

# Design of RESTful API for NFFG verifier

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## Conceptual structure of the resources

verifier

The root resource. Includes nffgs

TODO

nffgs

The collection of nffg elements.

TODO

nffg

Includes info about the nffg: name, last update, nodes, links, policies??

TODO

policies

The collection of policies.

TODO

policy

TODO

result

TODO

# Mapping of the resources to URLs

TODO

## Operations by resource

Methods summary:

/			
GET, DELETE	nffgs/		
GET, POST	{nffg_id}/		
GET, DELETE	policies/		
GET, POST	{policy_id}/		
GET, DELETE, PUT/PATCH	result/	GET	
	online_result/	GET	
	policies/	GET	
(flat view. readonly??)	{policy_id}/	GET	
??	result/	GET	
??			

### / verifier root

This is the root resource, also the entry point. Returns all the informations about NFFGs and policies.

method	request type	response type	explanation	errors
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GET	-	verifier	get the informations (pagination)
DELETE	-	OK	delete all the informations

## /nffgs

NFFGs collection

method	request type	response type	explanation	errors
GET	-	nffgs	get the collection of NFFGs (pagination)	
POST	nffg_req	nffg	create a new NFFG	

TODO: the id of nffg (named entities) is the name? PROs: same type in POST request and in response, no duplicated unique attribute. CONs: the name is always a valid URL?

## /nffgs/{nffg\_id}

A single nffg identified by its id

method	request type	response type	explanation	errors
GET	-	nffg	get the NFFG	
DELETE	-	OK	delete the NFFG	

## /nffgs/{nffg\_id}/policies

Policies collection for this NFFG

method	request type	response type	explanation	errors
GET	-	policies	get the collection of policies (pagination)	
POST	policy_req	policy	create a new policy	

[/nffgs/{nffg\\_id}/policies/{policy\\_id}](/nffgs/{nffg_id}/policies/{policy_id})

A policy identified by its id

method	request type	response type	explanation	errors
GET	-	policy	get the policy	
DELETE	-	OK	delete the policy	

[/nffgs/{nffg\\_id}/policies/{policy\\_id}/result](/nffgs/{nffg_id}/policies/{policy_id}/result)

The result of this policy

method	request type	response type	explanation	errors
GET	-	result	the verification of policy is performed and the result is both stored and returned	

[/nffgs/{nffg\\_id}/online\\_result](/nffgs/{nffg_id}/online_result)

Verification endpoint for client policies, not stored on the service

**request      response**

method	type	type	explanation	errors
GET	policy_req	policy/result??	get the result for this policy	

## /policies

This is a flat view on the policies. But should be readonly: POST requests should also contain the NFFG name/id and another type should be created.

??? TODO: replication of subtree about policies