

# VS Team Services Artifactory Plugin

## Overview



### Deprecation Notice

This plugin has been deprecated and is no longer maintained. To continue using Artifactory with VSTS, we recommend using the new JFrog Artifactory Extension. To get the new extension, please refer to [Azure DevOps and TFS Artifactory Extension](#). To facilitate switching from the old extension to the new one, both extensions can be installed and run concurrently in your VSTS environment.

Artifactory brings continuous integration to [Visual Studio Team Services](#)(VSTS) through the **Visual Studio Team Services Artifactory Plugin**.

Artifactory already provides a set of plugins for [Maven](#), [Gradle](#), [Ivy](#) and other [build tools](#) that are supported on VSTS and enable you to capture information about deployed artifacts, resolve dependencies and deploy artifacts to Artifactory. The Visual Studio Team Services Artifactory plugin adds the ability to deploy and download generic artifacts, promote a build to Artifactory and view build information and promotion history.

## Download and Installation

The VSTS Artifactory Plugin is an extension for VSTS and is available for download by account holders from the [VSTS Marketplace](#).

### Installation

To install the VSTS Artifactory Plugin, execute the following steps:

- Sign in to your VSTS account and go to the marketplace. You can find the plugin in the **Build and Release** section where it is named **JFrog Artifactory Integration**.
- On the VSTS Artifactory Plugin page, click "Install".
- Select the account to which you want to apply the plugin and confirm installation.

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## Configuration

Setting up VSTS to work with Artifactory involves two basic steps:

- [Configuring VSTS components](#)
- [Automating release workflow](#) with custom tasks

### Configuring VSTS Components



#### Access Artifactory through ssl and authorize cross-domain request

The components added to VSTS use AJAX to communicate with Artifactory through the REST API. To enable this, you need to configure Artifactory to authorize cross-domain requests from your VSTS.

Also, as VSTS is on HTTPS you must use an HTTPS connection to your Artifactory instance.

Configuring VSTS requires the following basic steps:

- [Configuring an Artifactory instance](#)
- [Configure your build](#)

### Configuring an Artifactory Instance

In VSTS, open your team project collection and go to the **Build** tab and select the **Setup JFrog Artifactory** sub-tab.

## Configure JFrog Artifactory

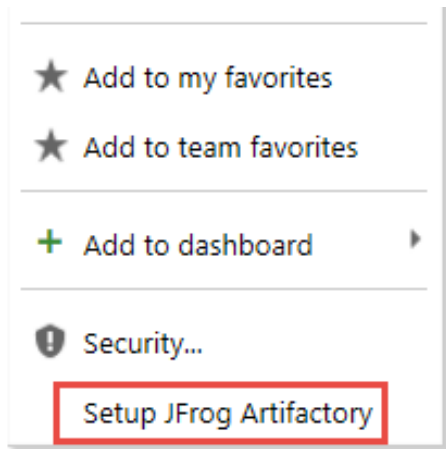
Artifactory URL   
User name   
Password

Provide your **Artifactory URL**, and default login credentials through which VSTS will connect to Artifactory. Once you save your settings they will be stored in VSTS and used for all your projects.

### Configuring Your Build

In the **Build Explorer** choose the build definition you want to configure to work with Artifactory and right click on it (in the tree).

The VSTS Artifactory plugin adds an action called **Setup JFrog Artifactory** in the menu which allows you to configure your build definition to work with Artifactory.



Select **Setup JFrog Artifactory** to display the configuration form.

SETUP ARTIFACTORY FOR THIS BUILD

### Configure Artifactory

Artifactory URL   
Override credentials   
User name   
Password   
Publish repo key   
Promote repo key

Once fill in the form and save these settings, they are saved in VSTS as variables which you can use in your build definition files (such as `pom.xml` and other scripts).

Field	Variable	Description
Artifactory URL	<b>ArtifactoryUrl</b>	Your Artifactory server URL
Override credentials	N/A	If checked, you can enter credentials to override the default credentials you provided under <a href="#">Configuring an Artifactory Instance</a> .
User name/ Password	<b>ArtifactoryUsername/ ArtifactoryPassword</b>	Artifactory login credentials to use if you have selected <b>Override credentials</b> .
Publish repo key	<b>PublishRepository</b>	The default repository for deployment.
Promote repo key	<b>PromoteRepository</b>	The default repository for promotion

## Running Your Build

Configure your project as usual, setting it up to deploy to Artifactory, and run the build.

Once the build has completed, the build summary includes a new JFrog Artifactory section which displays **Artifactory Build Info**.

The screenshot shows a VSTS build summary page. At the top, there are buttons for 'Queue new build...' and 'Download all logs as zip'. Below this is a green banner that says 'Build Succeeded'. Underneath, it shows 'Build 20160122.6' and 'Ran for 55 seconds (Hosted), completed 3 days ago'. There are tabs for 'Summary', 'Timeline', 'Artifacts', 'JFrog Artifactory', and 'Tests\*'. The 'JFrog Artifactory' tab is selected, showing 'Artifactory Build Info'. In this section, two circular icons are highlighted with a red box: one with a green checkmark and one with a green arrow. Below these icons are the labels 'Build agent Generic (v)', 'Agent VSO (v)', and 'Artifactory Principal tfs'. To the right of the 'Artifactory Build Info' section is a 'History' section with three entries: 'staged', 'dev', and 'Pre-Production'. Each entry shows the repository name, a comment, the CI user, and the Artifactory user.

The two buttons demarcated in the image above are used for linking directly to the corresponding build information page in Artifactory, and to promote the build.

## Promoting Your Build

If you choose to promote your build, VSTS Artifactory Plugin will display a set of fields through which you can configure the [Build Promotion REST API](#) call that will be used to promote the build.

PROMOTE THIS BUILD TO JFROG ARTIFACTORY
✕

### Promote to Artifactory

Target Status:

Comment:






Attach properties:

## JFrog Artifactory Deployer

The JFrog Artifactory Deployer task uses the [JFrog CLI](#) and facilitates working with VSTS and Artifactory, effectively, on any build tool such as Maven, Gradle and others, for any packaging format such as NuGet, npm and others.

To use it, you need to configure a new service that points to an Artifactory instance as displayed in the following screenshot.


### JFrogArtifactoryDeployer

Artifactory URL	ArtifactoryGC	 <a href="#">Manage</a> 
Target Repository	nuget-stage-local/JFrog/MyTestProject/\${Build.BuildNumber}/	
Override Credentials	<input type="checkbox"/>	
User Login		
User Encrypted Password		
Path to JFrog Artifactory Cli exe	\$/TestVSONline/tools/art.exe	 
Path to the Artifacts.	\$(Agent.BuildDirectory)\*TestProject*.nupkg	
Properties	qa=dev;stage=test	
Enable build information	<input checked="" type="checkbox"/>	

#### Control Options

- |                   |                                     |
|-------------------|-------------------------------------|
| Enabled           | <input checked="" type="checkbox"/> |
| Continue on error | <input type="checkbox"/>            |
| Always run        | <input type="checkbox"/>            |

 Upload artifacts to JFrog Artifactory using JFrog Artifactory cli.

 Parameter values with spaces should be enclosed within quotation marks.

Artifactory URL	Click "Manage" to set the Artifactory instance to which you want to deploy artifacts.
Target Repository	The target repository and path within that repository to which you want to deploy artifacts. Note that you can use environment variables such as <code>\$(Build.BuildNumber)</code> .
Override Credentials	When checked, you can override credentials provided by the service.
User Login	User name to use if you have checked <b>Override Credentials</b> .
User Encrypted Password	Corresponding encrypted password to use if you have checked <b>Override Credentials</b> .
Path to JFrog Artifactory Cli.exe	Path to the Artifactory CLI in your VSTS team project code repository.
Path to the Artifacts	Path to the artifacts you want to deploy. You may use environment variables and wild card characters.
Properties	Properties to attach to deployed artifacts.
Enable build information	If checked, build information will be created.

In the example above, we are deploying any NuGet package containing "VSODemo" in its name that is located in the build directory or subfolder of the Artifactory configured as service "ArtifactoryGC" in the repository called "nuget-stage-local" with path "JFrog/MyTestProject/<BuildNumberValue>". Some properties will be attached and the build information provided.

Once the build is complete, you can view its details in Artifactory as displayed below:

## Build Browser

### History for Build 'DemoVSO'

7 Builds

Build ID	CI Server	Status	Build Time
20160120.4	<a href="https://frogdev.visualstudio.com/DefaultCollection/5e470364-4033-447a-862f-cb348cd9764b/_b...">https://frogdev.visualstudio.com/DefaultCollection/5e470364-4033-447a-862f-cb348cd9764b/_b...</a>		20-01-16 12:53:30 +00:00
20160120.3	<a href="https://frogdev.visualstudio.com/DefaultCollection/5e470364-4033-447a-862f-cb348cd9764b/_b...">https://frogdev.visualstudio.com/DefaultCollection/5e470364-4033-447a-862f-cb348cd9764b/_b...</a>		20-01-16 12:50:01 +00:00
20160120.2	<a href="https://frogdev.visualstudio.com/DefaultCollection/5e470364-4033-447a-862f-cb348cd9764b/_b...">https://frogdev.visualstudio.com/DefaultCollection/5e470364-4033-447a-862f-cb348cd9764b/_b...</a>		20-01-16 12:36:44 +00:00
20160120.1	<a href="https://frogdev.visualstudio.com/DefaultCollection/5e470364-4033-447a-862f-cb348cd9764b/_b...">https://frogdev.visualstudio.com/DefaultCollection/5e470364-4033-447a-862f-cb348cd9764b/_b...</a>		20-01-16 12:25:49 +00:00
20160106.1	<a href="https://frogdev.visualstudio.com/DefaultCollection/5e470364-4033-447a-862f-cb348cd9764b/_b...">https://frogdev.visualstudio.com/DefaultCollection/5e470364-4033-447a-862f-cb348cd9764b/_b...</a>	prod	06-01-16 10:05:51 +00:00
20160105.40	<a href="https://frogdev.visualstudio.com/DefaultCollection/5e470364-4033-447a-862f-cb348cd9764b/_b...">https://frogdev.visualstudio.com/DefaultCollection/5e470364-4033-447a-862f-cb348cd9764b/_b...</a>	staged	05-01-16 17:35:34 +00:00
20160105.38	<a href="https://frogdev.visualstudio.com/DefaultCollection/5e470364-4033-447a-862f-cb348cd9764b/_b...">https://frogdev.visualstudio.com/DefaultCollection/5e470364-4033-447a-862f-cb348cd9764b/_b...</a>		05-11-15 14:40:00 +00:00

You can also view details for each build including a link back to the VSTS build summary:

## Build Browser

### Build #20160120.4

General Build Info

Published Modules

Environment

Issues

Licenses

Governance

#### General Info

Name:	DemoVSO
Number:	20160120.4
Agent:	VSO
Build Agent:	Generic
Started:	2016-01-20T12:53:30.300+0000
Duration:	0.0 seconds
Principal:	jon
Artifactory Principal:	tfs
URL:	<a href="https://frogdev.visualstudio.com/DefaultCollection/5e470364-4033-447a-862f-cb348cd9764b/_build#buildId=123&amp;a=summary">https://frogdev.visualstudio.com/DefaultCollection/5e470364-4033-447a-862f-cb348cd9764b/_build#buildId=123&amp;a=summary</a>

### Build #20160120.4

General Build Info

Published Modules

Environment

Issues

Licenses

Governance

Diff

Release History

Build Info JSON

#### Environment Variables

35 Variables

Key	Value
buildinfo.env.AGENT_BUILDDIRECTORY	C:\a\1
buildinfo.env.AGENT_HOMEDIRECTORY	C:\LR\MMS\Services\MmsTaskAgentProvisioner\Tools\agents\default
buildinfo.env.AGENT_ID	1
buildinfo.env.AGENT_JOBNAME	Build
buildinfo.env.AGENT_MACHINENAME	TASKAGENT2-0009
buildinfo.env.AGENT_NAME	Hosted Agent
buildinfo.env.AGENT_ROOTDIRECTORY	C:\a
buildinfo.env.AGENT_WORKFOLDER	C:\a
buildinfo.env.AGENT_WORKINGDIRECTORY	C:\a\SourceRoot\Mapping\2f6a6fe9-bd25-4ace-8b16-c3d5630e36f9\job-4c8aaf12-fcb2-4b99-9fda-3ad96ab1cef6
buildinfo.env.BUILDCONFIGURATION	debug
buildinfo.env.BUILDPLATFORM	any cpu
buildinfo.env.BUILD_ARTIFACTSTAGINGDIRECTORY	C:\a\1\a
buildinfo.env.BUILD_BINARIESDIRECTORY	C:\a\1\b
buildinfo.env.BUILD_BUILDID	123
buildinfo.env.BUILD_BUILDNUMBER	20160120.4
buildinfo.env.BUILD_BUILDURI	vsts:///Build/Build/123

Artifact Name	Type	Repo Path
VSDemo.1.0.0.0.nupkg	nupkg	nuget-prod-local/JFrog/MyTestProject/20160106.1/VSDemo.1.0.0.0.nupkg
VSDemo.DAL.1.0.0.0.nupkg	nupkg	nuget-prod-local/JFrog/MyTestProject/20160106.1/VSDemo.DAL.1.0.0.0.nupkg
VSDemo.Service.1.0.0.0.nupkg	nupkg	nuget-prod-local/JFrog/MyTestProject/20160106.1/VSDemo.Service.1.0.0.0.nupkg

## JFrog Artifactory Downloader

The JFrog Artifactory Downloader task downloads artifacts generated in a build from Artifactory as a zip archive and stored as `$env:temp\artifacts.zip`

The main point of this task is to enable download of artifacts in a release workflow and deploy them in a target environment where you can apply acceptance or other tests to them.

JFrog Artifactory Downloader [Link settings](#) [Remove](#)

Version 1.\* ▼

Display name

Artifactory URL \*  
 🔄 ⚙️

Override Credentials 📘

User Login 📘

User Encrypted Password 📘

Build Name. \*

Build Number 📘

Build Status 📘

Destination folder 📘














Control Options ▼

Artifactory URL	Please refer to parameters for the <a href="#">JFrog Artifactory Deployer</a> task.
Override Credentials	Please refer to parameters for the <a href="#">JFrog Artifactory Deployer</a> task.
User Login	Please refer to parameters for the <a href="#">JFrog Artifactory Deployer</a> task.
User API Key	Please refer to parameters for the <a href="#">JFrog Artifactory Deployer</a> task.
Build Name	The name of the build from which to download artifacts.
Build Number (optional)	If not provided, the task will use the current build number from the BUILD_BUILDNUMBER environment variable. If this variable is not available in context, the task will use the latest build from Artifactory.

Build Status (optional)	<p>If provided, the task only downloads artifacts linked to the latest build with the specified status.</p> <p>If not provided, the task downloads artifacts from the current build number (as determined from the environment variables).</p> <p>If the task is applied in a release workflow (rather than being triggered by a build, and therefore, there is no build number available), the latest build will be used.</p>
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## JFrog Artifactory Build Promotion Task

### JFrogArtifactoryPromote

Artifactory URL	<input type="text" value="ArtifactoryGC"/>	 Manage 
Override Credentials	<input type="checkbox"/>	
User Login	<input type="text"/>	
User Encrypted Password	<input type="text"/>	
Build Name.	<input type="text"/>	
Build number	<input type="text"/>	
Status	<input type="text" value="dev"/>	
Comment	<input type="text" value="dev release has been done"/>	
Target repository	<input type="text"/>	
Copy artifacts	<input type="checkbox"/>	
Copy/move build's dependencies	<input type="checkbox"/>	
Properties	<input type="text"/>	

#### Control Options

- Enabled
- Continue on error
- Always run

 Promote a build into Artifactory.

Artifactory URL	Please refer to parameters for the <a href="#">JFrog Artifactory Deployer</a> task.
Target Repository	Please refer to parameters for the <a href="#">JFrog Artifactory Deployer</a> task.
Override Credentials	Please refer to parameters for the <a href="#">JFrog Artifactory Deployer</a> task.
User Login	Please refer to parameters for the <a href="#">JFrog Artifactory Deployer</a> task.
User API Key	Please refer to parameters for the <a href="#">JFrog Artifactory Deployer</a> task.
Build Name (optional)	The name of the build from which to download artifacts. If not provided, the task will use values from environment variables if available.
Build Number (optional)	The number of the build from which to download artifacts. If not provided, the task will use values from environment variables if available.
Build Status	Target status for promotion.
Comment (Optional)	Optional comment to add.
Target Repository (Optional)	You may set this parameter if you want the build moved/copied to a target repository.



Copy artifacts	If checked, build artifacts will be copied, otherwise they will be moved.
Copy/move build dependencies	If checked, the build dependencies will also be copied/moved in the promotion.
Properties (optional)	You may add a set of properties separated by a semicolon.