Installation Guide Version 1.10

for

# Trimble<sup>®</sup> 4D Control Web version 4.4



Updated 2015-07-10

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# **1** Software Compatibility

## **1.1 Server-side Compatibility**

**Trimble® 4D Control Web** has been tested for compatibility with the following Microsoft operating systems:

Operating System	Service Pack	IIS Version
Server 2008 R2	None or SP1	7.5
Server 2008 x86	SP2	7.0
Server 2008 x64	SP2	7.0
Windows 7 x86	None or SP1	7.5
Windows 7 x64	None or SP1	7.5
Server 2012 R2 x64		8.5
Windows 8.1 x64		8.5

## **1.2 Database Server Compatibility**

Note that Trimble<sup>®</sup> 4D Control Web only works with instances of SQL Server 2008 or newer.

# 2 Server Requirements

Before attempting to install **Trimble® 4D Control Web** application on one of the compatible Microsoft platforms described in section 1, please ensure that the following requirements are met:

- Network Connectivity
- Internet Information Services (IIS)
- .NET Framework 3.5 and .NET Framework 4.5

## 2.1 Network Connectivity

Browsers on other computers will access the **Trimble® 4D Control Web** application via Port 80. It is important to ensure that the firewall configuration on the Web Server (i.e. the computer onto which you are installing the **Trimble® 4D Control Web** application) allows TCP traffic on port 80.

Process V	PID	Pr	Local Address	Local Port	Remote Address	Remote Port	State
🔝 w3wp.exe	2148	TCP	192.168.200.120	49173	41.72.145.4	1433	ESTABLISHED
📰 System	4	TCP	192.168.200.120	80	192.168.200.112	58818	ESTABLISHED

Figure 1: Example network connectivity

The **Trimble® 4D Control Web** application makes substantial use of E-mail communication. By default it will send emails via Google Mail. In order to do this, however, the Web Server must be able to send SMTP mail via port 587. On most computers this will already be allowed. After installation, you will also have the option to reconfigure the **Trimble® 4D Control Web** application to send emails via an alternative mail server of your choosing.

## 2.2 Internet Information Services (IIS)

Internet Information Services (referred to as IIS) must be installed and correctly configured on your Web Server in order to host the Trimble<sup>®</sup> 4D Control Web application as a web site.

The steps for installing and configuring IIS differ between Windows Server editions (e.g. Windows Server 2012 R2) and Windows Desktop editions (e.g. Windows 8.1).

#### 2.2.1 Server 2012 & 2012 R2

*Note:* Screenshots displayed in this document are for <u>Windows Server 2012 R2 Data Center</u>. The exact layout of the wizard shown below may differ slightly between different editions. It is however important to configure IIS exactly as shown below.

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

Depending on your edition of Windows Server 2012 or 2012 R2, IIS may not yet be installed on your server.

a) To install IIS navigate to the **Control Panel** and click on **Turn Windows features on or** off.

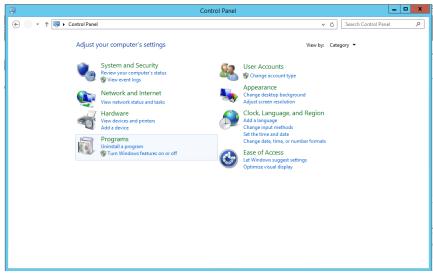
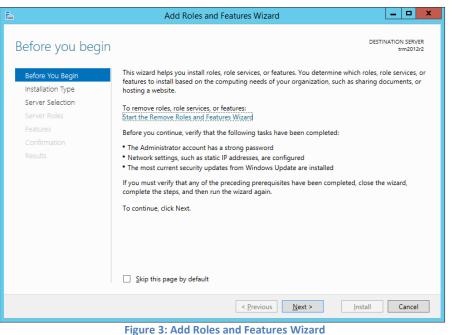


Figure 2: Turn Windows features on or off

b) The Add Roles and Features wizard will appear. Click Next.



0

c) Specify the installation type as a Role-based or feature-based installation and click on Next.

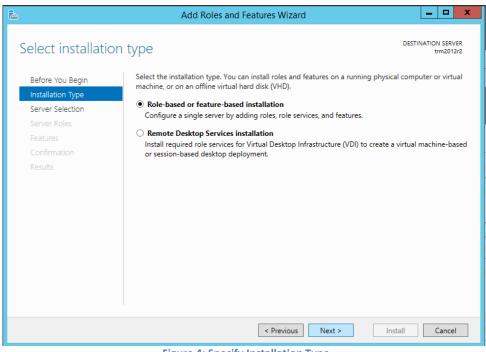


Figure 4: Specify Installation Type

d) Specify the machine on which the role must be enabled. This will typically be the same machine as the one you are logged on to.

2	Add Roles and Features Wizard
Select destinati	ON SERVER DESTINATION SERVER trm2012r2
Before You Begin	Select a server or a virtual hard disk on which to install roles and features.
Installation Type	• Select a server from the server pool
Server Selection	Select a virtual hard disk
Server Roles	Server Pool
Features	
	Filter:
Results	Name IP Address Operating System
	100.91 3 Microsoft Windows Server 2012 R2 Datacenter
	1 Computer(s) found This page shows servers that are running Windows Server 2012, and that have been added by using the Add Servers command in Server Manager. Offline servers and newly-added servers from which data collection is still incomplete are not shown.
	<u>Previous</u> <u>Next &gt; Install</u> Cancel           Figure 5: Specify Target Server

e) Select the Web server (IIS) role and choose to include management features.

Before You Begin Installation Type Server Selection       Select one or more roles to install on the selected server.         Roles       Description         Server Roles       OHCP Server         OHCP Server       OHCP Server         DNS Server       OHCP Server         P Features       Print and Document Services         Print and Document Services       Print and Document Services         Valuem EAccess       Print and Document Services         Valuem EAccess       Windows Server Essentials Experience		Add Roles and Features Wizard	_ <b>D</b> X	
Server Selection       Application Server         Server Roles       DHCP Server         DHCP Server       DHCP Server         DHS Server       DHS Server         B Flae and Storage Services (1 of 12 installed)       # Web Server (IIS) provides a reliable, manageable, and scalable Web application infrastructure.         P B File and Storage Services (1 of 12 installed)       # Menageable, and scalable Web application infrastructure.         P B File and Storage Services (1 of 12 installed)       # Menagement Tr [Tools] IIS M         Muchanism Comment Services       Remote Desktop Services         Valuem Access       Remote Desktop Services         Windows Deployment Services       Windows Server Essentials Experience	Before You Begin	Select one or more roles to install on the selected server.	trm2012r2	Add features that are required for Web Server
Willing Server obrage Services     A	Server Selection Server Roles Features Confirmation	Application Server     Application Server     DHCP Server     DNS Server     Fax Server     Fax Server     In File and Storage Services (1 of 12 installed)     Hyper-V     Network Policy and Access Services     Print and Document Services     Remote Desktop Services     Volume Activation Services     Volume Activation Services     Volume Activation Services     Windows Deployment Services	Web Server (IIS) provides a reliable, manageable, and scalable Web	The following tools are required to manage this feature, bu have to be installed on the same server.    Web Server (IIS)  Management Tools  [Tools] IIS Management Console  Include management tools (if applicable)  Add Features

Figure 6: Select the "Web Server (IIS)" role

f) Ensure that .NET Framework 3.5 Features and .NET Framework 4.5 Features are selected with the ASP.NET 4.5 features selected.

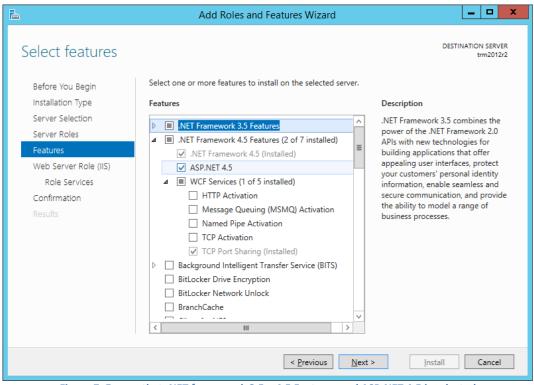


Figure 7: Ensure that .NET framework 3.5 + 4.5 Features and ASP.NET 4.5 is selected

g) Take note of the message displayed in the next step and click on Next.

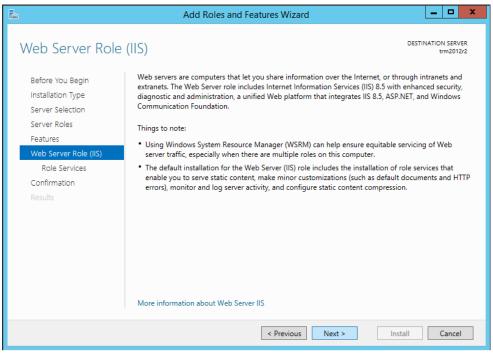
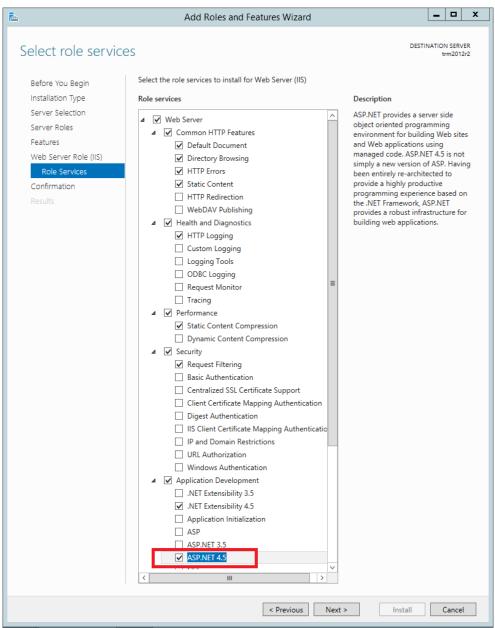


Figure 8: IIS related information

h) The next step entails selecting the role services to install for IIS. Make sure that all the options selected in the following window are selected. It is especially important to enable ASP.NET 4.5 under Application Development.



#### Figure 9: IIS Service Options

i) Finally, review the details on the confirmation page and click on Install.

2	Add Roles and Features Wizard	- 🗆 X
Confirm installatic	on selections	DESTINATION SERVER trm2012r2
Before You Begin	To install the following roles, role services, or features on selected server, click Install.	
Installation Type	Restart the destination server automatically if required	
Server Selection Server Roles	Optional features (such as administration tools) might be displayed on this page bec been selected automatically. If you do not want to install these optional features, clic	
Features	their check boxes.	
Veb Server Role (IIS)	.NET Framework 4.5 Features	^
Role Services	ASP.NET 4.5	
Confirmation	Web Server (IIS)	=
Results	Management Tools IIS Management Console Web Server	-
	Common HTTP Features	
	Default Document	
	Directory Browsing	
	HTTP Errors	~
	Export configuration settings Specify an alternate source path	
	< Previous Next > Install	Cancel

Figure 10: Confirmation Page

#### 2.2.2 Windows 8.1

By default, IIS is not installed on Windows 7. You can install IIS by clicking **Windows Features** in **Advanced Options** under **Programs** in **Control Panel**:

- a) Click Start and then click Control Panel.
- b) In Control Panel, click Programs and then click Turn Windows features on or off.
- c) In the Windows Features dialog box, click Internet Information Services and then click OK.
- d) Ensure that the ASP.NET option is enabled under the Application Development Features section of IIS

🔤 Windows Features – 🗆 🗙				
Turn Windows features on or off	)			
To turn a feature on, select its check box. To turn a feature off, clear its check box. A filled box means that only part of the feature is turned on.				
.NET Framework 4.5 Advanced Services     ∧	]			
Active Directory Lightweight Directory Services				
⊞				
Internet Explorer 11      Internet Information Services				
IIS 6 Management Compatibility				
IIS Management Console				
IIS Management Scripts and Tools				
🖃 🔳 World Wide Web Services				
🖃 🔳 Application Development Features				
.NET Extensibility 3.5				
✓ .NET Extensibility 4.5				
Application Initialization				
ASP				
ASP.NET 3.5				
✓ ISAPI Extensions				
✓ ISAPI Filters				
Server-Side Includes				
WebSocket Protocol				
Common HTTP Features				
OK Cancel	]			

Figure 11: IIS options for Windows 8.1

#### 2.2.3 Server 2008 & 2008 R2

Please refer to version 1.8 of this document for more details on how to enable IIS on Server 2008 and 2008 R2.

http://setup-guide.web.t4d.trimble.com/version4.2/

### 2.2.4 Windows 7

Please refer to version 1.8 of this document for more details on how to enable IIS on Windows 7

http://setup-guide.web.t4d.trimble.com/version4.2/

# 2.3 IIS Verifications

One useful way of verifying that IIS was set up correctly, is to verify that the **IIS\_IUSRS** role have been created in Windows and that it has been given the required permissions.

The easiest way to confirm this, is to open the properties window for the C:\Windows\Temp folder and to confirm that the IIS\_IUSRS role has special permissions on this folder.

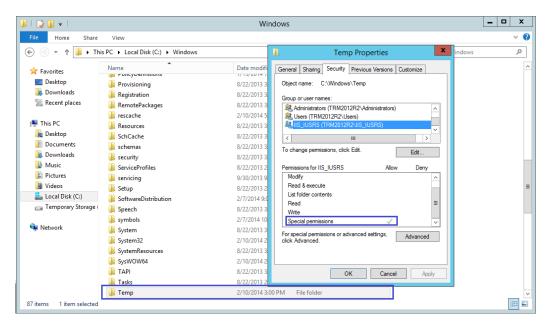


Figure 12: Verify that the IIS\_IUSRS role exists in Windows and that it has sufficient permissions.

# **3** Installation Instructions

Once all system prerequisites have been met as per section 2, please continue with the installation of **Trimble® 4D Control Web** on the server computer:

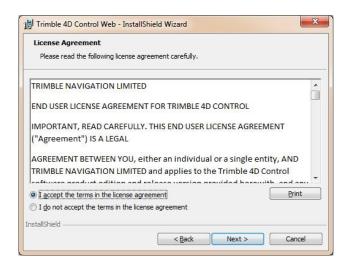
### **3.1 Installation Instructions**

a. Execute the **Trimble® 4D Control Web** setup.exe file (or launch it from the Suite Installation). If you are asked whether or not the program may be allowed to make changes to your computer then click on "Yes". Thereafter you should see the installation wizard appear with a "Welcome" message and instructions on how to download this document.

🗒 Trimble 4D Control Web - In	stallShield Wizard
le: Trimble.	Welcome to the InstallShield Wizard for Trimble 4D Control Web
147.181 11.746 14 AV	The InstallShield(R) Wizard will install Trimble 4D Control Web on your computer. To continue, dick Next.
	WARNING: This program is protected by copyright law and international treaties.
	< <u>Back</u> <u>Next</u> Cancel

Figure 13: Installation Welcome Step

b. Accept the license terms and enter a User Name and Organization.



**Figure 14: License Agreement** 

Customer Information Please enter your information.		
<u>U</u> ser Name:		
Joe soap		
Organization:		
My Organization		
stallShield		

Figure 15: User and Organizational information

c. In the next step, you will be prompted to specify database connection details to the Monitoring database which should be used by the Trimble<sup>®</sup> 4D Control Web application. If your Database Server and Web Server is running on the same machine and if you used the default settings to install the Monitoring Database earlier on during the Trimble<sup>®</sup> 4D Control Suite Installation then you can simply click on the "Next" button. Otherwise you will have to specify the address of the SQL server, credentials and database manually.

a 1 1 1 1 1		
Select database s	erver and authentication method	72
Database server tr (local) \SQLEXPRE	at you are installing to:	Brauna
(IOCAI) SQLEAPRE	••••••••••••••••••••••••••••••••••••••	Browse
Connect using:		
O Windows auth	entication credentials of current user	
Server auther	ntication using the Login ID and password below	
Login ID:	T4D	-
		-
	•••••	
Password:	catalogy	
Password: Name of database	catalog.	
	catalog.	Browse

**Figure 16: SQL Connection Details** 

d. In the next step, simply ensure that the **Complete** setup type is selected and click on the "Next" button.

Setup Type Choose the se	etup type that best suits your needs.
Please select	a setup type.
Complete	All program features will be installed. (Requires the most disk space.)
© Cu <u>s</u> tom	Choose which program features you want installed and where they will be installed. Recommended for advanced users.
stallShield	< Back Next > Cancel

Figure 17: Select Complete Installation

e. The installation now has enough information to continue and install the **Trimble® 4D Control Web** application. Simply click on the **Install** button and wait until the installation finished.

🖞 Trimble 4D Control Web - InstallShield Wizard	🙀 Trimble 4D Control Web - InstallShield Wizard
Ready to Install the Program The wizard is ready to begin installation.	InstallShield Wizard Completed
Click Install to begin the installation. If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.	The InstallShield Wizard has successfully installed Trimble 4D Control Web. Click Finish to exit the wizard.
InstallShield Cancel	< <u>B</u> ack Finish Cancel

Figure 18: Click "Install" and wait for the installation to complete.

## 3.2 Installation Verifications

After completing the software installation, you perform the following checks to confirm that the **Trimble® 4D Control Web** application has been installed correctly.

 Verify that the IIS Application Pool (T4DWebAppPool) has been successfully created by navigating through the Start Menu, Administrative Tools and clicking on Internet Information Services (IIS) Manager:

Internet Information Services (IIS)	Manager	-	-	
G S International Strength	Application Pools			😐 🖂 🔞 🗸
<u>F</u> ile <u>V</u> iew <u>H</u> elp				
Connections	Application Pools  Application Pools  Application pools are associat contain one or more applications, and pr different applications.  Fitter:  Asplication  Asp.NET v4.0  Asp.NET v4.0  Asp.NET v4.0  Asp.NET v4.0  Asp.NET v4.0  Asp.NET v4.0  DefaultAppPool  DefaultAppPool	ed with work	er processes, n among	Actions Add Application Pool Set Application Pool Defaults P Help Online Help
4 III >	Features View Content View			
Ready				<b>9</b> .:

Figure 19: Verify that T4DWebAppPool has been created in IIS

b. Verify that the Trimble<sup>®</sup> 4D Control Alarm Client has been successfully installed by navigating through the Start Menu, Administrative Tools and clicking on Services. The Trimble<sup>®</sup> 4D Control Web Alarm Client service status should be shown as Started and the service should be configured with Startup Type set to Automatic and with Log On As set to Local System:

🖏 Services							×
<u>File Action View H</u> elp							
♦ ♦ 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	📰 🕨 🖿 II 🕪						
Services (Local)	s (Local)						
Trimble 4D Co	ontrol Alarm Client	Name 🔺	Description	Status	Startup Type	Log On As	
		Trimble 4D Control Alarm Client	Initiates th	Started	Automatic	Local System	
Stop the service		🎑 UPnP Device Host	Allows UPn		Disabled	Local Service	
Restart the ser	vice	🔍 User Profile Service	This servic	Started	Automatic	Local System	
		🎑 Virtual Disk	Provides m		Manual	Local System	
Description:		🎑 Volume Shadow Copy	Manages a		Manual	Local System	
	mble 4D Control Alarm	🎑 Windows Audio	Manages a		Manual	Local Service	
Evaluation logic	: on a regular basis.	🥋 Windows Audio Endpoint Builder	Manages a		Manual	Local System	•
Extended 1	Standard /						
							_

Figure 20: Verify that the T4D Control Alarm Client has been installed.

# 4 First Steps in using the Trimble® 4D Control Web application

You are now ready to start using the **Trimble® 4D Control Web** application. Open a browser and navigate to "http://[Your Web Server IP or Address]/T4DWeb". (In the preceding address, the "[Your Web Server IP or Address]" must be replaced with the actual IP address for your Web Server.

You should be presented with the following page:



#### Figure 21: T4D Control Web login page

#### 4.1 First Time Login

By default, the **Trimble® 4D Control Web** application is created with only one user, with the username "Admin" and password "Admin" (case sensitive).

© Trimble.	Trimble 4D Control™ Version 4.4
	Email* admin Password* Keep me signed in
	Sign In
	Forgot your password?

Figure 22: Log in with "Admin" and "Admin".

*Hint: Normal users actually use their Email address as the username, but this default user simply logs in with "Admin".* 

## 4.2 Change Admin user Password

It is highly recommended that you change the password of the "Admin" user immediately after your first login.

To do this, click on "Account Settings", "My Account" and click on the "Change Password" icon.

<b>lenergy: Strimble</b> . 4D Control™		Project: TestProject (UTC -12) 🔻 🌏 10/29/2014 21:13 🔮 System Administrator (Admin) Sign Out
Home Sensors	Terrain View	Charting and Analysis Monitoring Framed Pages Administration
My Account	^	Account Settings
System Administrator (My Account)	ß	Create, manage and remove users of the web facility. Select the user you would like to view.
Select User	~	
Role Configuration	~	
Notification Settings	~	

#### Figure 23: Change Password

The "Change Password" page will appear. Re-enter the current password ("Admin") and then specify and confirm your new password for the Admin user.

le: Trimble:	Trimble 4D Version 4.4	Control™
AA. Aa	Change Current Password*	password
	New Password*	
MARINE	Confirm Password*	•••••
		Apply

Figure 24: Specify and Confirm New Password

*Hint: Be sure to remember your new password, otherwise you may not be able to log into the system again.* 

## 4.3 Mail Server Configuration

### 4.3.1 Default Configuration

The **Trimble® 4D Control Web** application makes substantial use of Emails; users are invited to the system via email and Alarms in the system can be configured to notify specific users via Email. Scheduled reports can also be configured to be sent via email.

The **Trimble**<sup>®</sup> **4D Control Web** application ships with a default email configuration that will work "out of the box", provided that your firewall allows outgoing traffic through port 587.

# NB: We recommend that you change the default email configuration to a custom configuration that sends emails via another mail server.

The email account used by the default configuration is shared with other installations and throughput or capacity issues may arise.

Before you can continue to invite the first user to the system you need to ensure that the system emails are working.

#### 4.3.2 Custom Configuration

# NB: Only edit the Email Server configuration if you do not wish to use the default mail server settings.

To view or edit the Mail server configuration, go to "Account Setting" > "Notification Settings" and click on the edit icon for "Email Server Configuration".

Figure 19 highlights the fields that have to be edited when configuring a different mail server. The values shows or for illustrative purposes only and should be replaced with settings obtained from your network administrator.

Frimble: 4D Control*   Nore: Sensor:   My Account   Select User   Role Configuration   Email Server Configuration   SMS Gateway Configuration   SMS Gateway Configuration   Image Password   From Address   System notices@Hd timble.com   Charge Password   From Address   Seconds between retries   20   Text Reset to Defaulte	-		Project:	TestProject (UTC -12) 🔻	2 10/29/2014 21:25	System Administrator (Admin)	Sign Out
Select User <ul> <li>Role Configuration</li> <li>Notification Settings</li> <li>Email Setter Configuration</li> <li>Email Setter Configuration</li> <li>Email Setter Configuration</li> <li>Email Not</li> <li>Email Not</li> <li>Email Not</li> <li>Email Not</li> <li>Email Setter Configuration</li> <li>Email Not</li> <li>Email Settings</li> <li>Email Settings<!--</th--><th>Analysis</th><th>Charting and Anal</th><th>lysis Monitoring</th><th>Framed Pages</th><th>Administration</th><th>_</th><th></th></li></ul>	Analysis	Charting and Anal	lysis Monitoring	Framed Pages	Administration	_	
Enail Settings       Institution Settings       Enail Sever Configuration       Enail Sever Configuration       SMS Gateway Configuration       Image Descent Configuration <td></td> <td>_</td> <td></td> <td></td> <td>Account Settings</td> <td></td> <td></td>		_			Account Settings		
Role Configuration       Image Password         Email Server Configuration       Image Password         SMS Gateway Configuration       Image Password         Image Password       Image Password         From Address       System notices@H4 timble.com         Maximum retries       5         Seconds between retries       20	15	Email Settings			<u> </u>		
Email Server Configuration  Email Host Email	·						
Email Perver Configuration  Enail Port Frank SSL Encryption System.notices@t4d trimble.com Frank Address Maximum retries Seconds between retries 20	<b>v</b>	Enable Emails	<b>2</b>				
SMS Gateway Configuration  Enable SSL Encryption Username Change Password From Address Maximum retries Seconds between retries 20				Specif	y your SMTP server mai	account	
Change Password From Address Maximum retries Seconds between retries 20				details	s here.		
From Address system.notices@t4d.trimble.com Maximum retries 5 Seconds between retries 20	-	Username		1			
Maximum retries 5 Seconds between retries 20							
Seconds between retries 20	sys	From Address	system.notices@t4d.trimble.com				
	5	Maximum retries	5				
Test Reset to Defaults	tries 20	Seconds between retries	s 20				
	o Defaults	Test Reset to D	efaults				
Click on any tab to navigate to the in	0		Click on any tab to paying to t	the indicated page			
Home Privacy Statement Terms of Use Copyright © 2014 Trimble Navi		acy Statement Terms of Us			English (USA)		

Figure 25: Changing the Mail Server Configuration

Once you have saved this setting, you can move on to test whether or not the email configuration is correct.

#### 4.3.3 Test Email

You can verify that system emails are working, by going to "Account Settings" > "Notification Settings", "Email Server Configuration" and by click on the "Test" button.

Note that the test will be performed using the last "Saved" settings.

(@) Trimb	le. 4D Control™				Project TestPro	oject (UTC -12) 🔻	2 10/29/2014 21:29	👤 System Administrator (Admin)	Sign Out
Home	Sensors	Terrain View	Charting and Analy	sis Monitorin	g Fra	amed Pages	Administration		
My Account	t	~							
Select User		~	Email Settings						
Role Config		~	-	_					
Notification	Settings	^	Enable Emails	×					
Email Server	Configuration		Email Host	smtp.gmail.com	1				
			Email Port	587					
SMS Gatewa	y Configuration	Ľ	Enable SSL Encryption						
			Username	system.notices@t	4d.trimble.com				
		٩	Change Password						
			From Address	system.notices@t	4d.trimble.com				
			Maximum retries	5					
			Seconds between retries	20					
			Test Reset to De	aults					
					•				
				Click here to test t	the current email serve	er configuration.			
		Home Privac	y Statement Terms of Use	Copyright	© 2014 Trimble Navi	igation Limited	English (USA)		

Figure 26: Test Email Server Configuration

Enter a *valid* Email address, a subject and an email body.

Recipient	joe.soap@my-company	
Subject	Hi There	
Message	This is a test message	
Send		

If you see the following message then it either means that your Email settings are not configured correctly or that the specified mail server cannot be reached.



Ensure that your email settings are correct and that the Firewall settings on the Web Server will allow traffic through the specified port and try again until your test mail was sent successfully.

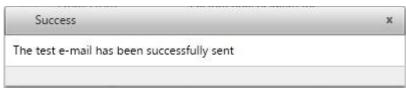


Figure 29: Test Email Succeeded

## 4.4 Invite new User

You are now ready to start inviting new users to access your newly installed **Trimble® 4D Control Web** application. To do this, navigate to "Account Settings", "Select User" and click on "New User".

() Trim	<b>ble</b> . 4D Control™				Project:	TestProject (UTC -12) 🔻	10/29/2014 21:31	System Administrator (Admin) Sign Out
Home	Sensors	Terrain View		Charting and Analysis	Monitoring	Framed Pages	Administration	
My Accour Select Use Status		~ ^	Create,	ount Settings manage and remove users the user you would like to vi				
Role User Name Clear Se		<b>-</b>						

Figure 30: Invite New User

Note: If you see the following message, then you are probably accessing the **Trimble® 4D Control Web** application on a local Web Server and using "localhost" as its address. Since other users will access the **Trimble® 4D Control Web** application from their own computers, the address you are currently using cannot be used to generate a valid link which they can follow to the web application. To avoid seeing this message, simply ensure that you are connecting to the Web Server via the same address that other user will use to access it.

#### Warning

When you invite a user, an email will be sent to that user containing a link back to the Trimble 4D Control Web application. This link is created based on the web address used by the person who is creating the new user.

You seem to be accessing the Trimble 4D Control Web application via "http://localhost/T4DWeb", which means that you are using a browser on the web server itself. The user you are inviting may not be able to access the Trimble 4D Control Web application via this address.

To avoid seeing this warning, make sure that you access the Trimble 4D Control Web application via the same network or IP address through which other users will access it.

Figure 31: Warning with using "localhost"

Continue to enter the details for the new user. It is very important to enter a valid Email address to which an invitation can be sent. Once you have completed all the details for the user, click on the "Register" button.

Email*	joe.soap@my-company
First Name*	Joe
Last Name*	Soap
Gender	Male
Notification Preference	Email Only
Mobile Phone*	+44126544782
Work Phone	
Home Phone	
Department	
Role	Admin  Admin
Culture	Analyst Guest
Register	

Figure 32: Specify details for the New User

An email will be sent to the newly invited user. This mail will contain instructions on how to access the **Trimble® 4D Control Web** application as well as a Temporary password. The user will be given the opportunity to specify a new password upon first login.



Figure 33: Email received by a new user

Your **Trimble® 4D Control Web** installation is now ready for use. For more details on how to use the system you can click on the help icon in the Your **Trimble® 4D Control Web** application itself.

# **5** Further reading

For information on how to use Trimble 4D Control please refer to our user manual at: <u>http://help.web.t4d.trimble.com/version4.4/T4D\_4.4\_Web\_Manual.pdf</u>

For information about Monitoring infrastructure please refer to the Trimble website at: <a href="http://www.trimble.com/infrastructure/monitoring.aspx">http://www.trimble.com/infrastructure/monitoring.aspx</a>

# 6 Troubleshooting

6.1.1 "HTTP Error 500.19 – Internal server error" message is displayed with error details "xxx' cannot be read because it is missing a section declaration" when trying to access Trimble® 4D Control Web from the server computer.

Detailed Err	or Information:		
Module	IIS Web Core	Requested URL	http://localhost:80/t4dweb
Notification	BeginRequest	Physical Path	C:\Program Files (x86)\Trimble\Trimble 4D Control Web
Handler	Not yet determined	Logon Method	Not yet determined
Error Code	0x80070021	Logon User	Not yet determined
	sed at this path. This happens when the section is locked at a parent level. Locki ng is either by default (overrideModeDef ault="Deny"), or set explicitly by a locat ion tag with overrideMode="Deny" or th e legacy allowOverride="false".		
Config File	\\?\C:\Program Files (x86)\Trimble\Tr imble 4D Control Web\web.config		
Config Sourc	:e:		
117:	<validation td="" validateinteg<=""><td>ratedModeConfigur</td><td>ation="false"/&gt;</td></validation>	ratedModeConfigur	ation="false"/>
118:	<modules runallmanagedmod<="" td=""><td></td><td></td></modules>		
119:	<urlcompression dostaticc<="" th=""><th>ompression="true'</th><th>doDynamicCompression="true"/&gt;</th></urlcompression>	ompression="true'	doDynamicCompression="true"/>
More Inform	ation:		

This typically happens on Windows Server 2012 R2 if the **ASP.NET 4.5** features are not installed. Please refer to section 2.2 in this document and verify that your IIS is configured correctly.

#### 6.1.2 "Could not load type 'System.ServiceModel.Activation.HttpModule'" message is displayed when trying to access Trimble® 4D Control Web from the server computer.

# Server Error in '/T4DWeb' Application.

*Could not load type 'System.ServiceModel.Activation.HttpModule' from assembly 'System.ServiceModel, Version=3.0.0.0, Culture=neutral, PublicKeyToken= b77a5c561934e089'.* 

Description: An unhandled exception occurred during the execution of the current web request. Please review the stack trace for more information about the error and where it originated in the code.

Exception Details: System.TypeLoadException: Could not load type 'System.ServiceModel.Activation.HttpModule' from assembly 'System.ServiceModel, Version=3.0.0.0, Culture=neutral, PublicKeyToken=b77a5c561934e089'.

#### Source Error:

An unhandled exception was generated during the execution of the current web request. Information regarding the origin and location of the exception can be identified using the exception stack trace below.

#### Stack Trace:

[TypeLoadException: Could not load type 'System.ServiceModel.Activation.HttpModule' from assembly 'System.ServiceModel, Version=3.0.0.0, Culture=neutral, PublicKeyToken=b77a5c561934e089'.] System.RuntimeTypeHandle.GetTypeByName(String name, Boolean throwOnError, Boolean ignoreCase, Boolean reflectionOnly, StackCrawlMarkHandle stackMark, IntPtr pPrivHostBinder, Boolean loadTypeFromPartialName, ObjectHandleOnStack type) +0 System.RuntimeTypeHandle.GetTypeByName(String name, Boolean throwOnError, Boolean ignoreCase, Boolean reflectionOnly, StackCrawlMark& stackMark, IntPtr pPrivHostBinder, Boolean loadTypeFromPartialName) +70 System.RuntimeTypeHandle.GetTypeByName, String name, Boolean throwOnError, Boolean ignoreCase, Boolean reflectionOnly, StackCrawlMark& stackMark, IntPtr pPrivHostBinder, Boolean loadTypeFromPartialName) +70 System.RuntimeType.GetType(String typeName, Boolean throwOnError, Boolean ignoreCase, Boolean reflectionOnly, StackCrawlMark& stackMark) +39 System.Type.GetType(String typeName, Boolean throwOnError, Boolean ignoreCase) +37 System.Web.Compilation.BuildManager.GetType(String typeName, Boolean throwOnError, Boolean ignoreCase) +37 System.Web.Compilation.BuildManager.GetType(String typeName, Boolean throwOnError, Boolean throwOnError, Boolean ignoreCase)

Figure 35: Http Error 500.19

#### This is a known issue with IIS.

All NET 4.5 websites running on IIS will display this error message under the following situations:

- 1. On Windows Server 2008, it could happen when you install .NET 3.x framework or IIS 7.5 with Activation features after .NET framework 4.x is installed
- 2. On **Windows Server 2012**, it always happens when you install .NET framework 3.x with Activation features.

We prescribe the **following** solution for each case:

 For Windows Server 2008 Microsoft officially announced the solution (http://support.microsoft.com/kb/2015129): Run aspnet\_regiis.exe /iru where the aspnet\_regiis.exe file can be found in one of the following locations: %windir%\Microsoft.NET\Framework\v4.0.30319 %windir%\Microsoft.NET\Framework64\v4.0.30319 (on a 64-bit computer)

- 2. For **Windows Server 2012** the command aspnet\_regilis.exe is not supported, instead follow these steps:
  - a. In **IIS manager**, click the machine name node.
  - b. In Features View, double-click Modules.
  - c. Find ServiceModel and remove it:

onnections					Actions
<b>↓• 🔛   ﷺ   ∰</b> . 🍓 Start Page	Modules Use this feature to configure the native and man	Add Managed Module Configure Native Modules			
DET-INFRA-QA05G (EU\HRaath)     G Application Pools	Group by: No Grouping -				Edit
a 🙀 Sites	Name *	Code	Module Type	Entry Typ ^	X Remove
a 🚯 Default Web Site	CustomErrorModule	%windir%\System32\inetsrv\	Native	Local	
aspnet_client	DefaultAuthentication	System.Web.Security.Default	Managed	Local	View Ordered List
p - TrimblePivotWeb	DefaultDocumentModule	%windir%\System32\inetsrv\	Native	Local	Help
▷ - P TrimblePivotWeb2	DirectoryListingModule	%windir%\System32\inetsrv\	Native	Local	
	FileAuthorization	System.Web.Security.FileAuth	Managed	Local	
	FormsAuthentication	System.Web.Security.FormsA	Managed	Local	
	HttpCacheModule	%windir%\System32\inetsrv\	Native	Local	
	HttpLoggingModule	%windir%\System32\inetsrv\I	Native	Local	
	IsapiFilterModule	%windir%\System32\inetsrv\f	Native	Local	
	IsapiModule	%windir%\System32\inetsrv\i	Native	Local	
	OutputCache	System.Web.Caching.Output	Managed	Local	
	Profile	System.Web.Profile.ProfileMo	Managed	Local	
	ProtocolSupportModule	%windir%\System32\inetsrv\	Native	Local II	
	RequestFilteringModule	%windir%\System32\inetsrv\	Native	Local	
	RoleManager	System.Web.Security.RoleMa	Managed	Local	
	ScriptModule-4.0	System.Web.Handlers.Script	Managed	Local	
	ServiceModel	System.ServiceModel.Activati	Managed	Local	
	ServiceModel-4.0	System.ServiceModel.Activati	Managed	Local	
	Session	System.Web.SessionState.Sess	Managed	Local	
	StaticCompressionModule	%windir%\System32\inetsrv\	Native	Local	
	StaticFileModule	%windir%\System32\inetsrv\s	Native	Local	
	UrlAuthorization	System.Web.Security.UrlAuth	Managed	Local	
	UrlMappingsModule	System.Web.UrlMappingsMo	Managed	Local	
	UrlRoutingModule-4.0	System.Web.Routing.UrlRouti	Managed	Local	
	< C			>	

Figure 36: Remove ServiceModel from IIS Modules on Windows Server 2012

- d. Go back to the Features View and double-click Handler Mappings.
- e. Find svc-Integrated and remove it:

Connections	Handler Mappings						Actions
Comparing a set of the set o	Handlifer Mappings Use this feature to specify the resources, such as DLLs and managed code, that handle responses for specific request types. Group by: Sate					Add Managed Handler Add Script Map Add Wildcard Script Map Add Module Mapping	
	Name         Profession (SSP 4.0., SSP 4.0.,	*.ashx	State Enabled	Peth Type Unspecified	Handler Handler handler handler System Scrivelshold Activation tappNotoda tappNotoda tappNotoda tappNotoda system Web Script Services Script tappNotoda taphNotoda taphNot	Entry T ∧           Local           Local	St. Br. Parama Lota Catrature Persistent Vie Geferel In inte

Figure 37: Browse to the ISAPI Restrictions of your Web Server in IIS

f. Restart IIS and the problem will be resolved.