

Deployit Webserver Plugin Manual

Version 3.6.0

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Preface

This document describes the functionality provided by the Webserver plugin.

See the **Deployit Reference Manual** for background information on Deployit and deployment concepts.

Overview

The webserver-plugin is a Deployit plugin that supports deployment of web content and webserver configuration to a webserver.

Features

- Runs on Deployit 3.6 and up.
- Supports deployment to Apache and IHS webservers.
- Deploys and undeploys webserver artifacts:
 - Web content (HTML pages, images, etc.)
 - Virtual host configuration
 - Any configuration fragment
- Supports starting, stopping and restarting of webserver as control tasks.

Requirements

- **Deployit requirements**
 - **Deployit:** version 3.6+
 - **Other Deployit Plugins:** None
- **Infrastructural requirements**
 - **User credentials** for accessing the webserver executables on the host running the webserver.

Usage in Deployment Packages

The following is a manifest snippet that shows how web content and a virtual host can be included in a deployment package. The web content CI refers to a folder, *html*, included in the deployment package.

Manifest-Version: 1.0
Deployit-Package-Format-Version: 1.3
CI-Application: PetClinic-ear
CI-Version: 2.0
Name: PetClinic-2.0.ear
CI-Type: jee.Ear
CI-Name: PetClinic
Name: html
CI-Type: www.WebContent
CI-Name: PetClinic-html
Name: PetClinic-vh
CI-Type: www.ApacheVirtualHostSpec
CI-host: *
CI-port: 8080

Using the deployables and deployed

The following table describes which deployable/container combinations are possible.

Deployable vs. Container table

Deployable	Container	Generated deployed
www.WebContent	www.ApacheHttpdServer	www.PublishedWebContent
www.ApacheVirtualHostSpec	www.ApacheHttpdServer	www.ApacheVirtualHost
www.ApacheConfFragmentSpec	www.ApacheHttpdServer	www.ApacheConfFragment

The following table describes the effect a deployed has on it's container.

Deployed Actions Table

Deployed	Actions performed for operations		
	Create	Destroy	Modify
www.PublishedWebContent	<ul style="list-style-type: none"> • Create target path on webserver, if needed • Copy web content to target path on webserver 	<ul style="list-style-type: none"> • Delete web content from host 	<ul style="list-style-type: none"> • Delete existing web content from webserver • Copy modified web content to target path on webserver
www.ApacheVirtualHost	<ul style="list-style-type: none"> • Copy virtual host configuration to webserver 	<ul style="list-style-type: none"> • Delete virtual host configuration from webserver 	<ul style="list-style-type: none"> • Delete virtual host configuration from webserver • Copy new virtual host configuration to webserver
www.ApacheConfFragment	<ul style="list-style-type: none"> • Copy configuration fragment to webserver 	<ul style="list-style-type: none"> • Delete configuration fragment from webserver 	<ul style="list-style-type: none"> • Delete configuration fragment from webserver • Copy new configuration fragment to webserver

CI Reference

Configuration Item Overview

Deployable Configuration Items

CI	Description
www.ApacheConfFragmentSpec	Specification for an Apache configuration fragment
www.ApacheVirtualHostSpec	Specification for an Apache virtual host
www.WebContent	Folder containing web content (HTML pages, images, etc)

Deployed Configuration Items

CI	Description
www.ApacheConfFragment	Apache configuration fragment
www.ApacheVirtualHost	Apache virtual host
www.PublishedWebContent	Web content on the webserver

Topology Configuration Items

CI	Description
www.ApacheHttpdServer	Apache HTTPD web server


Configuration Item Details

[www.ApacheConfFragment](#)

Hierarchy generic.ProcessedTemplate >> generic.AbstractDeployedArtifact >> generic.AbstractDeployed >> udm.BaseDeployed >> udm.BaseConfigurationItem

Interfaces udm.Deployed, udm.ConfigurationItem

Apache configuration fragment

Public Properties	
 container	: CI<udm.Container>
The container on which this deployed runs.	
deployable	: CI<udm.Deployable>
The deployable that this deployed is derived from.	

Hidden Properties

createOrder : *INTEGER = 50*

The order of the step in the step list for the create operation.

createVerb : *STRING = Create*

Create Verb

destroyOrder : *INTEGER = 40*

The order of the step in the step list for the destroy operation.

destroyVerb : *STRING = Destroy*

Destroy Verb

modifyOrder : *INTEGER = 50*

The order of the step in the step list for the modify operation.

modifyVerb : *STRING = Modify*

Modify Verb

noopOrder : *INTEGER = 50*

The order of the step in the step list for the noop operation.

noopVerb : *STRING = Modify*

Noop Verb

targetDirectory : *STRING = \${deployed.container.configurationFragmentDirectory}*

Target directory name

targetFile : *STRING = \${deployed.name}.conf*

Target file name

template : *STRING = www/apache/\${deployed.type}.conf.ftl*

Configuration fragment template file name.

createTargetDirectory : *BOOLEAN = false*

Create the target directory on the generic server if it does not exist.

restartRequired : *BOOLEAN = true*

Restart Required

restartRequiredForNoop : *BOOLEAN = false*

The generic container requires a restart for the NOOP action performed by this deployed.

targetDirectoryShared : *BOOLEAN = true*

Is the target directory shared by others on the generic server. When true, the target directory is not deleted during a destroy operation; only the artifacts copied to it.

www.ApacheConfFragmentSpec

Hierarchy generic.Resource >> udm.BaseDeployable >> udm.BaseConfigurationItem

Interfaces udm.Tagable, udm.Deployable, udm.ConfigurationItem

Specification for an Apache configuration fragment.

Public Properties**tags** : SET_OF_STRING

The tags to map deployables to containers.

www.ApacheHttpdServer

Hierarchy generic.Container >> udm.BaseContainer >> udm.BaseConfigurationItem**Interfaces** udm.Taggable, udm.ConfigurationItem, generic.GenericContainer, udm.Container, overthere.HostContainer

Apache HTTPD web server

Public Properties**configurationFragmentDirectory** : STRING

The directory into which Apache configuration files (for virtual host definitions) should be written

defaultDocumentRoot : STRING

The directory in which document roots for virtual hosts should be created. Web content deployed without a virtual host will also be copied into this directory

 **host** : CI<overthere.Host>

Host upon which the container resides

restartWaitTime : INTEGER = 10

Duration (in secs) to wait after the restart server step has been executed

startCommand : STRING

The command to start Apache. Arguments containing spaces are not supported

startWaitTime : INTEGER = 10

Duration (in secs) to wait after the start server step has been executed

stopCommand : STRING

The command to stop Apache. Arguments containing spaces are not supported

stopWaitTime : INTEGER = 10

Duration (in secs) to wait after the stop server step has been executed

envVars : MAP_STRING_STRING

Environment variables for container

restartCommand : STRING

The command to restart Apache. If left blank, reload command is used. If reload command is also blank than the sequence 'stop, start' is used. Arguments containing spaces are not supported

tags : SET_OF_STRING

The tags to map deployables to containers.

Hidden Properties

restartOrder : INTEGER = 90

The order of the restart container step in the step list.

restartScript : STRING = `<#assign restart=(container.restartCommand)!"><#if restart != ">www/apache/restart`

The command to restart or reload Apache. If left blank, the sequence 'stop, start' is used. Arguments containing spaces are not supported

startOrder : INTEGER = 90

The order of the start container step in the step list.

startScript : STRING = `www/apache/start`

The command to start Apache. Arguments containing spaces are not supported

stopOrder : INTEGER = 10

The order of the stop container step in the step list.

stopScript : STRING = `www/apache/stop`

The command to stop Apache. Arguments containing spaces are not supported

Control Tasks

restart

Restart Apache

start

Start Apache

stop

Stop Apache

www.ApacheVirtualHost

Hierarchy [www.ApacheConfFragment](#) >> generic.ProcessedTemplate >> generic.AbstractDeployedArtifact >> generic.AbstractDeployed >> udm.BaseDeployed >> udm.BaseConfigurationItem

Interfaces udm.Deployed, udm.ConfigurationItem

Apache virtual host

Public Properties



container : `CI<udm.Container>`

The container on which this deployed runs.

host : `STRING`

The virtual host name. Use '*' to match all hosts

port : `STRING`

The virtual host port. Use '*' to match all ports

deployable : `CI<udm.Deployable>`

The deployable that this deployed is derived from.

documentRoot : `STRING`

The document root for web content using this virtual host. If left blank, a directory is created in the web server's document root

Hidden Properties

createOrder : *INTEGER = 50*

The order of the step in the step list for the create operation.

createVerb : *STRING = Create*

Create Verb

destroyOrder : *INTEGER = 40*

The order of the step in the step list for the destroy operation.

destroyVerb : *STRING = Destroy*

Destroy Verb

modifyOrder : *INTEGER = 50*

The order of the step in the step list for the modify operation.

modifyVerb : *STRING = Modify*

Modify Verb

noopOrder : *INTEGER = 50*

The order of the step in the step list for the noop operation.

noopVerb : *STRING = Modify*

Noop Verb

targetDirectory : *STRING = \${deployed.container.configurationFragmentDirectory}*

Target directory name

targetFile : *STRING = \${deployed.name}.conf*

Target file name

template : *STRING = www/apache/\${deployed.type}.conf.ftl*

Configuration fragment template file name.

createTargetDirectory : *BOOLEAN = false*

Create the target directory on the generic server if it does not exist.

restartRequired : *BOOLEAN = true*

Restart Required

restartRequiredForNoop : *BOOLEAN = false*

The generic container requires a restart for the NOOP action performed by this deployed.

targetDirectoryShared : *BOOLEAN = true*

Is the target directory shared by others on the generic server. When true, the target directory is not deleted during a destroy operation; only the artifacts copied to it.

www.ApacheVirtualHostSpec

Hierarchy generic.Resource >> udm.BaseDeployable >> udm.BaseConfigurationItem

Interfaces udm.Tagable, udm.Deployable, udm.ConfigurationItem

Specification for an Apache virtual host

Public Properties

documentRoot : `STRING`

The document root for web content using this virtual host. If left blank, a directory is created in the web server's document root

host : `STRING`

The virtual host name. Use '*' to match all hosts

port : `STRING`

The virtual host port. Use '*' to match all ports

tags : `SET_OF_STRING`

The tags to map deployables to containers.

www.PublishedWebContent

Hierarchy generic.CopiedArtifact >> generic.AbstractDeployedArtifact >> generic.AbstractDeployed >> udm.BaseDeployed >> udm.BaseConfigurationItem

Interfaces udm.Artifact, udm.Deployed, udm.ConfigurationItem, udm.DerivedArtifact

Web content on the webserver

Public Properties

 **container** : `CI<udm.Container>`

The container on which this deployed runs.

deployable : `CI<udm.Deployable>`

The deployable that this deployed is derived from.

placeholders : `MAP_STRING_STRING`

A Map containing all the placeholders mapped to their values. Special values are <ignore> or <empty>

virtualHost : `CI<www.ApacheVirtualHost>`

Virtual host which this web content maps to.

Hidden Properties

createOrder : INTEGER = 50

The order of the step in the step list for the create operation.

createVerb : STRING = *Create*

Create Verb

destroyOrder : INTEGER = 40

The order of the step in the step list for the destroy operation.

destroyVerb : STRING = *Destroy*

Destroy Verb

modifyOrder : INTEGER = 50

The order of the step in the step list for the modify operation.

modifyVerb : STRING = *Modify*

Modify Verb

noopOrder : INTEGER = 50

The order of the step in the step list for the noop operation.

noopVerb : STRING = *Modify*

Noop Verb

targetDirectory : STRING = *<#assign target=(deployed.virtualHost.documentRoot)!"/><#if target != ">\${target}<#else>\${deployed.container.defaultDocumentRoot}*

Target directory name

createTargetDirectory : BOOLEAN = *false*

Create the target directory on the generic server if it does not exist.

restartRequired : BOOLEAN = *true*

Restart Required

restartRequiredForNoop : BOOLEAN = *false*

The generic container requires a restart for the NOOP action performed by this deployed.

targetDirectoryShared : BOOLEAN = *true*

Is the target directory shared by others on the generic server. When true, the target directory is not deleted during a destroy operation; only the artifacts copied to it.

targetFile : STRING

Target File

www.WebContent

Hierarchy generic.Folder >> udm.BaseDeployableFolderArtifact >> udm.BaseDeployableArtifact >> udm.BaseDeployable >> udm.BaseConfigurationItem

Interfaces udm.Taggable, udm.Deployable, udm.SourceArtifact, udm.Artifact, udm.DeployableArtifact, udm.ConfigurationItem, udm.FolderArtifact

Folder containing web content (HTML pages, images, etc)

Public Properties

placeholders : SET_OF_STRING

Placeholders detected in this artifact

scanPlaceholders : BOOLEAN = *true*

Scan Placeholders

tags : SET_OF_STRING

The tags to map deployables to containers.

Hidden Properties

textFileNamesRegex : STRING = *.\+\. (cfg | conf | config | ini | properties | props | txt | asp | aspx | htm | html | jsf | jsp | xht | xhtml | sql | xml | xsd | xsl | xslt)*

Regular expression that matches file names of text files