JSON Tool

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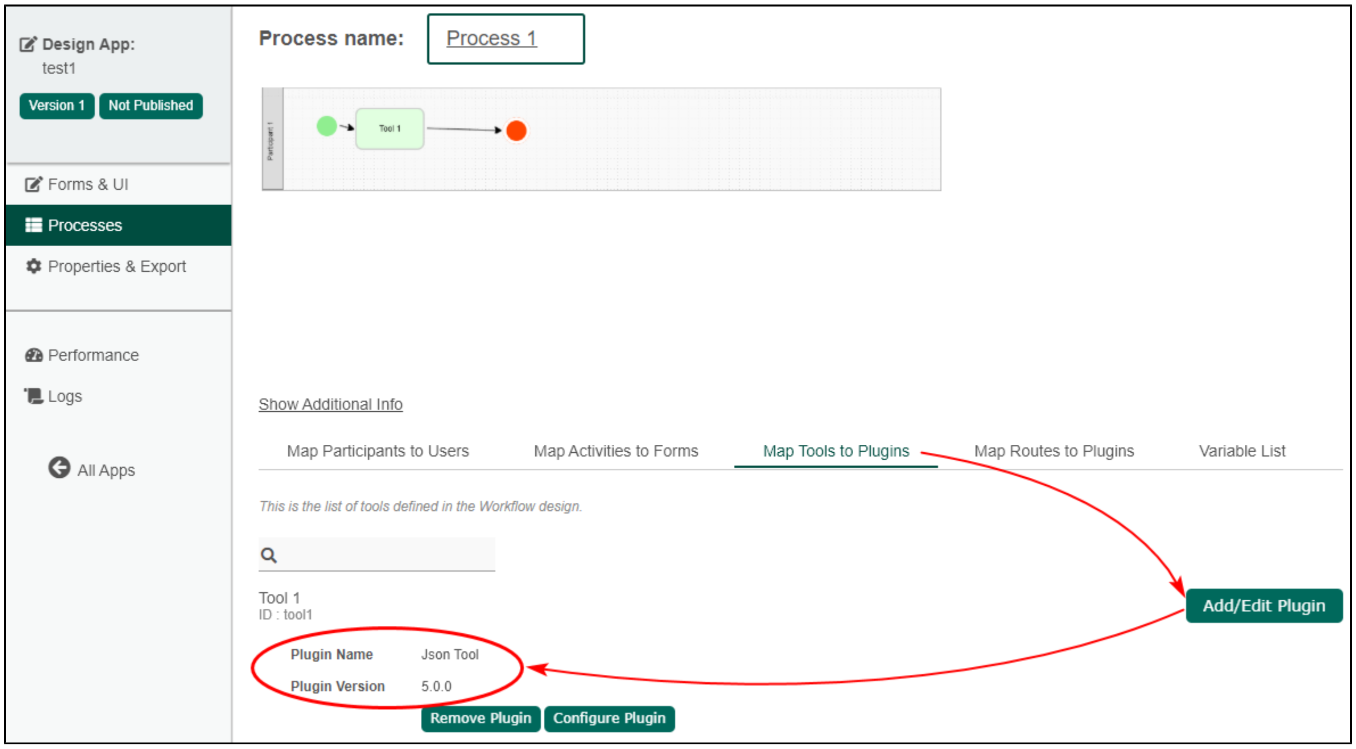
Introduction

The **JSON Tool** in a process enables one to issue a JSON web service call, and to save the returned data into Joget's form data and/or into the process's workflow variable. Download the demo app to try it out on your Joget DX platform.
The Joget Marketplace has a free **JSON Form Options Plugin** to use JSON to populate Form Select Box, Check Box or Radio Buttons.



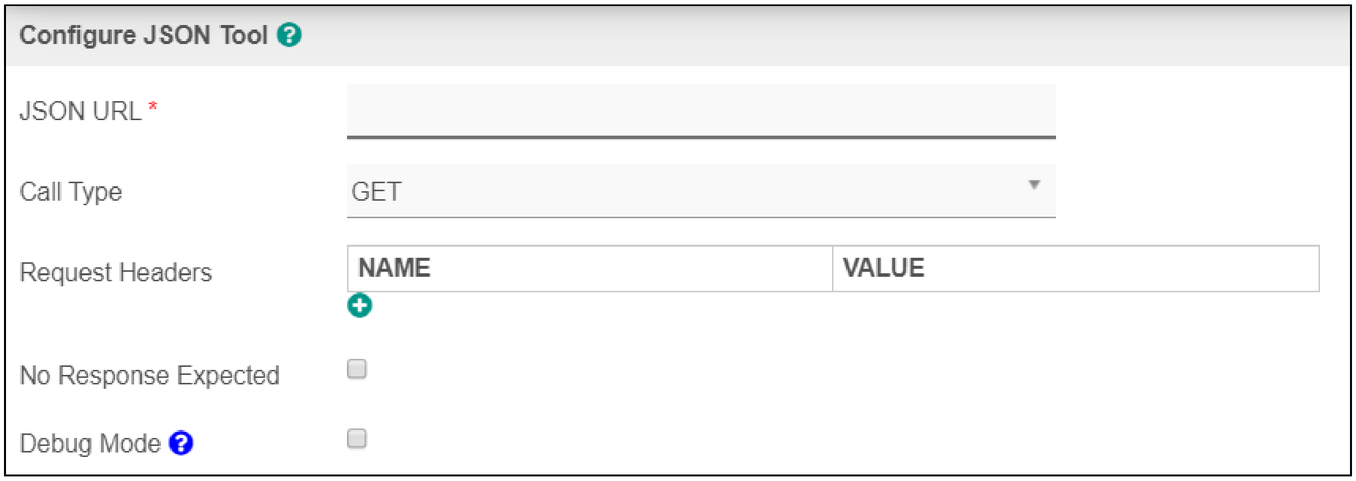
This is the list of tools defined in the Workflow design.

Tool 1
ID : tool1

Plugin Name	Json Tool
Plugin Version	5.0.0

JSON Tool Properties

Configure JSON Tool



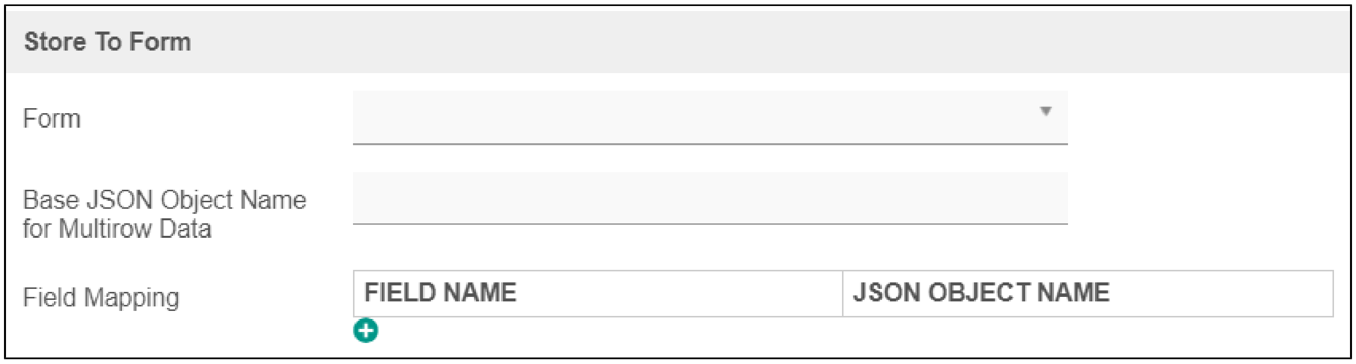
Configure JSON Tool

JSON URL *	
Call Type	GET
Request Headers	NAME / VALUE
No Response Expected	☐
Debug Mode	☐

Figure 1: Configure JSON Tool

Name	Description
JSON URL	URL to be called.
Call Type	Select the call type: • GET • **POST** **GET** requests include all required data in the URL. GET is less secure compared to POST because data sent is part of the URL. So it's saved in browser history and server logs in plaintext. In contrast, HTTP **POST** requests supply additional data from the client (browser) to the server in the message body. POST is a little safer than GET because the parameters are not stored in browser history or in web server logs. From here.
POST Method (Call type = POST)	Select the post method: • POST Parameters • POST Parameters as JSON Payload • Custom JSON Payload
POST Parameters (Call type = POST)	When POST Method is set to "POST Parameters", these parameters will be sent as a UrlEncodedFormEntity. When POST Method is set to "POST Parameters as JSON Payload", these parameters will be sent as a StringEntity in a form of an escaped JSON string.
Custom JSON Payload	Write your own JSON to be the payload. It will be sent as a StringEntity. This option is available only when "Custom JSON Payload" in selected.
Request Headers	Add name(s) and value(s) to the request header.
No Response Expected	Check if no response is expected, so that even if there is a response, this tool will simply ignore it. Using this option will also disable "store to form" and "store to workflow variable" properties.
Debug Mode	Show relevant debug entries in the server log for debugging purposes.

Store To Form


Store To Form

Form

Base JSON Object Name for Multirow Data

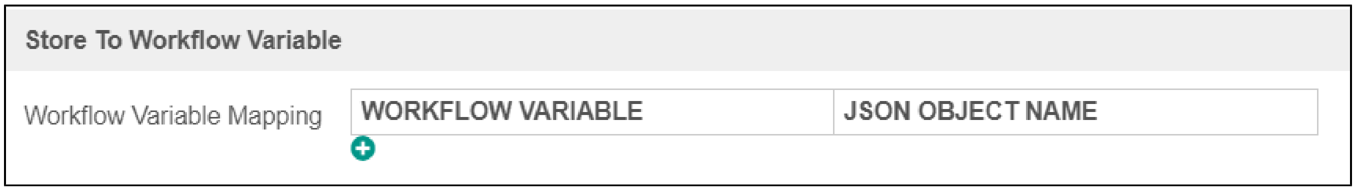
Field Mapping

FIELD NAME	JSON OBJECT NAME

Figure 2: Store to Form

Name	Description
Form	Select target form to store data to.
Base JSON Object Name for Multirow Data	Name of the object that contains an array to be based on.
Field Mapping	Mapping with JSON data with Form fields. Name / Description Field Name / Form field ID JSON Object Name / JSON property name

Store To Workflow Variable


Store To Workflow Variable

Workflow Variable Mapping

WORKFLOW VARIABLE	JSON OBJECT NAME

Figure 3: Store to Workflow Variable

Name	Description
Workflow Variable Mapping	Name / Description Workflow Variable / Workflow Variable Name. JSON Object Name / JSON property name.

Notes On JSON Returned Data

Introduced in v5, the API Domain Whitelist setting in **General Settings** needs to be configured to allow JSON API requests. If a request is from a non-whitelisted domain, the response will be a HTTP 400 Bad Request. Enter asterisk " * " into the **API Domain Whitelist** field in General Settings to allow API calls.

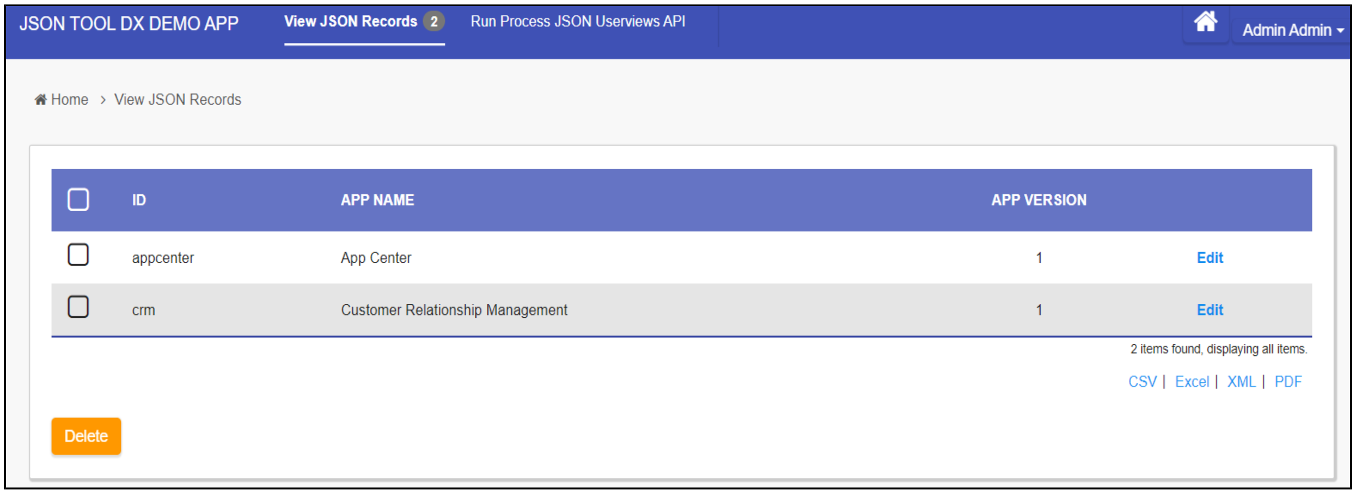
In figure 2 and 3 above, you can specify how to treat the returned data. The returned data may be saved as form data or/add to be saved into process's workflow variable. The example used in this article shows how one can store multi-row data into a form data table.

Sample JSON API **POST** call: http://localhost:8080/jw/web/json/apps/published/userviews

Sample JSON Returned Results

```
{
        "apps": [
                {
                        "name": "App Center",
                        "userviews": [
                                {
                                        "name": "Joget DX",
                                        "id": "v",
                                        "version": 1,
                                        "url": "/jw/web/userview/appcenter/v"
                                },
                                {
                                        "name": "Joget DX Platform",
                                        "id": "v2",
                                        "version": 1,
                                        "url": "/jw/web/userview/appcenter/v2"
                                }
                        ],
                        "id": "appcenter",
                        "version": 1
                },
                {
                        "name": "Customer Relationship Management",
                        "userviews": [
                                {
                                        "imageUrl": "/jw/web/app/crm/resources/crm_icon.png",
                                        "name": "Customer Relationship Management",
                                        "id": "crm_userview_sales",
                                        "version": 1,
                                        "url": "/jw/web/userview/crm/crm_userview_sales"
                                }
                        ],
                        "id": "crm",
                        "version": 1
                }
        ]
}
```

Download Demo App



	ID	APP NAME	APP VERSION	
☐	appcenter	App Center	1	Edit
☐	crm	Customer Relationship Management	1	Edit

2 items found, displaying all items.

CSV | Excel | XML | PDF

Delete

Figure 4: Download the demo app below to view how JSON TOOL is used in run process to populate form records

- APP_json_tool_dx_kb.jwa

Related Documentation

- List of JSON API
- JSON Form Options Plugin From Joget Marketplace
- Configure JSON Tool Based On Returned JSON Data Structure
- Sample JSON API Integration
- Single Sign On - SSO