

Build Forge Samples - Basic Project

This example demonstrates a very basic project library that creates and deploys a Java applet. Common tools and applications are used throughout the steps of this project. Please note that these examples are not intended to execute successfully without modification to match a specific environment.

Importing the Project

Before you begin, import the file named Basic.xml by following the instructions in the README.pdf file in this directory. Be sure to check the boxes marked 'Import Selectors' and 'Import Collectors'

NOTE: After the file is imported, a project will exist in the Projects section of your Build Forge installation. It will be necessary to be logged in as a user with Build Engineer Group Access in order to view the project and its subcomponents.

Servers

Two servers are created with this project. To view them navigate to Servers → Selectors. There are two new Selectors called 'Local Server' and 'Web Server'. At this time Server Authentications are not imported, and therefore these are merely examples.

Notice that on the Projects view, the imported project has a Selector of 'Local Server'. Also notice that when the steps for the Basic Sample project are shown, two of the steps have the 'Web Server' selector. The rest of the steps inherit the default (Local Server) selector from the project definition.

Environments

To view the environment variables that this project uses, go to Environments and click on the environment named 'Basic Environment'.

Variable Name	Default (Shipped) Value	Description
CVSROOT	C:\CVS_Storage	The root directory of a CVS installation containing the CVS module for this project
MODULE	TicTacToeApplet	The name of the CVS module that contains the code for this project
CVSCLIENT	Build Server 1	
TOMCAT_HOME	C:\jakarta-tomcat-3.3.2	The root installation directory of Apache Tomcat
JAVA_HOME	C:\Java50	The root installation directory of a Java Runtime Environment
PATH	%JAVA_HOME%\bin	The bin directory in the

		Java installation. This is set so that Build Forge will have access to the executables for compiling and executing Java code.
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Steps

The commands for each step can be viewed by clicking on the step name in the Projects view. The step names are deliberately descriptive to make it easier to see the overall flow of the project. Below is additional detail about how each step is configured. Note that familiarity with the tools being automated by Build Forge (CVS, Java, and Tomcat) is assumed and these examples are not intended as a tutorial on the tools themselves.

Step	Description
Checkout Source	This is the command to checkout code from the MODULE specified in the environment The directory that the code is checked out into is also named the value of the MODULE variable
Update Applet Version	Looks in the MODULE directory for a file named TicTacToe.html and changes all instances of the string '@VERSION@' to the major and minor revision numbers (stored in the Tags section of the Projects configuration)
Create Baseline	This step stores in memory information about the files in the MODULE directory for use in the Bill of Materials. For more information on the .scan command, see the Build Forge documentation
Compile Applet	Runs the java compiler in the MODULE directory to create the compiled Java class A full path to the javac executable is not necessary because it's location was added to the environment's PATH variable
Create Web Archive	Compress the compiled Java files into a web archive (.war) file
Create Checkpoint	Stores information about the current state of the MODULE directory for the Bill of Materials
Stop Web Server	Calls the command shutdown.bat from the TOMCAT_HOME/bin directory on a server that meets the criteria for the selector 'Web Server'
Deploy Applet	Remove the outdated war file and application from the Tomcat home directory and then copy the newly made war into its place
Restart Web Server	Calls the command startup.bat from the TOMCAT_HOME/bin directory on a server that meets the criteria for the selector 'Web Server'