

Deployit File Plugin Manual

Version 3.7.5

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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"> • Create target path on host, if needed • Copy file to 	<ul style="list-style-type: none"> • Delete file from host 	<ul style="list-style-type: none"> • Delete old file from host • Copy modified file to target path on host

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

CI Reference

Configuration Item Overview

Deployable Configuration Items

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

Deployed Configuration Items

CI	Description
file.DeployedArchive	The archive as deployed on the Host
file.DeployedFile	The file as deployed on the Host
file.DeployedFolder	The folder as deployed on the Host

Topology Configuration Items

CI	Description
overthere.CifsHost	Machine that can be connected to using either WinRM or Telnet and can perform file manipulation via the CIFS protocol
overthere.LocalHost	Machine on which the Deployit Server is running
overthere.SshHost	Machine that can be connected to using SSH
overthere.SshJumpstation	Machine that can be used to create a tunneled connection to a destination host

Virtual Deployed Configuration Items

CI	Description
file.DeployedArtifactOnHost	Abstract deployed that can target any DeployableArtifact to a Host

Virtual Topology Configuration Items

CI	Description
overthere.Host	Machine that runs middleware, on which scripts can be executed, etc
overthere.Jumpstation	Base class for jumpstations

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
createTargetPath : STRING
Create the targetPath on the host if it does not exist.
excludeFileNamesRegex : STRING
Regular expression that matches file names that must be excluded from scanning
placeholders : SET_OF_STRING

Placeholders detected in this artifact

scanPlaceholders : **BOOLEAN** = **true**

Scan Placeholders

tags : **SET_OF_STRING**

If set, this deployable will only be mapped automatically to containers with the same tag.

targetFileName : **STRING**

Name of the artifact on the host.

targetPath : **STRING**

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

targetPathShared : **STRING**

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

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.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



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.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	
createTargetPath :	STRING
Create the targetPath on the host if it does not exist.	
excludeFileNamesRegex :	STRING
Regular expression that matches file names that must be excluded from scanning	
placeholders :	SET_OF_STRING
Placeholders detected in this artifact	
scanPlaceholders :	BOOLEAN = true
Scan Placeholders	
tags :	SET_OF_STRING
If set, this deployable will only be mapped automatically to containers with the same tag.	
targetFileName :	STRING
Name of the artifact on the host.	
targetPath :	STRING
Path to which artifact must be copied to when being deployed.	
targetPathShared :	STRING
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	
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.Tagable, 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	
createTargetPath :	STRING
Create the targetPath on the host if it does not exist.	
excludeFileNamesRegex :	STRING
Regular expression that matches file names that must be excluded from scanning	
placeholders :	SET_OF_STRING
Placeholders detected in this artifact	
scanPlaceholders :	BOOLEAN = true
Scan Placeholders	
tags :	SET_OF_STRING
If set, this deployable will only be mapped automatically to containers with the same tag.	
targetFileName :	STRING
Name of the artifact on the host.	
targetPath :	STRING
Path to which artifact must be copied to when being deployed.	
targetPathShared :	STRING
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	
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.Tagable, udm.ConfigurationItem, udm.Container, [overthere.HostContainer](#)

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, WINRM_HTTP, WINRM_HTTPS] = WINRM
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	
deploymentGroup	: INTEGER
If the group-orchestrator is enabled, all containers with the same deployment group number will be deployed to at the same time. The groups are ordered by this number.	
jumpstation	: CI<overthere.Jumpstation>
Jumpstation that should be used to reach this host	
pathShareMappings	: MAP_STRING_STRING
Mapping from Windows paths to Windows share names, e.g. C:\IBMWebSphere -> WebSphereShare	
port	: INTEGER
Port on which the Telnet or WinRM server runs	
tags	: SET_OF_STRING
If set, only deployables with the same tag will be automatically mapped to this container.	
temporaryDirectoryPath	: STRING
Directory into which temporary files are stored. Will be cleaned up when the connection is closed.	
winrmEnableHttps	: BOOLEAN = false
Enable SSL communication to the WinRM server	

Hidden Properties	
connectionTimeoutMillis	: INTEGER = 120000
Number of milliseconds Overthere waits for a connection to a remote host to be established	
protocol	: STRING = cifs
Protocol	
tmpFileCreationRetries	: INTEGER = 1000
Number of times Overthere attempts to create a temporary file with a unique name	
winrmContext	: STRING = /wsman
Context used by the WinRM server	
winrmEnvelopSize	: INTEGER = 153600
Envelop size for WinRM messages	
winrmHttpsCertificateTrustStrategy	: ENUM [STRICT, SELF_SIGNED, ALLOW_ALL] = STRICT
HTTPS certificate trust strategy for WinRM over HTTPS	
winrmHttpsHostnameVerificationStrategy	: ENUM [STRICT, BROWSER_COMPATIBLE, ALLOW_ALL] = STRICT
HTTPS host name verification strategy for WinRM over HTTPS	
winrmLocale	: STRING = en-US
Locale to use for WinRM messages	
winrmTimeout	: STRING = PT60.000S
Timeout to use for WinRM messages in XML schema duration format	
tmpDeleteOnDisconnect	: BOOLEAN = true
Whether to delete the temporary connection directory when the connection is closed	
winrmDebugKerberosAuth	: BOOLEAN = false
If true, enabled Kerberos debug messages	

Control Tasks	
checkConnection	

Check connection

overthere.Host

Hierarchy udm.BaseContainer >> udm.BaseConfigurationItem
Interfaces udm.Taggable, udm.ConfigurationItem, udm.Container,
[overthere.HostContainer](#)

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

Public Properties

os : ENUM [WINDOWS, UNIX]

Operating system

deploymentGroup : INTEGER

If the group-orchestrator is enabled, all containers with the same deployment group number will be deployed to at the same time. The groups are ordered by this number.

jumpstation : CI<[overthere.Jumpstation](#)>

Jumpstation that should be used to reach this host

tags : SET_OF_STRING

If set, only deployables with the same tag will be automatically mapped to this container.

temporaryDirectoryPath : STRING

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

Hidden Properties

connectionTimeoutMillis : INTEGER = 1200000

Number of milliseconds Overthere waits for a connection to a remote host to be established

protocol : STRING

Protocol to use when connecting to this host

tmpFileCreationRetries : INTEGER = 1000

Number of times Overthere attempts to create a temporary file with a unique name

tmpDeleteOnDisconnect : BOOLEAN = true

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

Control Tasks

checkConnection

Check connection

overthere.Jumpstation

Hierarchy [overthere.Host](#) >> udm.BaseContainer >> udm.BaseConfigurationItem
Interfaces udm.Taggable, udm.ConfigurationItem, udm.Container,
[overthere.HostContainer](#)

Base class for jumpstations

Public Properties

deploymentGroup : INTEGER

If the group-orchestrator is enabled, all containers with the same deployment group number will be deployed to at the same time. The groups are ordered by this number.

jumpstation : CI<[overthere.Jumpstation](#)>

Jumpstation that should be used to reach this host

tags : SET_OF_STRING

If set, only deployables with the same tag will be automatically mapped to this container.

Hidden Properties

connectionTimeoutMillis : INTEGER = 1200000

Number of milliseconds Overthere waits for a connection to a remote host to be established

os : ENUM [WINDOWS, UNIX] = UNIX

Os

protocol : STRING

Protocol to use when connecting to this host

tmpFileCreationRetries : INTEGER = 1000

Number of times Overthere attempts to create a temporary file with a unique name

temporaryDirectoryPath : STRING

The default platform value (/tmp) suffices as no temporary files will be placed on the jumpstation

tmpDeleteOnDisconnect : **BOOLEAN** = true

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

Control Tasks

checkConnection

Check connection

overthere.LocalHost

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

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

Machine on which the Deployit Server is running

Public Properties

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

Operating system

deploymentGroup : **INTEGER**

If the group-orchestrator is enabled, all containers with the same deployment group number will be deployed to at the same time. The groups are ordered by this number.

jumpstation : **CI**<[overthere.Jumpstation](#)>

Jumpstation that should be used to reach this host

tags : **SET_OF_STRING**

If set, only deployables with the same tag will be automatically mapped to this container.

temporaryDirectoryPath : **STRING**

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

Hidden Properties

connectionTimeoutMillis : **INTEGER** = 1200000

Number of milliseconds Overthere waits for a connection to a remote host to be established

protocol : **STRING** = local

Protocol

tmpFileCreationRetries : **INTEGER** = 1000

Number of times Overthere attempts to create a temporary file with a unique name

tmpDeleteOnDisconnect : **BOOLEAN** = true

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

Control Tasks

checkConnection

Check connection

overthere.SshHost

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

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

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, TUNNEL] = 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

deploymentGroup : **INTEGER**

If the group-orchestrator is enabled, all containers with the same deployment group number will be deployed to at the same time. The groups are ordered by this number.
jumpstation : CI<overthere.Jumpstation>
Jumpstation that should be used to reach this host
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
If set, only deployables with the same tag will be automatically mapped to this container.
temporaryDirectoryPath : STRING
Directory into which temporary files are stored. Will be cleaned up when the connection is closed.

Hidden Properties
connectionTimeoutMillis : INTEGER = 1200000
Number of milliseconds Overthere waits for a connection to a remote host to be established
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
Number of times Overthere attempts to create a temporary file with a unique name
allocateDefaultPty : BOOLEAN = false
If true, a default PTY (dummy:80:24:0:0) is allocated when executing a command
allocatePty : STRING
Specification for the PTY to be allocated when executing a command. The format is TERM:COLS:ROWS:WIDTH:HEIGHT, e.g. xterm:80:24:0:0
sudoOverrideUmask : BOOLEAN = true
If true, permissions are explicitly changed with chmod -R go+rX after uploading a file or directory
sudoPreserveAttributesOnCopyFromTempFile : BOOLEAN = true
If true, files are copied from the connection temporary directory using the -p flag to the cp command
sudoPreserveAttributesOnCopyToTempFile : BOOLEAN = true
If true, files are copied to the connection temporary directory using the -p flag to the cp command
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

Control Tasks
checkConnection
Check connection

overthere.SshJumpstation

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

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

Machine that can be used to create a tunneled connection to a destination host

Public Properties**address** : **STRING**

Address of the host

port : **INTEGER** = 22

Port on which the SSH server runs

username : **STRING**

Username to connect with

deploymentGroup : **INTEGER**

If the group-orchestrator is enabled, all containers with the same deployment group number will be deployed to at the same time. The groups are ordered by this number.

jumpstation : **CI<overthere.Jumpstation>**

Jumpstation that should be used to reach this host

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

tags : **SET_OF_STRING**

If set, only deployables with the same tag will be automatically mapped to this container.

Hidden Properties**connectionTimeoutMillis** : **INTEGER** = 1200000

Number of milliseconds Overthere waits for a connection to a remote host to be established

connectionType : **ENUM** [SFTP, SFTP_CYGWIN, SFTP_WINSSHD, SCP, SUDO, INTERACTIVE_SUDO, TUNNEL] = TUNNEL

Connection Type

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

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

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

Os

portAllocationRangeStart : **INTEGER** = 1025

Port from where to start looking for freely available ports to use as the local part of an SSH port forward

protocol : **STRING** = ssh

Protocol

tmpFileCreationRetries : **INTEGER** = 1000

Number of times Overthere attempts to create a temporary file with a unique name

temporaryDirectoryPath : **STRING**

The default platform value (/tmp) suffices as no temporary files will be placed on the jumpstation

tmpDeleteOnDisconnect : **BOOLEAN** = true

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

Control Tasks**checkConnection**

Check connection