

# Extensible Choice Parameter plugin

## Plugin Information

View Extensible Choice Parameter [on the plugin site](#) for more information.



Older versions of this plugin may not be safe to use. Please review the following warnings before using an older version:

- [Arbitrary code execution vulnerability](#)

This plugin adds "Extensible Choice" as a build parameter. You can select how to retrieve choices, including the way to share choices among all jobs.

## What's this?

This plugin provides a Extensible Choice parameter:

- When building, the value can be selected with a dropdown like a built-in Choice parameter.
- The choices can be provided in several ways:
  - Global Choice Parameter: defines choices in the Configure System page.
    - Choices can be shared by multiple jobs.
    - Updating the choices in the Configure System, every job can immediately refer the updated choices.
  - Textarea Choice Parameter: writes choices in a textarea, just like a built-in Choice parameter.
  - System Groovy Script Choice Parameter: runs a System Groovy script to determine the list of choices
  - File Choice Parameter: lists files in a directory.
- Checking Editable checkbox allows you to specify any value, even one not in the choices.
  - Edited values can be added to the choice used next time automatically by checking "Add Edited Value".
- You can add a new way to provide choices with Extension Points.

## Disabling providers

Some choice providers may cause security issues in your system:

Choice Provider	Security Issue	Note
File Choice Parameter	Any users with project configuration privilege can list files in the OS with the privilege of the OS user Jenkins run with.	Users can do that also with "Execute shell" or "Execute Windows Batch" build step.

You can disable specific providers in system configuration page:

**SSH Server**

SSHD Port  Fixed :   Random  Disable

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**Extensible Choice: Available Choice Providers**

File Choice Parameter

Global Choice Parameter

Global Choice Parameter

Name

Choices

Allow Add Edited Value

System Groovy Choice Parameter

Textarea Choice Parameter

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**CVS**

[Check CVS version](#)

In the above screen, System Groovy Script Choice Parameter (unchecked one) is disabled.

## Screenshots

- "Extensible Choice" is added as a type of build parameters.

This build is parameterized

Disable Build

Execute on...

**Advanced Pro**

- Boolean Value
- Choice
- Extensible Choice**
- File Parameter
- List Subversion tags (and more)
- Password Parameter

the project is re-enab

- You can select the way to define choices of the parameter.

**Extensible Choice**

Name

Description

Choice Provider 

- Global Choice Parameter
- File Choice Parameter
- Global Choice Parameter**
- System Groovy Choice Parameter
- Textarea Choice Parameter

Add Edited Value

When to Add

\*\* A new way to provide choices can be added with Extension Points.

- Selecting "Textarea Choice Parameter", you can define choices like the built-in Choice parameter.

The screenshot shows a configuration form for a 'Textarea Choice Parameter'. At the top, there is a partially visible text input field containing 'program.'. Below it, the 'Choice Provider' is set to 'Textarea Choice Parameter'. The 'Choices' field is a text area containing three lines: 'VALUE1', 'VALUE2', and 'VALUE3'. At the bottom, there is an 'Editable' checkbox which is checked.

- "Global Choice Parameter" enables you to select a set of choices from the ones defined in System Configuration page.
  - Defining in System Configuration page:

The screenshot shows the 'Global Choice Parameter' configuration page. It has a title 'Global Choice Parameter' and a list of parameters. The first parameter has a name 'GLOBAL\_CHOICE1' and a text area for 'Choices' containing 'GLOBAL\_VALUE1', 'GLOBAL\_VALUE2', and 'GLOBAL\_VALUE3'. A 'Delete' button is located to the right of this parameter. The second parameter has a name 'GLOBAL\_CHOICE2' and a text area for 'Choices' containing 'PATH/TO/COMPILER1'.

- Select which set of choices to use:

The screenshot shows the configuration form for a 'Global Choice Parameter'. The 'Choice Provider' is set to 'Global Choice Parameter'. The 'Name' dropdown menu is open, showing three options: 'GLOBAL\_CHOICE1' (which is highlighted), 'GLOBAL\_CHOICE1', and 'GLOBAL\_CHOICE2'. The 'Editable' checkbox is checked. A 'Delete' button is at the bottom right.

- "System Groovy Choice Parameter" generate choices with a Groovy script:

Choice Provider: System Groovy Choice Parameter

Groovy System Script: `(0..9).collect{String.format("value%02d", it)}`

Default Choice: <Top Most Value>

Editable:

Add Parameter

Build (No new builds will be executed until the previous build is complete) concurrent builds if necessary

value00  
value01  
value02  
value03  
value04  
value05  
value06  
value07  
value08  
value09

- "File Choice Parameter" enables select a file in a specified directory:

Choice Provider: File Choice Parameter

Base Directory: .

File Name Pattern: \*\*/config.xml

Exclude Pattern: \*\*/2013-\*/config.xml

Type: File

config.xml  
jobs\testTextarea\config.xml  
jobs\test\config.xml  
users\admin\config.xml

List Files Now

Editable:

- You can specify its default value. This is useful with Global Choice Parameter to specify different default values in jobs:

Choice Provider: Global Choice Parameter

Name: GLOBAL\_CHOICE1

Default Choice: <Top Most Value>

Add Edited Value

GLOBAL\_VALUE1  
GLOBAL\_VALUE2  
GLOBAL\_VALUE3

Editable:

- Checking "Editable" enables you to input a value not in choices at build time:

## Project test1

This build requires parameters:

PARAM1: GLOBAL\_VALUE4

GLOBAL\_VALUE1  
GLOBAL\_VALUE2  
GLOBAL\_VALUE3

Build

\*\* Textarea Choice Parameter and Global Choice Parameter provides "Add Edited Value", which automatically adds a value not in the choice list:

## Extension point

A new way to provide choices can be added with extending `ChoiceListProvider`, overriding the following method:

```
abstract public List<String> getChoiceList()
```

## Issues

[Open Issues](#)

To report a bug or request an enhancement to this plugin please create a ticket in JIRA (you need to login or to sign up for an account). Also have a look on [How to report an issue](#)

- [Bug report](#)
- [Request or propose an improvement of existing feature](#)
- [Request or propose a new feature](#)

## Change Log

### Version 1.6.0 (May 20, 2018)

- Add an option to switch the behavior of input value when the input is editable ([JENKINS-22316](#), [JENKINS-50315](#))
  - You can select "Display all choices" (the behavior same to Extensible Choice Parameter <= 1.4.2) or "Display only matching choices" (the behavior same to Extensible Choice Parameter 1.5.0).
  - "Display all choices" is the default behavior.

### Version 1.5.0 (Mar 17, 2018)

- Filter options by input when the input is editable ([JENKINS-22316](#))
- Save as more simple configurations ([JENKINS-49210](#))

### Version 1.4.2 (Jan 27, 2018)

- Compatible with Jenkins >= 2.102 ([JENKINS-49017](#))
  - See [JEP-200](#) for more details
- Fix typo ([PR #32](#))

### Version 1.4.1 (Aug 27, 2017)

- FIXED: HTML in description is always escaped ([JENKINS-42903](#))
- Fix typo ([PR #29](#))

### Version 1.4.0 (Apr 10, 2017)

- SECURITY FIX: [Jenkins Security Advisory 2017-04-10#Extensible Choice Parameter Plugin](#)
  - Groovy scripts run with [Script Security Plugin](#)
  - Existing scripts are configured to run in the script sandbox.
  - You might require approve some methods for the sandbox, or configure scripts run without the sandbox and approve scripts.
- Targets Jenkins >= 1.580.1.

- The pre-defined variable 'jenkins' is no longer provided.
  - You can get Jenkins instance with `jenkins.model.Jenkins.instance` instead. Require appropriate approving.

### Version 1.3.4 (Jan 28, 2017)

- Use the top most value if the specified default parameter isn't contained in the choice list.
  - Note: Builds fail if you passed a value not contained in the choice list explicitly (e.g. via Parameterized trigger plugin).

### Version 1.3.3 (Oct 22, 2016)

- FIXED: "Top Most Value" is replaced with an empty value when saved before the job configuration page is completed to be load ([JENKINS-37147](#))

### Version 1.3.2 (Aug 23, 2015)

- Fixed UnsupportedOperationException when Empty Choice is configured for File Choice Parameter ([JENKINS-29934](#))
- Improved the help of Exclude Pattern of File Choice Parameter.

### Version 1.3.1 (Jun 20, 2015)

- Fixed NPE with "List Files Now" in configuration pages ([JENKINS-28841](#), regression in 1.3.0)

### Version 1.3.0 (May 05, 2015)

- Now you can disable specific providers in system configuration page ([JENKINS-27375](#)).
  - See [#Disabling providers](#) for details.
- Validates parameter names by checking they can be handled by Jenkins core ([JENKINS-22222](#)).
- Fixed "Error: No stapler-class is specified" when saving project configuration with Jenkins 1.610([JENKINS-28046](#)).
  - Dot letters are allowed for variable names with Jenkins > 1.526.
- Added an empty choice option to FilenameChoiceListProvider ([JENKINS-22318](#)).
- Also accepts \$class introduced in Jenkins 1.588 ([JENKINS-25403](#)).

### Version 1.2.2 (Dec 08, 2013)

- Added feature to use `project` in System Groovy Script. [JENKINS-17875](#)
- Added feature to reverse file lists.

### Version 1.2.1 (Jun 22, 2013)

- Added documents for System Groovy Script Choice Parameter.
- Added "Run the Script Now" Button for System Groovy Script Choice Parameter.

### Version 1.2.0 (May 03, 2013)

- Added new providers
  - System Groovy Script Choice Parameter: runs a System Groovy script to determine the list of choices
  - File Choice Parameter: lists files in a directory.
- Added checkbox "Add Edited Value" to Textarea Choice Parameter and Global Choice Parameter. By checking this, edited values used in builds are automatically added to choices.

### Version 1.1.0 (Feb 06, 2013)

- Now you can select the default choice in each job.
- Fixed the misspell.

### Version 1.0.0 (Jan 07, 2013)

- Initial release.