

# INSTOOLS: Instrumentation Tools for A ProtoGENI Prototype

GEC-6

Instrumentation and Measurement  
Working Group Meeting

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# Team

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# INSTOOLS Objective

- Automatically deploy, configure, and enable slice-specific measurement infrastructure
- Make measurement results available via an easy to use interface.

# INSTOOLS Functionality

- Measurement Infrastructure Setup
- Configure/control information be captured
- Capture data
- Collect data
- Store data
- Process data
- Present data
- Control access to data

# Goals for Spiral 2

- Improve the process for automatically deploying measurement infrastructure.
- Establish control and access policies.
- Improve the authentication mechanisms.
- Extend the architecture to support netflow data and display.
- Develop a new interface to the data that leverages content management system software.

# Challenges

1. Authentication and Security
2. Authentication and Security
3. Authentication and Security
4. ....

# Other Challenges

- Scaling the software setup and installation process.
- Supporting (many) virtual nodes
- Building a slice-specific measurement plane
- Determining which metadata to save
- Dealing with netflow data.
- Scaling the display interface

# Proposed Approach

- Authentication/Security - TBD
  - Promote MC to privileged level?
  - Use ssh tunneling as the access mechanism?
- Create images with monitoring built-in and mostly configured.
- Add support for virtual interfaces.
- Add links from experimental nodes directly to the MC
- Begin moving toward the perfSONAR formats
- Incorporate content management system to enhance user interface to data.



# Thank You!

# Questions?

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