## PlanetLab Control Framework for GENI – GEC 5

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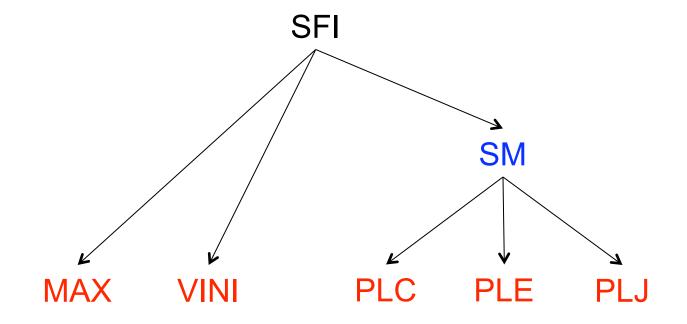
## Three Ways to Participate

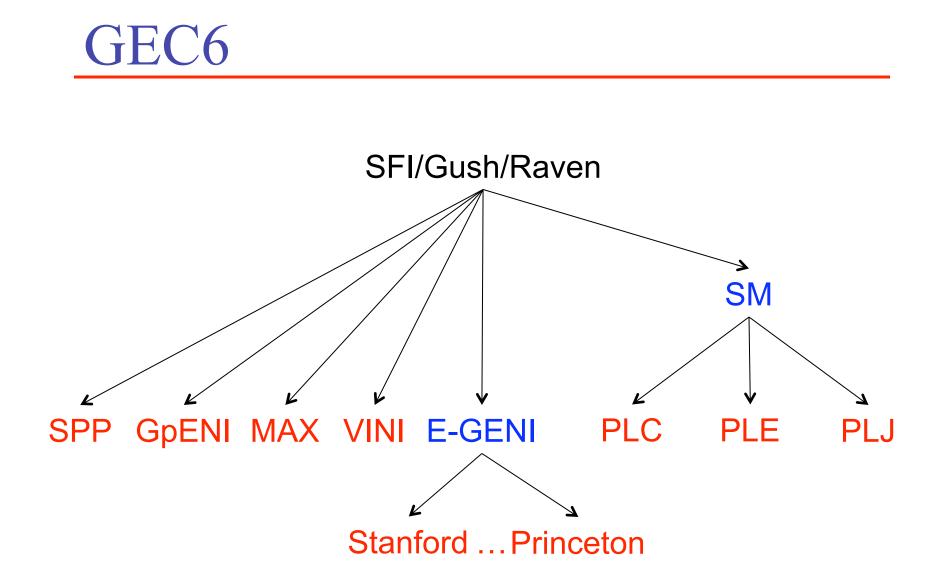
- SFA only
  - WSDL interface specification
  - Includes SFA-lite (no credentials, subset of operations)
- SFA + geniwrapper
  - Includes security machinery
  - Substitute your own "backend"
- SFA + geniwrapper + MyPLC
  - Includes PlanetLab's O&M machinery



- Defined on a per-aggregate basis
  - Capacity (XSD)
  - Request (XSD)
  - Policy (XSLT)
- Two examples to draw from
  - PlanetLab (nodes only)
  - MAX & VINI (nodes + topology)
- Two representations
  - XML over-the-wire
  - XSGR easy to specify, read, and edit







## TODO

- Attract real users
  - 4300+ PlanetLab users...
- Control Framework
  - Complete transition to "new" rspec model
  - Fix security for registry hierarchy
  - Rework with standard SSL
  - Round out SFI as a full-fledged per-user-SM
- Federation
  - Settle on peering plan (and naming conventions)
  - Define realistic policies

## TODO (cont)

- End-to-End Slices
  - Plan A: When possible, concatenate Layer-2 VLANS
  - Plan B: Must support IP stitching by default
- User-Level Services/Tools
  - Raven: Integrate
  - Gush: Integrate
  - SFI: Integrate