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Workflow Data model Attribution

Workflow Metadata

#	Field Name	Description	Data Type	Editable	Validations
1	id	Identifier generated by SDC per each Workflow. Remains same across various versions of Workflow.	string	N	
2	name	Name of the Workflow.	string	Y	1. Allow only capital Alphabets [A-Z] and underscore[_]. 2. The name should be Unique (case insensitive) across workflows that are in Draft or Certified state. 3. Minimum length of 6 characters. 4. Maximum-length of 30 characters.
3	description	Description of Workflow.	string	Y	

4	category	Categories of the workflow.	string[]	Y	Configurable valid values e.g., Service <ul style="list-style-type: none"> • SD-WAN • VoIP • Considerupto10 Resource <ul style="list-style-type: none"> • VNF • PNF • Network
5	states	List of states of the workflow, derived from the states of its versions	string[]	Y	valid values: 1.DRAFT 2.CERTIFIED

State

#	Field Name	Description	Data Type	Validations
1	name	Name of The State	string	valid values: 1.DRAFT 2.CERTIFIED

Version

#	Field Name	Description	Data Type	Editable	Validations
1	version	Automatically assigned semantic version	string	N	The workflow version. Two dots (".") separated digit blocks.
2	versionId		string	N	Workflow Version ID. Version Identifier: UUID generated per each <u>version</u> of the workflow model
3	description	description of the current workflow version	string	Y/N	The description of a version is editable until the version becomes certified
3	state	State of the version	state	N	The lifecycle state of the workflow. Values are: 1. DRAFT 2. CERTIFIED
4	inputs		<u>input[]</u>	Y	
5	outputs		<u>output[]</u>	Y	
6	artifact	path to the workflow artifact	string	Y	The data of the artifact after Base64 encoding

input

#	Field	Description	Data Type	Validations
1	name	Name of Parameter	string	[A-Z], [a-z], [0-9] and underscore[_].
2	type	Data-type of Parameter	string	Enumeration with valid values 1. string 2. integer 3. float 4. boolean 5. timestamp

3	mandatory	Indicates if the Parameter is mandatory or optional	boolean	true - mandatory false - optional
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output

#	Field	Description	Data Type	Validations
1	name	Name of Parameter	string	[A-Z], [a-z], [0-9] and underscore[_].
2	type	Data-type of Parameter	string	Enumeration with valid values 1. string 2. integer 3. float 4. boolean 5. timestamp
3	mandatory	Indicates if the Parameter is mandatory or optional	boolean	true - mandatory false - optional

API's Summary

#	Operation	URI	Request	Response Status	Response Body	Description
1	GET	/workflows/	? state= CERTIFIED ? state= DRAFT ? state= DRAFT, CERTIFIED ? limit=50&offset=0	200 (OK)	{id, name, description, category, states[{name,...}], limit, offset, count}	get all workflows, optionally filtered by state (comma separated)
2	GET	/workflows/{id}	? expand=versions	200 (OK) / 404 (Not Found) If does not exist	{id, name, description, category, states[{name,...}] }. If expanded (i.e. ? expand=versions), will include the list of versions with their metadata (semantic, ID) only [version{...}]	getspecificworkflow

3	GET	/workflows/{id} /versions/{versionId}	? state=CERTIFIED ? state=DRAFT ? state=DRAFT, CERTIFIED ? limit=50&offset=0	200 (OK) / 404 (Not Found) if the workflow does not exist, with an appropriate message	{version, versionId, state, inputs[{name, type}], outputs[{name, type}]}	return all versions of a workflow, optionally filtered by state (comma separated)
4	GET	/workflows/{id} /versions/{versionId}	? fields=inputs, outputs	200 (OK) / 404 (Not Found) if the workflow or version does not exist, with an appropriate message	{inputs[{name, type}], outputs[{name, type}], state}	get specific workflow version
5	PUT	/workflows/{id} /versions/{versionId} /artifact	file	201 (Created) if did not exist / 200 (OK) if replaced / 422 (Unprocessable Entity) if the state does not allow modifications (e.g. certified), must include a detailed message / 404 (Not Found) if the workflow or version does not exist, with an appropriate message		Save/Update artifact of a version i SDC
6	GET Deprecated	(Exposed by SDC)	file	200 (OK) / 404 (Not Found) if the workflow, version, or artifact does not exist, with an appropriate message	binary	Download artifact
7	GET (Deprecated)	/workflows/{id} /versions/{versionId} /state	none	200 (OK) / 404 (Not Found) if the workflow or version does not exist, with an appropriate message	{name, description, time, nextStates: [a,b,...]}	Get current state of the workflow. Time in ISO 8064

API's Specification

(GET) List all Workflows

Description

Get all workflows, optionally filtered by state(s)

Request Header

Header Name	Mandatory?	Description
Content-Type	Y	Valid value is : application/json
Authorization	Y	TBD

URI

```
GET http://ip:port/wf/workflows/
```



The list can also be filtered with one or more criteria using query params (when specifying several criteria, a logical 'AND' will be added between them)

```
GET http://ip:port/wf/workflows/?{filterKey}={filterValue}&limit={limit}&offset={offset}
```

Request Filter Example

```
/**get all workflows**/  
GET http://ip:port/wf/workflows/  
  
/**get specific state within the list**/  
GET http://ip:port/wf/workflows/?state=DRAFT
```

Response Body

```
200  
{  
  "total": 1,  
  "limit": 100,  
  "offset": 0,  
  "workflows": [  
    {  
      "id": "b9075cc2-f33e-4c17-a6fb-4a3fe13b7fa2",  
      "name": "a name string ...",  
      "description": "a description string ...",  
      "category": "VNF"  
      "states": [  
        "DRAFT"  
      ]  
    }  
  ]  
}
```

Response Error

Code	Error	Message
200	OK	OK

(GET) Get Workflow by ID

Description

Get specific workflow by ID

Request Header

Header Name	Mandatory?	Description
Content-Type	Y	Valid value is : application/json
Authorization	Y	TBD

URI

```
GET http://ip:port/wf/workflows/{id}
```

Request Example

```
GET http://ip:port/wf/workflows/62a09622-2199-4ab1-a73c-daf1caab0092
```

Response Body

```
200
GET http://ip:port/wf/workflows/10ac539f-0c10-4065-b1c0-eac9bbd3b308
{
  "id": "0ac539f-0c10-4065-b1c0-eac9bbd3b308",
  "name": "a name string ...",
  "description": "a description string ...",
  "category": "VNF",
  "states": [
    "DRAFT", "CERTIFIED"
  ]
}
```

Response Error

Code	Error	Message
200	OK	OK
404	Not Found	workflow does not exist

Request Filter Example

```
/**espsific version within the list**/
GET http://ip:port/wf/workflows/10ac539f-0c10-4065-b1c0-eac9bbd3b308?expand=versions

200
{
  "id": "0ac539f-0c10-4065-b1c0-eac9bbd3b308",
  "name": "a name string ...",
  "description": "a description string ...",
  "category": "VNF",
  "states": [
    "DRAFT", "CERTIFIED"
  ],
  "versions": [
    {
      "version": "1.1",
      "versionId": "10ac539f-0c10-4065-b1c0-eac9bbd3b308",
      "description": "workflow version desc.",
      "state": "CERTIFIED"
    },
    {
      "version": "0.2",
      "versionId": "11bc5f0a-1b33-416a-2ac0-5ac3abd3c4af",
      "description": "workflow version desc.",
      "state": "DRAFT"
    }
  ]
}
```



expand

?expand=versions

The `expand` query parameter increases the set of fields that appear in the response in addition to the default fields.

(GET) List of Workflow Versions

Description

Return all versions of a workflow, optionally filtered by state

Request Header

Header Name	Mandatory?	Description
Content-Type	Y	Valid value is : application/json
Authorization	Y	TBD

URI

```
GET http://ip:port/wf/workflows/{id}/versions/
```



The list can also be filtered with one or more criteria using query params(when specifying several criteria, a logical 'AND' will be added between them)

```
GET http://ip:port/wf/workflows/{id}/versions/?{filterKey}={filterValue}
```

Request Example

```
GET http://ip:port/wf/workflows/62a09622-2199-4ab1-a73c-daf1caab0092/versions/?state=DRAFT,CERTIFIED
```

Response Body

```
200
{
  "total": 2,
  "versions": [
    {
      "version": "1.1",
      "versionId": "10ac539f-0c10-4065-b1c0-eac9bbd3b308",
      "description": "workflow version desc.",
      "inputs": [
        {
          "name": "timeout",
          "type": "integer",
          "mandatory": True
        }
      ],
      "outputs": [
        {
          "name": "timeout",
          "type": "integer",
          "mandatory": True
        }
      ],
      "artifact": "/storage/myArtifact.bpmn",
      "state": "DRAFT"
    },
    {
      "version": "2.0",
      "versionId": "234c52a0-fcf0-4a64-bac5-bde6a9362786",
      "description": "workflow version desc.",
      "inputs": [
        {
          "name": "timeout",
          "type": "integer",
          "mandatory": True
        }
      ],
      "outputs": [
        {
          "name": "timeout",
          "type": "integer",
          "mandatory": True
        }
      ],
      "artifact": "/storage/myArtifact.bpmn",
      "state": "CERTIFIED"
    }
  ]
}
```

Response Error

Code	Error	Message
200	OK	-
404	Not Found	Workflow %id does not exist.
404	Not Found	Version %id does not exist.

(GET) Workflow Version

Description

Get specific workflow version

Request Header

Header Name	Mandatory?	Description
Content-Type	Y	Valid value is : application/json
Authorization	Y	TBD

URI

```
GET http://ip:port/wf/workflows/{id}/versions/{versionId}
```

Response Body

```
200
{
  "version": "2.0",
  "versionId": "234c52a0-fcf0-4a64-bac5-bde6a9362786",
  "description": "workflow version desc.",
  "inputs": [
    {
      "name": "timeout",
      "type": "integer",
      "mandatory": True
    }
  ],
  "outputs": [
    {
      "name": "timeout",
      "type": "integer",
      "mandatory": True
    }
  ],
  "artifact": "/storage/myArtifact.bpmn",
  "state": "CERTIFIED"
}
```

Response Error

Code	Error	Message
200	OK	-
404	Not Found	Workflow does not exist.
404	Not Found	Version does not exist

(PUT) Create or Update Workflow Version Artifact (Exposed by SDC)

Description


Save/Update artifact of a version in SDC

URI

```
PUT http://ip:port/wf/workflows/{id}/versions/{versionId}/artifact
```

Request Body

```
PUT http://ip:port/wf/workflows/62a09622-2199-4ab1-a73c-daf1caab0092/versions/7a7a23b0-a952-427e-b856-b550eaaa8b23/artifact
{
  "artifact": "
ew0KICAiYXJ0aWZyY3RzIjogImRmc2FmIiwNCiAgIm5vcm1hbG16ZWROYW1lIjogImNpc2VydmljZTBiYzY5ODk2OTQ4ZiIsDQogICJzeXN0ZW10
YW1lIjogIkNpc2VydmljZTBiYzY5ODk2OTQ4ZiIsDQogICJpbmZhcm1hbnRV... "
}
```

 "artifact": The data of the artifact after Base64 encoding

Response Body

none

Response Error

Code	Error	Message	notes
200	OK	-	if the artifact got replaced
201	Created	-	if the artifact did not exist
404	Not Found	Workflow does not exist.	
404	Not Found	Version does not exist.	
422	Unprocessable Entity	The state of the workflow version does not allow modification. "CERTIFIED"	

(GET) Download Workflow Artifact (Deprecated)

Description

Download Workflow Artifact

Request Header

Header Name	Mandatory?	Description
Content-Type	Y	Valid value is : application/json
Authorization	Y	TBD

URI

```
GET http://ip:port/wf/workflows/{id}/versions/{versionId}/artifact
```

Request Body

none

Response Body

```
200
{
  "artifact": "
ew0KICAiYXJ0aWZhY3RzIjogImRmc2FmIiwNCiAgIm5vcmlhbGl6ZWROYW11IjogImNpc2VydmljZTBiYzY5ODk2OTQ4ZiIsDQogICJzeXN0ZW10
YW11IjogIkNpc2VydmljZTBiYzY5ODk2OTQ4ZiIsDQogICJpbnZhcm1hbnRV... "
}
```

Response Error

Code	Error	Message
200	OK	-
404	Not Found	Workflow does not exist.
404	Not Found	Version does not exist.