

Steven Templeton
UC Davis
Hivemind Project

rspec noob

- ▣ Project task to investigate a security layer for GENI
 - Ultimately integrated into GENI infrastructure

- ▣ Decision to use GENI for prototyping

- ▣ Accidental Experimenter

Add security layer to Experimenter's slice

- ▣ Augment ProtoGENI rspec file
 - Start sentinel process on each node
 - Start sergeant process on separate node
- ▣ Add tarfiles, start monitoring processes

- ▣ ProtoGENI “test files”
- ▣ Our own scripts
 - e.g. `create_secure_slice.py`

General Findings

- ▣ Very compelling
- ▣ rspec XML easy to work with
- ▣ rspec frustrating
- ▣ ProtoGENI has “quirks”
- ▣ U. Utah folks very helpful

Example Observations

- ▣ Failure without any error information
- ▣ Inconsistent results
- ▣ Start scripts not run as user
- ▣ /users vs /home
- ▣ Account is csh (but scripts bash)
- ▣ Default OS images may not be what you want
 - missing libraries, common programs
 - Old versions, e.g Python

Example Issues

- ▣ Scripts work one day, not the next
 - Non-static system
- ▣ “test scripts” work, then fail, then work again later
 - Timeouts, busy system
- ▣ Request all Fedora10, but one comes up as FreeBSD
- ▣ I can't type

- ▣ /users dir not empty

Learning Curve

▣ Available Information

- rspec Schema
- Example scripts
- Some discussion

▣ Missing information

- Which OS images are available?
 - ▣ How to specify?
- “gotchas”

Hints

- ▣ Know directory organization
- ▣ Sudo
- ▣ Specify the image you want
 - Be prepared to install packages when you start
 - No persistent storage?
- ▣ Assume nothing
- ▣ Expect Failure

Noob wish list

- ▣ Better user documentation
- ▣ How to's
 - Basic tutorial is great, but not enough
 - Direct use from Windows
- ▣ Samples w/ comments, references
 - That work
- ▣ Rspec tutorial
- ▣ Better tools
- ▣ Better monitoring and error reporting

- ▣ Persistent storage? Custom Images?

Remember

- ▣ Be patient
 - ▣ You're not a user, but a tester
 - ▣ ProtoGENI folks great help
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- ▣ Don't suffer alone
 - Use and build GENI community