

AntBuilder

A simple Builder to interface with Ant

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1. Overview

AntBuilder: *A simple Builder to interface with Ant*

This type goes beyond Builder in allowing an AntZip dependency which can be installed via #Deploy. It also allows a custom-installed Ant and/or custom-installed Java for each AntBuilder. The number of available settings is much higher. It also provides integration with the CruiseControl and Hudson types in order to generate configuration files for those services.

2. Design

Super Type Builder

Role	Concrete. (Objects can be created.)
Instance Names	Unique
Notification	false
Template Directory	
Data View	Children, proximity: 1
Logger Name	AntBuilder

3. Constraints

3.1. Allowed Child Dependencies

- [AntBuilderAntArgs](#) 1
- [AntBuilderAntOpts](#) 1
- [AntZip](#) 1
- [BuilderAntHome](#) 1
- BuilderAutoUpdate1
- BuilderBuildFile1
- BuilderBuildstamp1
- BuilderBuildTarget1
- BuilderImportMax1
- BuilderImportMin1
- [BuilderJavaHome](#) 1
- BuilderNotificationList1
- BuilderPackageBuildtimePattern1

- BuilderPackageExtension1
- BuilderPackageFilebase1
- BuilderPackageInstallRank1
- BuilderPackageInstallRank1
- BuilderPackageInstallroot1
- BuilderPackagePurgeRegex1
- BuilderPackageRequireBuildstamp1
- BuilderPackageSeparator1
- BuilderPackageType1
- BuilderPackageVendor1
- BuilderPackageVersion1
- [BuilderPath](#) 1
- BuilderScmBinding1
- BuilderScmConnection1
- BuilderScmLabel1
- BuilderScmModule1
- BuilderScmUser1
- BuilderScmView1
- BuilderVersionBuild1
- BuilderVersionMajor1
- BuilderVersionMinor1
- BuilderVersionRelease1
- BuilderVersionTag1
- CruiseControlArtifact1
- CruiseControlInterval1
- CruiseControlMailHost1
- CruiseControlReturnAddress1
- HudsonPollSpec1

1: These types have a *Singleton* constraint. Only one instance may be added as a resource.

3.2. Allowed Parent Dependencies

- [CruiseControl](#)
- [Hudson](#)
- Node
- Updater

4. Attributes

4.1. Exported Attributes

Name	Property
basedir	deployment-basedir
targetdir	deployment-install-root

4.2. Defaults for Imported Attributes

Name	Default
antArgs	
antOpts	
autoUpdate	false
buildAntHome	\${env.ANT_HOME}
buildFile	build.xml
buildPath	/bin:/usr/bin
buildTarget	all
cruiseControlInterval	300
hudsonPollSpec	* / 5 * * * *
importMax	1
importMin	1
javaHome	\${env.JAVA_HOME}
packageBuildtimePattern	yyyyMMdd'T'HHmmss
packageExtension	war
packageFilebase	.*?
packageInstallRank	10
packagePurgeRegex	^(?!^\${entity.attribute.buildstamp}\$).*
packageSeparator	-
packageType	war
requireBuildstamp	false

scmBinding	CVS
scmLabel	
scmUser	\${user.name}

5. Commands

Note:

Commandline options displayed in square brackets "[]" are optional. If an option expects arguments, then angle brackets are shown after the option "<>". Any default value is shown within the brackets.

5.1. runBuildScript

runs the build script

Makes sure the build file exists and then runs Ant using the custom ANT_HOME and JAVA_HOME.

Usage

```
runBuildScript [-antArgs <>] [-anthome <>] [-antOpts <>]
[-basedir <>] [-buildfile <>] [-buildstamp <>] [-javahome
<>] -packageBuildtimePattern [-path <>] [-target <>]
[-targetdir <>]
```

Options

Option	Description
antArgs	<i>ANT_ARGS setting</i>
anthome	<i>Ant installation to use for build</i>
antOpts	<i>ANT_OPTS setting</i>
basedir	<i>directory where build resources reside</i>
buildfile	<i>build file to execute</i>
buildstamp	<i>build identifier</i>
javahome	<i>Java installation to use for build</i>
packageBuildtimePattern	<i>Build Time date format</i>
path	<i>System path to use for build</i>
target	<i>build target to evaluate</i>

targetdir	<i>directory build artifacts will be written</i>
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5.2. generateProject

Generate a CruiseControl project definition for inclusion in config.xml

Called from CruiseControl#Docs-Generate. Checks to see if there is a CruiseControl referrer object. If so, generates a configuration file fragment which is then included in CruiseControl's config.xml which uses the exec task to run either the Build command on the object if building only, or the BuildAndUpdate command on this object's parent Updater if autoupdate=true.

Usage

```
generateProject [-anthome <>] [-artifactname <>]
[-artifacttype <>] [-autoupdate <>] [-basedir <>] -file <>
[-interval <>] [-mailhost <>] [-notificationlist <>]
[-project <${context.name}>] [-returnaddress <>]
```

Options

Option	Description
anthome	<i>ANT_HOME to use for the build</i>
artifactname	<i>CruiseControl artifact name</i>
artifacttype	<i>CruiseControl artifact type</i>
autoupdate	<i>Set to true to automatically update after build</i>
basedir	<i>directory where build resources reside</i>
file	<i>The project absolute path of the file to generate for inclusion by CruiseControl</i>
interval	<i>Minimum duration between builds in seconds</i>
mailhost	<i>CruiseControl mail server address</i>
notificationlist	<i>Comma separated list of email addresses to be notified about the build</i>
project	<i>Name of the CruiseControl project to generate</i>
returnaddress	<i>CruiseControl returned mail address</i>

5.3. generateHudsonConfig

Generate a Hudson job (project) config.xml file

Called from Hudson#Docs-Generate. Generates a Hudson config.xml file in opts.jobdir based on the templates in templates/hudson.

Usage

```
generateHudsonConfig [-anthome <>] [-autoupdate <>] -jobdir
<> [-notificationlist <>] [-project <${context.name}>]
```

Options

Option	Description
anthome	<i>ANT_HOME to use for the build</i>
autoupdate	<i>Set to true to automatically update after build</i>
jobdir	<i>Absolute path to Hudson jobs folder</i>
notificationlist	<i>Comma separated list of email addresses to be notified about the build</i>
project	<i>Name of the project to generate</i>

5.4. generateHudsonAntInstallation*Generate a Hudson Ant installation xml fragment*

Generates an xml fragment to be included in Hudson's Ant configuration file with this AntBuilder's custom ANT_HOME

Usage

```
generateHudsonAntInstallation [-antHome <>] -file <>
```

Options

Option	Description
antHome	<i>ANT_HOME to use for the build</i>
file	<i>Absolute path to the Hudson xml fragment temp file</i>

5.5. generateHudsonJdkInstallation*Generate a Hudson JDK installation xml fragment*

Generates an xml fragment to include in Hudson's main configuration that specifies the location of the JDK for this AntBuilder.

Usage

```
generateHudsonJdkInstallation -file <> [-javaHome <>]
```

Options

Option	Description
file	<i>Absolute path to the Hudson xml fragment temp file</i>
javaHome	<i>JavaHome</i>

5.6. writeBuildProperties

Write out properties file for use in Hudson

Uses a template to write out a file with properties that can be read by Ant during the build. This location is passed to Ant from the Hudson config.xml generated by #generateHudsonConfig

Usage

```
writeBuildProperties [-buildstamp <>] -file <>
```

Options

Option	Description
buildstamp	<i>build identifier</i>
file	<i>Absolute path to the Hudson xml fragment temp file</i>

6. Related Types

The following types are defined for use with AntBuilder.

6.1. BuilderJavaHome**6.1.1. Overview**

BuilderJavaHome: *Java instance that ant should use*

6.1.2. Design**Super Type**

BuilderSetting

Role	Concrete. (Objects can be created.)
Instance Names	Unique

6.1.3. Attributes

6.1.3.1. Exported Attributes

Name	Property
javaHome	settingValue

6.2. BuilderAntHome

6.2.1. Overview

BuilderAntHome: *Ant instance that should be used*

6.2.2. Design

Super Type

BuilderSetting

Role	Concrete. (Objects can be created.)
Instance Names	Unique

6.2.3. Attributes

6.2.3.1. Exported Attributes

Name	Property
buildAntHome	settingValue

6.3. BuilderPath

6.3.1. Overview

BuilderPath: *Path that should be used*

6.3.2. Design

Super Type

BuilderSetting

Role	Concrete. (Objects can be created.)
Instance Names	Unique

6.3.3. Attributes

6.3.3.1. Exported Attributes

Name	Property
buildPath	settingValue

6.4. AntBuilderAntOpts

6.4.1. Overview

AntBuilderAntOpts: *Ant Opts like ANT_OPTS environment variable*

6.4.2. Design

Super Type
BuilderSetting

Role	Concrete. (Objects can be created.)
Instance Names	Unique

6.4.3. Attributes

6.4.3.1. Exported Attributes

Name	Property
antOpts	settingValue

6.5. AntBuilderAntArgs

6.5.1. Overview

AntBuilderAntArgs: *Ant Args like ANT_ARGS environment variable*

6.5.2. Design

Super Type
BuilderSetting

Role	Concrete. (Objects can be created.)
Instance Names	Unique

6.5.3. Attributes

6.5.3.1. Exported Attributes

Name	Property
antArgs	settingValue