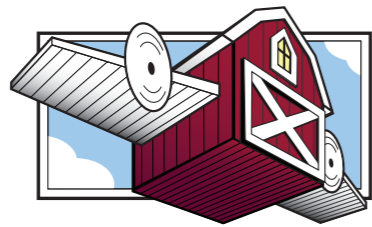


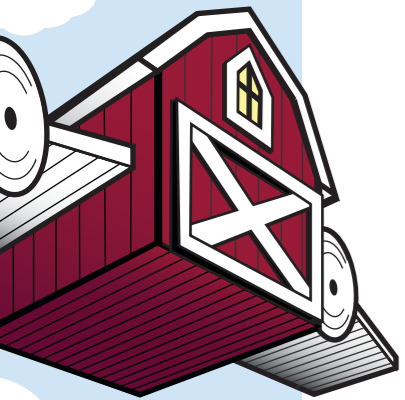
# Using GENI with geni-lib



**BARNSTORMER**  
S O F T W O R K S

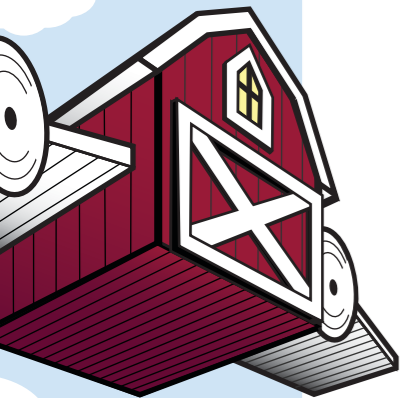
# What is geni-lib?

- Python library for programmatically interacting with GENI aggregates
- Fully self-contained (does not require omni, etc.)
- No documentation!



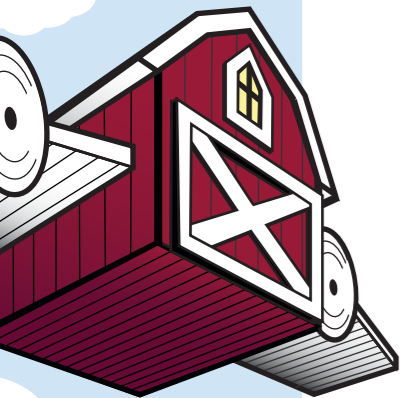
# What do it do?

- OO API for generating rspecs
- Make AM API calls
- Pythonic data structures for inspecting advertisement / manifest data



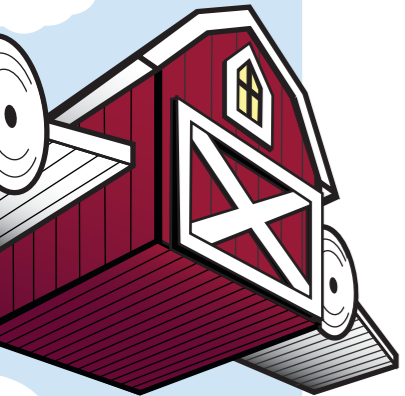
# Example Uses

- Resource availability across the federation
  - <http://groups.geni.net/geni/wiki/ExpGraphs>
- Static ARP entries across my experiment
  - GPO monitoring slice
- “Cookie-cutter” bound requests at different sites



# Simple Example

```
>>> ad = IG.MAX.listresources(context)
>>> for node in ad.nodes:
...     if node.available and node.shared:
...         if "emulab-xen" in node.sliver_types:
...             print node.component_id
...
urn:publicid:IDN+instageni.maxgigapop.net+node+pc3
urn:publicid:IDN+instageni.maxgigapop.net+node+pc2
```



# Where do I get it?

- <http://bitbucket.org/barnstorm/geni-lib>
- Examples in samples/ directory
- Direct questions to geni-users (for now)

