

PINsafe Windows Installation

This document outlines the necessary steps to install Swivel on a Microsoft Windows platform. For upgrading an existing Windows installation, see [Upgrading PINsafe on Microsoft Windows](#).

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Prerequisites

Windows Platform, XP, 2000, 2003, 2008, Vista, Win 7. In fact any OS for which there is a compatible JRE and Apache-Tomcat release.

At least 300 Mb Hard disk space for the software (more for large internal Db installs), at least 1 Gb of RAM, Network Card, 2 GHz processor

Java Run Time Environment [1] 32 bit/64 bit

Apache Tomcat Software [2] At this moment in time Tomcat 6 or 7 is recommended and not Tomcat 8. The Service installer is usually the best option to use, and this will automatically install for 32 bit and 64 bit.

Download the latest Swivel software, see [Downloads](#)

Use `netstat -b` to ensure that ports 8080 and 1812 are not already in use.

Java Installation

Version 3.5 of Swivel requires Sun/Oracle JRE version 5

Version 3.6 or later of Swivel requires Sun/Oracle JRE version 6

NOT compatible with Java Version 8

Checking Installed Java versions

Check to see which versions of Java are installed under C:\Program Files\Java or go to the Windows control panel and examine the list of installed programs.

If you have multiple JREs installed, check which one is on the windows path by typing at the command line:

```
java -version
```

Install Java Runtime Environment (JRE)

Java can be automatically installed from the following website from the SUN Java website, <http://java.sun.com/javase/downloads/index.jsp>. If an older version is required then refer to <http://java.sun.com/javase/downloads/previous.jsp>

Several versions of Java may be installed on a system at one time.

Apache Tomcat Installation

Apache Tomcat will attempt to bind to port 8080 by default. To check that no services are currently using this port, (also check port 1812 is not in use), type at the command line:

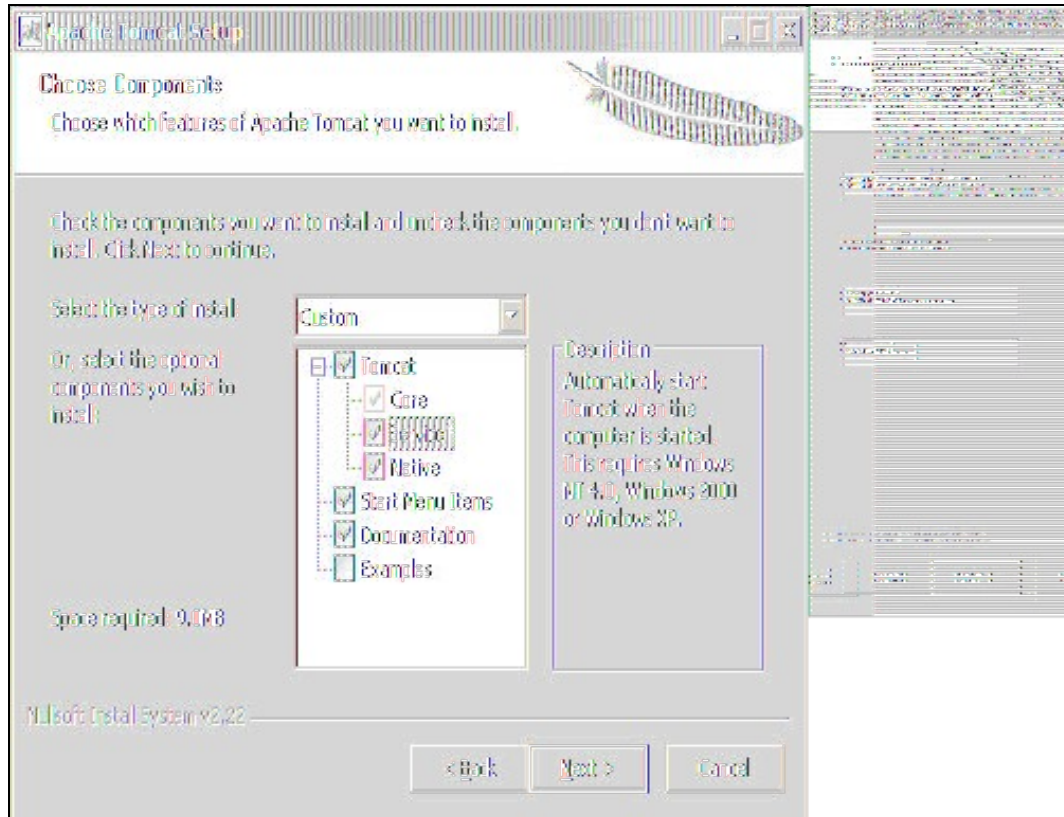
```
netstat -an
```

To ensure that no service is already listening on port 8080. If there is a service already running on port 8080 you need to stop/delete that service or if that is not possible you must configure apache-tomcat to run on a [different port](#)

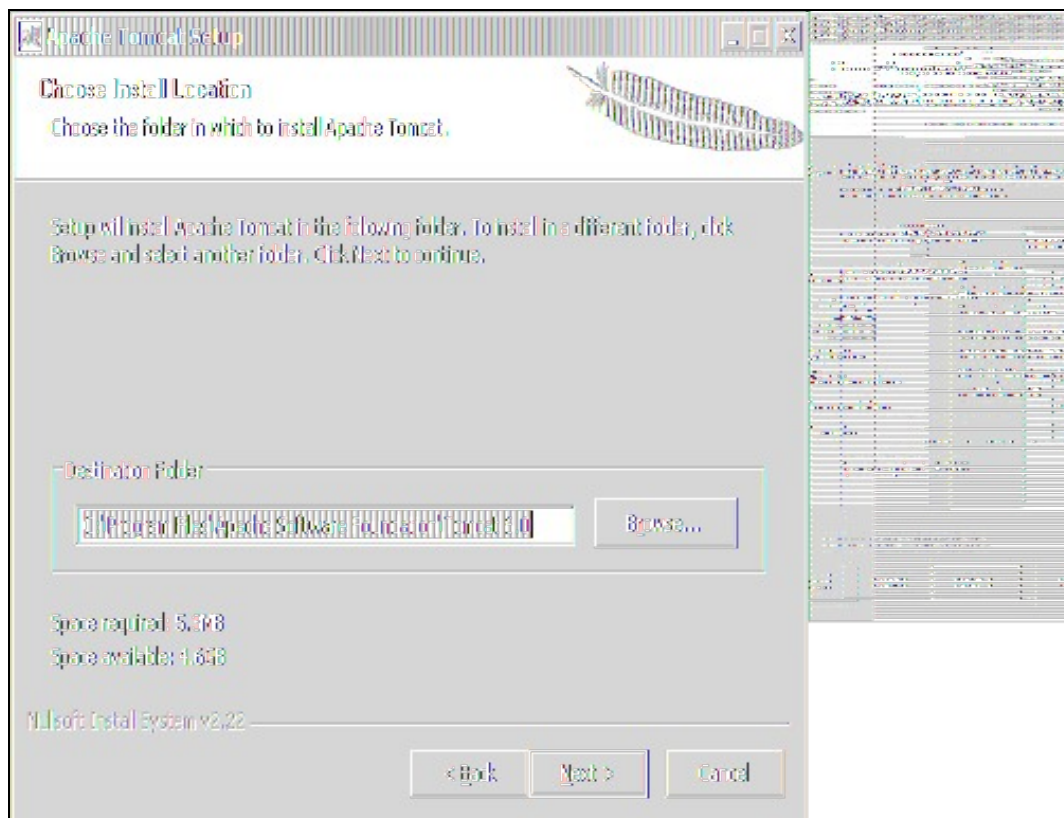
Downloading Apache Tomcat

Note: PINsafe has no specific installation requirements for Apache Tomcat, so these steps are shown as an example. If there are differences between this example and the instructions on the Tomcat website, follow the standard Apache-Tomcat instructions.

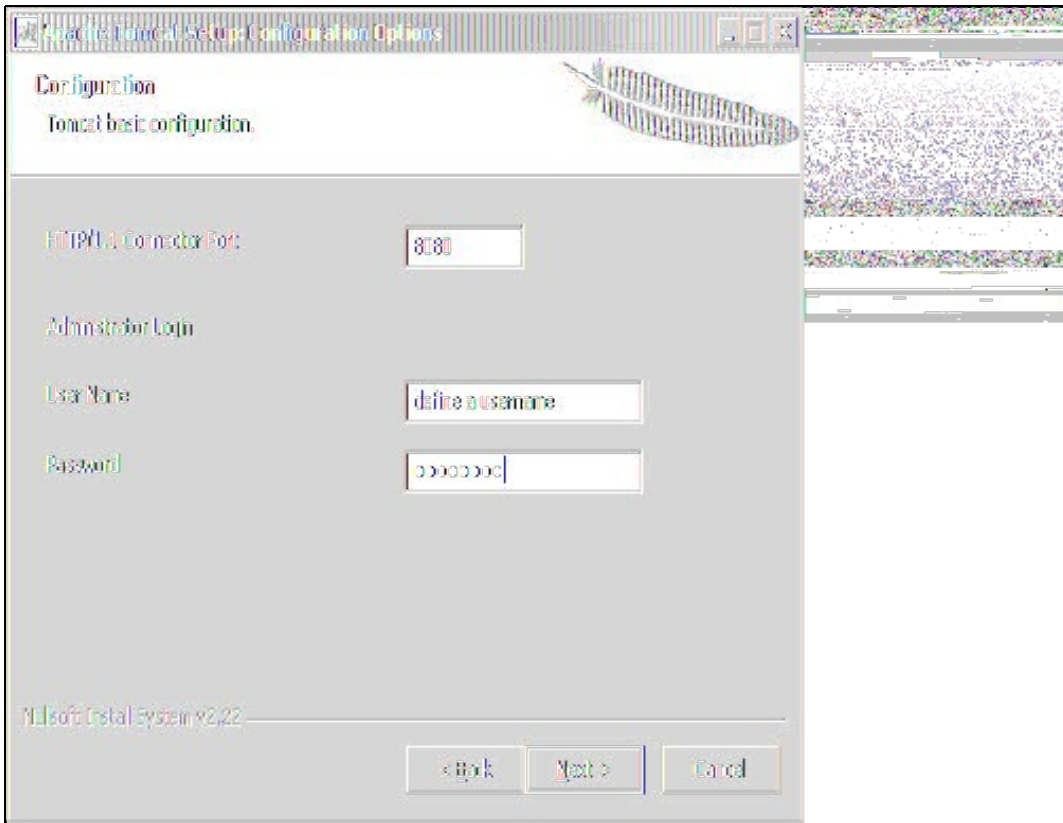
Download the required version of Apache Tomcat from <http://tomcat.apache.org>. Under Download select the version and then under binary distributions select the **Windows Service Installer**. The 32-bit/64-bit Windows Service Installer is recommended. Run the Apache Installer Executable accepting the license agreement and then selecting the components to install, **ensure that service selected**. Native is optional. Do not install the Apache Management Software unless there is a specific requirement.



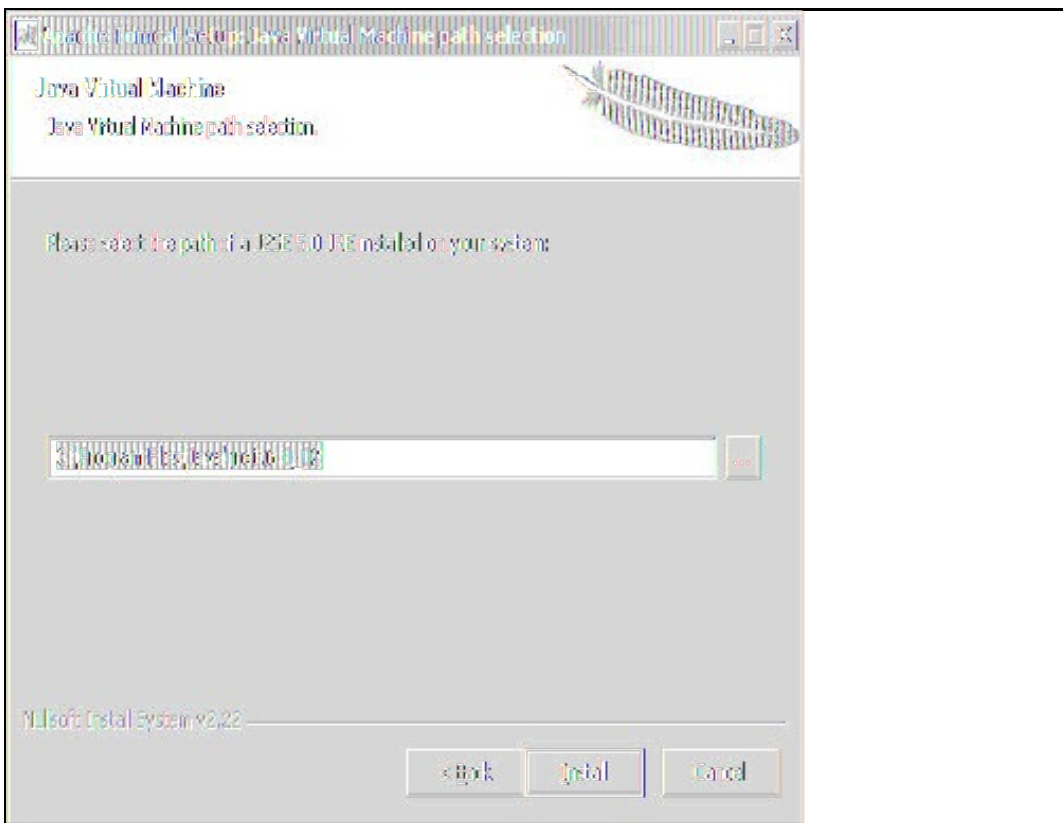
Choose the install location: It is recommended you accept the default location



Ensure a password is set and for added security change the username. Make a note of both these details



Define the path to the Java Virtual Machine



Apache Tomcat should now be installed and should be run by ensuring the checkbox is selected.

Verifying Apache Tomcat Install

An Apache Tomcat icon should appear in the taskbar with the following status:

Started = A green Arrow

Stopped = A red square

You can right-click on this icon to see the status and start and stop tomcat

Also the services for the system, accessed via right-clicking on My Computer and selecting Manage, should list an Apache Tomcat service

If you have installed an SSL certificate, then it would normally be https://<IP Address>:8443. See [3]

If Apache Tomcat fails to start check the system logs and the Apache Tomcat logs located under: C:\Program Files\Apache Software Foundation\Tomcat 6.0\logs

Swivel Installation

Whilst Tomcat is NOT running; Copy the pinsafe.war file to the Apache Tomcat webapps folder:

C:\Program Files\Apache Software Foundation\Tomcat 6.0\webapps

Then start Tomcat

A *pinsafe* folder should appear. If it fails to appear after a few minutes, stop Apache Tomcat then start the service.

Connecting to Swivel

Connect to the PINsafe server from a web browser using port

http://<IP Address>:8080/pinsafe

And you should see the Admin Login page which for 3.x versions looks like



• [Login](#)

Swivel Administration Login

Username:

Password:

OTC:

Additional Installation Steps

Remember if there is a firewall on the Windows server then the following ports may need to be opened:

RADIUS 1812 UDP

RADIUS 1813 UDP

WWW 8080 TCP

Security

The Swivel virtual or hardware appliance offers additional security through the use of a Proxy to allow external access on 8443, but a software install does not offer this feature and if external access is required, it will be possible to connect to the administration console on port 8080. To prevent this it is

possible to use the IP filter, see [Filter IP How to Guide](#).

The Apache Management console should not be installed if it is not required.

Do not allow external access on other ports to the Swivel server.

Next Steps

For what to do next refer to:

Either, the detailed install guide with the explanation of options: [Getting Started with PINsafe](#) guide.

Or, the quick start guide that only gives the required steps: [How to initially configure PINsafe](#)

Troubleshooting

If after a repository synchronization, the User Administration view by user attributes shows users but no values within the attributes it may be the [Transient Data Storage](#) does not have the correct permissions. On the status page check the **Data Storage Root** for where the [Transient Data Storage](#) path is then check that the folder and all sub folders and files are not read only and that appropriate user/Administrator permissions are set. Restart Tomcat then from the User Administration carry out a User Sync then view attributes.