



**PureWeb<sup>®</sup> STK 3.1**

Installation Guide for  
Microsoft Windows

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## Preface

Welcome to the *PureWeb 3.1 Installation Guide for Microsoft Windows*. Although every effort has been made to make this document clear and easy to understand, it is still very technical in nature.

Wherever possible, cross-referencing among chapters and other documents within the PureWeb® Software Transformation Kit (STK) documentation suite has been used.

This document is valid for all 3.x release(s) of this product.

This preface contains the following sections:

- [Intended Audience, page 7](#)
- [Reading Recommendations, page 7](#)
- [Making Comments on This Document, page 8](#)
- [Contacting Calgary Scientific Support, page 8](#)
- [Basic Tasks, page 9](#)

For information about related resources and about the conventions that are used in this document, see the supplementary material starting on [page 38](#).

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## Intended Audience

This document is intended to be read by software developers/server administrators that plan to install and use the PureWeb® STK.

It is assumed that the developer/server administrator has:

- A general understanding of server configuration and installation.
- A general knowledge of application development.

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## Reading Recommendations

This preface includes tasks-based tables that contain all of the tasks and procedures needed to successfully install PureWeb®.

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Web Site	Telephone	E-Mail
<a href="http://support.calgaryscientific.com">http://support.calgaryscientific.com</a> Follow the online instructions to create your own account and login.	<ul style="list-style-type: none"> <li>• Canada and US               <ul style="list-style-type: none"> <li>• 1-866-656-6537</li> </ul> </li> <li>• International               <ul style="list-style-type: none"> <li>• 1-905-762-7911</li> </ul> </li> </ul>	<a href="mailto:support@calgaryscientific.com">support@calgaryscientific.com</a>



# Basic Tasks

Common tasks for installing PureWeb® are listed in the table below.

## Task Summary: Install PureWeb®

Task	Procedure
Read the introduction for information about the PureWeb® solution, architecture and the sample applications provided.	Chapter 1, “Introducing PureWeb®,” on <a href="#">page 12</a> .
Check the prerequisite.	“Requirements and Recommendations” on <a href="#">page 17</a> .
It is not advised to install a newer version of PureWeb® on top of an existing version. Please uninstall the existing version before installing a new version, see <a href="#">Task Summary: Uninstall PureWeb®</a> . Install multiple versions of the PureWeb® solution side-by-side.	“Installing Multiple Versions of PureWeb®” on <a href="#">page 29</a> .
It is not advised to install a newer version of PureWeb® on top of an existing version. Please uninstall the existing version before installing a new version, see <a href="#">Task Summary: Uninstall PureWeb®</a> . Install a single version of the PureWeb® solution.	“Installing PureWeb®” on <a href="#">page 26</a> .
Ensure proper licensing.	The PureWeb® Server will start, but will <i>not</i> be operational without a valid license. The license is an ASCII text file with a .lic extension and is not part of the PureWeb® Server installation. To make the PureWeb® Server operational, you must acquire the license from Calgary Scientific Inc. and follow the steps in the “ <a href="#">Installing the License</a> ” procedure. Follow the steps in the “ <a href="#">Verify the License File is Installed</a> ” procedure, to confirm the installation of your PureWeb® license.
Install the Java SDK/JRE.	“Installing the JDK and JRE” on <a href="#">page 20</a> .

**Task Summary: Install PureWeb® (Continued)**

Task	Procedure
Prepare your environment to use the JDK and JRE.	<p>“Setting the JAVA_HOME Environment Variables” on <a href="#">page 20</a>.</p> <p>“Updating the Path Variable to Include JAVA_HOME” on <a href="#">page 21</a>.</p>
Install Apache Ant.	“Installing Apache Ant” on <a href="#">page 22</a> .
Prepare your environment to use Apache Ant.	<p>“Setting the ANT_HOME Environment Variables” on <a href="#">page 23</a>.</p> <p>“Updating the Path Variable to Include ANT_HOME” on <a href="#">page 23</a>.</p>
Verify the installation of files, folders, and environment variables.	<p>“Verifying the Directory Structure is Complete” on <a href="#">page 32</a>.</p> <p>“Verifying the Environment Variables are Set Correctly” on <a href="#">page 33</a></p>
Test your PureWeb® Server after installation.	“Testing the Server Installation” on <a href="#">page 35</a> .
<b>Next Steps</b>	<p>If you were able to log in to the PureWeb® Server:</p> <ul style="list-style-type: none"> <li>• Refer to the <i>Common Task</i> section of the <i>PureWeb® Server Administration Guide</i> to learn how to operate and configure the PureWeb® Server.</li> <li>• Refer to the <i>Common Development Tasks</i> section found in each of the <i>PureWeb® Quick Start Guides</i> to examine the samples and their code.</li> </ul> <p>If you were unable to log in the PureWeb® Server:</p> <ul style="list-style-type: none"> <li>• Refer to the <i>Installation Troubleshooting</i> section of the <i>PureWeb® Troubleshooting Guide</i>.</li> </ul>

Common tasks for uninstalling PureWeb® are listed in the table below.

### Task Summary: Uninstall PureWeb®

Task	Procedure
Uninstall PureWeb® components.	<ol style="list-style-type: none"> <li>1. Stop the PureWeb® Server by clicking on the Stop PureWeb® desktop icon or by closing the server console window. You can also stop the PureWeb® Server by:               <ol style="list-style-type: none"> <li>a. Opening a console window.</li> <li>b. Navigating to %PUREWEB_HOME%/tomcat/bin.</li> <li>c. Typing shutdown.bat.</li> </ol> </li> <li>2. Click on the uninstall.exe file found in the PureWeb® installation directory.</li> </ol> <p><b>NOTE:</b> If you have installed multiple versions of PureWeb® using the “<a href="#">Installing Multiple Versions of PureWeb®</a>” procedure then you must remove each version individually using the steps above. You <i>cannot</i> uninstall multiple versions of PureWeb® from the Windows Control Panel.</p>

# 1

## Introducing PureWeb®

This chapter contains detailed information about the PureWeb® solution, its architecture, and prerequisites for installing and using PureWeb®.

This chapter contains the following sections:

- [About PureWeb®, page 12](#)
- [Basic Architecture, page 13](#)
- [About the Sample Applications, page 15](#)
- [Requirements and Recommendations, page 17](#)
- [Common Procedures, page 20](#)

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## About PureWeb®

PureWeb® is a platform that enables applications to be centrally hosted and delivered to the end user, from workstations to hand-held devices, through standard web technologies.

PureWeb® allows you to migrate your existing desktop applications to the web without requiring a costly rewrite of your existing applications.

The PureWeb® application framework is built specifically to leverage HTTP and XML for the highest level of flexibility, optimization, consistency and performance. Its architecture is designed to use web standard technologies to deliver your applications through all internet browsers capable of hosting Microsoft Silverlight, as well as in many smart phones and tablet offerings, using the PureWeb® API.

PureWeb® integrates directly into your existing C#, C++, or Java code and allows you to maintain one code-base from which you can deliver desktop-based applications as well as browser and mobile-based applications such as an Apple iPad, Apple iPhone or Google Android devices.

Applications that leverage PureWeb® provide access in a highly secure and compliant manner, so mobile users can connect to your applications and

interface with them as if they were stored locally on their device without any of the application data ever persisting on the device itself.

This is achieved by:

- Reimplementing the existing software user interface (UI) through a web interface.
- Modifying the application to act as a service for the remote interface.

The PureWeb® STK includes both sample applications and documentation to help you with your development.

For more information about the product, visit the PureWeb® website at [www.getpureweb.com](http://www.getpureweb.com).

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## Basic Architecture

The PureWeb® platform enables applications to run through a standardized web interface.

PureWeb® solutions are typically composed of three tiers:

- PureWeb® Service—contains most of the application logic. It uses the Service API to *plug in* to the PureWeb® Server, maintain application state, and generate rendered views.
- PureWeb® Server—is responsible for starting/stopping PureWeb® Services, and mediating communication between PureWeb® Clients and PureWeb® Services.
- PureWeb® Client—allows users to interact with PureWeb® Services through web browsers and/or mobile devices.

To PureWeb® enable an existing application means transforming the workstation version of an application into a PureWeb® Service by creating objects and calling methods from the Service API.

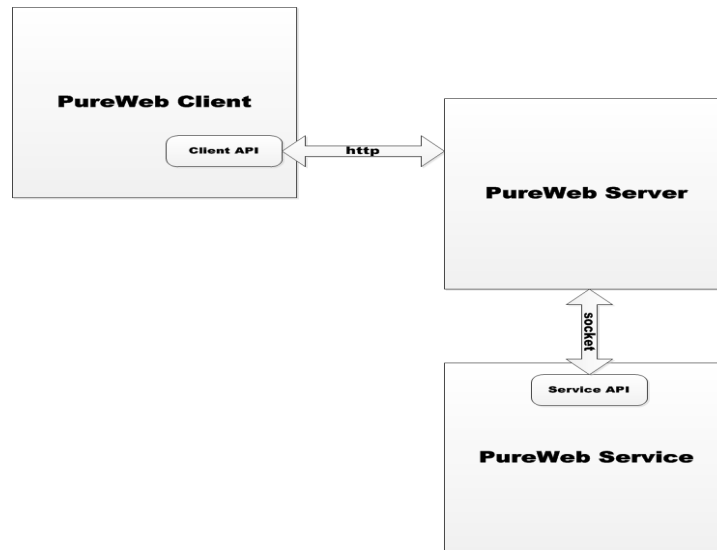
Specifically, the application will create a singleton instance of the StateManager class (responsible for maintaining application state in a PureWeb® Service) and pass it to a singleton instance of StateManagerServer.

The StateManagerServer handles communication with the PureWeb® Server over a socket. Messages arriving from the client via the Server as XML text are converted to lists of command objects that are executed by the StateManager. These include commands to change the application state, commands that represent user input events, and custom commands understood by the application.

In executing the commands, the application will generate response objects including changes to the application state and new rendered images. The StateManagerServer converts the response objects to XML text messages that are passed back to the client via the PureWeb® Server.

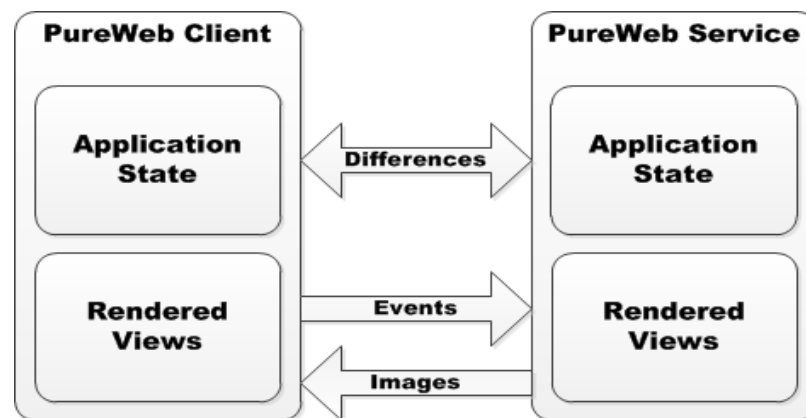
Once the service creates the StateManager instance, it will register event handlers that are invoked when specific nodes in the application state change.

Every rendered view that is intended to be displayed on the client must be registered with the StateManager. In order to communicate with the StateManager, views must inherit from the IRenderedView interface. Use the adapter pattern, if it is not possible or convenient for view classes to inherit directly from the IRenderedView interface.



**Figure 1: Typical PureWeb® Solution**

As shown in [Figure 2](#), the application state is stored on both the client and server sides as XML. To maintain synchronicity, the differences in the state are transmitted to and from both the client and the service. The client sends commands and input events to the service (in XML form). The service sends updated images to the client.



**Figure 2: State Views**

## About the Sample Applications

The installation includes a number of sample application to illustrate the fundamentals of using the PureWeb® STK:

- ScribbleApp—Exercises the functionality of drawing lines, changing line color, and erasing lines.
- AsteroidsApp—Enables two individuals to work together within the same application.

**Table 1** list the Scribble service and client samples that are included in the installation along with the URLs that launch them. All of the samples must be built prior to launching, refer to the *PureWeb® Quick Start Guides* for details.

**Table 1: Scribble Samples**

Services	Clients	Launching URL	URL with Diagnostics Panel Option
C# • ScribbleApp	• Silverlight • Flex	<ul style="list-style-type: none"> <li>• Silverlight               <ul style="list-style-type: none"> <li>• <a href="http://localhost:8080/app?name=ScribbleApp&amp;client=silverlight">http://localhost:8080/app?name=ScribbleApp&amp;client=silverlight</a></li> </ul> </li> <li>• Flex               <ul style="list-style-type: none"> <li>• <a href="http://localhost:8080/app?name=ScribbleApp&amp;client=flex">http://localhost:8080/app?name=ScribbleApp&amp;client=flex</a></li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Silverlight               <ul style="list-style-type: none"> <li>• <a href="http://localhost:8080/app?name=ScribbleApp&amp;client=silverlight&amp;_diagnostics=true">http://localhost:8080/app?name=ScribbleApp&amp;client=silverlight&amp;_diagnostics=true</a></li> </ul> </li> <li>• Flex               <ul style="list-style-type: none"> <li>• <a href="http://localhost:8080/app?name=ScribbleApp&amp;client=flex&amp;_diagnostics=true">http://localhost:8080/app?name=ScribbleApp&amp;client=flex&amp;_diagnostics=true</a></li> </ul> </li> </ul>
C++ • ScribbleAppCpp	Silverlight	<a href="http://localhost:8080/app?name=ScribbleAppCpp&amp;client=silverlight">http://localhost:8080/app?name=ScribbleAppCpp&amp;client=silverlight</a>	<a href="http://localhost:8080/app?name=ScribbleAppCpp&amp;client=silverlight&amp;_diagnostics=true">http://localhost:8080/app?name=ScribbleAppCpp&amp;client=silverlight&amp;_diagnostics=true</a>
Java • ScribbleAppJava	• Silverlight • Android	<ul style="list-style-type: none"> <li>• Silverlight               <ul style="list-style-type: none"> <li>• <a href="http://localhost:8080/pureweb/app?name=ScribbleAppJava">http://localhost:8080/pureweb/app?name=ScribbleAppJava</a></li> </ul> </li> <li>• Android               <ul style="list-style-type: none"> <li>• The Android sample is launched by building an Android Application Package (apk) file and installing it on a device. See the <i>PureWeb® Quick Start Guide: Android</i> for details.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Silverlight               <ul style="list-style-type: none"> <li>• <a href="http://localhost:8080/pureweb/app?name=ScribbleAppJava">http://localhost:8080/pureweb/app?name=ScribbleAppJava</a></li> </ul> </li> <li>• Android               <ul style="list-style-type: none"> <li>• The diagnostics panel is not an option.</li> </ul> </li> </ul>

**Table 2** list the Asteroids service and client samples that are included in the installation along with the URLs that launch them. All of the samples must be built prior to launching, refer to the *PureWeb® Quick Start Guides* for details.

**Table 2: Asteroids Samples**

Services	Clients	Launching URL
C# <ul style="list-style-type: none"> <li>There is no service application written in C#. The C# asteroids client application uses the AsteroidsApp service written in Java.</li> </ul>	Silverlight	<a href="http://localhost:8080/app?name=AsteroidsApp&amp;client=silverlight">http://localhost:8080/app?name=AsteroidsApp&amp;client=silverlight</a>
Java <ul style="list-style-type: none"> <li>AsteroidsApp</li> </ul>	<ul style="list-style-type: none"> <li>Silverlight</li> <li>Android</li> </ul>	<ul style="list-style-type: none"> <li>Silverlight               <ul style="list-style-type: none"> <li><a href="http://localhost:8080/pureweb/app?name=AsteroidsApp">http://localhost:8080/pureweb/app?name=AsteroidsApp</a></li> </ul> </li> <li>Android               <ul style="list-style-type: none"> <li>The Android sample is launched by building an Android Application Package (apk) file and installing it on a device. See the <i>PureWeb® Quick Start Guide: Android</i> for details.</li> </ul> </li> </ul>



# Requirements and Recommendations

The implementation and testing of the PureWeb® STK requires the installation of a specific (but readily available) combination of software.

## Client STK Development

Table 3 describes the required and recommended software for client development.

**Table 3: Requirements and Recommendations for Client Development**

Component	Requirements	Recommendations
Development Machine Operating System Requirements	<ul style="list-style-type: none"> <li>Windows 7 (64-bit)</li> </ul> or <ul style="list-style-type: none"> <li>Windows Server 2008 R2 (64-bit)</li> </ul> or <ul style="list-style-type: none"> <li>Linux kernel version 2.6 (64-bit)</li> </ul>	
Java	<ul style="list-style-type: none"> <li>Java JDK v1.5 (or higher)</li> </ul>	<ul style="list-style-type: none"> <li>Java JDK v1.7</li> <li>Apache Ant v1.8.1</li> <li>A Java IDE, such as Eclipse Indigo Classic (version 3.7.2)</li> </ul>
Android	<ul style="list-style-type: none"> <li>Android 4.0</li> <li>Java JDK v1.5</li> </ul>	<ul style="list-style-type: none"> <li>Java JDK v1.7</li> <li>Apache Ant v1.8.1</li> <li>A Java IDE, such as Eclipse Indigo Classic (version 3.7.2)</li> </ul> <p>NOTE: Eclipse for Android is limited to version 3.5 (or greater). For detailed information, see <a href="http://developer.android.com/sdk/requirements.html">http://developer.android.com/sdk/requirements.html</a>.</p>
Silverlight	<ul style="list-style-type: none"> <li>Microsoft Visual Studio 2010 SP1</li> <li>Microsoft Silverlight v5.0 Tools for Visual Studio 2010 SP1</li> <li>Microsoft Silverlight 5 Toolkit</li> </ul>	<ul style="list-style-type: none"> <li>Microsoft Visual Studio 2010 SP1</li> <li>Microsoft Silverlight v5.0 Tools for Visual Studio 2010 SP1</li> <li>Microsoft Silverlight 5 Toolkit</li> </ul>

**Table 3: Requirements and Recommendations for Client Development (Continued)**

Component	Requirements	Recommendations
Flex	<ul style="list-style-type: none"> <li>Flex 4.6</li> <li>Flash 11</li> </ul>	<ul style="list-style-type: none"> <li>Adobe Flash Builder 4.6</li> </ul>
iOS	<ul style="list-style-type: none"> <li>iOS 5</li> <li>Xcode 4.2</li> <li>Lion</li> </ul>	<ul style="list-style-type: none"> <li>iOS 5</li> <li>Xcode 4.2</li> <li>Lion</li> </ul>

## Service STK Development

[Table 4](#) describes the required and recommended software for service development.

**Table 4: Requirements and Recommendations for Service Development**

Component	Requirements	Recommendations
Development Machine Operating System Requirements	<ul style="list-style-type: none"> <li>Windows 7 (64-bit)</li> </ul> or <ul style="list-style-type: none"> <li>Windows Server 2008 R2 (64-bit)</li> </ul> or <ul style="list-style-type: none"> <li>Linux kernel version 2.6 (64-bit)</li> </ul>	
Service Application Requirements	<ul style="list-style-type: none"> <li>32-bit or 64-bit</li> </ul>	
Java	<ul style="list-style-type: none"> <li>Java JDK 1.7</li> <li>2010 SP1 x86/x64 C++ Runtime</li> </ul> or <ul style="list-style-type: none"> <li>2008 SP1 ATL x86/x64 C++ Runtime</li> </ul>	<ul style="list-style-type: none"> <li>Apache Ant v1.8.1</li> <li>A Java IDE, such as Eclipse Indigo Classic (version 3.7.2)</li> </ul>
C++ Windows	<ul style="list-style-type: none"> <li>Microsoft Visual Studio 2008 SP1</li> </ul> or <ul style="list-style-type: none"> <li>Microsoft Visual Studio 2010 SP1</li> </ul>	

**Table 4: Requirements and Recommendations for Service Development (Continued)**

Component	Requirements	Recommendations
C++ Linux	<ul style="list-style-type: none"> <li>• GCC 4.1.2</li> </ul>	
C#	<ul style="list-style-type: none"> <li>• .NET 3.5</li> <li>• Microsoft Visual Studio 2008 SP1</li> </ul> or <ul style="list-style-type: none"> <li>• Microsoft Visual Studio 2010 SP1</li> </ul>	

## PureWeb® Server Requirements

[Table 5](#) describes the required software for the PureWeb® Server.

**Table 5: Requirements for the PureWeb Server**

Component	Required
JDK	<ul style="list-style-type: none"> <li>• Java JDK v1.7</li> </ul>
C++ Runtime	<ul style="list-style-type: none"> <li>• 2010 SP1 x86/x64 C++ Runtime</li> </ul> or <ul style="list-style-type: none"> <li>• 2008 SP1 ATL x86/x64 C++ Runtime</li> </ul>
Operating System	<ul style="list-style-type: none"> <li>• Windows 7 (64-bit)</li> </ul> or <ul style="list-style-type: none"> <li>• Windows Server 2008 R2 (64-bit)</li> </ul> or <ul style="list-style-type: none"> <li>• Linux kernel version 2.6 (64-bit)</li> </ul>

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# Common Procedures

## Installing the JDK and JRE

**Purpose:** To install the 64-bit versions of both the Java Development Kit and Java Runtime Environment v1.7.

### Start of procedure

1. Open a browser.
2. Navigate to <http://www.oracle.com/technetwork/java/javase/downloads/index.html>.
3. To install both the Java SDK v1.7 and JRE v1.7, follow the instructions to download and install the jdk-7u6-windows-x64.exe file.

### End of procedure

### Next Steps

- “Setting the JAVA\_HOME Environment Variables” on [page 20](#).

## Setting the JAVA\_HOME Environment Variables

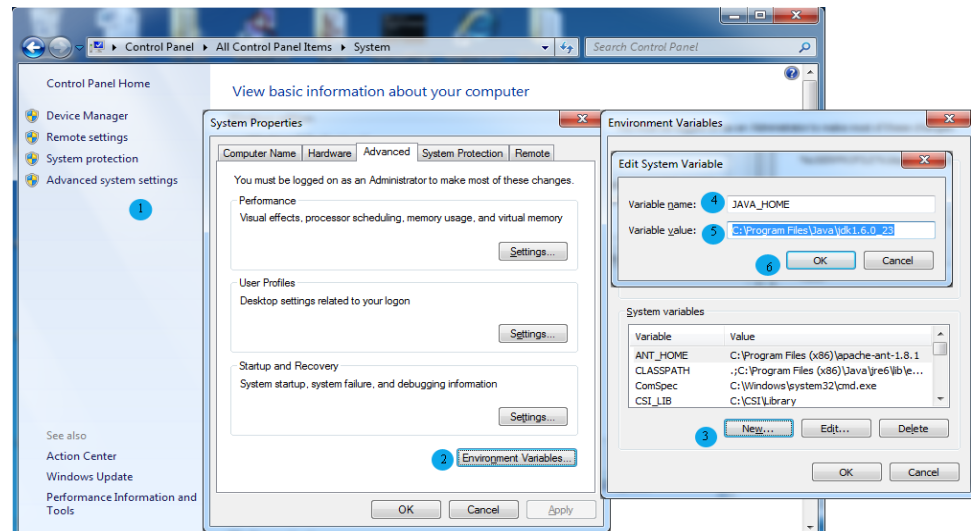
**Purpose:** To set the JAVA\_HOME environment variable to the root of the JDK installation directory.

**Note:** If you had an earlier version of the JDK already installed, the JAVA\_HOME environment variable may already be set to point to the earlier version. In this case, when working with PureWeb, ensure the value in the Variable name field (step 5 below) points to the location where you installed version 1.7 of the JDK.

### Start of procedure

1. Select Control Panel | System | Advanced system settings.
2. Click the Environment Variables button.
3. Select New in the System Variable section.
4. Enter JAVA\_HOME in the Variable name field.
5. Enter the path to your JDK in the Variable value field.
6. Click the OK button to save your changes.

Figure 3 illustrates the six steps used to set the JAVA\_HOME environment variable.



**Figure 3: Setting the JAVA\_HOME Environment Variable**

**Tip:** The default installation directory of the JDK 7 Update 6 for 64-bit Windows is C:\Program Files\Java\jdk1.7.0\_6.

7. Reboot your computer to ensure these changes take effect.

**End of procedure**

**Next Steps**

- “Updating the Path Variable to Include JAVA\_HOME” on [page 21](#).

## Updating the Path Variable to Include JAVA\_HOME

**Purpose:** To update the Path variable to include JAVA\_HOME.

**Start of procedure**

1. Select Control Panel | System | Advanced system settings.
2. Click the Environment Variables button.
3. Select the Path variable in the System Variable section.
4. Click the Edit button.
5. Add the following to the Variable value string:  
%JAVA\_HOME%\bin;

Note: A semicolon (;) must separate each entry in the value string.

6. Click OK to save the changes.

Figure 4 illustrates the six steps used to update the Path environment variable.

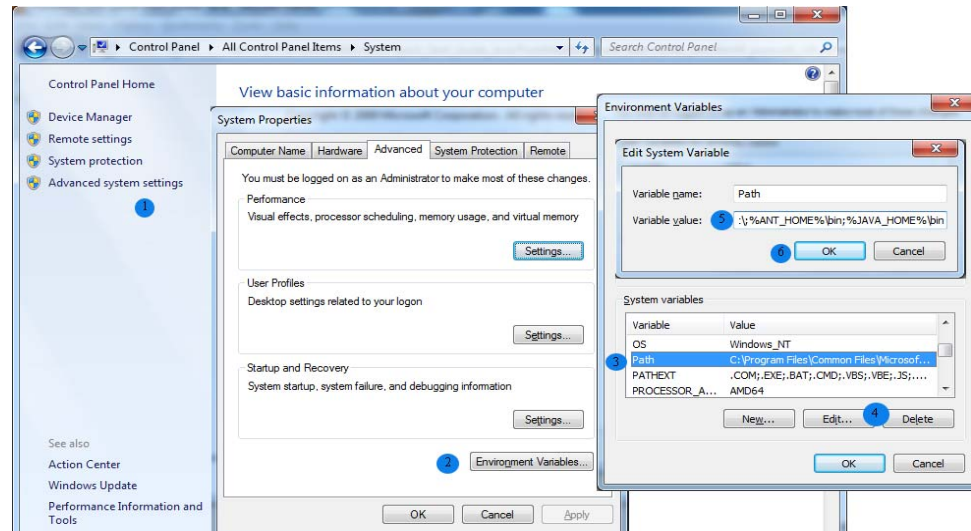


Figure 4: Updating the Path Environment Variable

End of procedure

Next Steps

- “Installing Apache Ant” on [page 22](#).

## Sample Application Requirements

In addition to the JDK installed for the PureWeb® Server, Apache Ant may be required to build sample applications.

### Installing Apache Ant

**Purpose:** To install Apache Ant.

**Prerequisites**

- You must have downloaded Apache Ant at <http://ant.apache.org/bindownload.cgi>.

**Start of procedure**

1. Unzip apache-ant-1.8.1-bin.zip to C:\Program Files (x86)\apache-ant-1.8.1\.

**End of procedure****Next Steps**

- “Setting the ANT\_HOME Environment Variables” on [page 23](#).

**Setting the ANT\_HOME Environment Variables**

**Purpose:** To set the ANT\_HOME environment variable.

**Start of procedure**

1. Select Control Panel | System | Advanced system settings`.
2. Click the Environment Variables button.
3. Select New in the System Variable section.
4. Enter ANT\_HOME in the Variable name field.
5. Enter C:\Program Files (x86)\apache-ant-1.8.1\ in the Variable value field.
6. Click the OK button to save your changes.

**End of procedure****Next Steps**

- “Updating the Path Variable to Include ANT\_HOME” on [page 23](#).

**Updating the Path Variable to Include ANT\_HOME**

**Purpose:** To update the Path variable to include ANT\_HOME.

**Start of procedure**

1. Select Control Panel | System | Advanced system settings.
2. Click the Environment Variables button.
3. Select the Path variable in the System Variable section.
4. Click the Edit button.
5. Add the following to the Variable value string:  
%ANT\_HOME%\bin;

---

**Note:** A semicolon (;) must separate each entry in the value string.

---

6. Click OK to save the changes.

**End of procedure**

**Next Steps**

- Chapter 2, “Installing PureWeb®,” on [page 25](#).



Chapter

# 2

## Installing PureWeb<sup>®</sup>

This section provides detailed information about installing PureWeb<sup>®</sup> and the required license.

This chapter contains the following sections:

- [PureWeb<sup>®</sup> Installation, page 26](#)
- [PureWeb<sup>®</sup> Side-by-Side Installation, page 29](#)
- [PureWeb<sup>®</sup> License Installation, page 31](#)

---

# PureWeb® Installation

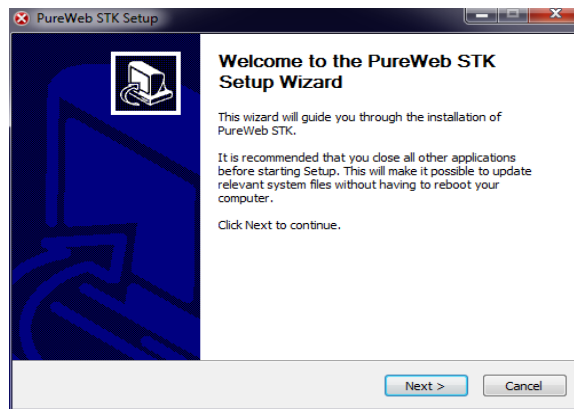
Use the installation wizard to install PureWeb®.

## Installing PureWeb®

**Purpose:** To install PureWeb®.

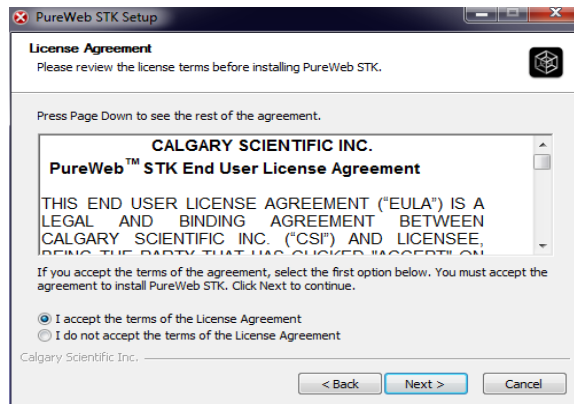
### Start of procedure

1. Click the PureWeb® executable file to launch the installation wizard.



**Figure 5: PureWeb® Wizard**

2. Click the Next button and review the terms of the License Agreement.



**Figure 6: PureWeb® License Agreement**

3. Choose to Accept the terms of the License Agreement.
4. Click the Next button to choose the location of the installation.

---

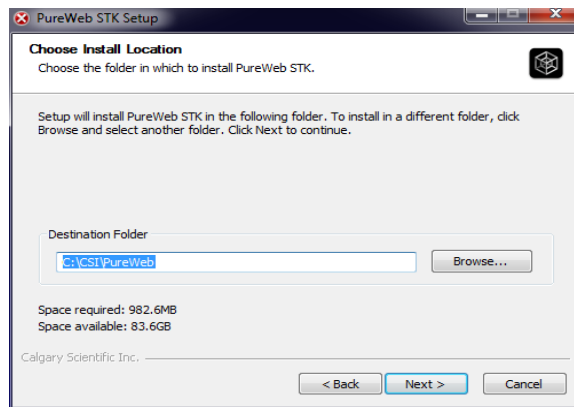
**Note:** The default installation directory for PureWeb® is C:\CSI\PureWeb.

---

---

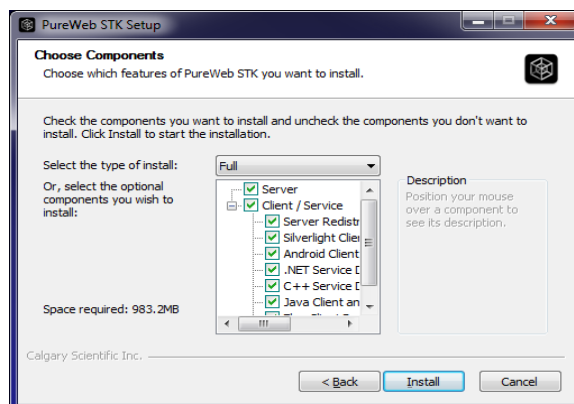
**Warning!** The installation directory path *cannot* contain any spaces. For example, changing the default installation directory to, C:\CSI\Pure Web will result in a File Not Found Exception.

---



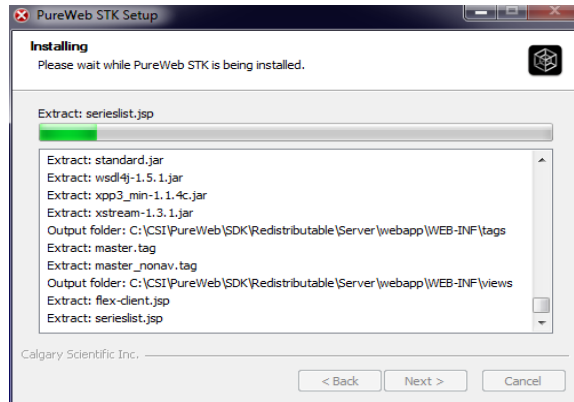
**Figure 7: PureWeb® Location**

5. Click the Next button to choose the PureWeb® components that you wish to install.



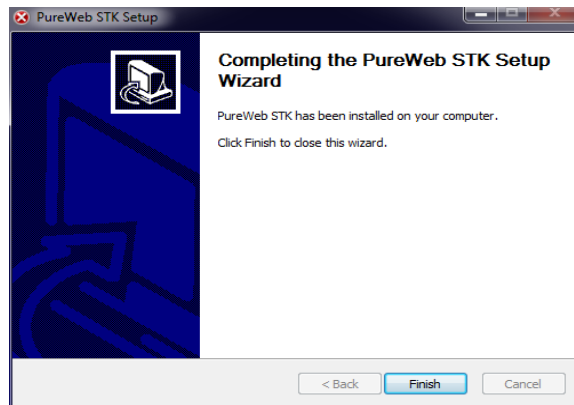
**Figure 8: PureWeb® Components**

6. Check your desired components and click the Install button to start the installation.



**Figure 9: PureWeb® Installation**

7. Click the Next button to display the confirmation screen.



**Figure 10: PureWeb® Confirmation**

8. Click the Finish button to close the PureWeb® wizard.

End of procedure

Next Steps

- Follow the steps in the [“Installing the License”](#) procedure.

---

# PureWeb® Side-by-Side Installation

You may be require to have more then a single version of PureWeb® installed at the same time. In order to ensure that both installed versions function correctly, follow the steps in the “[Installing Multiple Versions of PureWeb®](#)” procedure.

## Installing Multiple Versions of PureWeb®

**Purpose:** To install multiple version of PureWeb® on your computer.

### Start of procedure

1. Install the first version of PureWeb by following the steps in the “[Installing PureWeb®](#)” procedure. In [Step 4](#) ensure that you create a directory structure that will make it easy to recognize the version of PureWeb that is located within. For example: C:\CSI\PureWeb\**Version1**.
2. Install the second version of PureWeb by following the steps in the “[Installing PureWeb®](#)” procedure. In [Step 4](#) ensure that you create a directory structure that will make it easy to recognize the version of PureWeb that is located within. For example: C:\CSI\PureWeb\**Version2**.
3. Modify your PUREWEB\_HOME environment variable. Your PUREWEB\_HOME environment variable will include the path to both installed versions of the PureWeb® Sever separated by a semi-colon. The variable must point to only one server at a time to function correctly.

### Example:

After installing both versions of PureWeb®, the value of the PUREWEB\_HOME variable is

C:\CSI\PureWeb\Version1;C:\CSI\PureWeb\Version2.

When you want to use PureWeb® version1, you modify the value of the PUREWEB\_HOME variable to C:\CSI\PureWeb\**Version1**.

When you want to use PureWeb® version2, you modify the value of the PUREWEB\_HOME variable to C:\CSI\PureWeb\**Version2**.

4. Modify your PUREWEB\_LIBS environment variable. Your PUREWEB\_LIBS environment variable will include the path to both installed versions of PureWeb® separated by a semi-colon. The variable must point to only one version at a time to function correctly.

**Example:**

After installing both versions of PureWeb®, the value of the PUREWEB\_LIBS variable is

```
C:\CSI\PureWeb\Version1\SDK\Redistributable\Libs;C:\CSI\PureWeb\Version2\SDK\Redistributable\Libs.
```

When you want to use PureWeb® version1, you modify the value of the PUREWEB\_HOME variable to

```
C:\CSI\PureWeb\Version1\SDK\Redistributable\Libs.
```

When you want to use PureWeb® version2, you modify the value of the PUREWEB\_HOME variable to

```
C:\CSI\PureWeb\Version2\SDK\Redistributable\Libs.
```

5. Create additional Start PureWeb and Stop PureWeb desktop icon to simplify starting and stopping the server. After installing both versions of PureWeb®, you will have a single set of icons on your desktop for starting and stopping the server. For simplicity, we suggest that you copy and paste a second set of icons on your desktop to start and stop the second version of PureWeb®.
  - a. Rename all four icons to easier recognize which version of PureWeb® they will start and stop. For example: Start PureWeb Version1 and Stop PureWeb Version1.
  - b. Right-click on each of the new icons, select Properties and click the Shortcut tab.
  - c. Modify the paths in both the Target and Start in fields to point to the locations of your startup.bat and shutdown.bat files.

**Example:**

```
Target: C:\CSI\PureWeb\Version1\Server\tomcat\bin\shutdown.bat
```

```
Start in: C:\CSI\PureWeb\Version1\Server\tomcat\bin
```

**End of procedure**

**Next Steps**

- Follow the steps in the [“Installing the License”](#) procedure. The location that you need to copy the license file to will be slightly different than that mentioned in [Step 1](#), because your side-by-side versions of PureWeb® are probably not in the default installation location.

---

# PureWeb® License Installation

The PureWeb® Server will start, but will *not* be operational without a valid license. The license is an ASCII text file with a .lic extension and is not part of the PureWeb® Server installation. To make the PureWeb® Server operational, you must acquire the license from Calgary Scientific Inc. and follow the steps in the “[Installing the License](#)” procedure below.

## Installing the License

**Purpose:** To install the PureWeb® license.

### Start of procedure

1. Navigate to C:\CSI\PureWeb\Server\conf\.
2. Place the .lic PureWeb® license file that you received from Calgary Scientific Inc. into the ...conf directory.
3. Click on the Start PureWeb desktop icon to start the server.

### End of procedure

### Next Steps

- Chapter 3, “Verifying the PureWeb® Installation,” on [page 32](#).

# 3

## Verifying the PureWeb® Installation

This section provides detailed information about verifying your PureWeb® installation. It includes information about the installation location and environment variables.

This chapter contains the following sections:

- [Verify the Files and Folders, page 32](#)
- [Verify the Environment Variables, page 33](#)

---

### Verify the Files and Folders

Use the following procedures to verify that the installation is correct and complete.

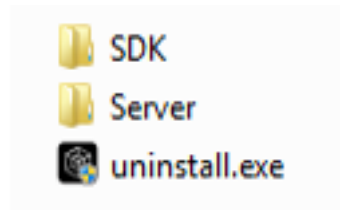
#### **Verifying the Directory Structure is Complete**

**Purpose:** To confirm that your installation is correct and complete.

##### **Start of procedure**

1. Navigate to C:\CSI\PureWeb.
2. Confirm that your directory structure includes the folders seen in Figure 11 on [page 33](#).





**Figure 11: PureWeb® Directory Structure**

End of procedure

Next Steps

- “Verify the License File is Installed” on [page 33](#).

## Verify the License File is Installed

**Purpose:** To verify the installation of the license file.

Start of procedure

1. Navigate to the `.../conf` directory.
2. Ensure that the `pureweb.lic` file is present.
3. If the file is not present follow the steps in the *Installing the License* procedure in the *PureWeb® Administration Guide*.

End of procedure

Next Steps

- “Verifying the Environment Variables are Set Correctly” on [page 33](#).

---

# Verify the Environment Variables

Use the following procedures to verify that the environment variables are set correctly.

## Verifying the Environment Variables are Set Correctly

**Purpose:** To confirm that your environment variables are set correctly.

Start of procedure

1. Select Control Panel | System | Advanced system settings.
2. Click the Environment Variables button.

3. Confirm that the system variable list includes PUREWEB\_HOME with a value of C:\CSI\PureWeb\Server.
4. Confirm that the system variable list includes PUREWEB\_LIBS with a value of C:\CSI\PureWeb\SDK\Redistributable\Libs.

#### End of procedure

#### Next Steps

- Chapter 4, “Testing the PureWeb® Installation,” on [page 35](#).

# 4

## Testing the PureWeb<sup>®</sup> Installation

This section provides detailed information about testing your PureWeb<sup>®</sup> installation.

This chapter contains the following sections:

- [Test the PureWeb<sup>®</sup> Server, page 35](#)

---

### Test the PureWeb<sup>®</sup> Server

Follow the procedure below to confirm that your PureWeb<sup>®</sup> Server is operational.

#### Testing the Server Installation

**Purpose:** To confirm that the PureWeb<sup>®</sup> Server is operational.

#### Start of procedure

1. Launch the PureWeb Apache Tomcat Server with the Start PureWeb desktop icon.
2. Open a browser.
3. Navigate to <http://localhost:8080/pureweb/server/status>.
4. Enter admin/admin into the Name and Password fields.



Figure 12: PureWeb® Server Login

5. Click the Sign In button to open the Status page.
6. Click on the links (Apps, Status, Configuration, Logs, Version, License, and Logout) to ensure that they work without errors.
7. Review the output in the Apache Tomcat terminal window. There will be an entry for each of the links (Apps, Status, Configuration, Logs, Version, License, and Logout) that have been clicked.

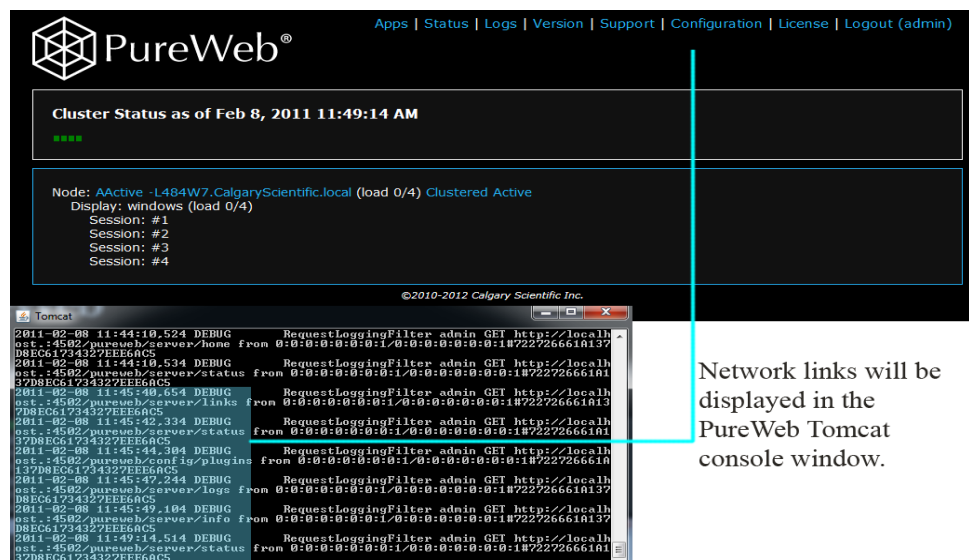


Figure 13: PureWeb® Server Status and Terminal Output

## End of procedure

## Next Steps

- Refer to the *PureWeb® STK Quick Start Guides* for information on the provided application samples.
- Refer to the *PureWeb® STK API Reference* documents for details on the classes and methods available to you for developing applications.

- Refer to the *PureWeb® Server Administration Guide* for information about the PureWeb® Server.

## Supplements

# Related Documentation Resources

The following resources provide additional information that is relevant to this software. Consult these additional resources as necessary.

## PureWeb<sup>®</sup>

- *PureWeb<sup>®</sup> Server Administration Guide*, which provides information about the PureWeb<sup>®</sup> Server.
- *PureWeb<sup>®</sup> iOS STK Installation Guide*, which provides detailed information on installing the PureWeb<sup>®</sup> iOS STK.
- *PureWeb<sup>®</sup> STK Quick Start Guide: Java*, which describes the sample applications and their code.
- *PureWeb<sup>®</sup> STK Quick Start Guide: C#*, which describes the sample applications and their code.
- *PureWeb<sup>®</sup> STK Quick Start Guide: C++*, which describes the sample applications and their code.
- *PureWeb<sup>®</sup> STK Quick Start Guide: Android*, which describes the sample applications and their code.
- *PureWeb<sup>®</sup> Java Client STK API Reference*, which describes the Java Client STK.
- *PureWeb<sup>®</sup> Java Server STK API Reference*, which describes the Java Server STK.
- *PureWeb<sup>®</sup> Silverlight Client STK API Reference*, which describes the Silverlight Client STK.
- *PureWeb<sup>®</sup> C++ Server STK API Reference*, which describes the C++ Server STK.
- *PureWeb<sup>®</sup> DotNet Server STK API Reference*, which describes the C# Server STK.
- *PureWeb<sup>®</sup> Troubleshooting Guide*, which describes solutions to common issue.

## Related Documentation Resources

- *PureWeb® STK Release Notes.*
- *PureWeb® STK Application Upgrading Notes.*

# Document Conventions

This document uses certain stylistic and typographical conventions—introduced here—that serve as shorthands for particular kinds of information.

## Document Version Number

A version number appears at the bottom of the inside front cover of this document. Version numbers change as new information is added to this document. Here is a sample version number:

```
PW3.0_Java_QSG_03-2011_v3.0.001.00
```

You will need this number when you are talking with Calgary Scientific Support about this product.

## Screen Captures Used in This Document

Screen captures from the product graphical user interface (GUI), as used in this document, may sometimes contain minor spelling, capitalization, or grammatical errors. The text accompanying and explaining the screen captures corrects such errors *except* when such a correction would prevent you from installing, configuring, or successfully using the product. For example, if the name of an option contains a usage error, the name would be presented exactly as it appears in the product GUI; the error would not be corrected in any accompanying text.

## Type Styles

[Table 6](#) describes and illustrates the type conventions that are used in this document.

**Table 6: Type Styles**

Type Style	Used For	Examples
Italic	<ul style="list-style-type: none"> <li>Document titles</li> <li>Emphasis</li> <li>Definitions of (or first references to) unfamiliar terms</li> <li>Mathematical variables</li> </ul> <p>Also used to indicate placeholder text within code samples or commands, in the special case where angle brackets are a required part of the syntax (see the note about angle brackets on <a href="#">page 41</a>).</p>	<p>Please consult the <i>Calgary Scientific Migration Guide</i> for more information.</p> <p>Do <i>not</i> use this value for this option.</p> <p>A <i>customary and usual</i> practice is one that is widely accepted and used within a particular industry or profession.</p> <p>The formula, <math>x + 1 = 7</math> where <math>x</math> stands for . . .</p>



**Table 6: Type Styles (Continued)**

Type Style	Used For	Examples
Monospace font (Looks like teletype or typewriter text)	All programming identifiers and GUI elements. This convention includes: <ul style="list-style-type: none"> <li>• The <i>names</i> of directories, files, folders, configuration objects, paths, scripts, dialog boxes, options, fields, text and list boxes, operational modes, all buttons (including radio buttons), check boxes, commands, tabs, CTI events, and error messages.</li> <li>• The values of options.</li> <li>• Logical arguments and command syntax.</li> <li>• Code samples.</li> </ul> Also used for any text that users must manually enter during a configuration or installation procedure, or on a command line.	Select the Show variables on screen check box.  In the Operand text box, enter your formula.  Click OK to exit the Properties dialog box.  Scribble service distributes the error messages in EventError events.  If you select true for the inbound-bsns-calls option, all established inbound calls on a local agent are considered business calls.  Enter exit on the command line.
Square brackets ([ ])	A particular parameter or value that is optional within a logical argument, a command, or some programming syntax. That is, the presence of the parameter or value is not required to resolve the argument, command, or block of code. The user decides whether to include this optional information.	<code>smcp_server -host [/flags]</code>
Angle brackets (<>)	A placeholder for a value that the user must specify. This might be a DN or a port number specific to your enterprise.  <b>Note:</b> In some cases, angle brackets are required characters in code syntax (for example, in XML schemas). In these cases, italic text is used for placeholder values.	<code>smcp_server -host &lt;confighost&gt;</code>

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