

DP2 2016/2017 Assignment 3 Web Service

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Abstract

The web service for assignment 3 provide the possibility to create a set of nffgs and

1 Resources Structure

The resource structure is represented in this diagram:

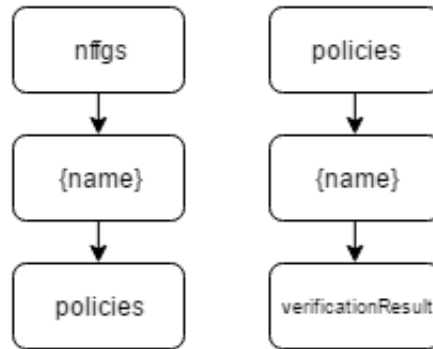


Figure 1: Resources structure diagram

Resource	Allowed Method
nffgs	GET / DELETE / POST
nffgs/{name}	GET / DELETE
nffgs/{name}/policies	GET / DELETE / POST
policies	GET / DELETE
policy/verificationResult	POST
policies/{name}	GET / DELETE / PUT
policies/{name}/verificationResult	POST

2 Resource Mapping

The resource are mapped, starting from the base path *http://localhost:8080/NffgService/rest* following URL:

/nffgs	The set of nffgs
/nffgs/{name}	The nffg identified by name
/nffgs/{name}/policies	The set of policy of the nffg identified by name
/policies	The set of policies
/policies/{name}	The policy identified by name
/policies/{name}/verificationResult	The verification result of the policy identified by name
/policy/verificationResult	The verification result of a policy not stored in the service

3 Resource Operation

The operations available for these resources are listed below:

3.1 nffgs

URL: *http://localhost:8080/NffgService/rest/nffgs*

These operations let you manage the nffgs collection. You can add a new NFFG, retrieve or delete the entire collection.

Method	Input	Code	Meaning	Output
POST	nffg			
		200	OK	nffg
		400	Bad Request	–
		500	Internal Server Error	
GET				
		200	OK	nffgs
		500	Internal Server Error	
DELETE				
		200	OK	nffgs
		500	Internal Server Error	

3.2 nffgs/{name}

URL: *http://localhost:8080/NffgService/rest/nffgs/{name}*

These operations let you manage a single nffg already in the service selected by means of its name, allowing to retrieve or delete it.

Method	Path Param.	Code	Meaning	Output
GET	name			
		200	OK	nffg
		404	Not found	
		500	Internal Server Error	
DELETE	name			
		200	OK	nffg
		404	Not found	
		500	Internal Server Error	

3.3 nffgs/{name}/policies

URL: <http://localhost:8080/NffgService/rest/nffgs/{name}/policies>

These operations let you manage the set of policies bounded to a particular nffg, selected by means of its name. You can add a new policy for this nffg, retrieve or delete all the policies bounded to the nffg.

Method	Path Param.	Input	Code	Meaning	Output
POST	name	policy			
			200	OK	policy
			400	Bad Request	
			404	Not found	
			500	Internal Server Error	
GET	name				
			200	OK	policies
			404	Not found	
			500	Internal Server Error	
DELETE	name				
			200	OK	policies
			404	Not found	
			500	Internal Server Error	

3.4 /policies

URL: <http://localhost:8080/NffgService/rest/policies>

These operations let you manage the collection of policies stored in the service. You can retrieve or delete all the policies.

Method	Code	Meaning	Output
GET			
	200	OK	policies
	500	Internal Server Error	
DELETE			
	200	OK	policies
	500	Internal Server Error	

3.5 /policies/{name}

URL: <http://localhost:8080/NffgService/rest/policies/{name}>

These operations let you manage the a single policy stored in the service. You can update , retrieve or delete the policy selected by means of it's name.

Method	Path Param.	Input	Code	Meaning	Output
PUT	name	policy			
			200	OK	policy
			400	Bad Request	
			403	Forbidden	
			404	Not found	
			500	Internal Server Error	
GET	name				
			200	OK	policy
			404	Not found	
			500	Internal Server Error	
DELETE	name				
			200	OK	policy
			404	Not found	
			500	Internal Server Error	

3.6 /policies/{name}/verificationResult

URL: http://localhost:8080/NffgService/rest/policies/{name}/verificationResult

These operations let you verify one or more policy stored inside the service and retrieve their verificationResult.

To verify more policy the parameter "names" must be used, listing the name of the other policy to verify.

Method	Path Param.	Query Param.	Code	Meaning	Output
POST	name:nameType	names:nameListType			
			200	OK	results
			400	Bad Request	
			404	Not found	
			500	Internal Server Error	
GET	name:nameType				
			200	OK	verificationResult
			404	Not found	
			500	Internal Server Error	

3.7 /policy/verificationResult

URL: http://localhost:8080/NffgService/rest/policy/verificationResult

This operation let you verify one or more policy not stored inside the service and obtain their verificationResult.

Method	Input	Code	Meaning	Output
POST	policies			
		200	Success	results
		400	Bad Request	
		500	Internal Server Error	