksoft Management Studio.

Only one Management Studio database is needed. If you have already created a Management Studio database, go to ["Registering and Creating a Worksoft Analyze Database" on page 38](#).

### ► To create the Worksoft Management Studio database:

- 1 Open the Worksoft Management Studio on your web server by navigating to the following address: `http://localhost/ManagementStudio`.

The Management Studio Installation page opens.

- 2 Type in the Worksoft Management Studio URL address.

If you did not use the default website during installation, your URL address will be different. The implementation of your network landscape will need to be considered when choosing a URL address. Verify that the URL can be accessed by all users.

The URL address should either be a domain or a machine name for on-premise installations. If using a machine name, you will need to decide if a fully-qualified domain and machine name is required. Do not use IP addresses.

If your DNS settings require a fully-qualified machine name complete with domain, please make those changes accordingly.

If there is a load balancer in front of one or more web servers, then the URL address should point to the load balancer domain. If you have any questions about your specific URL address, please ask your IT administrator.

If you intend to use HTTPS for your application server, you will need to first configure your server with HTTP, and then you will be able to reconfigure the application server to use HTTPS.

**3** In the Management Studio Database section, type in the server name in the SQL Server field.

**4** For SQL Database Authentication, type the SQL user name and password in the fields to access the database server.

The user name and password must have enough SQL Server permissions to create a database. After you created your database, you are able to use a different SQL user name and password.

**5** In the Database Name field, type in the name of the Management Studio database.

Worksoft recommends using the database name *ManagementStudio* for easy identification.

**6** Click the **Test Configuration** button to test your connection.

If the test fails, the reason for the database connection failure appears.

After it detects that the database does not exist, a **Create** button appears.

**7** Click the **Create** button to create a new database.

If you are upgrading your database, then you will click the **Update** button.

After creating the database, your SQL Server database administrator should review the database settings and configuration so that it meets expectations and adheres to appropriate best practices, such as using an appropriate recovery model.

**8** Click **Continue**.

After saving the Management Studio configuration, you will be prompted to log on to the Management Studio.

**9** If you are a new user, type `admin@worksoft.com` in the User Name field.

**10** If you are a new user, type `password` in the password field.

**11** Click **Login**.

After applying this configuration, you have successfully enabled Management Studio to be operational. The User Administration tab opens.

- 12** Click the **Master Configuration** tab.

The screenshot shows the 'Master Configuration' page in the Worksoft Management Studio. The left sidebar contains a navigation menu with the following items: User Administration, Master Configuration (highlighted), Execution Manager, Impact, Analyze (with a red 'X' icon), BPP, Tenant Administration, Configuration, Integration, and Change History. The main content area is titled 'Master Configuration' and has two buttons: 'Discard' and 'Save Changes'. It is divided into two sections: 'Management Studio Options' and 'Management Studio Database'. The 'Management Studio Options' section includes a text input for 'Management Studio URL' with the value 'http://unclefeater02/managementstudio' and a checkbox for 'Enable Verbose Logging' which is currently unchecked. Below this is a 'Services' dropdown menu. The 'Management Studio Database' section, marked with a green checkmark, contains four text inputs: 'SQL Server' with 'vwssq2016', 'SQL User' with 'CertifyTester', 'SQL Password' with masked characters '\*\*\*\*\*', and 'Database Name' with 'UF02DevMS'. A 'Test Configuration' button is located at the bottom right of the database section.

- 13** If you want to enable verbose logging, select the **Enable Verbose Logging** option in the Management Studio Options section and click **Save Changes**.

---

## Registering and Creating a Worksoft Analyze Database

---

Besides creating a Worksoft Management Studio database, you must create and register a Worksoft Analyze database.

► **To create and register a Worksoft Analyze database:**

- 1 In the Worksoft Management Studio, click the **Master Configuration > Analyze** tab.

The Analyze Database tab opens.

The screenshot displays the 'Analyze Database' configuration interface in Worksoft Management Studio. The top navigation bar includes 'Analyze', 'Discard', and 'Save Changes'. The main form contains the following fields:

- SQL Server: 172.24.16.213
- SQL User: qauser
- SQL Password: masked with asterisks
- Database Name: Analyze\_QA2

A 'Test Configuration' button is located below the form fields. Below the form is a 'Status' section with a table summarizing the configuration results:

Status		
Connection	✓	Successful
Database Version	✓	1.0.0.5011
Software Version	✓	1.0.0.5011
SQL User Permissions	✓	Success

- 2 In the SQL Server field, type in the name of your SQL Server.
- 3 In the SQL User and Password fields, type in the SQL Server user name and password.  
The user name and password must have enough SQL Server permissions to create a database. After you created your database, you are able to use a different SQL user name and password.
- 4 In the Database Name field, type in a unique name for your database.  
Worksoft recommends using the database name **Analyze** for easy identification.
- 5 Click the **Test Configuration** button to test the connection.  
If the test fails, the reason for the database connection failure appears.  
After it detects that the database does not exist, a **Create** button appears.

- 6 Click the **Create** button to create a new database.

If you are upgrading your database, then you will click the **Update** button.

After creating the database, your SQL Server database administrator should review the database settings and configuration so that it meets expectations and adheres to appropriate best practices, such as using an appropriate recovery model.

- 7 Click **Save Changes** to save your registered Analyze database.
- 8 Scroll down the Worksoft Analyze tab to verify that the services are running.

It may take a few minutes for the Worksoft Analyze Service to recognize this configuration change after you save the database.

---

## Adding Worksoft Analyze Licenses

---

The administrator must upload their Worksoft Analyze licenses into the Worksoft Management Studio where they will maintain the licenses. Worksoft Customer Support provides you with license files. Save the license files to a directory that you will be able to access when adding them to the Worksoft Management Studio.

### ► To add Worksoft Analyze licenses to Worksoft Management Studio:

- 1 In the Worksoft Management Studio, click the **Configuration > Licenses** tab.

The Licenses tab opens.

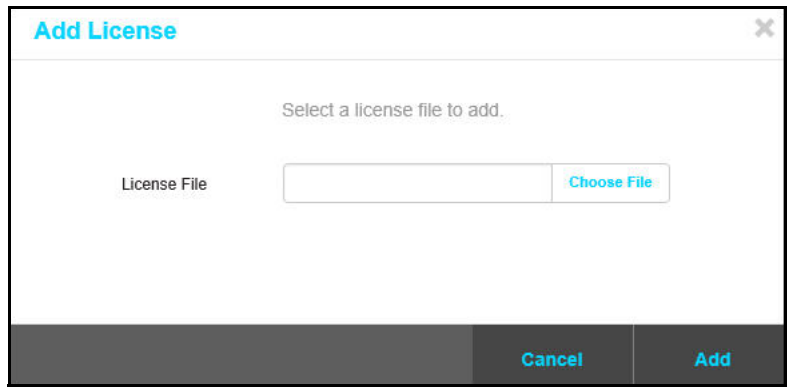
Worksoft Licenses						Add
Application Name	Application Version	Entitlement	Created Date	Expiration Date	Status	
Analyze		Session: 999 Capture: 999	2019/02/21		Active	

License Usage					Usage Report
Application Name	Application Version	License Type	Entitlement	In Use	
Analyze		Session	999	0	

- 2 Click **Add**.

The Add License dialog box appears.



- 3 Click **Choose File**.
- 4 Browse to the directory where your license file is saved.
- 5 Click **Open**.  
The license file name appears in the License File text box.
- 6 Click **Add**.  
The new license appears in the Licenses tab.

Worksoft Licenses						Add
Application Name	Application Version	Entitlement	Created Date	Expiration Date	Status	
Analyze		Session: 999 Capture: 999	2019/02/21		Active	
Analyze		Session: 1	2019/04/09		Active	



---

## Registering Users

---

The next step to configuring Worksoft Management Studio is to register users who will be using the Worksoft Analyze.

There are two ways to register users:

- ◆ Manually add users in Worksoft Management Studio
- ◆ Import users from a Microsoft Excel® spreadsheet

If you have multiple tenants, users are added to the tenant in which you are logged into Worksoft Management Studio.

► **To manually add users in Worksoft Management Studio:**

- 1 In the Worksoft Management Studio, click the **User Administration** tab.
- 2 In the User Administration tab, click **Add**.

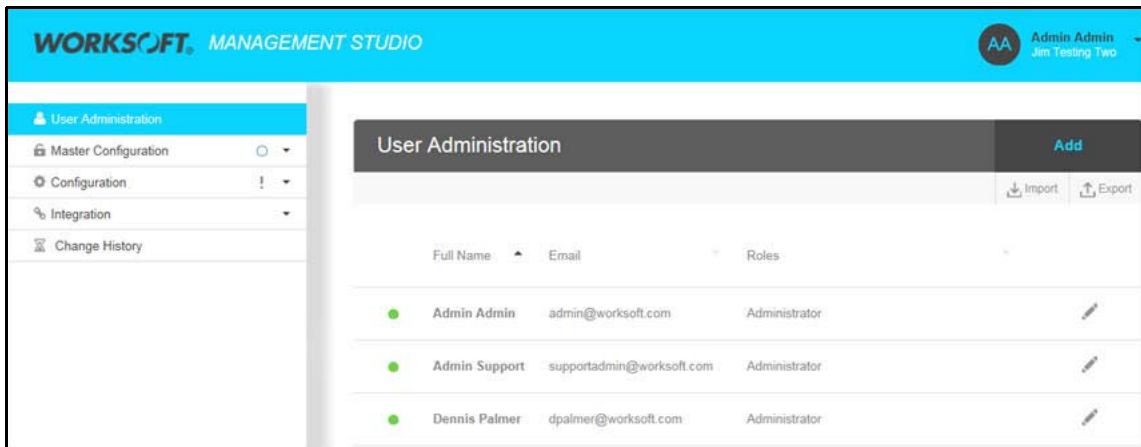
The Add User dialog box opens.

The screenshot shows the 'Add User' dialog box with the following fields and options:

- First Name**: Text input field.
- Last Name**: Text input field.
- Email**: Text input field.
- Password**: Text input field.
- Confirm Password**: Text input field.
- Authentication**: Dropdown menu with 'Worksoft' selected.
- User Roles**: A group of checkboxes including 'Administrator', 'Upload Only', 'Execution Manager', 'Impact', and 'Analyze'.
- Default Time Zone**: Dropdown menu with 'Server Default - (UTC-05:00) Eastern Time (US & Canada)' selected.
- Buttons**: 'Cancel' and 'Add' buttons at the bottom right.

- 3 To create an active user, verify that **Active** is selected.  
To deactivate a user, select **Inactive**.
- 4 In the related fields, type in the following information:
  - **First name**
  - **Last name**
  - **Email address**
  - **Password**
  - **Confirm Password**
- 5 From the Authentication drop-down list, use the default authentication option **Worksoft**.
- 6 If you want to give the user administrative rights, select the **Administrator** option.
- 7 If you want the user to only be able to upload Worksoft Capture files, select **Upload Only**.
- 8 Select **Analyze** under User Roles.
- 9 From the Default Time Zone drop-down list, select a time zone for the user.
- 10 Click **Add**.

The user name appears in the left User Administration tab.



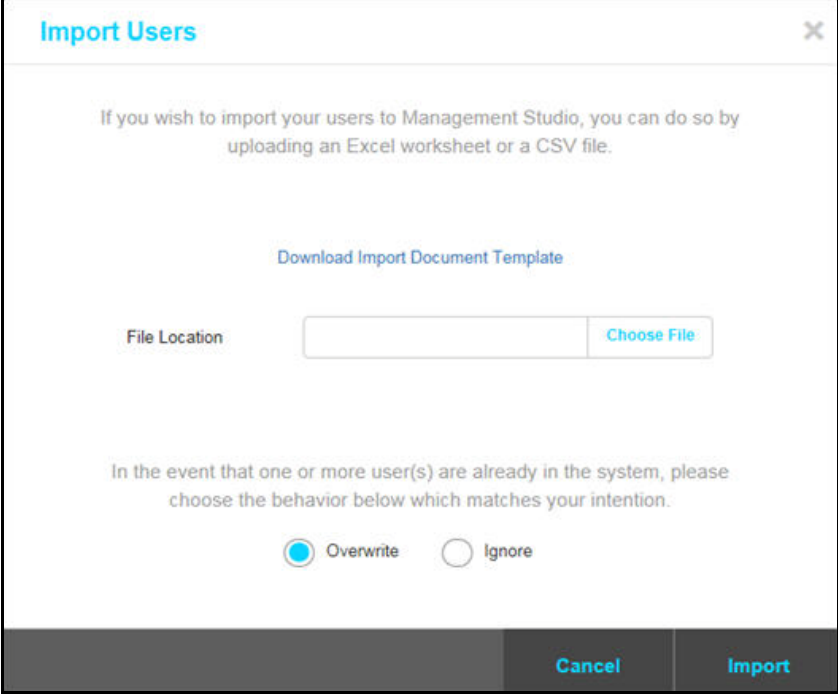
- 11 Repeat this process to add more users.

To edit a user, click the **Edit**  icon next to the user.

► **To register users by importing from a Microsoft Excel spreadsheet:**

- 1** In the Worksoft Management Studio, click the **User Administration** tab.
- 2** In the User Administration tab, click **Import**.

The Import User dialog box opens.



The screenshot shows the 'Import Users' dialog box. At the top, it says 'Import Users' with a close button (X). Below that, a message states: 'If you wish to import your users to Management Studio, you can do so by uploading an Excel worksheet or a CSV file.' There is a link 'Download Import Document Template'. Below this is a 'File Location' label next to a text input field and a 'Choose File' button. Further down, another message says: 'In the event that one or more user(s) are already in the system, please choose the behavior below which matches your intention.' There are two radio buttons: 'Overwrite' (which is selected) and 'Ignore'. At the bottom, there are two buttons: 'Cancel' and 'Import'.

- 3** To download an Excel template, click **Download Sample Upload File**.  
Use this template to create your own Excel spreadsheet.
- 4** Click the **Choose File** button and select the CSV file that you want to import.
- 5** After you have selected your file, click the **Import** button.  
The users are imported into the Worksoft Management Studio and appear in the Users Administration tab.

---

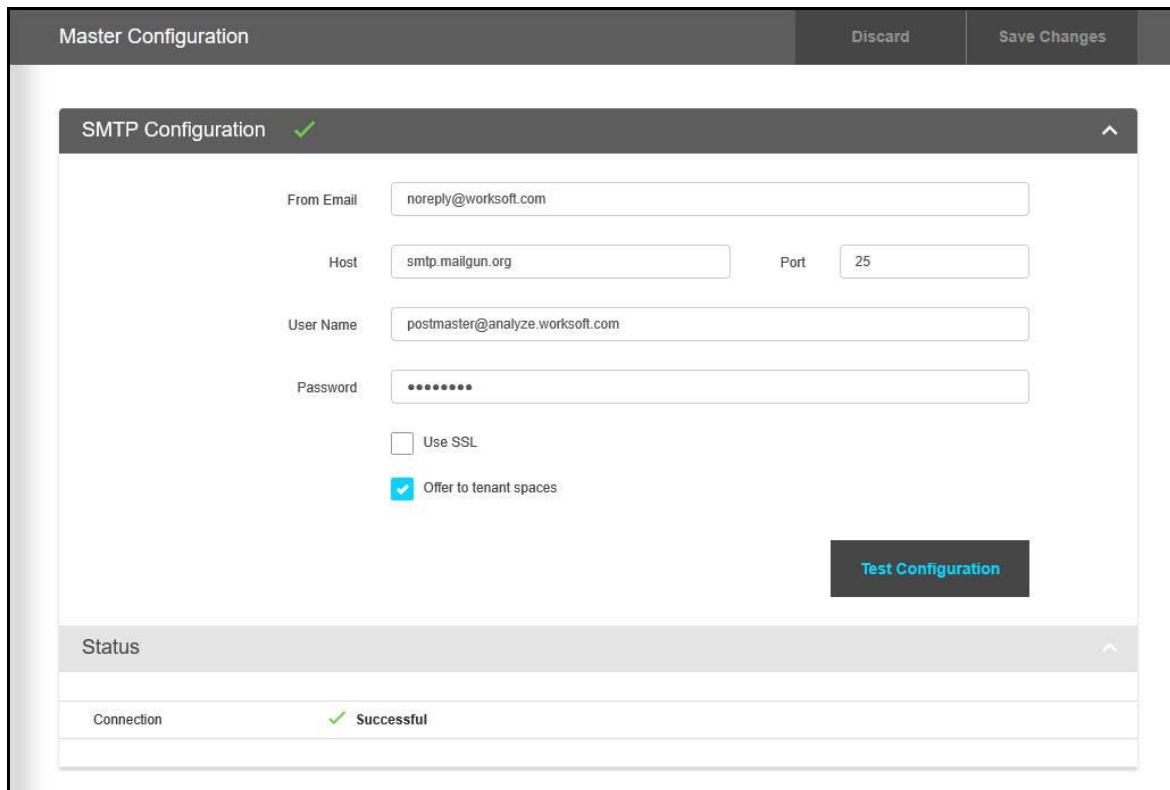
## Configuring Email Service

---

To send out Worksoft Analyze email notifications, you must specify the SMTP server that will send out email notifications.

► **To configure your email service:**

- 1 In the Worksoft Management Studio, click the **Master Configuration** tab.  
The Master Configuration tab opens.
- 2 Scroll down to the SMTP Configuration section.



The screenshot shows the 'Master Configuration' interface. At the top, there are tabs for 'Master Configuration', 'Discard', and 'Save Changes'. Below this is the 'SMTP Configuration' section, which is expanded and has a green checkmark icon. The section contains the following fields and options:

- From Email:** A text input field containing 'noreply@worksoft.com'.
- Host:** A text input field containing 'smtp.mailgun.org'.
- Port:** A text input field containing '25'.
- User Name:** A text input field containing 'postmaster@analyze.worksoft.com'.
- Password:** A password input field with masked characters '.....'.
- Use SSL:** An unchecked checkbox.
- Offer to tenant spaces:** A checked checkbox.
- Test Configuration:** A button with a blue 'Test Configuration' label.

Below the configuration fields is a 'Status' section with a table showing the connection status:

Status	
Connection	✓ Successful

- 3 In the SMTP Configuration section, type in the following information:
  - **From Email**
  - **SMTP Host**
  - **SMTP Port**
  - **SMTP User Name**
  - **SMTP Password**

- 4 If you want to use a SSL certificate, select the **Use SSL** option.
- 5 If you are using tenant spaces and want to use the Master Configuration SMTP configuration, select the **Offers to Tenant Spaces** option.
- 6 Click the **Test Configuration** button to test your connection.

If the test fails, the reason for the failure appears in the Status section.

If the settings are not valid, Worksoft Analyze will still be functional; however, the size of your log file will be affected since Worksoft Analyze will log errors for all of the failed email notifications.

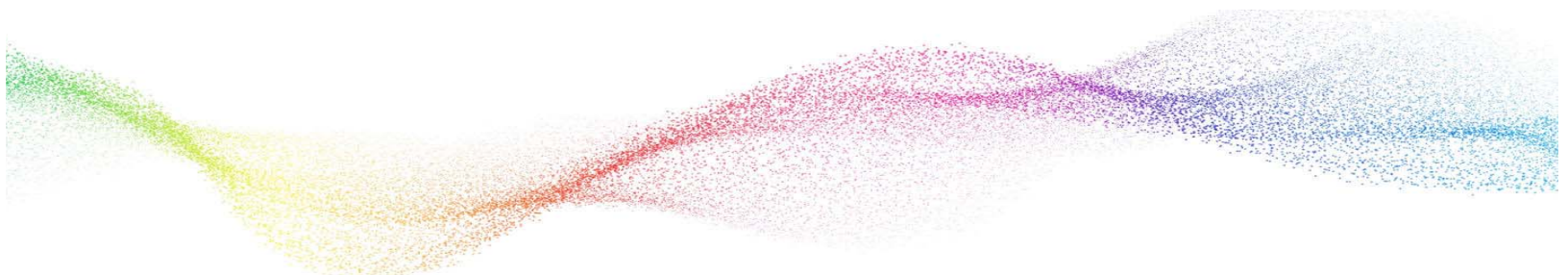
---

## Accessing Worksoft Analyze

---

To access Worksoft Analyze, go to the following site to log onto the system:

`http://<server>/Analyze`



# Chapter 4                      Configuring Multi-Tenant Spaces

---

## In This Chapter

Overview .....	47
Adding Tenants .....	47
Adding Users to Tenants .....	49

---

## Overview

When Worksoft Management Studio is installed, a single primary tenant is created by default, and this tenant is responsible for configuring the master configuration. From the primary tenant space, an administrator can create other tenant spaces if they want to partition data within their organization.

The administrator manages all tenants within Management Studio and assigns users to each tenant. These users will be managed by administrators in that tenant space.

Only users within the assigned tenant will be able view and access the data for that tenant. Captured process data that is uploaded into Worksoft Analyze will be associated to the tenant of the user performing the upload. Users associated with other tenants will not see the captured data.

## Adding Tenants

Administrators add tenants in the Tenant Administration tab within the Worksoft Management Studio.

### ► To add tenants:

- 1 Log on to Worksoft Management Studio as an administrator.
- 2 Under Master Configuration, click the **Tenant Administration** tab.  
The Tenant Administration tab opens.
- 3 Click **Add** to create a new tenant.  
The Add Tenant dialog box opens.

**Add Tenant** [Close]

ACTIVE

Tenant Name

Email

First Name

Last Name

Website  *Optional*

Phone  *Optional*

User Limit  ☒ No user limit

Default Time Zone  ▼

Cancel Add

- 4 To create an active tenant, verify that **Active** is selected.

**5** In the related fields, type in the following information:

- **Tenant name**
- **Email address**
- **First name**
- **Last name**
- **Website address**
- **Phone number**

The user that you specify will be the main administrator for this new tenant space. The default password for the administrator is **password**.

**6** If you want to limit the number of users, clear the **No user limit** option and type in the number of users.

If you do not want to limit the number of users, leave this option selected.

**7** From the Default Time Zone drop-down list, select a time zone for the user.

**8** Click **Add**.

The new tenant appears in the Tenant Administration tab.

**9** Log out of Worksoft Management Studio by clicking the arrow in the right-hand corner and selecting **Logout**.

**10** Log on to Worksoft Management Studio with the email address you specified when creating the tenant and the default **password**.

You will now be able to perform administration tasks for the newly created tenant.

**11** Repeat this process for creating additional tenants.

When creating additional tenants, an email account can be associated with more than one tenant space.

## Switching Between Tenants

To switch between tenants, the administrator must log out of the Worksoft Management Studio. When logging on to Management Studio, the administrator must select a tenant from the Tenant list.

As long as the passwords for the tenant administrators are the same, then they will be able to select tenants from the Tenant list. If the password for either administrator is changed, then the user will not see the Tenant list and will only be able to manage the tenant in which it was created.



## Adding Users to Tenants

You will now add users to your multiple tenants by one of the following methods:

- ◆ Manually add users in Worksoft Management Studio
- ◆ Import users from a Microsoft Excel® spreadsheet

► **To manually add users to tenants:**

- 1 Log on to Worksoft Management Studio as the tenant administrator.
- 2 From the Tenant list, select the tenant in which you would like to create a new Analyze user.
- 3 In the Worksoft Management Studio, click the **User Administration** tab.
- 4 In the User Administration tab, click **Add**.

The Add User dialog box opens.

- 5 To create an active user, verify that **Active** is selected.  
To deactivate a user, select **Inactive**.

- 6 In the related fields, type in the following information:
  - **First name**
  - **Last name**
  - **Email address**
  - **Password**
  - **Confirm Password**
- 7 From the Authentication drop-down list, use the default authentication option **Worksoft**.
- 8 If you want to give the user administrative rights, select the **Administrator** option.
- 9 If you want the user to only be able to upload Worksoft Capture files, select **Upload Only**.
- 10 Select **Analyze** under User Roles.
- 11 From the Default Time Zone drop-down list, select a time zone for the user.
- 12 Click **Add**.

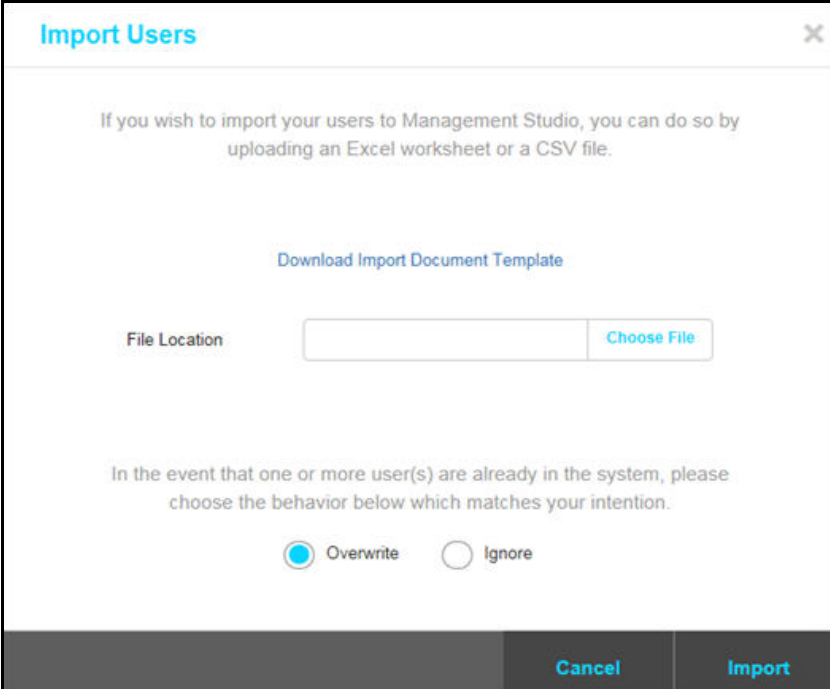
The user name appears in the left User Administration tab.
- 13 Repeat this process to add more users.

To edit a user, click the **Edit**  icon next to the user.

► **To add users by importing from a Microsoft Excel spreadsheet:**

- 1 In the Worksoft Management Studio, click the **User Administration** tab.
- 2 In the User Administration tab, click **Import**.

The Import User dialog box opens.



The image shows a dialog box titled "Import Users" with a close button (X) in the top right corner. The main text inside the dialog box reads: "If you wish to import your users to Management Studio, you can do so by uploading an Excel worksheet or a CSV file." Below this text is a link that says "Download Import Document Template". Further down, there is a label "File Location" followed by a text input field and a "Choose File" button. At the bottom of the dialog box, there is a message: "In the event that one or more user(s) are already in the system, please choose the behavior below which matches your intention." Below this message are two radio buttons: "Overwrite" (which is selected) and "Ignore". At the very bottom of the dialog box, there are two buttons: "Cancel" and "Import".

- 3** To download an Excel template, click **Download Sample Upload File**.  
Use this template to create your own Excel spreadsheet.
- 4** Click the **Choose File** button and select the CSV file that you want to import.
- 5** After you have selected your file, click the **Import** button.  
The users are imported into the Worksoft Management Studio and appear in the Users Administration tab.



# Chapter 5      Upgrading Worksoft Analyze

---

## In This Chapter

Updating Worksoft Analyze ..... 53

---

## Updating Worksoft Analyze

---

To update Worksoft Analyze, you will run the installer from the distribution package.

If you are using a remote Worksoft Management Studio instance with Worksoft Analyze, you need to copy over the Analyze database folder to the machine where Management Studio is installed in order for it to create and update Analyze databases. The database folder is located in the following directory:

C:\Program Files (x86)\Worksoft\Worksoft Analyze\Database

### ► To update Worksoft Analyze:

- 1** Follow the instructions from the Worksoft Analyze upgrade distribution package.  
The installer will uninstall the older version and then install the new version of the application.
- 2** After the installation completes, log on to Worksoft Management Studio to update the Worksoft Analyze database.  
The Analyze tab displays a red X. Your database needs to be updated to sync with the new version.
- 3** In the Worksoft Management Studio, click the **Master Configuration** tab.
- 4** Click the **Analyze** tab.  
The Analyze tab opens.
- 5** Click the **Update** button to update the database.  
A message appears asking if you want to update the Worksoft Analyze database.
- 6** Click **Update**.
- 7** Repeat this process if you have more than one database.



## Appendix A      Worksoft Analyze Silent Installation

### Silent Install

To run Worksoft Analyze installation silently, run the installer from the command line and add **/s** option to the executable:

```
WorksoftAnalyze.exe /s
```

### Installation Log File

The default installation log is located at **%userprofile%** of the user who installed Worksoft Analyze. If you want to override the install log file location, enter the following string to provide an override for install log file location:

```
WorksoftAnalyze.exe /s /l=C:\temp\AnalyzeInstalllog.txt
```

### Silent Uninstall

To uninstall Worksoft Analyze silently, run the installer from the command line and enter the following string:

```
WorksoftAnalyze.exe /s MODIFY=FALSE REMOVE=TRUE UNINSTALL=YES
```