

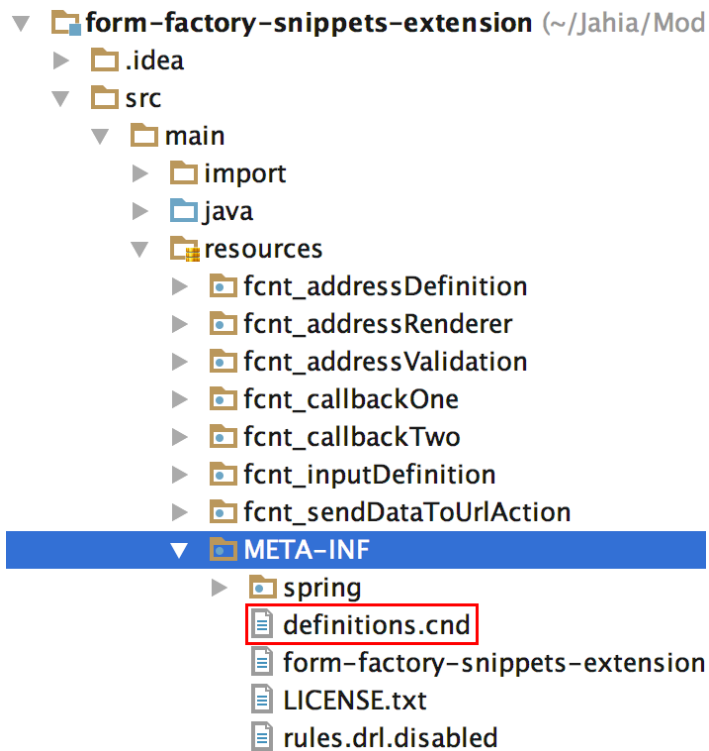
CREATE A CUSTOM ACTION

FORM FACTORY V2

This document serves to illustrate the procedure in successfully creating a custom action.

To create an action, the followings steps should be followed:

1. Create an entry in the definition.cnd file located in:
[*module_name*]/src/main/resources/META-INF/

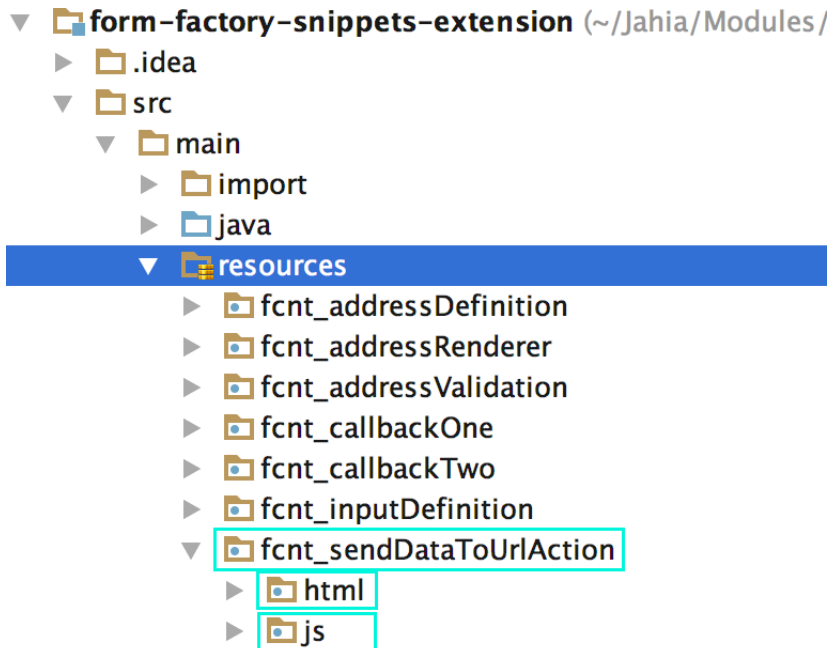


Ensure that the definition name contains: fcmix:action

```
//-----  
// Form Center actions Definition  
//-----
```

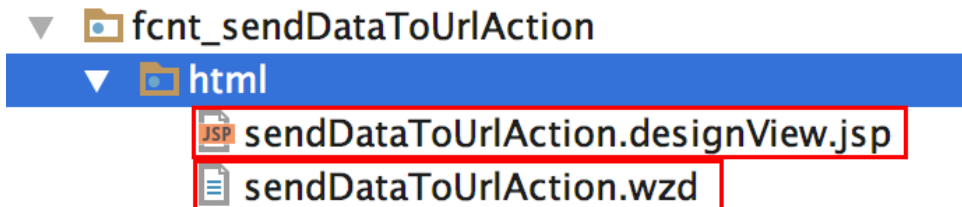
```
[fcnt:sendDataToUrlAction] > jnt:content, fcmix:action, mix:title, jmix:droppableContent, jmix:hiddenType
```

2.) With the definition created, we can now create the folder structure that houses the necessary files. Create a folder within [*module_name*]/src/main/resources/ that matches your action's definition name and within that folder create two more folders named 'html' and 'js'(optional) respectively:



3.) Within the html folder there will reside 2 files (1 being optional) :

- **actionName.wzd** - contains the defined properties for your action
- **actionName.designView.jsp**(optional) - used to edit any of the specified properties



actionName.wzd contents:

```
package fcnt_sendDataToUrlAction.html

action {
  label "Send Data To Url"
  wizard "<ff-send-data-to-url view-type='designView'></ff-send-data-to-url>"
  properties {
    actionname "senddatatourl"
    sendto ""
    parametername "formData"
  }
}
```

The wzd file is composed of:

- **package** (This is the action's definition name)
- **action**(**mandatory**): encloses all the action properties
- **label**(**mandatory**): The human readable name of your action (used to generate a system name for the action)
- **wizard**(**optional**): Used in order to define the view for the action.
The value of the wizard property corresponds to the action's directive name, and view-type corresponds to the name given to the view (in our case it is designView)
- **properties**(**optional**): declare properties that should not be internationalized within this container.
- **propertiesI18n**(**optional**): declare properties that should be internationalized within this container.

actionName.designView.jsp

```
<div class="side-panel-body-content">
  <div class="row">
    <div class="col-sm-12">
      <label message-key="fcnt_sendDataToUrlAction.designView.label.sendDataToUrl"></label>
      <input type="text" class="form-control" ng-model="action.sendto">
    </div>
  </div>
  <div class="row">
    <div class="col-sm-12">
      <label message-key="fcnt_sendDataToUrlAction.designView.label.parameterName"></label>
      <input type="text" class="form-control" ng-model="action.parametername">
    </div>
  </div>
</div>
```

The view has a basic structure that contains a div with the class "side-panel-body-content" which encompasses all displayable content.

Any properties that are configurable for the action can be specified within this view and should be bound to action.[*propertyName*].

The message-key directive (seen in the label element) is used to retrieve any key that is defined within the resource bundle.

The above designView corresponds to the following image:

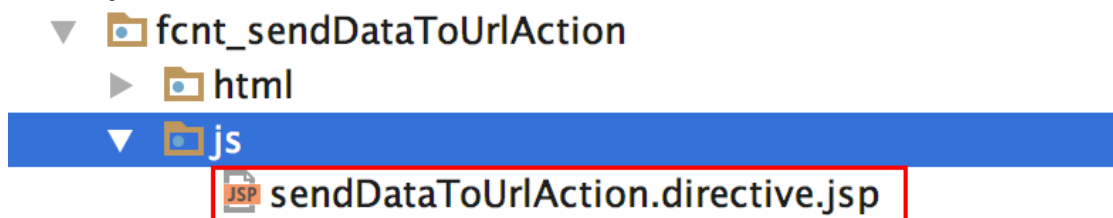
Edit action

URL where the data should be sent

Parameter name

✕Close

4.) Within the js folder resides the directive for the action:



This directive is only necessary if you wish to create a view for manipulating the action's available properties. The directive name is the name of the action's definition:
[*actionDefinitionName*].directive.jsp

```
<%@ page contentType="text/javascript" %>
<%@ taglib prefix="formfactory" uri="http://www.jahia.org/formfactory/functions" %>

(function () {
  'use strict';

  //Define the action directive
  var sendDataToUrlAction = function($log, ffTemplateResolver) {
    var directive = {
      restrict: 'E',
      templateUrl: function(el, attrs) {
        return ffTemplateResolver.resolveTemplatePath(
          '${formfactory:addFormFactoryModulePath("/form-factory-actions/send-data-to-url/", renderContext)}',
          attrs.viewType
        );
      },
      link: linkFunc
    };
    return directive;

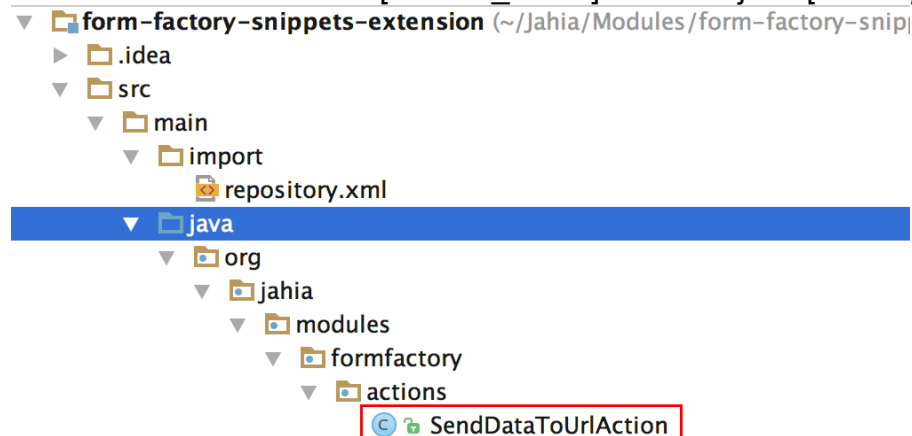
    function linkFunc(scope, el, attr) {
      /**
       * Any initialization of action properties or any other variables
       * can be done within this function.
       */
    }
  };
  //Attach the directive to the module
  angular
    .module('formFactory')
    .directive('ffSendDataToUrl', ['$log', 'ffTemplateResolver', sendDataToUrlAction]);
})();
```

Illustrated above is the general implementation of the action's directive which is necessary when creating a view.

As mentioned in the comment above, any initialization of the action's properties can be done within the linking function.

5.) All that is left is to create the Java action class that will handle the desired functionality of our implemented action.

Create the action class in `[module_name]/src/main/java/[namespace]/actions/`



The custom action class will be required to extend **Action**(`org.jahia.bin.Action`) *abstract class* and implement the required **doExecute** *abstract method* that returns an `ActionResult` object.

Remember to create the associating bean for the above created action in the `[module_name].xml` file located in:
`[module_name]/src/main/resources/META-INF/spring:`

```
<?xml version="1.0" encoding="UTF-8"?>
<beans xmlns="http://www.springframework.org/schema/beans"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.springframework.org/schema/beans
  http://www.springframework.org/schema/beans/spring-beans-3.0.xsd">
  <bean id="SendDataToUrlAction" class="org.jahia.modules.formfactory.actions.SendDataToUrlAction"/>
</beans>
```

After completing the aforementioned steps, upon redeploying of the module, the newly created action will be visible in the actions side panel.