Federation API:
Benefits for GENI Developers

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Federation API: Status

- ## Implemented at the GPO
  - Supports version 2 of the API
  - In use by portal and omni 2.5

- ## Implemented at Utah ProtoGENI
  - Supports version 1, currently alpha

- ## Omni knows how to invoke the Federation API
  - Use framework "chapi"

`http://groups.geni.net/geni/wiki/CommonFederationAPI`

- Identical API available at ProtoGENI and GPO
  - And other federation services in the future
- Richer set of calls than previously available
  - Project information
  - Slice membership
  - Key management (SSH)
- XML-RPC API over client-authenticated TLS
  - Same infrastructure as Aggregate Manager (AM) API
  - As secure as AM API

- ## Support for "speaks for" authorization
  - Lets hosted tools act on behalf of users
  - Users maintain control of their private key
- ## Capability discovery through `get_version()`
  - Services declare which sets of features are implemented
  - Tools can dynamically adjust

- Access to sliver information
  - Slivers per slice per aggregate
  - Note: advisory, not authoritative
  - Currently only a few tools report info (portal, omni)
  - Better to get info from aggregates
- International adoption gives tools a wider audience
  - Tools can be used on non-GENI testbeds
  - Tools from other testbeds can be used in GENI