

# Deployit Remoting Plugin Manual

Version 3.9.2

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## Preface

This document describes the functionality provided by the Remoting plugin.

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

## Overview

The Remoting plugin is a Deployit plugin that allows Deployit to manipulate files and execute commands on remote hosts. It does so by using the **Overthere** framework.

Overthere is a Java library to manipulate files and execute processes on remote hosts, i.e. do stuff "over there". See the [Overthere repository](#) for more information.

## Features

- Define remote host CIs to use as deployment targets.
- Define jump stations to connect to remote hosts.

## Requirements

- **Deployit requirements**
  - **Deployit:** version 3.5+
  - **Other Deployit Plugins:** None

## Examples

### Connecting through a tunnel

When Deployit cannot reach a Host directly, but that Host can only be reached through an SSH tunnel, you need to create a so-called Jumpstation Host. This can be set up as follows:

1. Two Infrastructure items need to be created, ie. the target `overthere.Host` and the `overthere.SshJumpstation` that will actually be used to connect to the target machine.
2. Once these are created, they can be hooked up to eachother, by pointing the `jumpstation` property of the target machine to the created `overthere.Jumpstation`.

Once Deployit starts a deployment to the target host, it will see that it needs to connect through the jumpstation, and will first open a connection to that machine, and then setup a dynamic ssh tunnel to the target machine.

### Exposing more Overthere properties in Deployit

Most of the Overthere connection properties defined in the Overthere documentation are available as regular properties or hidden properties on the `overthere.SshHost` and `overthere.CifsHost` types. If you need access to any additional properties, you can create a type-modification in the `ext/synthetic.xml` file like this:

```
<type-modification type="overthere.SshHost">
  <property name="listFilesCommand" hidden="true" default="/bin/ls -al {0}" />
  <property name="getFileInfoCommand" hidden="true" default="/bin/ls -ld {0}" />
</type-modification>
```

## CI Reference

### Configuration Item Overview

### Containers

CI	Description
<a href="#">overthere.CifsHost</a>	Machine that can be connected to using either WinRM or Telnet and can perform file manipulation via the CIFS protocol
<a href="#">overthere.Host</a>	Machine that runs middleware, on which scripts can be executed, etc
<a href="#">overthere.Jumpstation</a>	Base class for jumpstations
<a href="#">overthere.LocalHost</a>	Machine on which the Deployit Server is running
<a href="#">overthere.RemoteHost</a>	Description unavailable
<a href="#">overthere.SshHost</a>	Machine that can be connected to using SSH
<a href="#">overthere.SshJumpstation</a>	Machine that can be used to create a tunneled connection to a destination host

## Other Configuration Items

CI	Description
<a href="#">overthere.CifsHost</a>	Machine that can be connected to using either WinRM or Telnet and can perform file manipulation via the CIFS protocol
<a href="#">overthere.Host</a>	Machine that runs middleware, on which scripts can be executed, etc
<a href="#">overthere.Jumpstation</a>	Base class for jumpstations
<a href="#">overthere.LocalHost</a>	Machine on which the Deployit Server is running
<a href="#">overthere.RemoteHost</a>	Description unavailable
<a href="#">overthere.SshHost</a>	Machine that can be connected to using SSH
<a href="#">overthere.SshJumpstation</a>	Machine that can be used to create a tunneled connection to a destination host

## Configuration Item Details

### overthere.CifsHost

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

**Interfaces** udm.Taggable, 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

Hidden Properties			
* <b>connectionTimeoutMillis</b> : <b>INTEGER</b> = 1200000			Number of milliseconds Overthere waits for a connection to a remote host to be established
* <b>protocol</b> : <b>STRING</b> = cifs			Protocol to use when connecting to this host
* <b>tmpFileCreationRetries</b> : <b>INTEGER</b> = 1000			Number of times Overthere attempts to create a temporary file with a unique name
* <b>winrmContext</b> : <b>STRING</b> = /wsman			Context used by the WinRM server
* <b>winrmEnvelopSize</b> : <b>INTEGER</b> = 153600			Envelop size for WinRM messages
* <b>winrmHttpsCertificateTrustStrategy</b> : <b>ENUM</b> [STRICT, SELF_SIGNED, ALLOW_ALL] = STRICT			HTTPS certificate trust strategy for WinRM over HTTPS
* <b>winrmHttpsHostnameVerificationStrategy</b> : <b>ENUM</b> [STRICT, BROWSER_COMPATIBLE, ALLOW_ALL] = STRICT			HTTPS host name verification strategy for WinRM over HTTPS
* <b>winrmLocale</b> : <b>STRING</b> = en-US			Locale to use for WinRM messages
* <b>winrmTimeout</b> : <b>STRING</b> = PT60.000S			Timeout to use for WinRM messages in XML schema duration format
<b>tmpDeleteOnDisconnect</b> : <b>BOOLEAN</b> = true			Whether to delete the temporary connection directory when the connection is closed
<b>winrmKerberosAddPortToSpn</b> : <b>BOOLEAN</b> = false			Add the port number (e.g. 5985) to the service principal name (SPN) for which a Kerberos ticket is requested
<b>winrmKerberosDebug</b> : <b>BOOLEAN</b> = false			Enable Kerberos debug messages
<b>winrmKerberosUseHttpSpn</b> : <b>BOOLEAN</b> = false			Use the HTTP protocol in the service principal name (SPN) for which a Kerberos ticket is requested, instead of the default WSMAN protocol
Control task	Parameter CI	Attributes	Description
<b>checkConnection</b>			Checks whether Deployit can transfer files to and execute commands on this host.

## overthere.Host

### Virtual Type

**Type 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			
* <b>os</b> : <b>ENUM</b> [WINDOWS, UNIX]			Operating system the host runs
<b>tags</b> : <b>SET_OF_STRING</b>			If set, only deployables with the same tag will be automatically mapped to this container.
<b>temporaryDirectoryPath</b> : <b>STRING</b>			Directory into which temporary files are stored. Will be cleaned up when the connection is closed.
Hidden Properties			
* <b>protocol</b> : <b>STRING</b>			Protocol to use when connecting to this host
* <b>tmpFileCreationRetries</b> : <b>INTEGER</b> = 1000			Number of times Overthere attempts to create a temporary file with a unique name
<b>tmpDeleteOnDisconnect</b> : <b>BOOLEAN</b> = true			Whether to delete the temporary connection directory when the connection is closed
Control task	Parameter CI	Attributes	Description
<b>checkConnection</b>			Checks whether Deployit can transfer files to and execute commands on this host.

**overthere.Jumpstation****Virtual Type**

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

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

Base class for jumpstations

Public Properties			
<b>jumpstation</b>	: <a href="#">CI</a> < <a href="#">overthere.Jumpstation</a> >		Jumpstation that should be used to reach this host
<b>tags</b>	: <a href="#">SET_OF_STRING</a>		If set, only deployables with the same tag will be automatically mapped to this container.
Hidden Properties			
* <b>connectionTimeoutMillis</b>	: <a href="#">INTEGER</a> = 1200000		Number of milliseconds Overthere waits for a connection to a remote host to be established
* <b>os</b>	: <a href="#">ENUM</a> [ <a href="#">WINDOWS</a> , <a href="#">UNIX</a> ] = <a href="#">UNIX</a>		Operating system the host runs
* <b>protocol</b>	: <a href="#">STRING</a>		Protocol to use when connecting to this host
* <b>tmpFileCreationRetries</b>	: <a href="#">INTEGER</a> = 1000		Number of times Overthere attempts to create a temporary file with a unique name
<b>temporaryDirectoryPath</b>	: <a href="#">STRING</a>		The default platform value (/tmp) suffices as no temporary files will be placed on the jumpstation
<b>tmpDeleteOnDisconnect</b>	: <a href="#">BOOLEAN</a> = true		Whether to delete the temporary connection directory when the connection is closed
Control task	Parameter CI	Attributes	Description
<b>checkConnection</b>			Checks whether Deployit can transfer files to and execute commands on this host.

**overthere.LocalHost**

**Type 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			
* <b>os</b>	: <a href="#">ENUM</a> [ <a href="#">WINDOWS</a> , <a href="#">UNIX</a> ]		Operating system the host runs
<b>tags</b>	: <a href="#">SET_OF_STRING</a>		If set, only deployables with the same tag will be automatically mapped to this container.
<b>temporaryDirectoryPath</b>	: <a href="#">STRING</a>		Directory into which temporary files are stored. Will be cleaned up when the connection is closed.
Hidden Properties			
* <b>protocol</b>	: <a href="#">STRING</a> = local		Protocol to use when connecting to this host
* <b>tmpFileCreationRetries</b>	: <a href="#">INTEGER</a> = 1000		Number of times Overthere attempts to create a temporary file with a unique name
<b>tmpDeleteOnDisconnect</b>	: <a href="#">BOOLEAN</a> = true		Whether to delete the temporary connection directory when the connection is closed
Control task	Parameter CI	Attributes	Description
<b>checkConnection</b>			Checks whether Deployit can transfer files to and execute commands on this host.

**overthere.RemoteHost**

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

Description unavailable

Public Properties			
<b>* os</b>	: <b>ENUM</b> [WINDOWS, UNIX]		Operating system the host runs
<b>jumpstation</b>	: <b>CI</b> < <a href="#">overthere.Jumpstation</a> >		Jumpstation that should be used to reach this host
<b>tags</b>	: <b>SET_OF_STRING</b>		If set, only deployables with the same tag will be automatically mapped to this container.
<b>temporaryDirectoryPath</b>	: <b>STRING</b>		Directory into which temporary files are stored. Will be cleaned up when the connection is closed.
Hidden Properties			
<b>* connectionTimeoutMillis</b>	: <b>INTEGER</b> = 1200000		Number of milliseconds Overthere waits for a connection to a remote host to be established
<b>* protocol</b>	: <b>STRING</b>		Protocol to use when connecting to this host
<b>* tmpFileCreationRetries</b>	: <b>INTEGER</b> = 1000		Number of times Overthere attempts to create a temporary file with a unique name
<b>tmpDeleteOnDisconnect</b>	: <b>BOOLEAN</b> = true		Whether to delete the temporary connection directory when the connection is closed
Control task	Parameter CI	Attributes	Description
<b>checkConnection</b>			Checks whether Deployit can transfer files to and execute commands on this host.

**overthere.SshHost****Type Hierarchy** [overthere.RemoteHost](#) >> [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	
<b>* address</b> : <b>STRING</b>	Address of the host
<b>* connectionType</b> : <b>ENUM</b> [SFTP, SFTP_CYGWIN, SFTP_WINSSHD, SCP, SUDO, INTERACTIVE_SUDO, TUNNEL] = SFTP	Type of SSH connection to create
<b>* os</b> : <b>ENUM</b> [WINDOWS, UNIX]	Operating system the host runs
<b>* port</b> : <b>INTEGER</b> = 22	Port on which the SSH server runs
<b>* username</b> : <b>STRING</b>	Username to connect with
<b>jumpstation</b> : <b>CI&lt;overthere.Jumpstation &gt;</b>	Jumpstation that should be used to reach this host
<b>passphrase</b> : <b>STRING</b>	Optional passphrase for the private key in the private key file
<b>password</b> : <b>STRING</b>	Password to use for authentication
<b>privateKeyFile</b> : <b>STRING</b>	Private key file to use for authentication
<b>sudoUsername</b> : <b>STRING</b>	Username to sudo to when accessing files or executing commands
<b>tags</b> : <b>SET_OF_STRING</b>	If set, only deployables with the same tag will be automatically mapped to this container.
<b>temporaryDirectoryPath</b> : <b>STRING</b>	Directory into which temporary files are stored. Will be cleaned up when the connection is closed.
Hidden Properties	
<b>* connectionTimeoutMillis</b> : <b>INTEGER</b> = 1200000	Number of milliseconds Overthere waits for a connection to a remote host to be established
<b>* interactiveKeyboardAuthRegex</b> : <b>STRING</b> = <code>.*Password:[ ]?</code>	Regular expression to look for in keyboard-interactive authentication before sending the password
<b>* protocol</b> : <b>STRING</b> = <code>ssh</code>	Protocol to use when connecting to this host
<b>* sudoCommandPrefix</b> : <b>STRING</b> = <code>sudo -u {0}</code>	Sudo command to prefix to the original command. The placeholder {0} is replaced with the sudoUsername
<b>* sudoPasswordPromptRegex</b> : <b>STRING</b> = <code>.*[Pp]assword.*:</code>	Regular expression to look for in interactive sudo before sending the password
<b>* tmpFileCreationRetries</b> : <b>INTEGER</b> = 1000	Number of times Overthere attempts to create a temporary file with a unique name
<b>allocateDefaultPty</b> : <b>BOOLEAN</b> = <code>false</code>	If true, a default PTY (dummy:80:24:0:0) is allocated when executing a command
<b>allocatePty</b> : <b>STRING</b>	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
<b>sudoOverrideUmask</b> : <b>BOOLEAN</b> = <code>true</code>	If true, permissions are explicitly changed with <code>chmod -R go+rX</code> after uploading a file or directory
<b>sudoPreserveAttributesOnCopyFromTempFile</b> : <b>BOOLEAN</b> = <code>true</code>	If true, files are copied from the connection temporary directory using the <code>-p</code> flag to the <code>cp</code> command
<b>sudoPreserveAttributesOnCopyToTempFile</b> : <b>BOOLEAN</b> = <code>true</code>	If true, files are copied to the connection temporary directory using the <code>-p</code> flag to the <code>cp</code> command
<b>sudoQuoteCommand</b> : <b>BOOLEAN</b> = <code>false</code>	If true, the original command is quoted when it is prefixed with <code>sudoCommandPrefix</code>
<b>tmpDeleteOnDisconnect</b> : <b>BOOLEAN</b> = <code>true</code>	Whether to delete the temporary connection directory when the connection is closed



Control task	Parameter CI	Attributes	Description
<b>checkConnection</b>			Checks whether Deployit can transfer files to and execute commands on this host.

## overthere.SshJumpstation

**Type Hierarchy** [overthere.Jumpstation](#) >> [overthere.RemoteHost](#) >> [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			
<b>* address</b> :	<a href="#">STRING</a>		Address of the host
<b>* port</b> :	<a href="#">INTEGER</a> = 22		Port on which the SSH server runs
<b>* username</b> :	<a href="#">STRING</a>		Username to connect with
<b>jumpstation</b> :	<a href="#">CI</a> <a href="#">&lt;overthere.Jumpstation &gt;</a>		Jumpstation that should be used to reach this host
<b>passphrase</b> :	<a href="#">STRING</a>		Optional passphrase for the private key in the private key file
<b>password</b> :	<a href="#">STRING</a>		Password to use for authentication
<b>privateKeyFile</b> :	<a href="#">STRING</a>		Private key file to use for authentication
<b>tags</b> :	<a href="#">SET_OF_STRING</a>		If set, only deployables with the same tag will be automatically mapped to this container.
Hidden Properties			
<b>* connectionTimeoutMillis</b> :	<a href="#">INTEGER</a> = 1200000		Number of milliseconds Overthere waits for a connection to a remote host to be established
<b>* connectionType</b> :	<a href="#">ENUM</a> [ <a href="#">SFTP</a> , <a href="#">SFTP_CYGWIN</a> , <a href="#">SFTP_WINSSHD</a> , <a href="#">SCP</a> , <a href="#">SUDO</a> , <a href="#">INTERACTIVE_SUDO</a> , <a href="#">TUNNEL</a> ] = <a href="#">TUNNEL</a>		Connection Type
<b>* interactiveKeyboardAuthRegex</b> :	<a href="#">STRING</a> = <a href="#">.*Password:[ ]?</a>		Regular expression to look for in keyboard-interactive authentication before sending the password
<b>* os</b> :	<a href="#">ENUM</a> [ <a href="#">WINDOWS</a> , <a href="#">UNIX</a> ] = <a href="#">UNIX</a>		Operating system the host runs
<b>* portAllocationRangeStart</b> :	<a href="#">INTEGER</a> = 1025		Port from where to start looking for freely available ports to use as the local part of an SSH port forward
<b>* protocol</b> :	<a href="#">STRING</a> = <a href="#">ssh</a>		Protocol to use when connecting to this host
<b>* tmpFileCreationRetries</b> :	<a href="#">INTEGER</a> = 1000		Number of times Overthere attempts to create a temporary file with a unique name
<b>temporaryDirectoryPath</b> :	<a href="#">STRING</a>		The default platform value (/tmp) suffices as no temporary files will be placed on the jumpstation
<b>tmpDeleteOnDisconnect</b> :	<a href="#">BOOLEAN</a> = <a href="#">true</a>		Whether to delete the temporary connection directory when the connection is closed
Control task	Parameter CI	Attributes	Description
<b>checkConnection</b>			Checks whether Deployit can transfer files to and execute commands on this host.