

# Deployit File Plugin Manual

Version 3.6.1

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# Preface

This document describes the functionality provided by the File Plugin.

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

## Overview

In many cases, an application depends on external resources for its configuration. The application accesses these resources from a predefined location or using a predefined mechanism. In the simplest of forms, a resource can be described as a file, an archive or a folder (collection of files). The File Plugin enables the definition of such resources in a deployment package and subsequently managing them on a target host. The resources can contain placeholders that the plugin will replace when targeting to the specific host, thus allowing resources to be defined independent of their environment.

## Features

- Deploy, upgrade, and undeploy of a file based resource on a [Host](#).
  - [File](#)
  - [Folder](#)
  - [Archive](#)

## Requirements

This plugin requires:

- **Deployit:** version 3.5+

## Usage in Deployment Packages

Please refer to *Packaging Manual* for more details about the DAR packaging format.

Sample DAR MANIFEST.MF entries defining a file, folder and archive resource

```
Manifest-Version: 1.0
Deployit-Package-Format-Version: 1.3
CI-Application: FilePluginSample
CI-Version: 1.0

Name: sampleFile.txt
CI-Name: sampleFile
CI-Type: file.File

Name: sampleArchive.zip
CI-Name: sampleArchive
CI-Type: file.Archive

Name: sampleFolder
CI-Name: sampleFolder
CI-Type: file.Folder
```

## Using the deployables and deployed

### Deployable vs. Container Table

The following table describes which deployable / container combinations are possible. Note that the CIs can only be targeted to containers derived from [Host](#).

Deployables	Containers	Generated Deployed
file.File file.Archive	overthere.Host	file.DeployedFile file.DeployedArchive
file.Folder	overthere.Host	file.DeployedFolder

## Deployed Actions Table

The following table describes the effect a deployed has on its container.

Deployed	Create	Destroy	Modify
file.DeployedFile file.DeployedArchive	<ul style="list-style-type: none"> <li>Create target path on host, if needed</li> <li>Copy file to target path on host</li> </ul>	<ul style="list-style-type: none"> <li>Delete file from host</li> </ul>	<ul style="list-style-type: none"> <li>Delete old file from host</li> <li>Copy modified file to target path on host</li> </ul>
file.DeployedFolder	<ul style="list-style-type: none"> <li>Create target folder on host, if needed</li> <li>Copy folder content to target folder on host</li> </ul>	<ul style="list-style-type: none"> <li>Delete folder content from host</li> <li>If folder is not a shared folder, the folder itself is deleted from host</li> </ul>	<ul style="list-style-type: none"> <li>Perform actions as described by <i>Destroy</i> for old folder</li> <li>Perform actions as described by <i>Create</i> for modified folder</li> </ul>

## CI Reference

### Configuration Item Overview

#### Deployable Configuration Items

CI	Description
<a href="#">file.Archive</a>	An archive (zip, jar, tar, etc) artifact that can be packaged in a Deployment Package
<a href="#">file.File</a>	A single file artifact that can be packaged in a Deployment Package
<a href="#">file.Folder</a>	A folder artifact that can be packaged in a Deployment Package

#### Deployed Configuration Items

CI	Description
<a href="#">file.DeployedArchive</a>	The archive as deployed on the Host
<a href="#">file.DeployedFile</a>	The file as deployed on the Host
<a href="#">file.DeployedFolder</a>	The folder as deployed on the Host

#### Topology Configuration Items

CI	Description
<a href="#">overthere.CifsHost</a>	A machine that can be connected to using either WinRM or Telnet and can perform file manipulation via the CIFS protocol
<a href="#">overthere.LocalHost</a>	The machine on which the Deployit Server is running on
<a href="#">overthere.SshHost</a>	A machine that can be connected to using ssh

## Virtual Deployed Configuration Items

CI	Description
<a href="#">file.DeployedArtifactOnHost</a>	Abstract deployed that can target any DeployableArtifact to a Host

## Virtual Topology Configuration Items

CI	Description
<a href="#">overthere.Host</a>	A machine that runs middleware, on which scripts can be executed, etc
<a href="#">overthere.HostContainer</a>	

## Configuration Item Details

### file.Archive

**Hierarchy** `udm.BaseDeployableArchiveArtifact >> udm.BaseDeployableFileArtifact >> udm.BaseDeployableArtifact >> udm.BaseDeployable >> udm.BaseConfigurationItem`

**Interfaces** `udm.Taggable, udm.Deployable, udm.SourceArtifact, udm.ArchiveArtifact, udm.Artifact, udm.DeployableArtifact, udm.ConfigurationItem, udm.FileArtifact`

An archive (zip, jar, tar, etc) artifact that can be packaged in a Deployment Package

Public Properties
<p><b>placeholders</b> : <code>SET_OF_STRING</code></p> <p>Placeholders detected in this artifact</p> <p><b>scanPlaceholders</b> : <code>BOOLEAN = true</code></p> <p>Scan Placeholders</p> <p><b>tags</b> : <code>SET_OF_STRING</code></p> <p>The tags to map deployables to containers.</p> <p><b>targetPath</b> : <code>STRING</code></p> <p>Path to which artifact must be copied to when being deployed.</p>

Hidden Properties
<p><b>textFileNamesRegex</b> : <code>STRING = .+\. (cfg   conf   config   ini   properties   props   txt   asp   aspx   htm   html   jsf   jsp   xht   xhtml   sql   xml   xsd   xsl   xslt)</code></p> <p>Regular expression that matches file names of text files</p>

### file.DeployedArchive

**Hierarchy** `file.DeployedArtifactOnHost >> udm.BaseDeployedArtifact >> udm.BaseDeployed >> udm.BaseConfigurationItem`

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

The archive as deployed on the Host.

## Public Properties



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

The container on which this deployed runs.

**targetPath** : `STRING`

Path to which artifact must be copied to on the host.

**createTargetPath** : `BOOLEAN = false`

Create the targetPath on the host if it does not exist.

**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>`

**targetFileName** : `STRING`

Name of the artifact on the host.

**targetPathShared** : `BOOLEAN = true`

Is the targetPath shared by others on the host. When true, the targetPath is not deleted during undeployment; only the artifacts copied to it.

## file.DeployedArtifactOnHost

**Hierarchy** udm.BaseDeployedArtifact >> udm.BaseDeployed >> udm.BaseConfigurationItem

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

Abstract deployed that can target any DeployableArtifact to a Host.

## Public Properties



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

The container on which this deployed runs.

**targetPath** : `STRING`

Path to which artifact must be copied to on the host.

**createTargetPath** : `BOOLEAN = false`

Create the targetPath on the host if it does not exist.

**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>`

**targetFileName** : `STRING`

Name of the artifact on the host.

**targetPathShared** : `BOOLEAN = true`


Is the targetPath shared by others on the host. When true, the targetPath is not deleted during undeployment; only the artifacts copied to it.

## file.DeployedFile

**Hierarchy** [file.DeployedArtifactOnHost](#) >> [udm.BaseDeployedArtifact](#) >> [udm.BaseDeployed](#) >> [udm.BaseConfigurationItem](#)

**Interfaces** [udm.Artifact](#), [udm.Deployed](#), [udm.ConfigurationItem](#), [udm.DerivedArtifact](#)

The file as deployed on the Host.

Public Properties	
 <b>container</b> : <a href="#">CI&lt;udm.Container&gt;</a>	
The container on which this deployed runs.	
<b>targetPath</b> : <a href="#">STRING</a>	
Path to which artifact must be copied to on the host.	
<b>createTargetPath</b> : <a href="#">BOOLEAN</a> = <i>false</i>	
Create the targetPath on the host if it does not exist.	
<b>deployable</b> : <a href="#">CI&lt;udm.Deployable&gt;</a>	
The deployable that this deployed is derived from.	
<b>placeholders</b> : <a href="#">MAP_STRING_STRING</a>	
A Map containing all the placeholders mapped to their values. Special values are <ignore> or <empty>	
<b>targetFileName</b> : <a href="#">STRING</a>	
Name of the artifact on the host.	
<b>targetPathShared</b> : <a href="#">BOOLEAN</a> = <i>true</i>	
Is the targetPath shared by others on the host. When true, the targetPath is not deleted during undeployment; only the artifacts copied to it.	

## file.DeployedFolder

**Hierarchy** [file.DeployedArtifactOnHost](#) >> [udm.BaseDeployedArtifact](#) >> [udm.BaseDeployed](#) >> [udm.BaseConfigurationItem](#)

**Interfaces** [udm.Artifact](#), [udm.Deployed](#), [udm.ConfigurationItem](#), [udm.DerivedArtifact](#)

The folder as deployed on the Host.

## Public Properties

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

The container on which this deployed runs.

**targetPath** : `STRING`

Path to which artifact must be copied to on the host.

**createTargetPath** : `BOOLEAN = false`

Create the targetPath on the host if it does not exist.

**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>

**targetPathShared** : `BOOLEAN = true`

Is the targetPath shared by others on the host. When true, the targetPath is not deleted during undeployment; only the artifacts copied to it.

## Hidden Properties

**targetFileName** : `STRING`

Not applicable for this type.

## file.File

**Hierarchy** `udm.BaseDeployableFileArtifact >> udm.BaseDeployableArtifact >> udm.BaseDeployable >> udm.BaseConfigurationItem`

**Interfaces** `udm.Taggable, udm.Deployable, udm.SourceArtifact, udm.Artifact, udm.DeployableArtifact, udm.ConfigurationItem, udm.FileArtifact`

A single file artifact that can be packaged in a Deployment Package

## 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.

**targetPath** : `STRING`

Path to which artifact must be copied to when being deployed.

## 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



## file.Folder

**Hierarchy** `udm.BaseDeployableFolderArtifact >> udm.BaseDeployableArtifact >> udm.BaseDeployable >> udm.BaseConfigurationItem`

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

A folder artifact that can be packaged in a Deployment Package

### 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.

**targetPath** : `STRING`

Path to which artifact must be copied to when being deployed.

### 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

## overthere.CifsHost

**Hierarchy** `overthere.Host >> udm.BaseContainer >> udm.BaseConfigurationItem`

**Interfaces** `udm.Taggable, udm.ConfigurationItem, udm.Container, overthere.HostContainer`

A machine that can be connected to using either WinRM or Telnet and can perform file manipulation via the CIFS protocol.

## Public Properties

**address** : *STRING*

Address of the host

**connectionType** : *ENUM [TELNET, WINRM\_HTTP, WINRM\_HTTPS] = TELNET*

Connection Type

**os** : *ENUM [WINDOWS, UNIX]*

Operating system

**password** : *STRING*

Password to use for authentication

**username** : *STRING*

Username to connect with

**cifsPort** : *INTEGER = 445*

Port on which the CIFS server runs

**port** : *INTEGER*

Port on which the Telnet or WinRM server runs

**tags** : *SET\_OF\_STRING*

The tags to map deployables to containers.

**temporaryDirectoryPath** : *STRING*

Directory into which temporary files are stored. Will be cleaned up when the connection is closed.

## Hidden Properties

**connectionTimeoutMillis** : *INTEGER = 1200000*

Connection Timeout Millis

**protocol** : *STRING = cifs*

Protocol

**tmpFileCreationRetries** : *INTEGER = 1000*

Tmp File Creation Retries

**winrmContext** : *STRING = /wsman*

Winrm Context

**winrmEnvelopSize** : *INTEGER = 153600*

Winrm Envelop Size

**winrmLocale** : *STRING = en-US*

Winrm Locale

**winrmTimeout** : *STRING = PT60.000S*

Winrm Timeout

**tmpDeleteOnDisconnect** : *BOOLEAN = true*

Whether to delete the temporary connection directory when the connection is closed

## overthere.Host

**Hierarchy** udm.BaseContainer >> udm.BaseConfigurationItem

**Interfaces** udm.Taggable, udm.ConfigurationItem, udm.Container, [overthere.HostContainer](#)

A machine that runs middleware, on which scripts can be executed, etc.

### Public Properties

**os** : ENUM [WINDOWS, UNIX]

Operating system

**tags** : SET\_OF\_STRING

The tags to map deployables to containers.

**temporaryDirectoryPath** : STRING

Directory into which temporary files are stored. Will be cleaned up when the connection is closed.

### Hidden Properties

**connectionTimeoutMillis** : INTEGER = 1200000

Connection Timeout Millis

**protocol** : STRING

Protocol to use when connecting to this host

**tmpFileCreationRetries** : INTEGER = 1000

Tmp File Creation Retries

**tmpDeleteOnDisconnect** : BOOLEAN = true

Whether to delete the temporary connection directory when the connection is closed

## overthere.HostContainer

null

## overthere.LocalHost

**Hierarchy** [overthere.Host](#) >> udm.BaseContainer >> udm.BaseConfigurationItem

**Interfaces** udm.Taggable, udm.ConfigurationItem, udm.Container, [overthere.HostContainer](#)

The machine on which the Deployit Server is running on.

### Public Properties

**os** : ENUM [WINDOWS, UNIX]

Operating system

**tags** : SET\_OF\_STRING

The tags to map deployables to containers.

**temporaryDirectoryPath** : STRING

Directory into which temporary files are stored. Will be cleaned up when the connection is closed.

## Hidden Properties

**connectionTimeoutMillis** : **INTEGER** = *1200000*

Connection Timeout Millis

**protocol** : **STRING** = *local*

Protocol

**tmpFileCreationRetries** : **INTEGER** = *1000*

Tmp File Creation Retries

**tmpDeleteOnDisconnect** : **BOOLEAN** = *true*

Whether to delete the temporary connection directory when the connection is closed

## overthere.SshHost

**Hierarchy** [overthere.Host](#) >> [udm.BaseContainer](#) >> [udm.BaseConfigurationItem](#)

**Interfaces** [udm.Taggable](#), [udm.ConfigurationItem](#), [udm.Container](#), [overthere.HostContainer](#)

A machine that can be connected to using ssh.

## Public Properties

**address** : **STRING**

Address of the host

**connectionType** : **ENUM** [**SFTP**, **SFTP\_CYGWIN**, **SFTP\_WINSSHD**, **SCP**, **SUDO**, **INTERACTIVE\_SUDO**] = *SFTP*

Type of SSH connection to create

**os** : **ENUM** [**WINDOWS**, **UNIX**]

Operating system

**port** : **INTEGER** = *22*

Port on which the SSH server runs

**username** : **STRING**

Username to connect with

**passphrase** : **STRING**

Optional passphrase for the private key in the private key file

**password** : **STRING**

Password to use for authentication

**privateKeyFile** : **STRING**

Private key file to use for authentication

**sudoUsername** : **STRING**

Username to sudo to when accessing files or executing commands

**tags** : **SET\_OF\_STRING**

The tags to map deployables to containers.

**temporaryDirectoryPath** : **STRING**

Directory into which temporary files are stored. Will be cleaned up when the connection is closed.

## Hidden Properties

**connectionTimeoutMillis** : **INTEGER** = *1200000*

Connection Timeout Millis

**interactiveKeyboardAuthRegex** : **STRING** = *.\*Password:[ ]?*

Regular expression to look for in keyboard-interactive authentication before sending the password

**protocol** : **STRING** = *ssh*

Protocol

**sudoCommandPrefix** : **STRING** = *sudo -u {0}*

Sudo command to prefix to the original command. The placeholder {0} is replaced with the sudoUsername

**sudoPasswordPromptRegex** : **STRING** = *.\*[Pp]assword.\*:*

Regular expression to look for in interactive sudo before sending the password

**tmpFileCreationRetries** : **INTEGER** = *1000*

Tmp File Creation Retries

**allocateDefaultPty** : **BOOLEAN** = *true*

If true, a default pty is allocated when executing a command. All sudo implementations require it for interactive sudo, some even require it for normal sudo. Some SSH server implementations (notably the one on AIX 5.3) crash when it is allocated.

**sudoQuoteCommand** : **BOOLEAN** = *false*

If true, the original command is quoted when it is prefixed with sudoCommandPrefix

**tmpDeleteOnDisconnect** : **BOOLEAN** = *true*

Whether to delete the temporary connection directory when the connection is closed