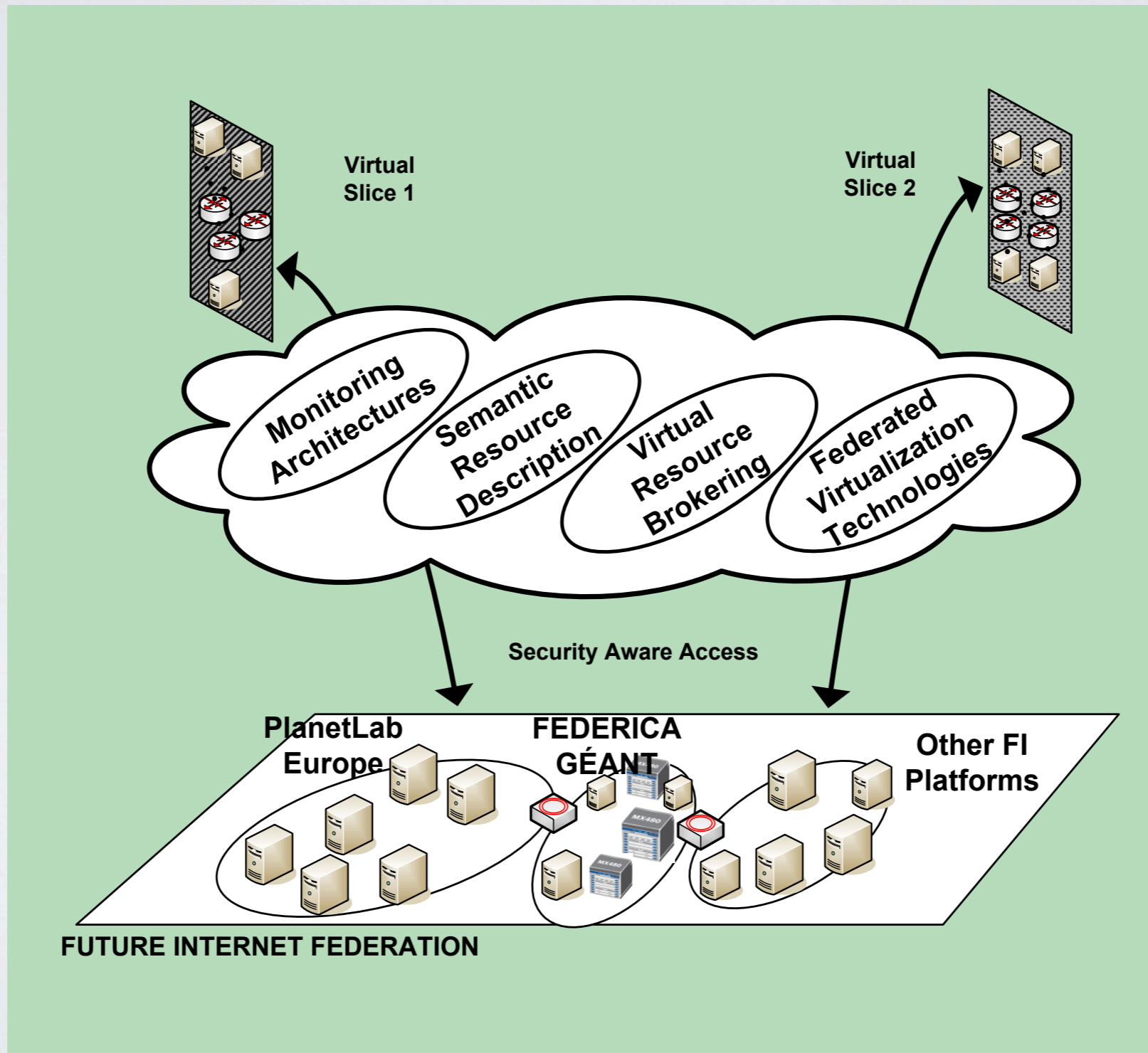


Challenges of an Information Model for Federating Virtualized Infrastructures

Jeroen van der Ham, Chrysa Papagianni, József Stéger, Péter Mátray, Yiannos Kryftis, Paola Grosso , Leonidas Lymberopoulos

Networking innovations Over Virtualized Infrastructures



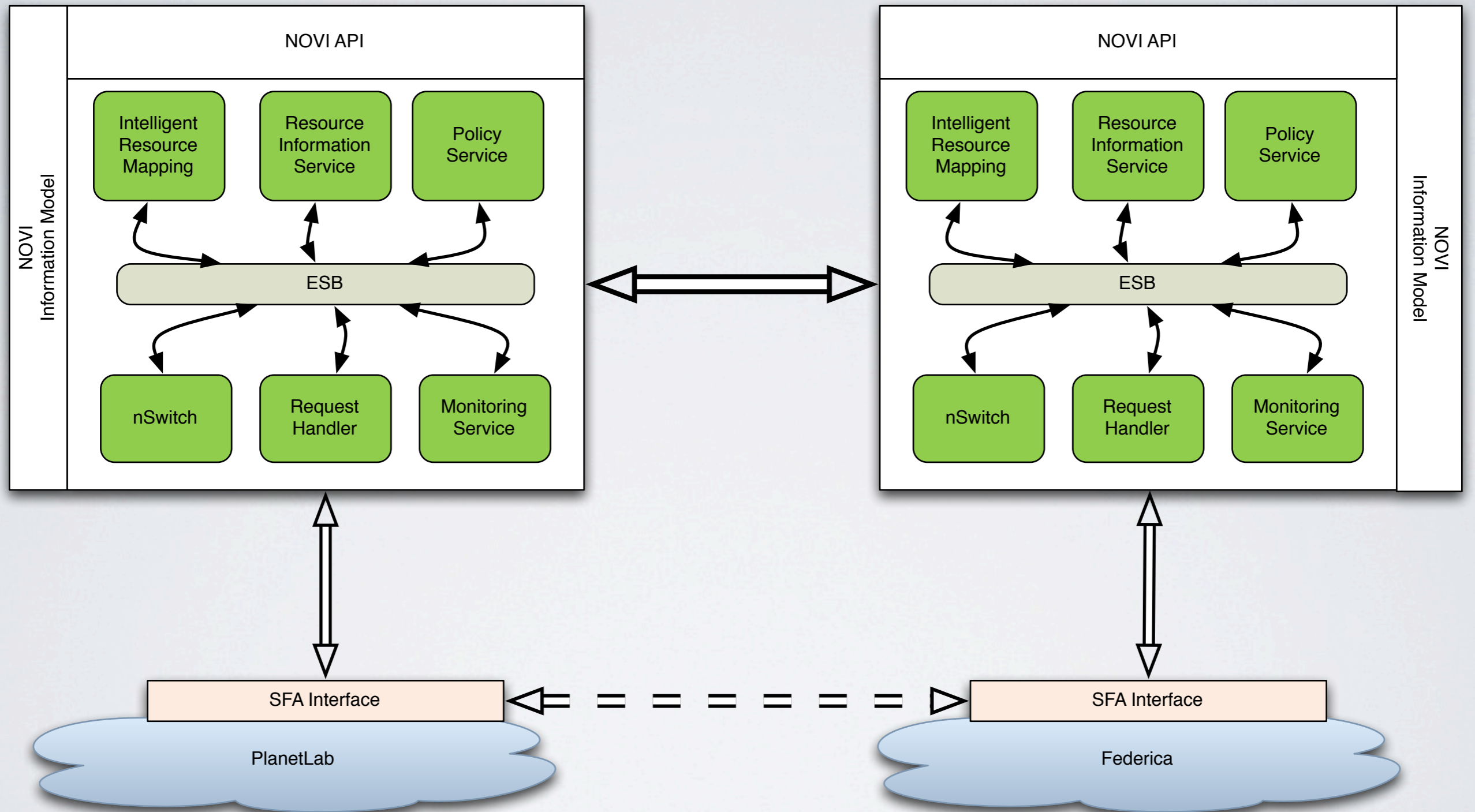
Three main efforts

- NOVI Information Model
- NSwitch (NOVI Virtual Switch)
- Extensible Federated Management and Control

Requests

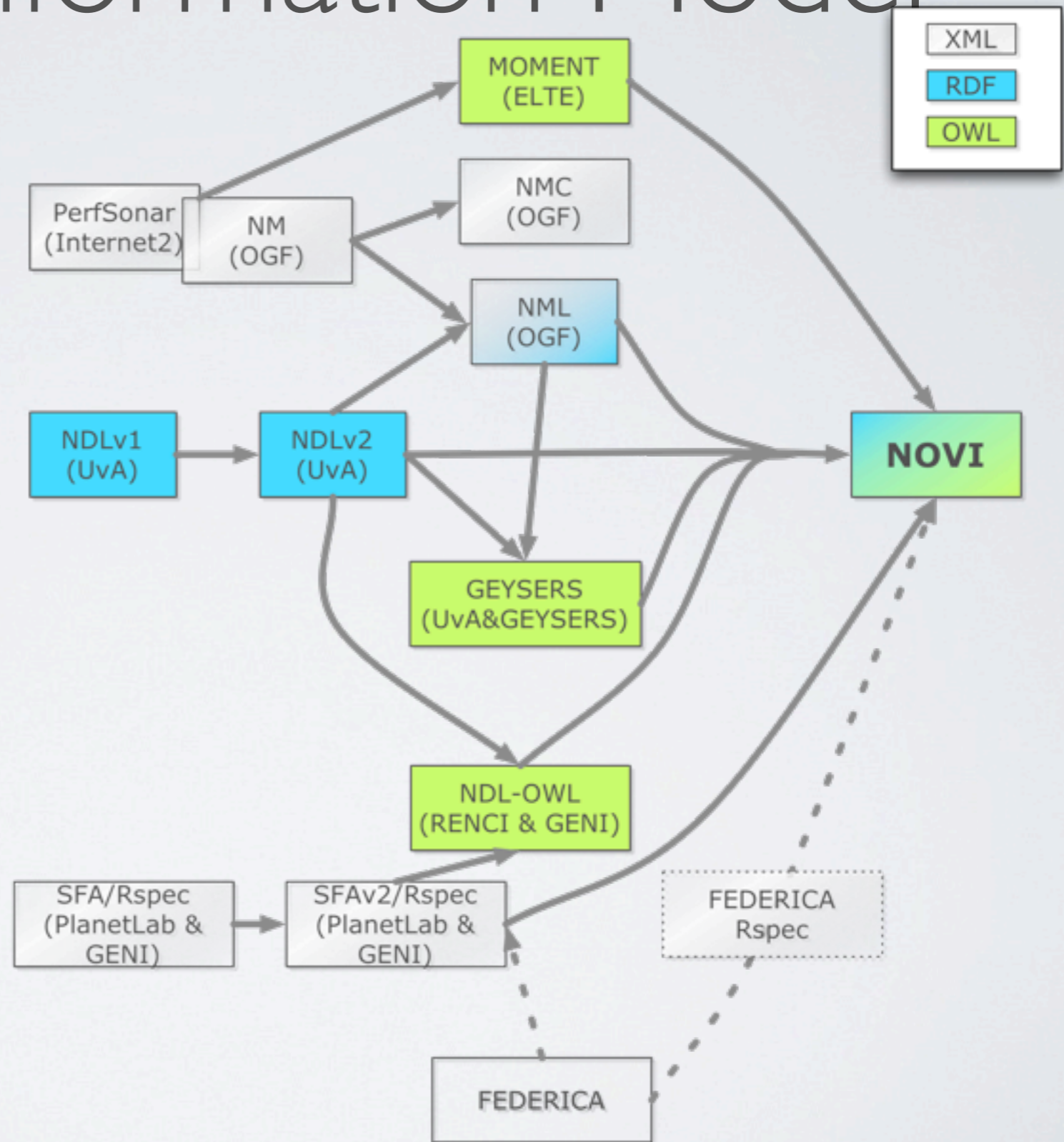
- NOVI supports requests in different levels of detail:
 - Named / Bound request
 - Mixed request
 - Service / Unbound request

NOVI Architecture

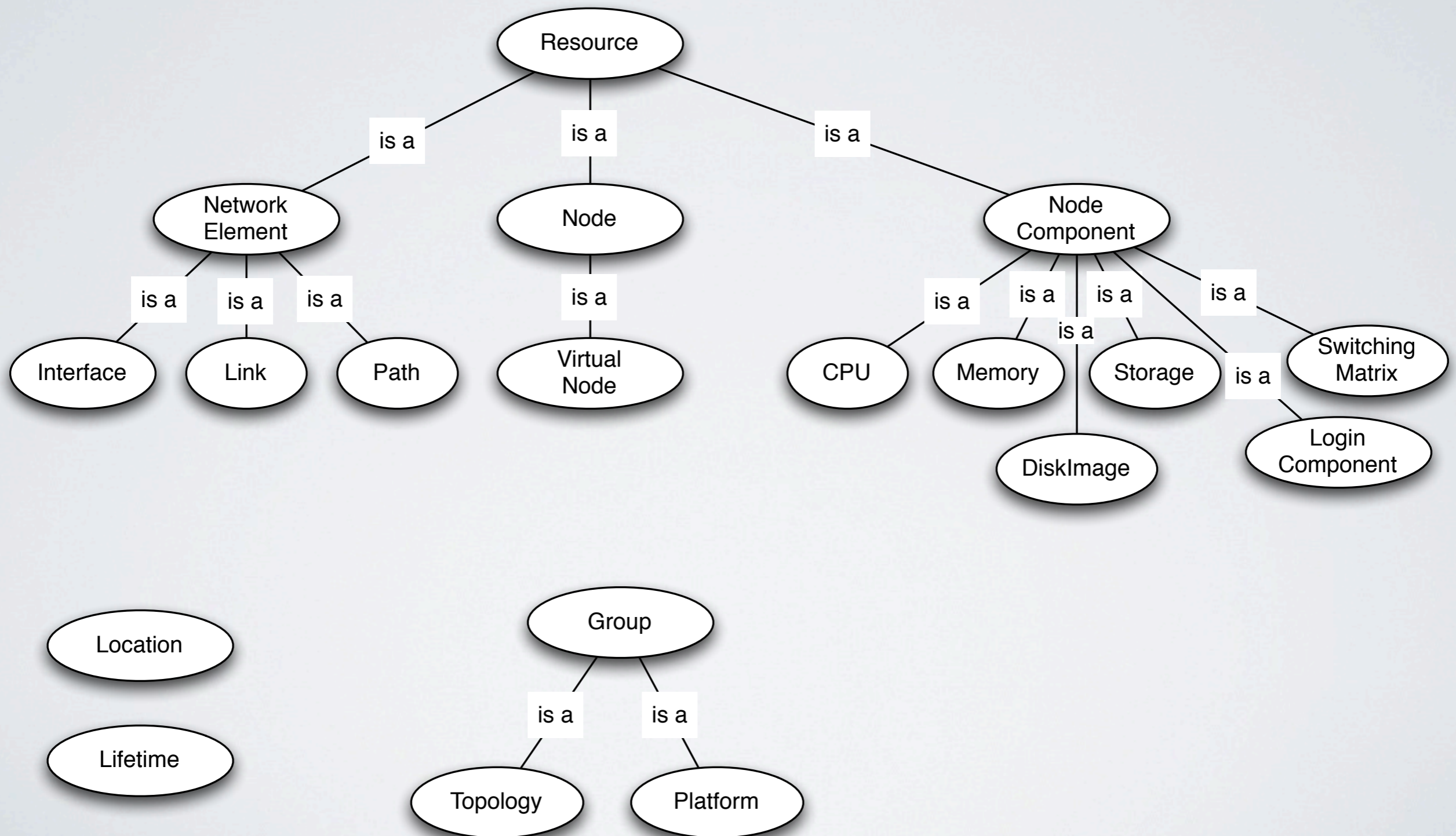


NOVI Information Model

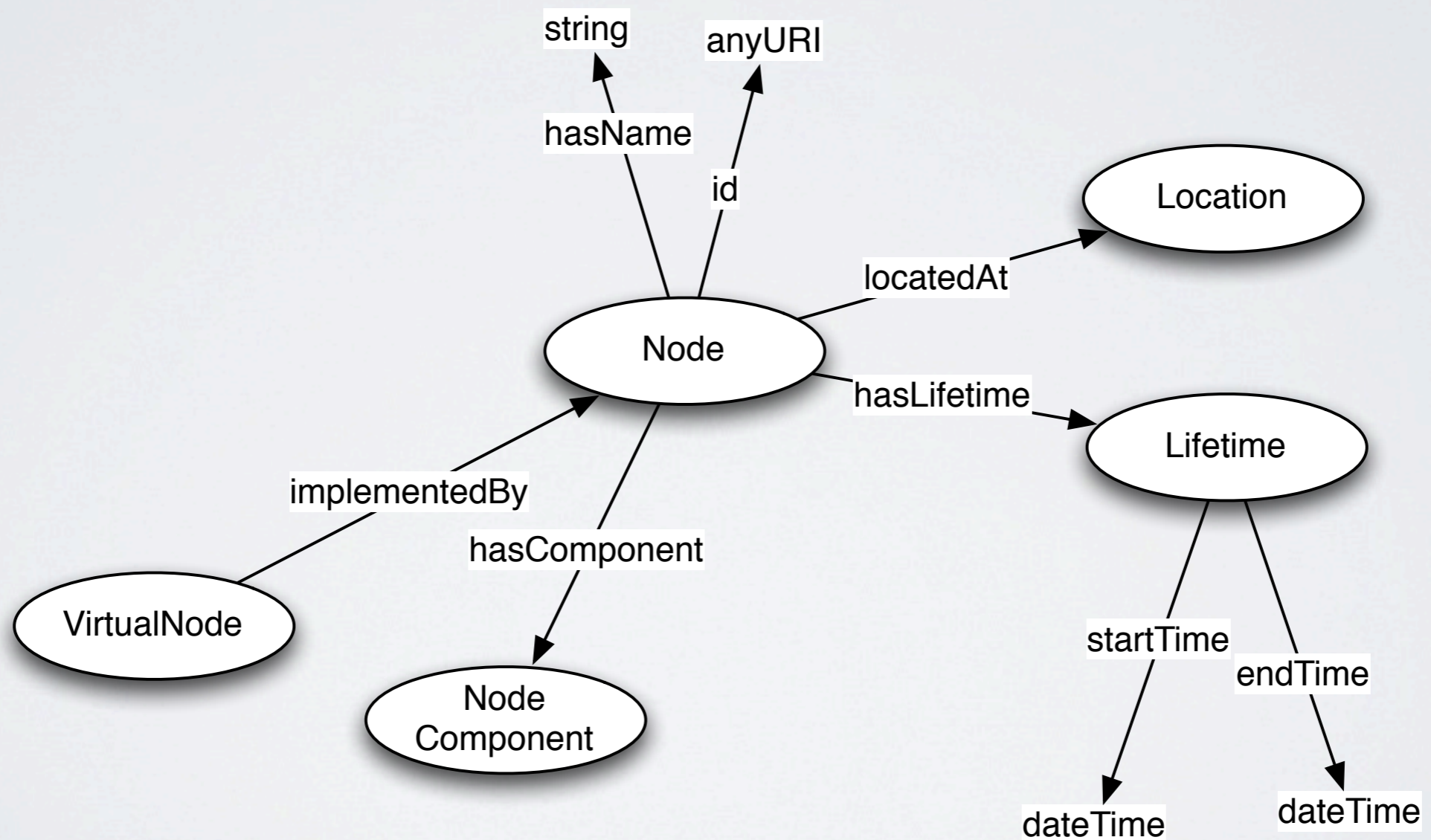
The NOVI IM is based on experiences and efforts in other communities



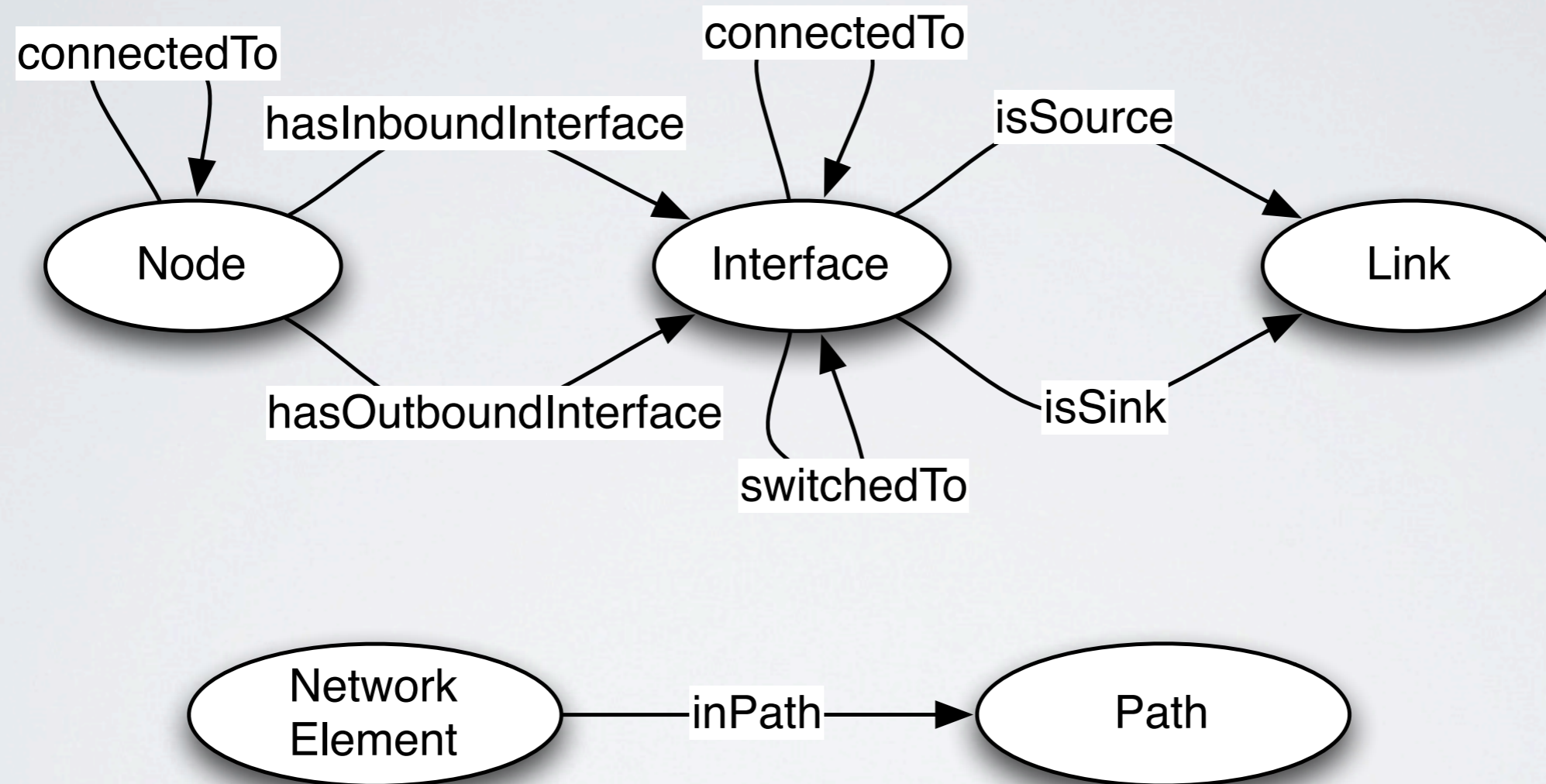
NOVI Base Classes

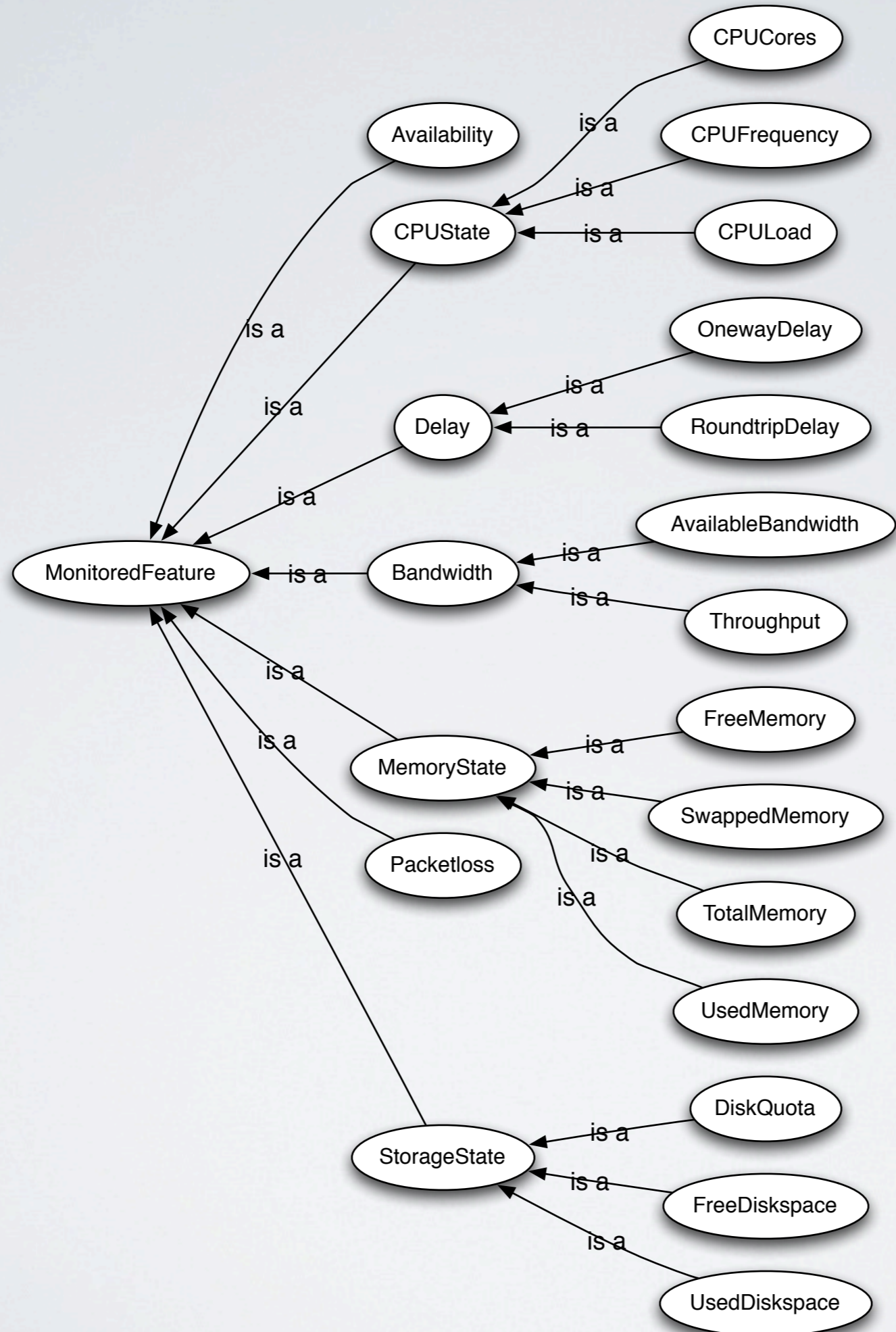


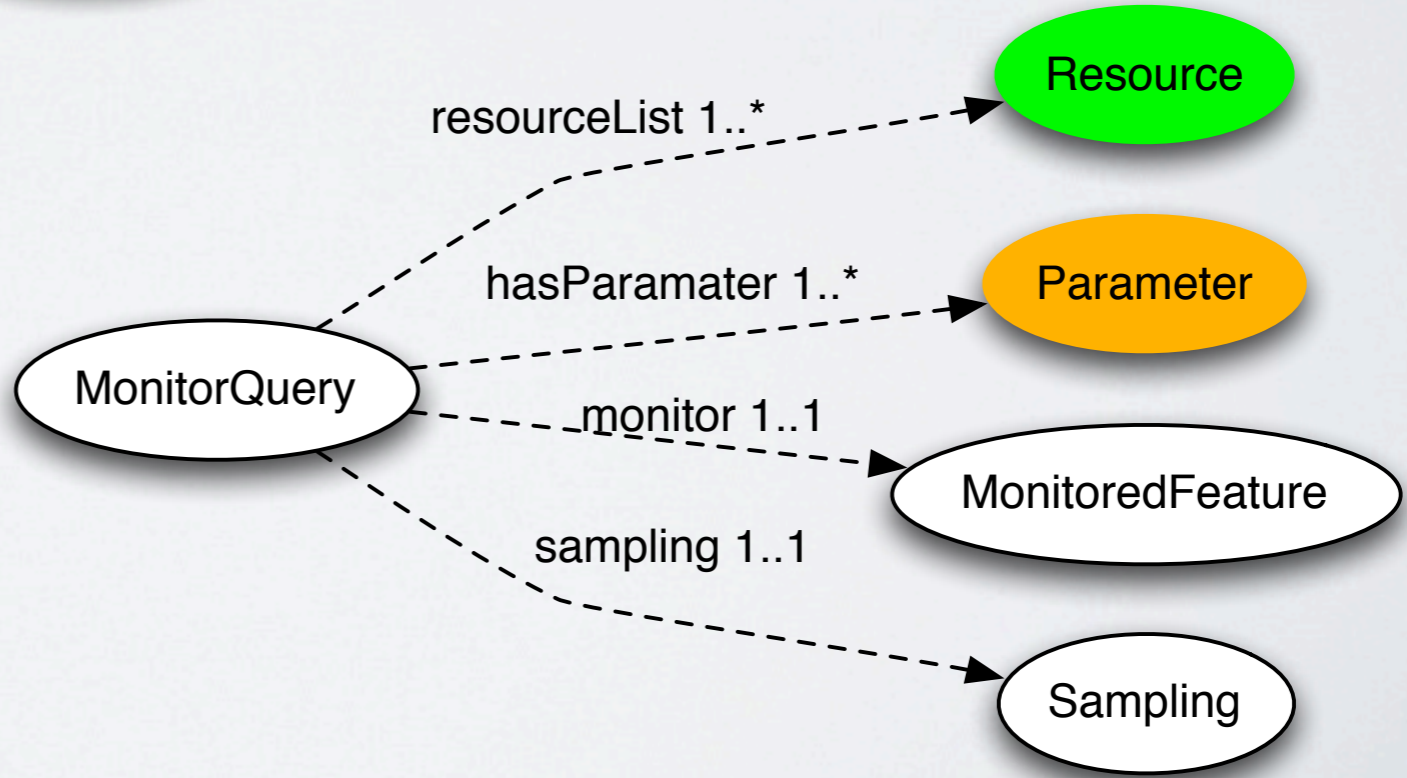
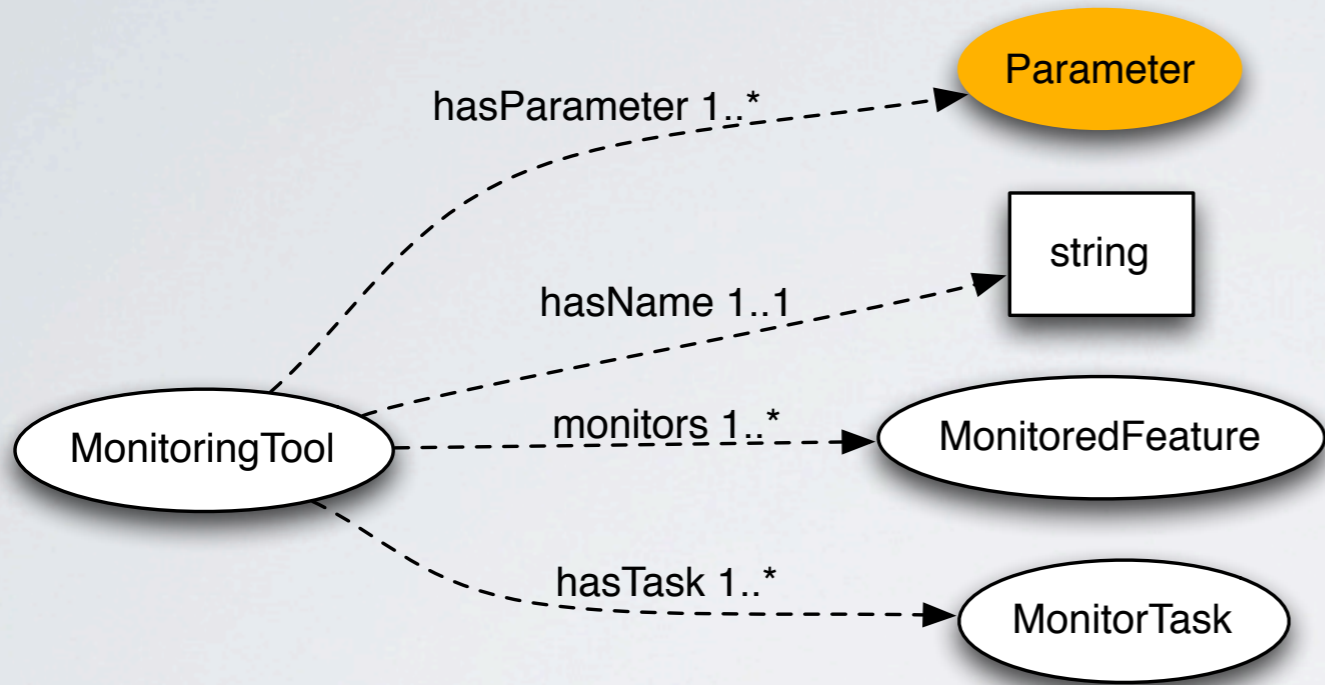
Object Relations



Network Connectivity





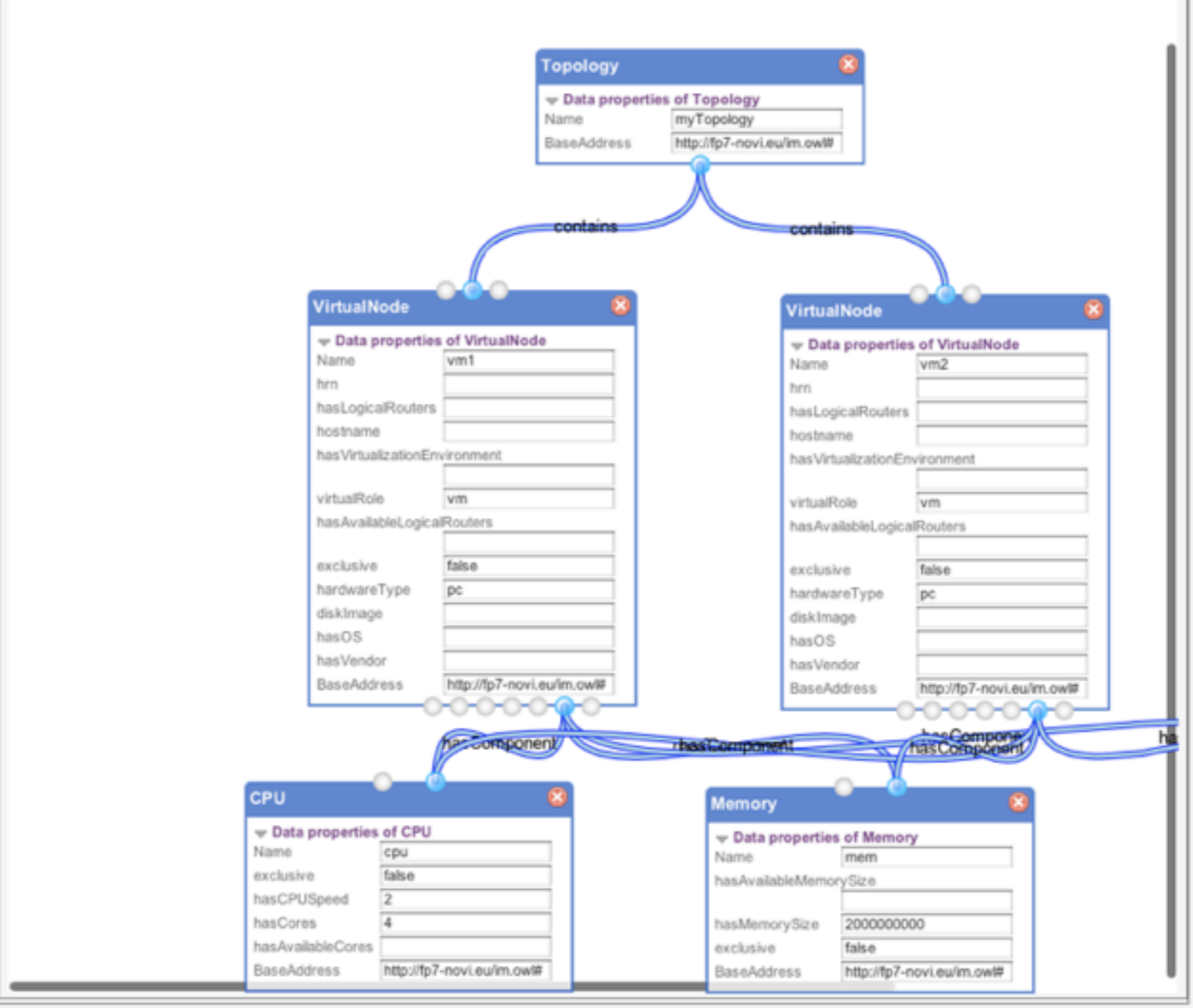


NOVI Slice Editor [Slice Editor for NOVI](#)

- [New](#)
- [Load Template](#)
- [Save Template](#)
- [Upload](#)
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- [Send Request](#)
- [Help](#)

- NOVI Information Model**
- NOVI Monitoring**
- Composed**
- TemplateTest
 - boudRequestSimple.owl
 - PLE topology
 - unboundRequestSimple.owl
 - substrate

Graph View OWL View



Properties

Slice Name: unboundRequestSimple.owl

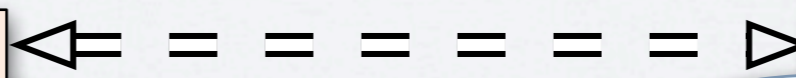
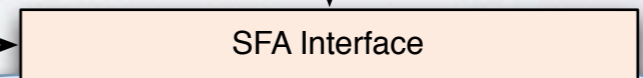
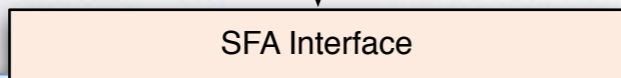
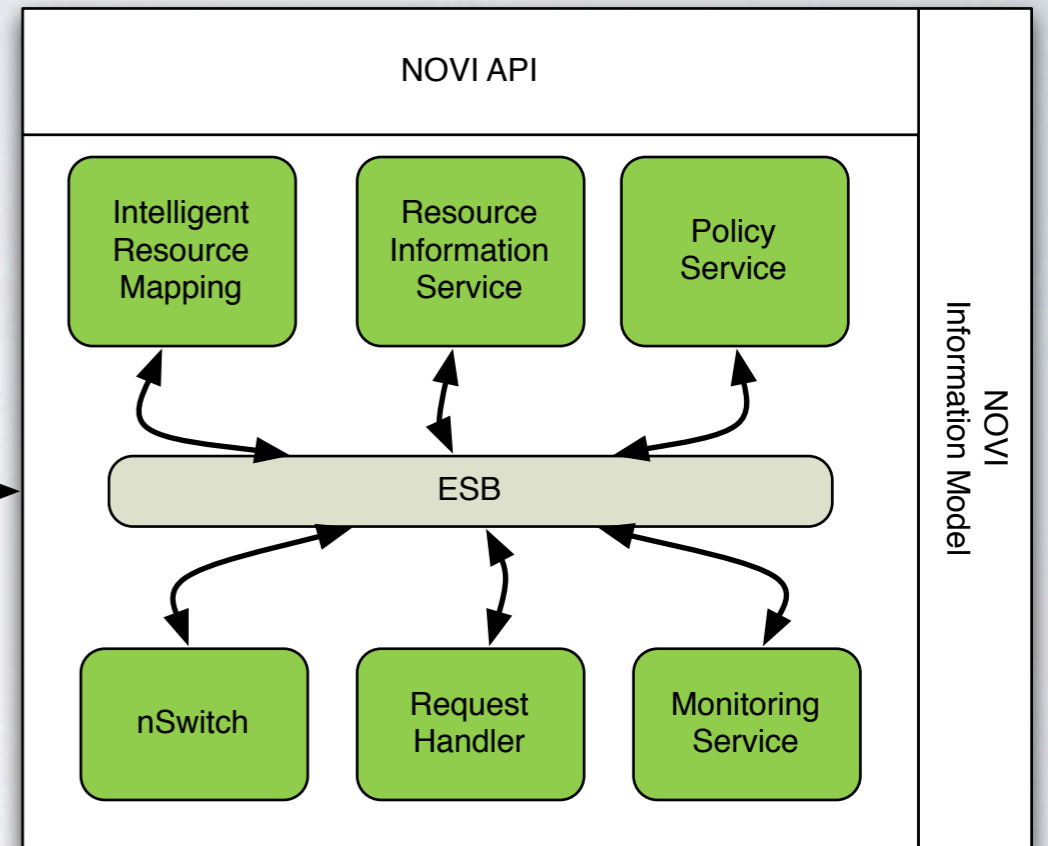
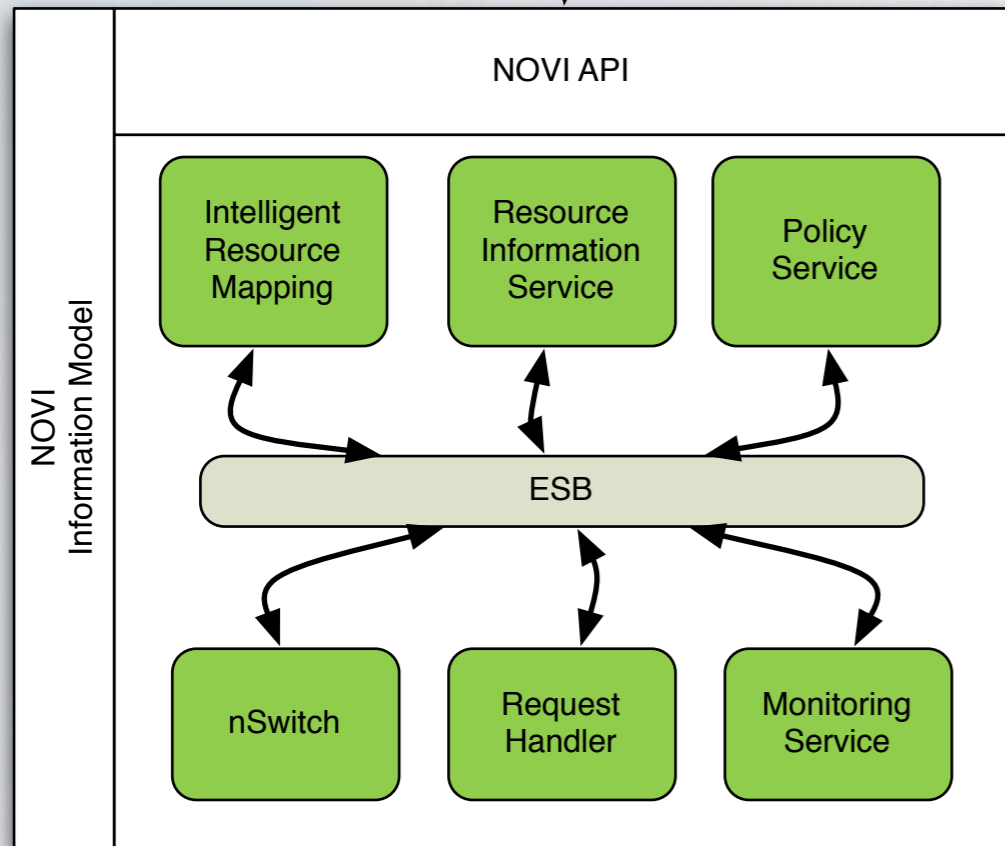
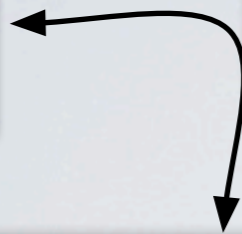
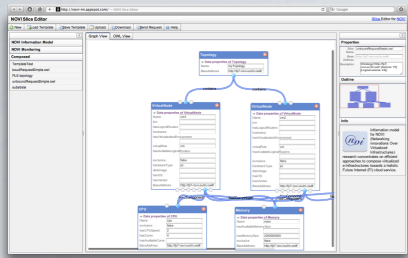
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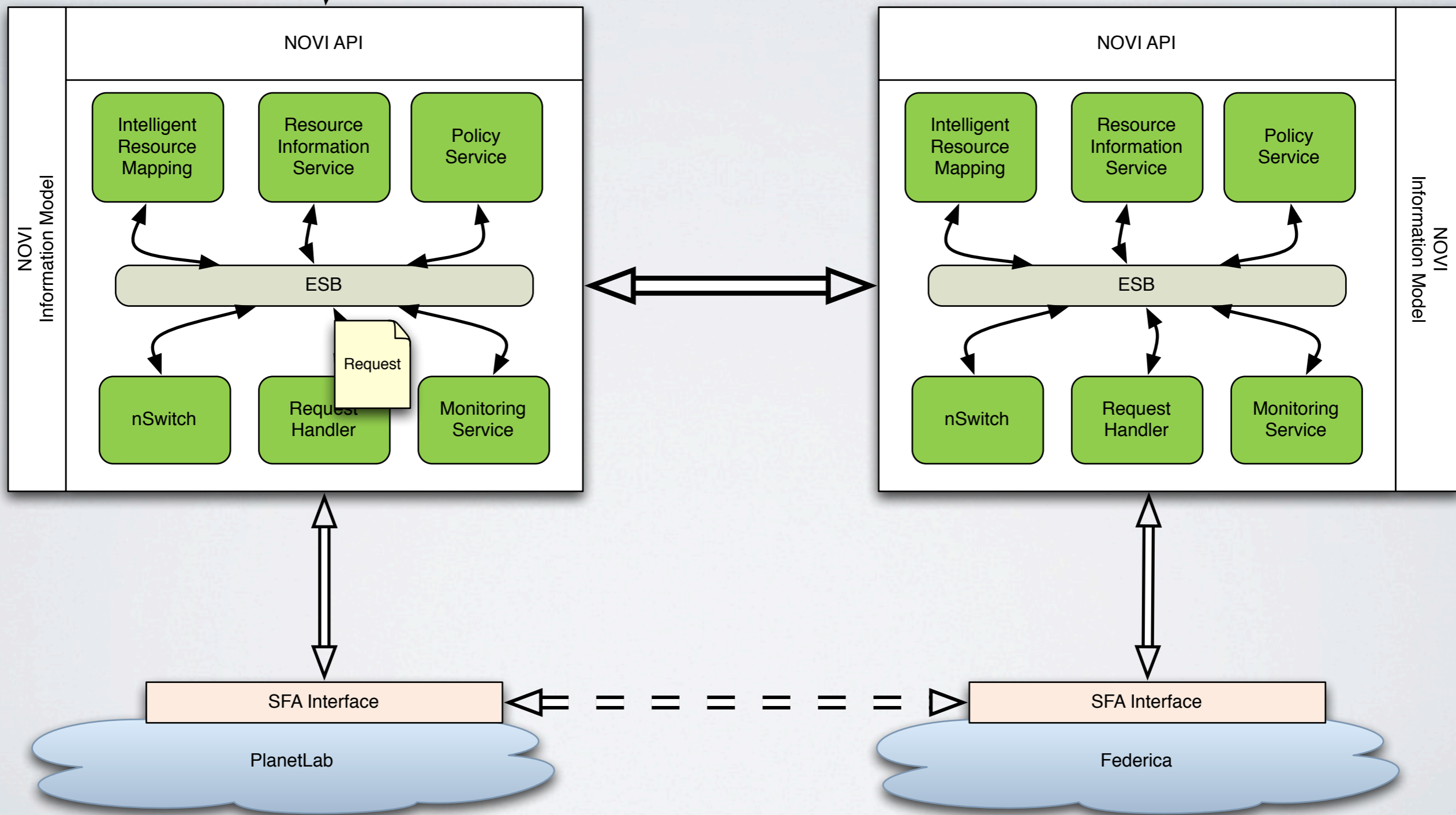
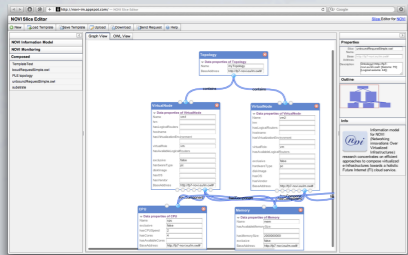
Description: Ontology(<http://fp7-novi.eu/im.owl#> [Axioms: 75] [Logical axioms: 44])

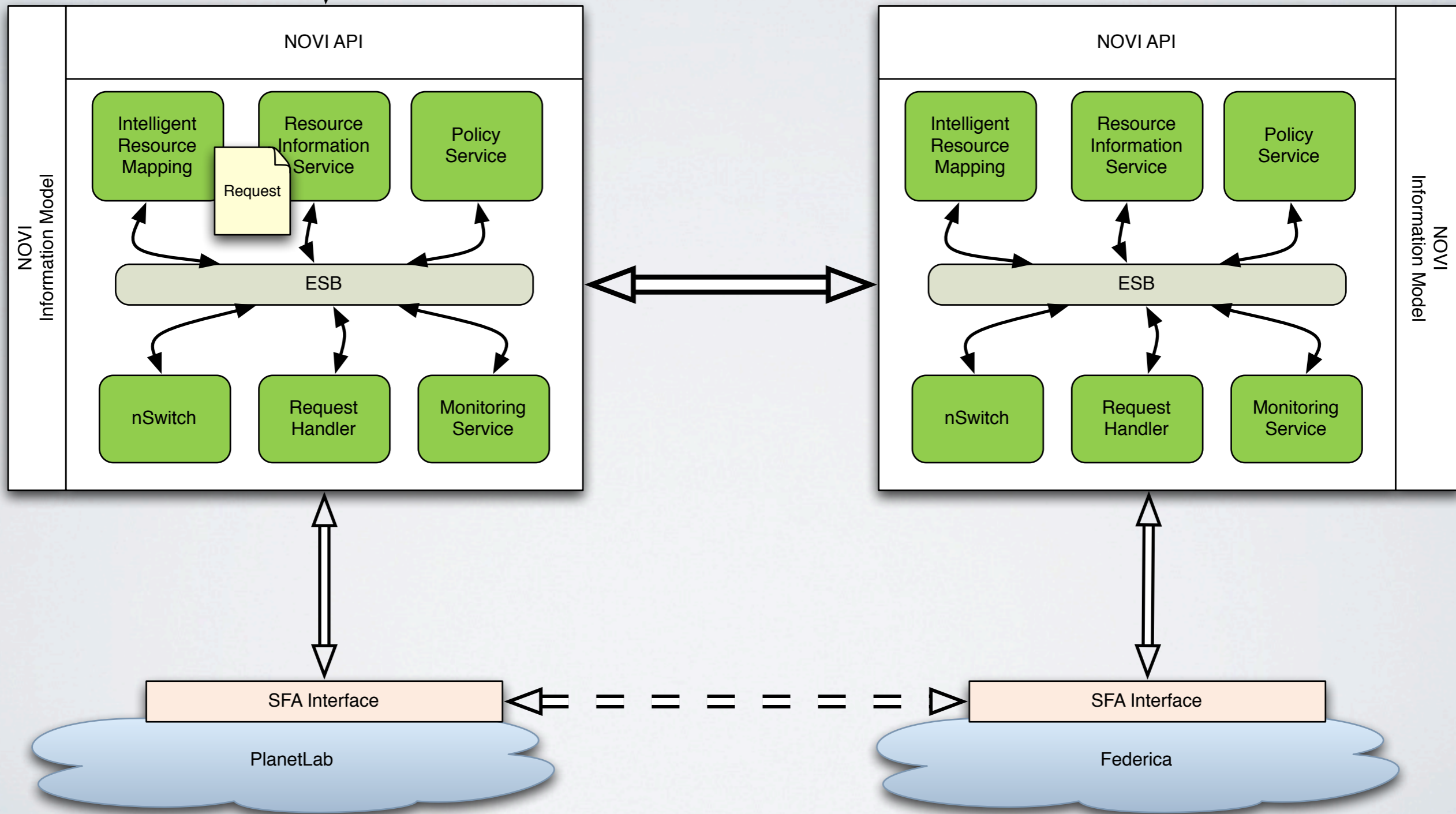
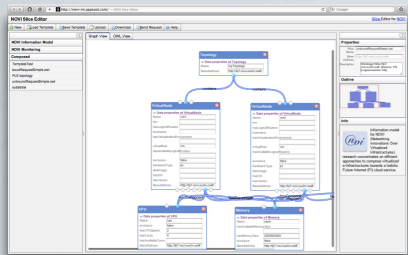
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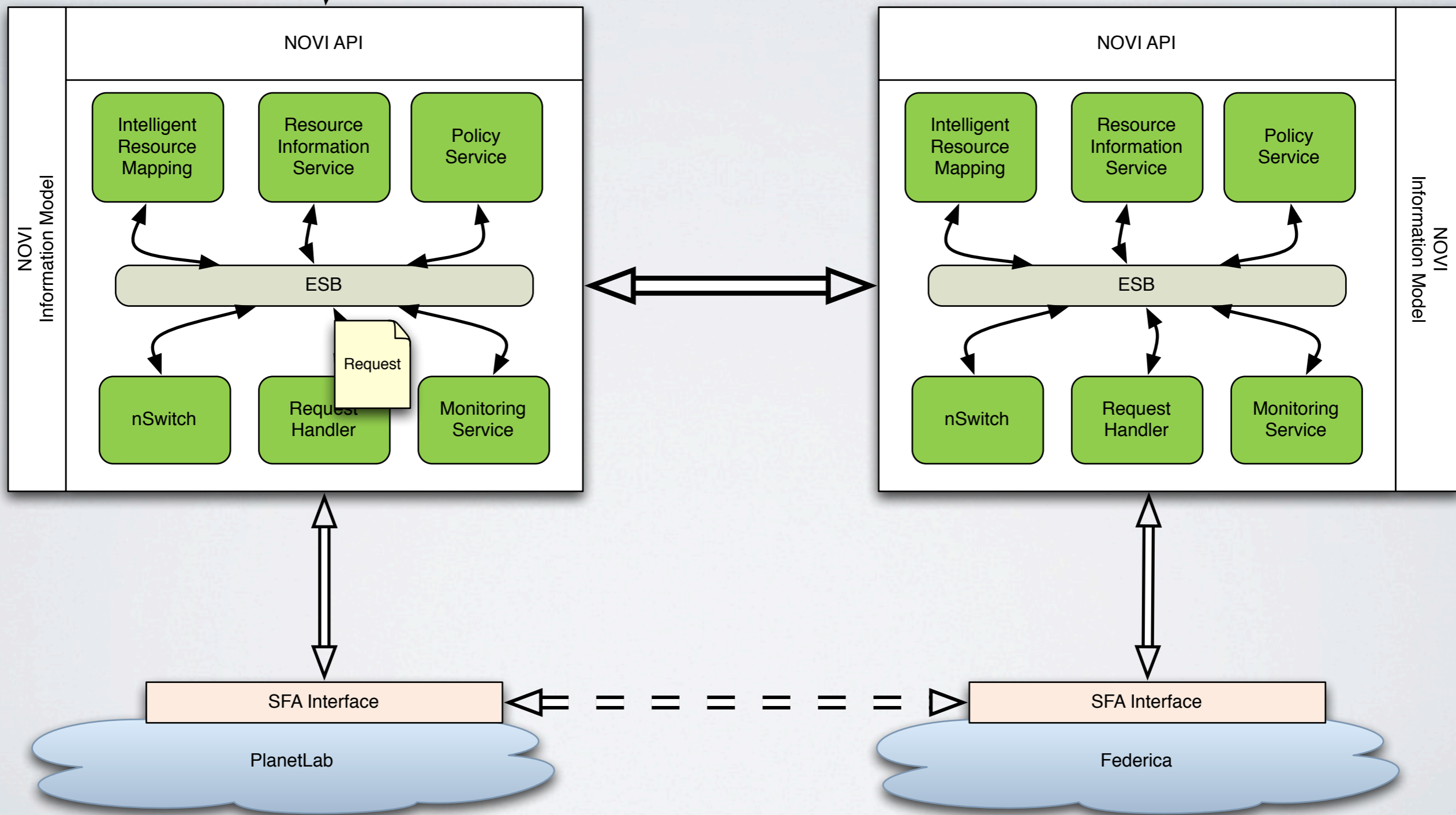
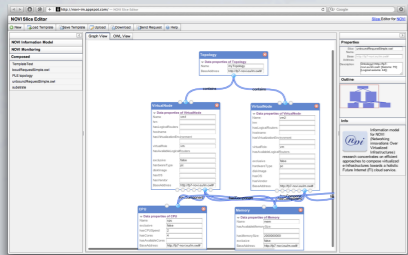
Info

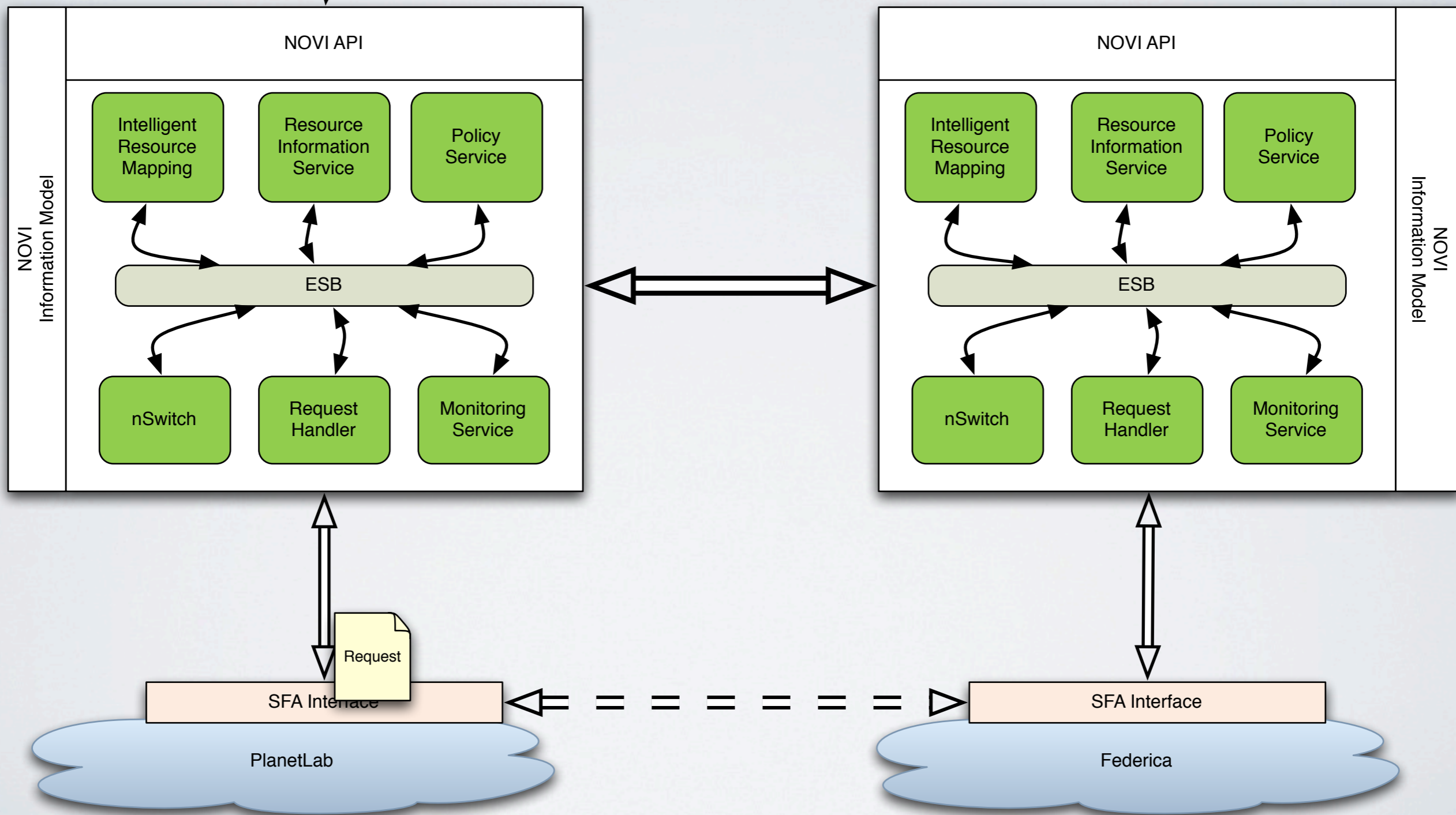
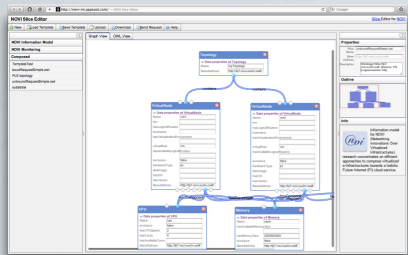
Information model for NOVI (Networking innovations Over Virtualized Infrastructures) research concentrates on efficient approaches to compose virtualized e-Infrastructures towards a holistic Future Internet (FI) cloud service.

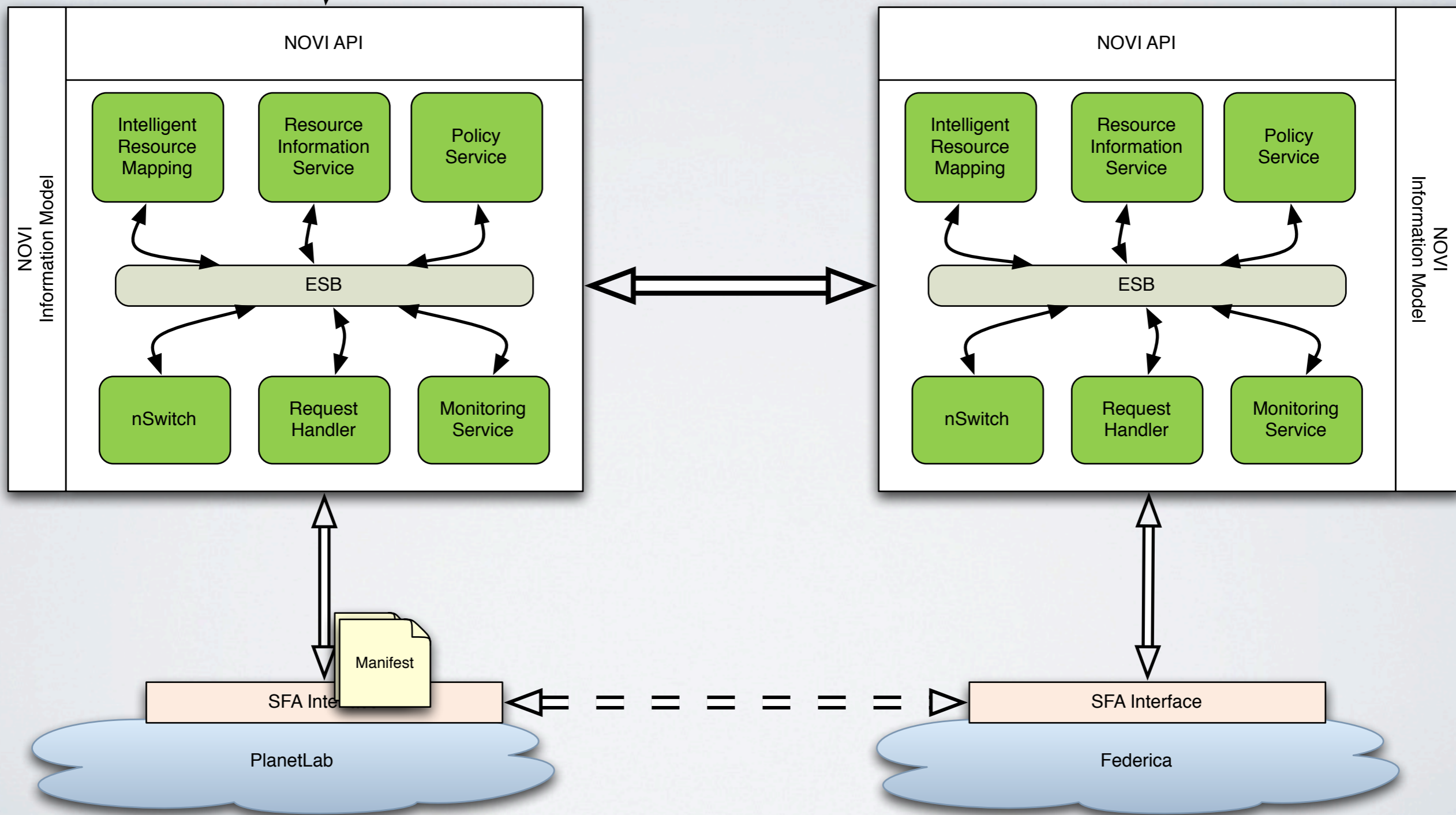
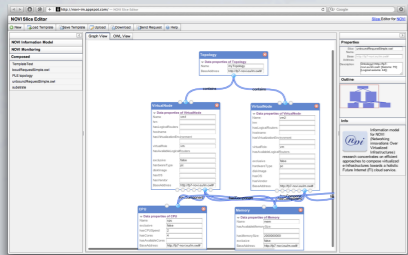


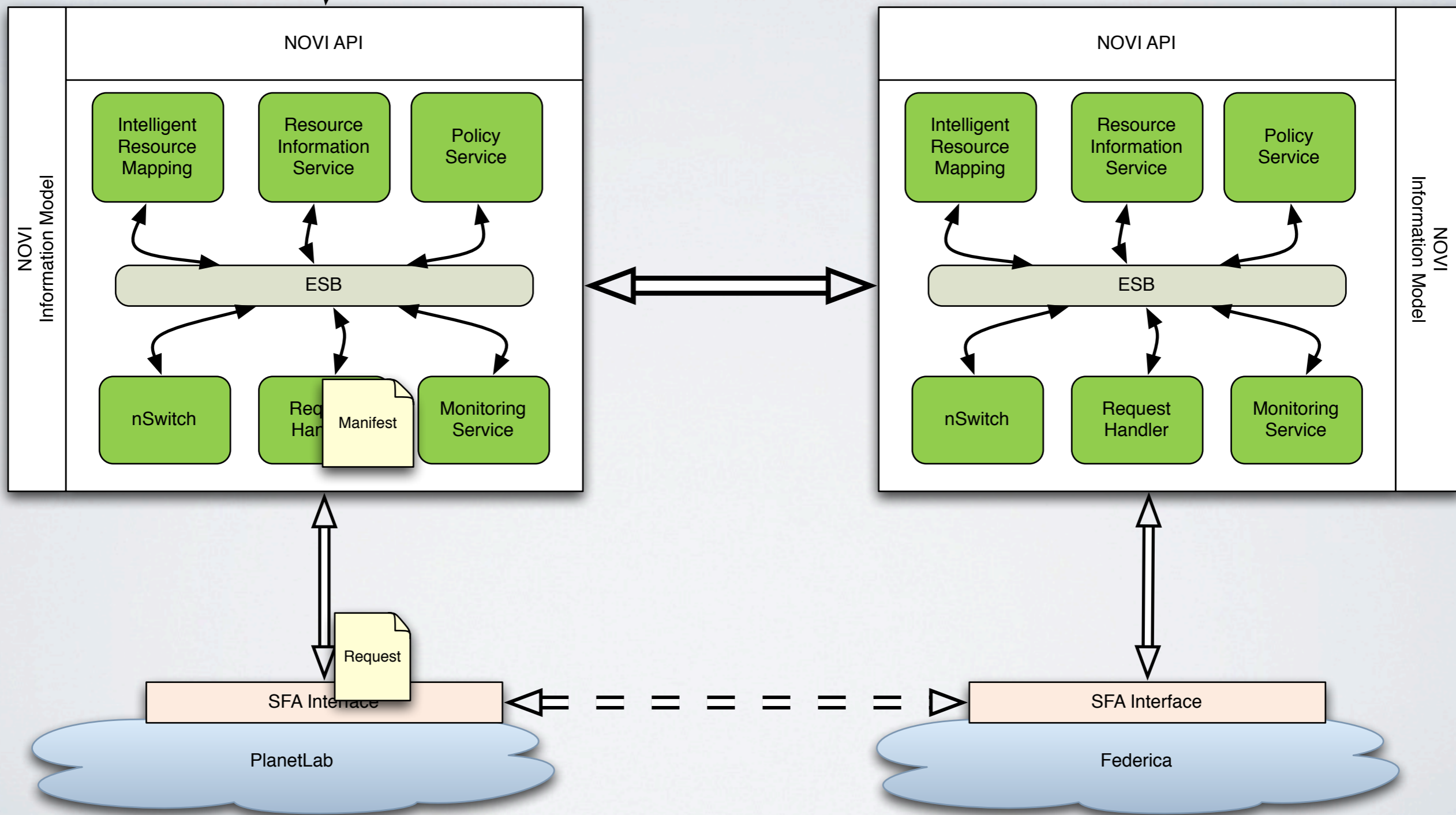
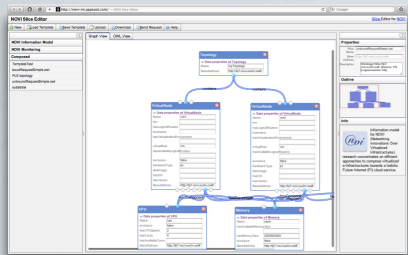


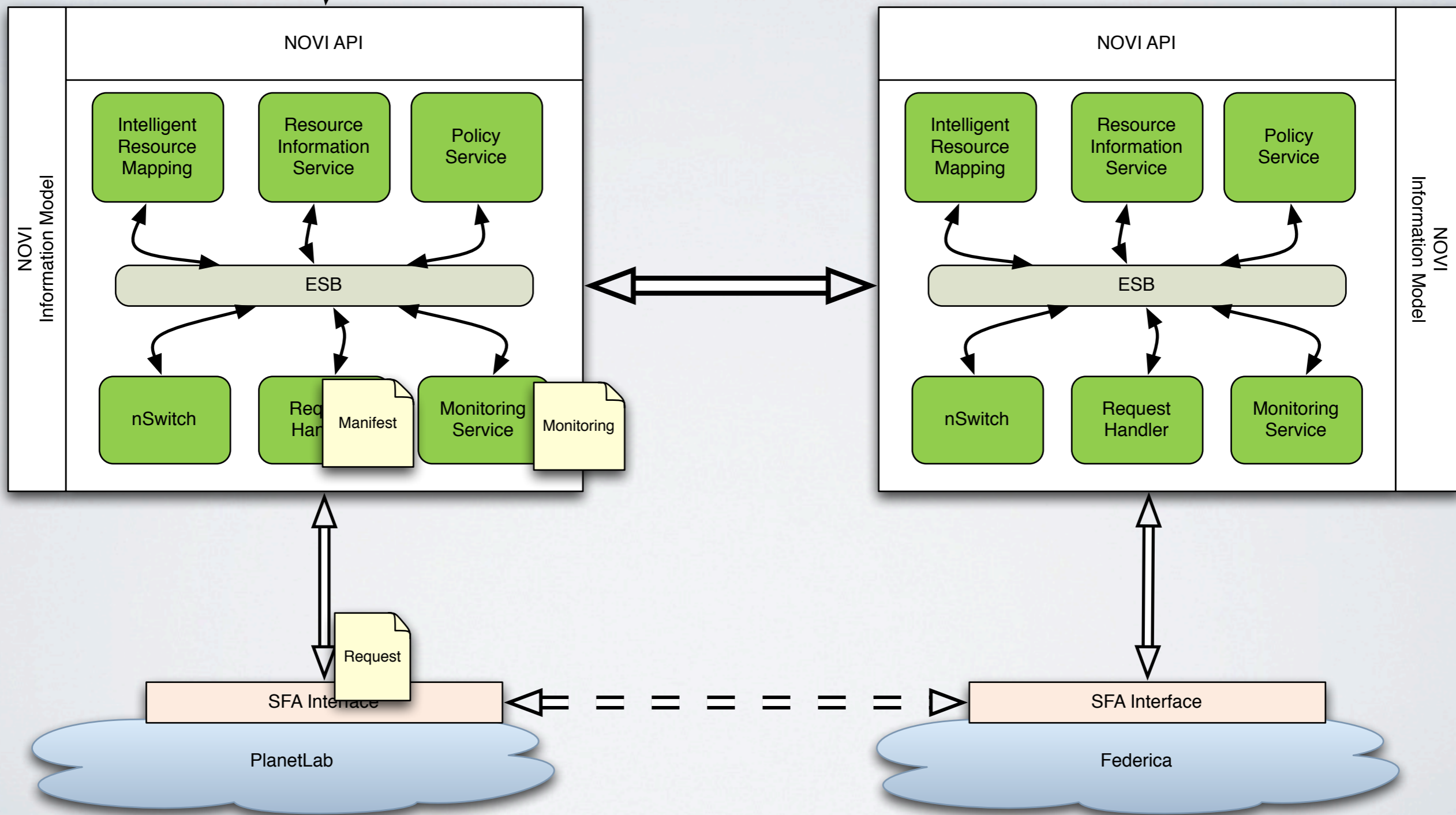
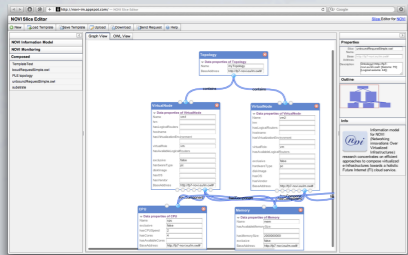


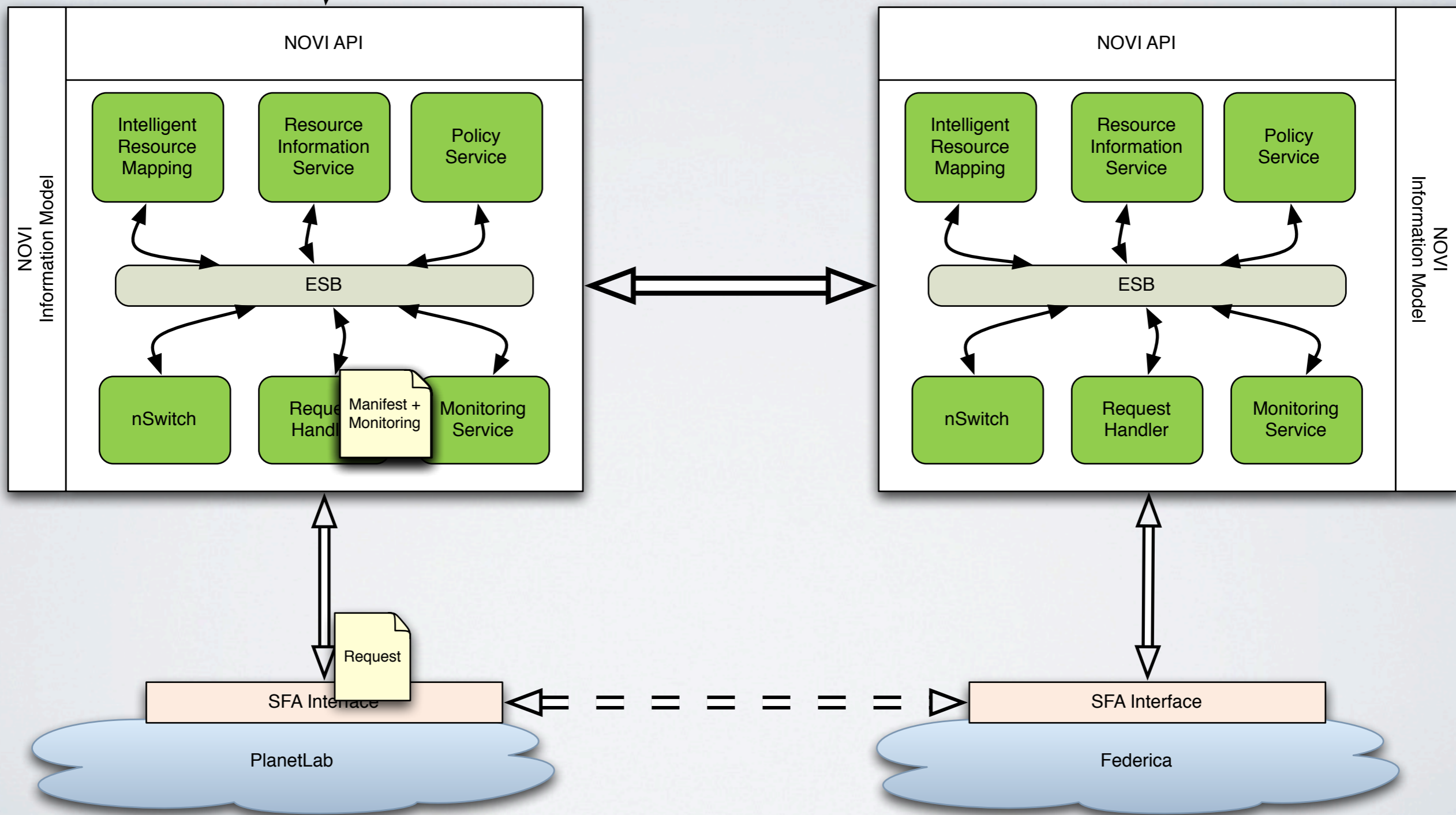
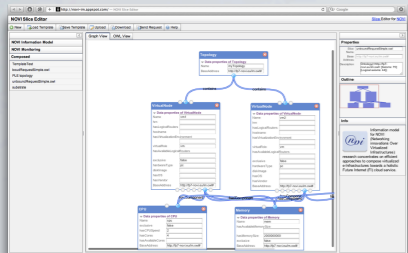


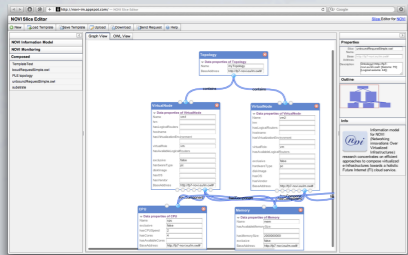












Manifest +
Monitoring

