

Script rules examples

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This article describes how to write a script rule in [Exalate visual mode](#).

Intro

Script rules can be used when the standard mapping rules are not sufficient to cover the use case. Creating a script rule is straightforward.

- Edit your visual connection
- Select the rules
- Select the 'add script'

The screenshot shows the Exalate visual mode interface for a connection named 'a_to_b 2'. The interface includes a 'Publish' button, tabs for 'Scope', 'Rules', 'Statistics', and 'Info', and a description: 'Configure the synchronization behavior with the help of field mappings and script rules.' There are 'Expand all' and 'Collapse all' buttons, and a '+ Add mapping' dropdown. The main area shows a table with columns 'Order', 'a', 'Sync direction', 'b 2', and 'Add script'. The table contains two rows: row 1 is a script rule, and row 2 is a field mapping for 'Issue type'.

Order	a	Sync direction	b 2	Add script
1	> Script			
2	Issue type	←→	Issue type	

How does it work

The scripts are groovy-based - meaning that all groovy structures can be used to define the behavior of the mapping.

For instance, if a mapping is needed between the assignees of one side with the instance name 'left' and another side with the instance name 'right', the following code snippet will implement the mapping:

```

// define the mapping

def leftToRightAssignee = [
  // left Assignee ---> right Assignee
  "peter@acme.com" : "peter.pan@acme.com",
  "cinderella@acme.com" : "cinderella.white@acme.com",
]

// look up the corresponding email, default to team@acme.com
def targetUserEmail = leftToRightAssignee[left.issue.assignee?.email] ?: "team@acme.com"

// assign to right issue

right.issue.assignee = nodeHelper.getUserByEmail(targetUserEmail)

```

Examples

Below you can find examples of the most common field types that are usually synchronized

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- [Components](#)
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- [User picker custom fields](#)
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Labels

```
your_instance_shortcode.issue.labels = remote_instance_shortcode.issue.labels
```

Components

```

your_instance_shortcode.issue.components = remote_instance_shortcode.issue.components.collect { component ->
def remoteComponentLeadEmail = component.lead?.email
def localComponentLeadName = nodeHelper.getUserByEmail(remoteComponentLeadEmail)
nodeHelper.createComponent(
  issue,
  component.name,
  component.description, // can also be null
  localComponentLeadName?.key, // can also be null
  component.assigneeType?.name() // can also be null
)
}

```

Resolution

Set the local resolution same as on the remote side, if there's no such resolution on your side don't set anything

```
if(nodeHelper.getResolution(remote_instance_shortname.issue.resolution?.name)) {
  your_instance_shortname.issue.resolution = remote_instance_shortname.issue.resolution
}
```

Versions

```
// assign fix versions from JIRA A to JIRA B
your_instance_shortname.issue.fixVersions = remote_instance_shortname.
.fixVersions
// ensure that all the fixVersions are available on B
.collect { v -> nodeHelper.createVersion(issue, v.name, v.description) }
// assign affected versions from JIRA A to JIRA B
your_instance_shortname.issue.affectedVersions = remote_instance_shortname
.affectedVersions
.collect { v -> nodeHelper.createVersion(issue, v.name, v.description) }
```

User fields

- assignee

```
your_instance_shortname.issue.assignee = nodeHelper.getUser(remote_instance_shortname.issue.assignee?.
key)
```

- reporter

```
your_instance_shortname.issue.reporter = nodeHelper.getUser(remote_instance_shortname.issue.reporter?.
key)
```

Custom fields

Text/String custom fields

Sync value from "remote side select list custom field" to the local "select list custom field"

```
your_instance_shortname.issue.customFields."text custom field".value = remote_instance_shortname.issue.
customFields."remote side text custom field".value
```

Set a fixed value in the local custom field

```
your_instance_shortname.issue.customFields."My CF".value = "Exalate"
```

Single select list/radio button

Sync value from "remote side select list custom field" to the local "select list custom field"

```
your_instance_shortname.issue.customFields."select list custom field".value = remote_instance_shortname.issue.
customFields."remote side select list custom field".value
```

Set a fixed value in the local custom fields "My select list"

```
your_instance_shortname.issue.customFields."My Select list".value = "Red"
```

Multi-select list/Checkbox

```
// sync value from "remote multi-select list custom field" to the local "select list multiple choice"
your_instance_shortcode.issue.customFields."select list multiple choice".value = remote_instance_shortcode.
issue.customFields."remote multi-select list custom field".value?.value
// Add "Red" as a value in the custom fields "My multi-select list"
your_instance_shortcode.issue.customFields."My multi-select list".value += nodeHelper.getOption("Red")
```

Multi-cascade custom fields

Sync only existing option values

```
def sourceRegion = remote_instance_shortcode.issue.customFields."Source Region/Country"?.value?.parent?.value
def sourceCountry = remote_instance_shortcode.issue.customFields."Source Region/Country"?.value?.child?.value

def region = nodeHelper.getOption(
  issue,
  "Destination Region/Country",
  sourceRegion
)
def country = region.childOptions.find{it.value == sourceCountry}
if ( region != null && (sourceCountry == null || country != null)) {
  your_instance_shortcode.issue.customFields."Destination Region/Country"?.value = nodeHelper.getCascadingSelect
  (
    region,
    country
  )
} else if (sourceRegion == null) {
  your_instance_shortcode.issue.customFields."Destination Region/Country"?.value = null
}
```

Date/DateTime custom fields

```
// if you have a custom field called "My Date" (of type Date Picker or Date Time Picker)
// on your Side and you'd like to populate it from
// "Their Date" of remote Side (of type Date Picker or Date Time Picker)
your_instance_shortcode.issue.customFields."My Date".value = remote_instance_shortcode.issue.customFields."
Their Date".value
// or if you'd like to assign a fixed moment in time:
your_instance_shortcode.issue.customFields."My Date".value = new java.text.SimpleDateFormat("yyyy-MM-dd HH:mm:
ss z")
  .parse("2019-10-24 13:30:59 EET")
```

URL custom fields

```
// sync value from "remote side url custom field" to the local "url custom field"
your_instance_shortcode.issue.customFields."url custom field".value = remote_instance_shortcode.issue.
customFields."remote side url custom field".value

// Set a fixed value "https://exalate.com" in the custom field with name "My url custom field"
your_instance_shortcode.issue.customFields."My url custom field".value = "https://exalate.com"
```

Label custom fields

```
// sync value from "remote side labels" to the local "My labels"
your_instance_shortcode.issue.customFields."My labels".value = remote_instance_shortcode.issue.customFields."
remote side labels".value
// add "attention" to the custom field "My labels"
your_instance_shortcode.issue.customFields."My labels".value += nodeHelper.getLabel("attention")
```

User picker custom fields

```
// sync value from "remote side user picker custom field" to the local "user picker custom field"
your_instance_shortcode.issue.customFields."user picker custom field".value = nodeHelper.getUser
(remote_instance_shortcode.issue.customFields."remote side user picker custom field".value)
// Set a fixed value "557358:bda57a72g56a9-4219-9c29-7d666481388f" (id for a user in your system) in the custom
field with name "My user picker"
your_instance_shortcode.issue.customFields."My user picker".value = "557358:bda57a72g56a9-4219-9c29-
7d666481388f"
```

Number custom fields

```
your_instance_shortcode.issue.customFields."numeric custom field".value = remote_instance_shortcode.issue.
customFields."remote side numeric custom field".value
```