Control Framework WG

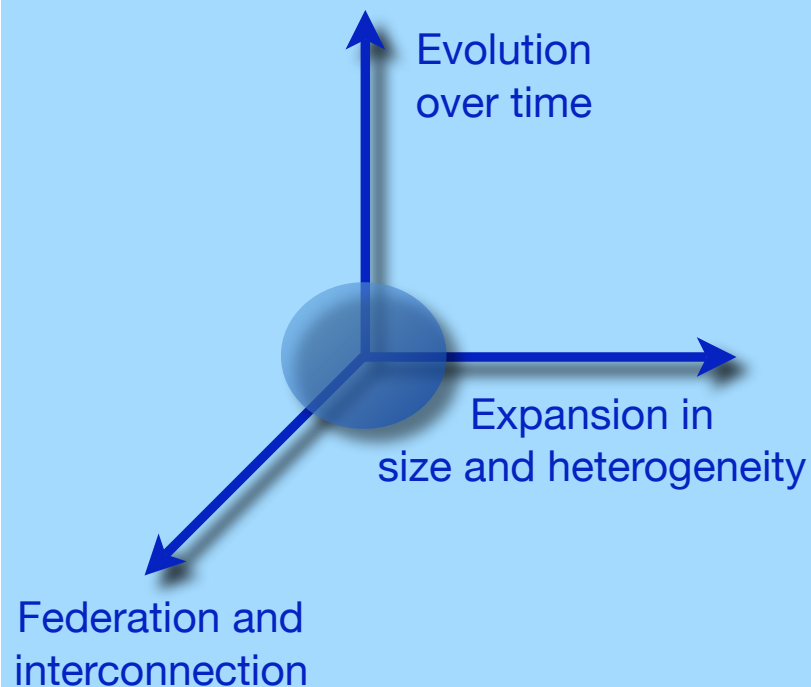## GEC Meeting - March 2008

Agenda

- ▶ Overview: scope and current topics

- ▶ Resource description task

  - ▶ "RSpec" presentation

  - ▶ Discussion

WG Mission

GENI Development Path

Evolution over time

Expansion in size and heterogeneity

Federation and interconnection

Core control framework - "narrow waist"

Key "fixed points" in the design

Structural underpinnings to support

- ▶ Basic functions
- ▶ Evolution over time
- ▶ Expansion and scaling
- ▶ Federation with similar facilities

Cross-group topics 1

- *Authentication* and *authorization*
  - basic models and flow....
  - ...but not specific policies, etc.
- Resource *description*
  - Capabilities and syntax...
  - ...but not description of particular resources

Cross-group topics 2

▶ Resource *discovery*

    ▶ Basic model - 2 phase discovery:

        ▶ Resources *push* preliminary descriptions to external registries, databases, search engines

        ▶ Potential customers *may pull* additional description directly from resource

            ▶ To obtain additional *detail*

            ▶ To obtain *short-timescale* data

    ▶ ...but not details of registry, search mechanisms, etc.

Cross-group topics 3

▶ Resource *allocation*

   ▶ Basic *request-promise-ticket* primitives for allocating individual resources...

   ▶ ...but not

      ▶ coordination mechanisms

      ▶ higher level embedding services

      ▶ resource selection services

      ▶ etc.

General path forward (?)

- ▶ short "vertical slice" documents to define starting point for discussion

- ▶ GEC or interim (WebEx..) meetings to introduce and frame topic

- ▶ cross-group "design teams" to

  - ▶ continue the work

  - ▶ coordinate across WGs

Today
Resource Description

▶ Key glue function that ties together

   ▶ substrate (components)

   ▶ control framework

   ▶ facility services

▶ Basis for resource discovery, request, allocation - *many* steps in the use case

▶ Starting point: "RSpec"

▶ Today: presentation, questions, discussion

▶ On mailing list - followup, design team