

**CodeArts Artifact**

# **Best Practices**

**Issue**            01  
**Date**             2023-05-15



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# Contents

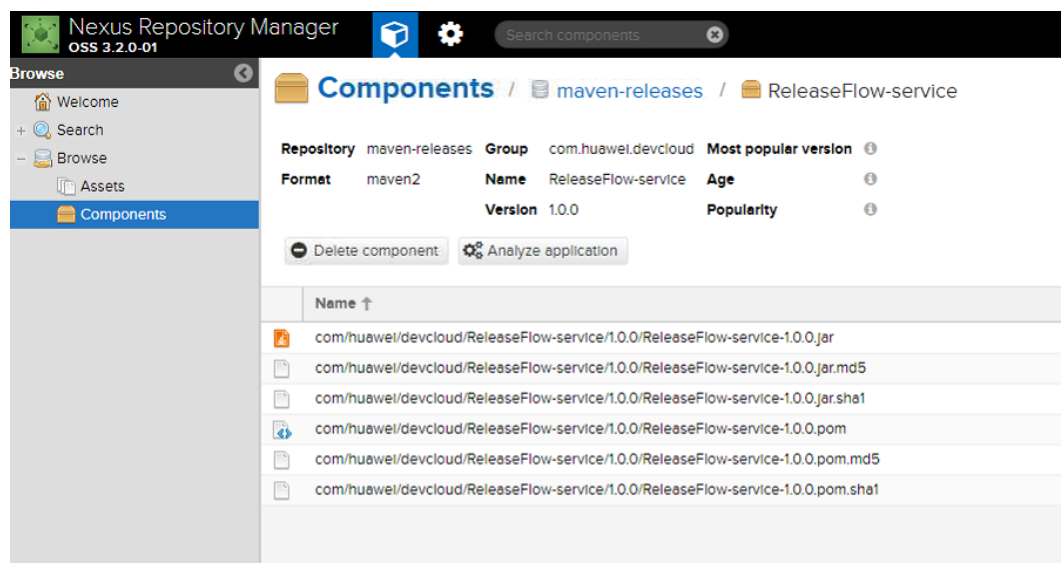
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**1 Migrating Maven Components to Self-Hosted Repo in Batches.....1**

# 1 Migrating Maven Components to Self-Hosted Repo in Batches

CodeArts Artifact provides batch migration tool to migrate Maven components from the Nexus server to CloudArtifact. This section describes how to migrate Maven components in batches.

The repositories and components to be migrated are as follows:



## Prerequisites

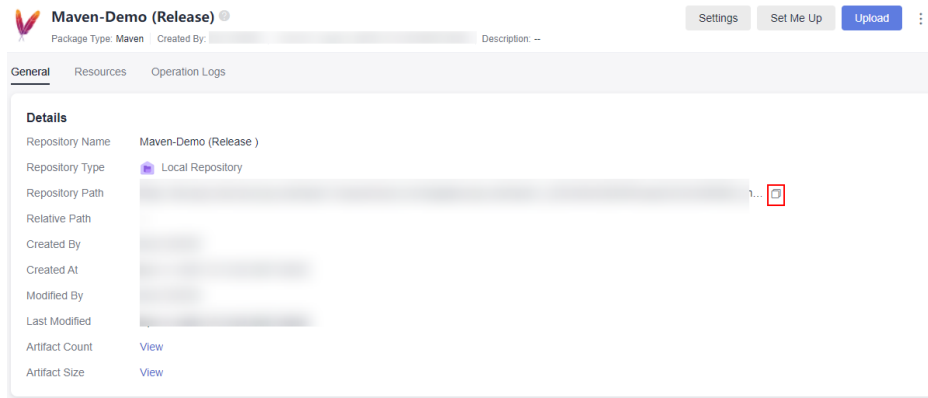
1. A private Maven repository has been created.
2. This document is written based on the Python language, and the Nexus server must support Python2.

## Obtaining CloudArtifact Address and Configuration File

**Step 1** Obtain the repository address.

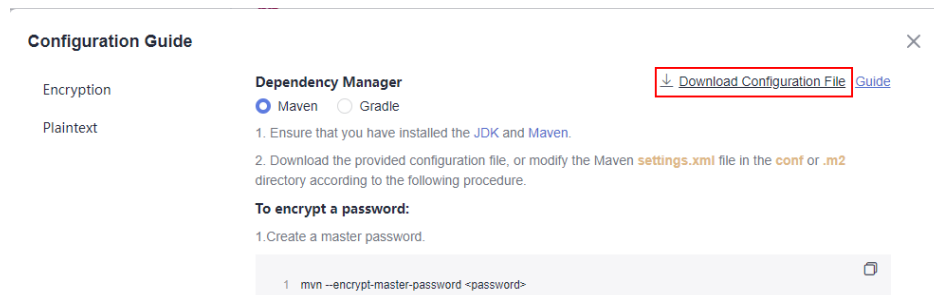
1. Access the Self-Hosted Repo, and choose the target Maven repository in the left pane.

2. Find the **Repository Address**. Click  to copy the address.



### Step 2 Obtain the configuration file.

1. In the upper right corner, choose **Set Me Up**
2. In the displayed dialog box, click **Download Configuration File**.



3. Open the configuration file on the local PC and search for the username and password.

```
<server>
  <id>releases</id>
  <username>[REDACTED]</username>
  <password>[REDACTED]</password>
</server>
<server>
  <id>snapshots</id>
  <username>[REDACTED]</username>
  <password>[REDACTED]</password>
</server>
<server>
  <id>z_mirrors</id>
</server>
```

----End

## Downloading the Migration Tool to the Server

- Step 1** Return to the Self-Hosted Repo homepage, and choose **Download Migration Tool**.
- Step 2** Copy the downloaded .zip package to the server.
- Step 3** Log in to the server and go to the directory where the .zip package is stored. Run the following commands to decompress the package and go to the directory generated after the decompression:

```
unzip Nexus2DevCloud.zip
cd Nexus2DevCloud/
```

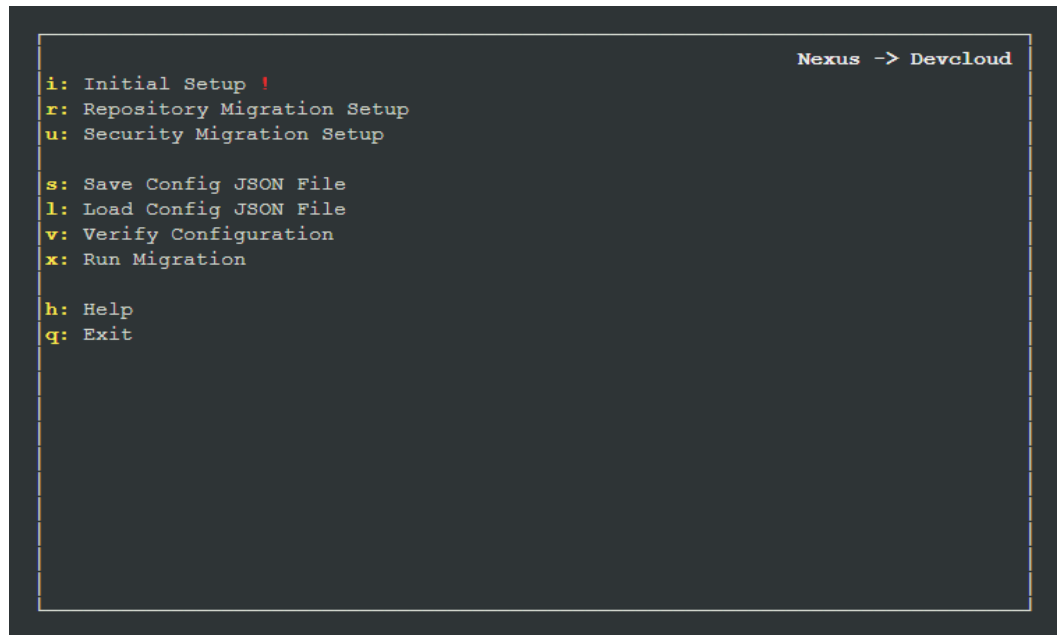
----End

## Configuring and Running the Migration

**Step 1** Run the following command to start the migration tool script:

```
./NexusToDevcloud.py
```

The following configuration page is displayed.



```
Nexus -> Devcloud
i: Initial Setup !
r: Repository Migration Setup
u: Security Migration Setup

s: Save Config JSON File
l: Load Config JSON File
v: Verify Configuration
x: Run Migration

h: Help
q: Exit
```

### NOTE

If **Permission denied** is displayed, run the following command:

```
$ sudo chmod -R 777 ./NexusToDevcloud.py
```

or

```
$ sudo chmod 755 ./NexusToDevcloud.py
```

**Step 2** Press **i** to start the initial configuration.

Press the letter before each line, enter the server configuration and CloudArtifact configuration, and press **q** to return to the previous page.

Configuration Item	Description
Nexus Data Directory	Enter the Nexus data directory on the server. After you enter the directory, <b>Nexus URL</b> , <b>Nexus Username</b> , and <b>Nexus Password</b> may be displayed. Enter the values based on the site requirements.
DevCloud URL	Enter the address obtained in <a href="#">Obtaining CloudArtifact Address and Configuration File</a> .

Configuration Item	Description
DevCloud Username	Enter the username obtained in <a href="#">Obtaining CloudArtifact Address and Configuration File</a> .
DevCloud Password	Enter the password obtained in <a href="#">Obtaining CloudArtifact Address and Configuration File</a> .

```
Initial Setup
n: Nexus Data Directory /opt/releasenexus/nexus/sonatype-work/nexus3
x: Nexus URL http://localhost:8081
s: Nexus Username admin
c: Nexus Password *****

a: Devcloud URL https://devrepo.devcloud.
u: Devcloud Username
p: Devcloud Password *****

h: Help
q: Back
|
```

**Step 3** Press **r** to go to the repository migration configuration page.

The repository list is displayed. Press the left or right arrow key to turn pages. Enter the repository ID to select or cancel the repository to be migrated. If a green + is displayed next to a repository name, the repository needs to be migrated. After the configuration is complete, press **q** to return to the previous page.

**NOTE**

You can select only one host repository (that is, the repository ending with **maven**) for migration at a time.

```
Migrate Repositories (Page 1 of 2)
1: thirdparty (maven)
2: central [maven]
3: releases (maven) +
4: snapshots (maven)
5: java.net-m1 [maven]
6: google [maven]
7: apache-snapshots [maven]
8: central-m1 <maven>

<-/->: Previous Page / Next Page

f: Search Filter
m: Mass Edit

e: Edit Repository

h: Help
q: Back
```

**Step 4** Press **s** to save the configuration (save the document as **conf.json**).

```
Nexus -> Devcloud
i: Initial Setup
r: Repository Migration Setup
u: Security Migration Setup

s: Save Config JSON File
l: Load Config JSON File
v: Verify Configuration
x: Run Migration

h: Help
q: Exit

Edit Save Config JSON File:
> conf.json
```

**Step 5** Press **v** to verify the configuration. If the verification is successful, the following information is displayed:



```
Nexus -> Devcloud  
i: Initial Setup  
r: Repository Migration Setup  
u: Security Migration Setup  
  
s: Save Config JSON File conf.json  
l: Load Config JSON File conf.json  
v: Verify Configuration  
x: Run Migration  
  
h: Help  
q: Exit  
█  
Configuration verified successfully.
```

**Step 6** Press **x** to run the migration. If the following page is displayed, the migration is complete.

```
Running Migration ...  
+ Repositories   1/1  
+ Groups        0/0  
+ Users         0/0  
+ Permissions   0/0  
+ LDAP Confgs  0/0  
+ Artifacts     3 Total  
+ Finalizing    1/1  
  
Total Progress:  
██████████████████████████████████████████████████████████████████████████████ 100%  
  
Migration successful!  
Completed in 8s  
  
Press 'q' to continue.  
█
```

**NOTE**

If the push fails, check whether the following configurations are correct:

- Check whether the network connection between the server and DevCloud is normal.
- Check whether the repository path is correct.
- Check whether the uploaded account and password are correct.

**Step 7** Access CloudArtifact to view the migration result.

----End