

# The MyProxy Online Credential Repository

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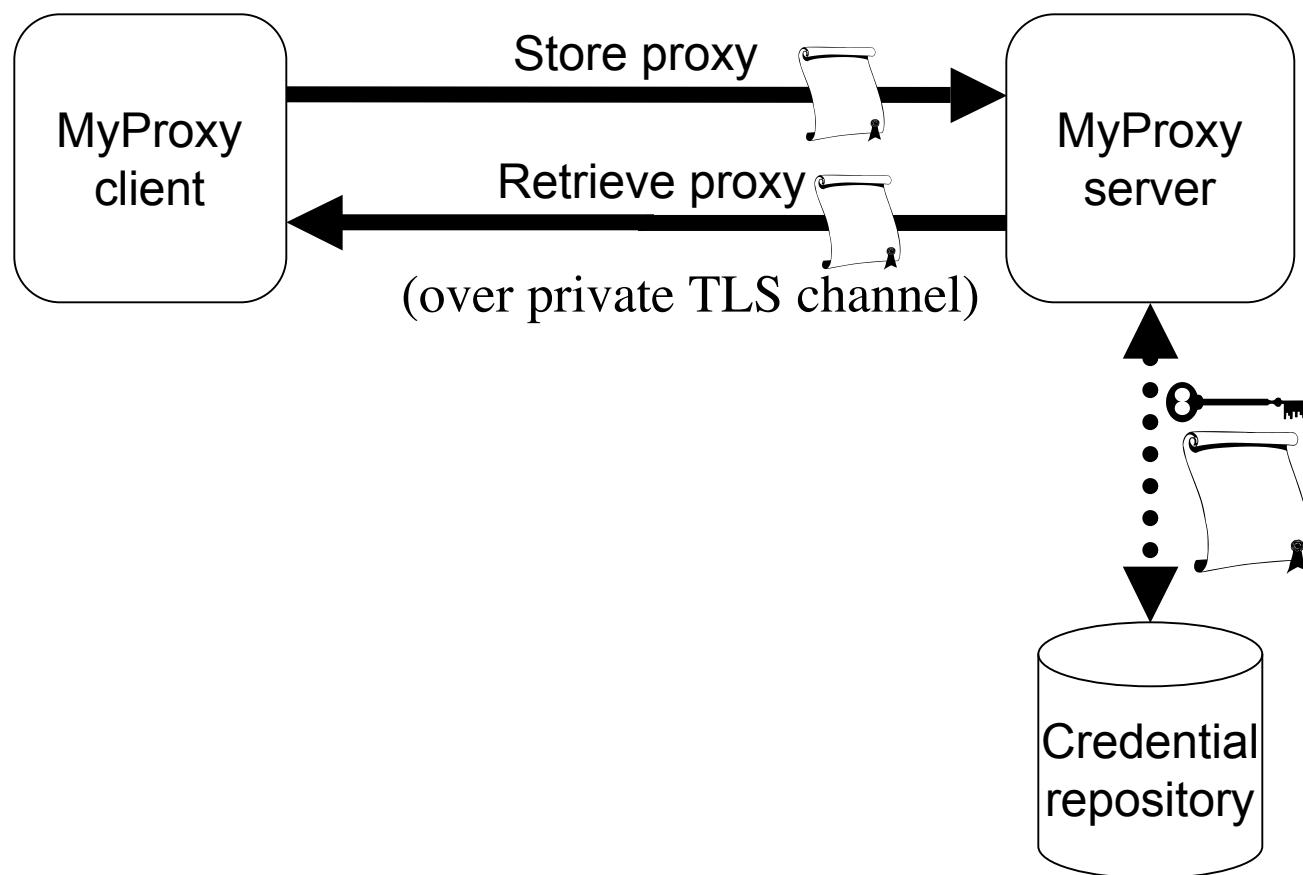


# What is MyProxy?

- A new component in Globus Toolkit 4.0
  - ◆ Independent Globus Toolkit add-on since 2000
- A repository for storing long-lived private keys
  - ◆ Keys encrypted with user-chosen password
  - ◆ Keys never leave MyProxy server
- A service for retrieving proxy credentials
  - ◆ Supporting mobility, delegation, and renewal
- A commonly-used service for grid portal security
  - ◆ Integrated with OGCE, GridSphere, and GridPort



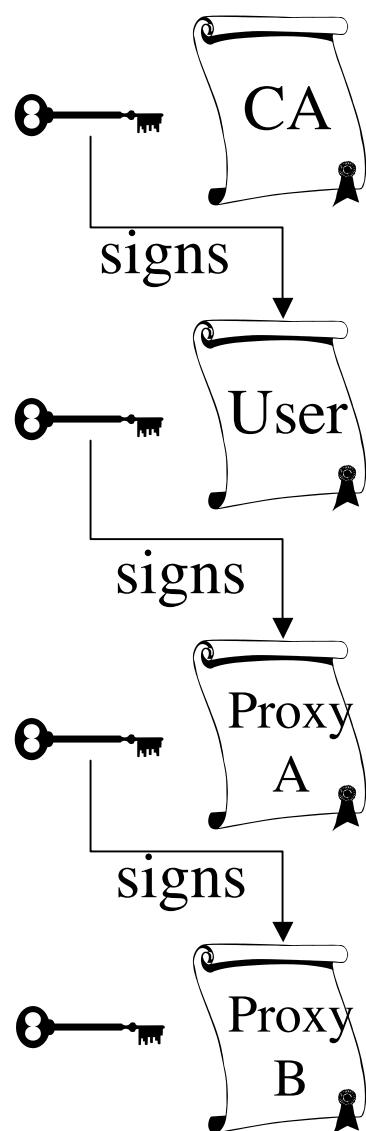
# MyProxy System Architecture





the globus alliance  
www.globus.org

# Proxy Delegation



Server

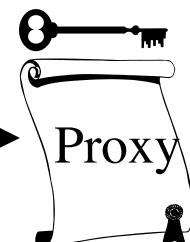


Client

Generate new key pair

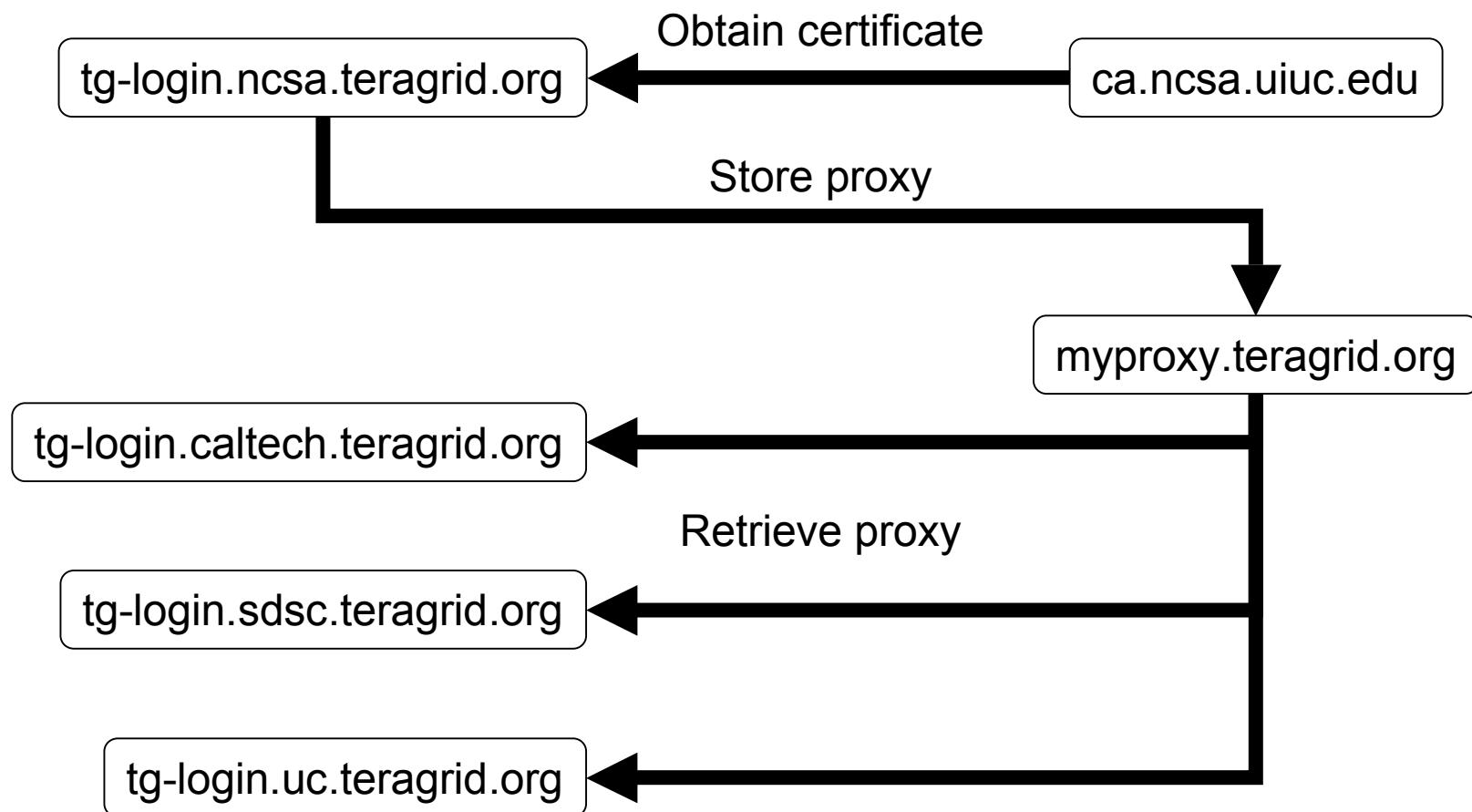
Proxy certificate request

Sign proxy  
certificate  
with  
private key



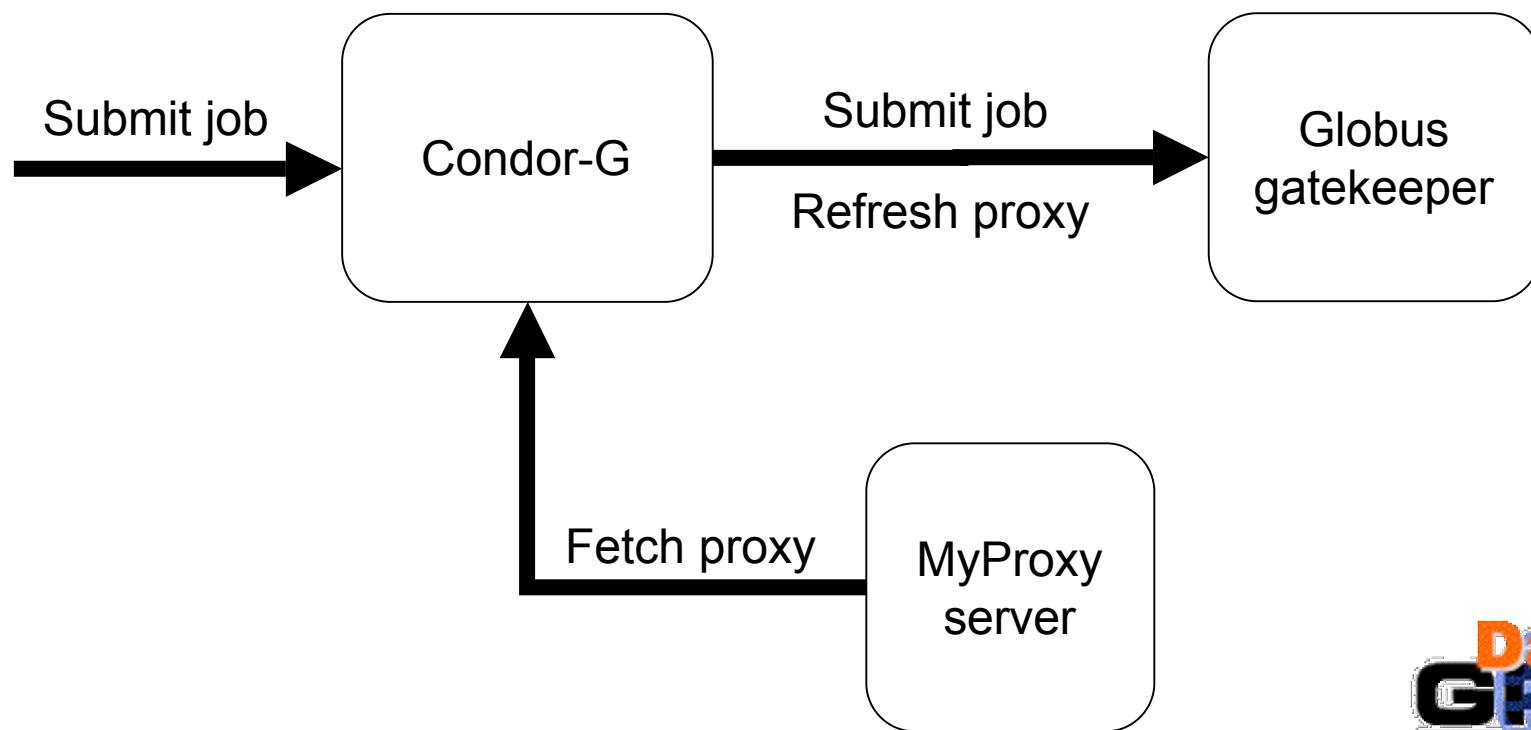


# MyProxy: Credential Mobility





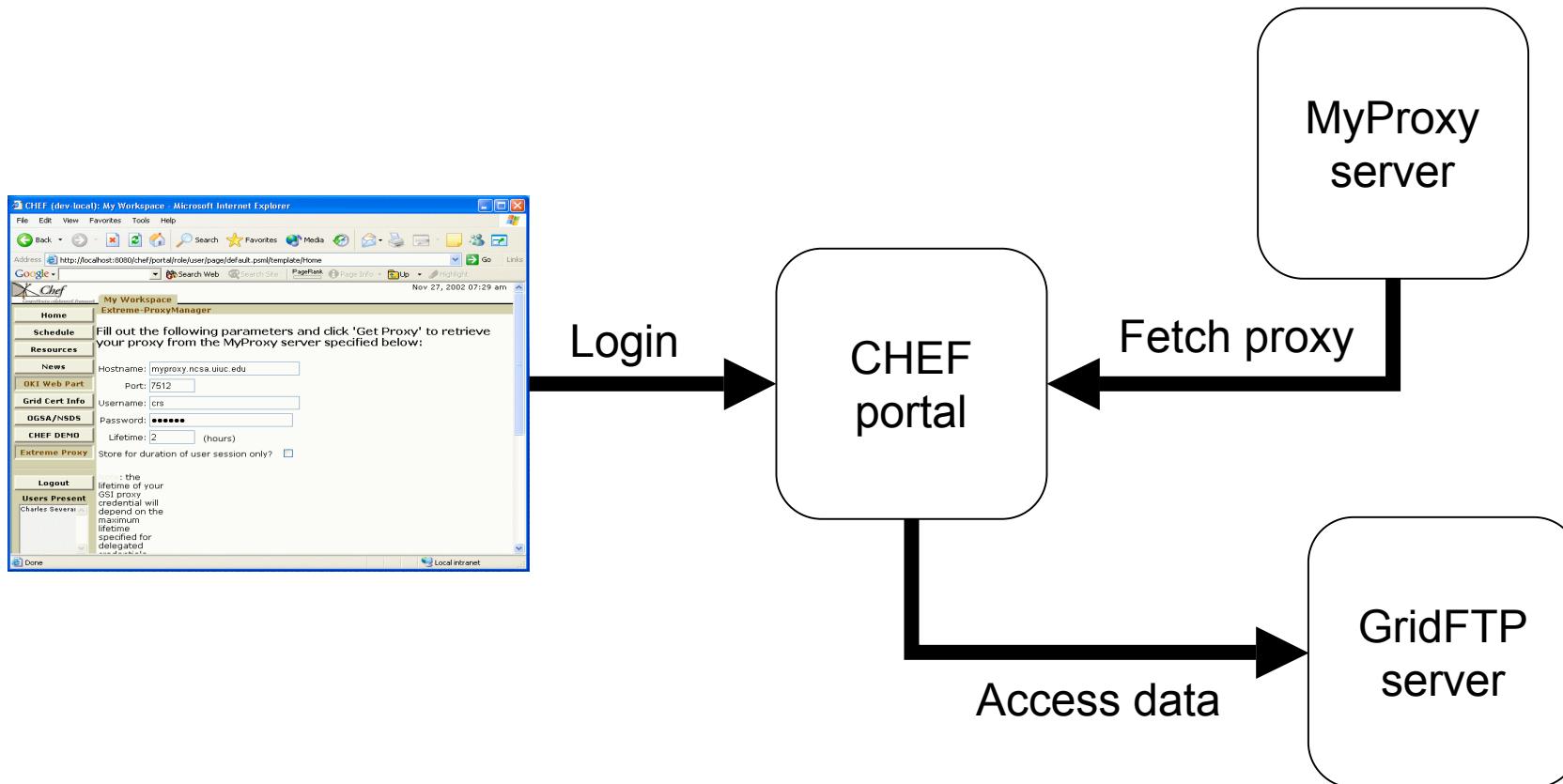
# MyProxy: Credential Renewal



**Condor**  
High Throughput Computing



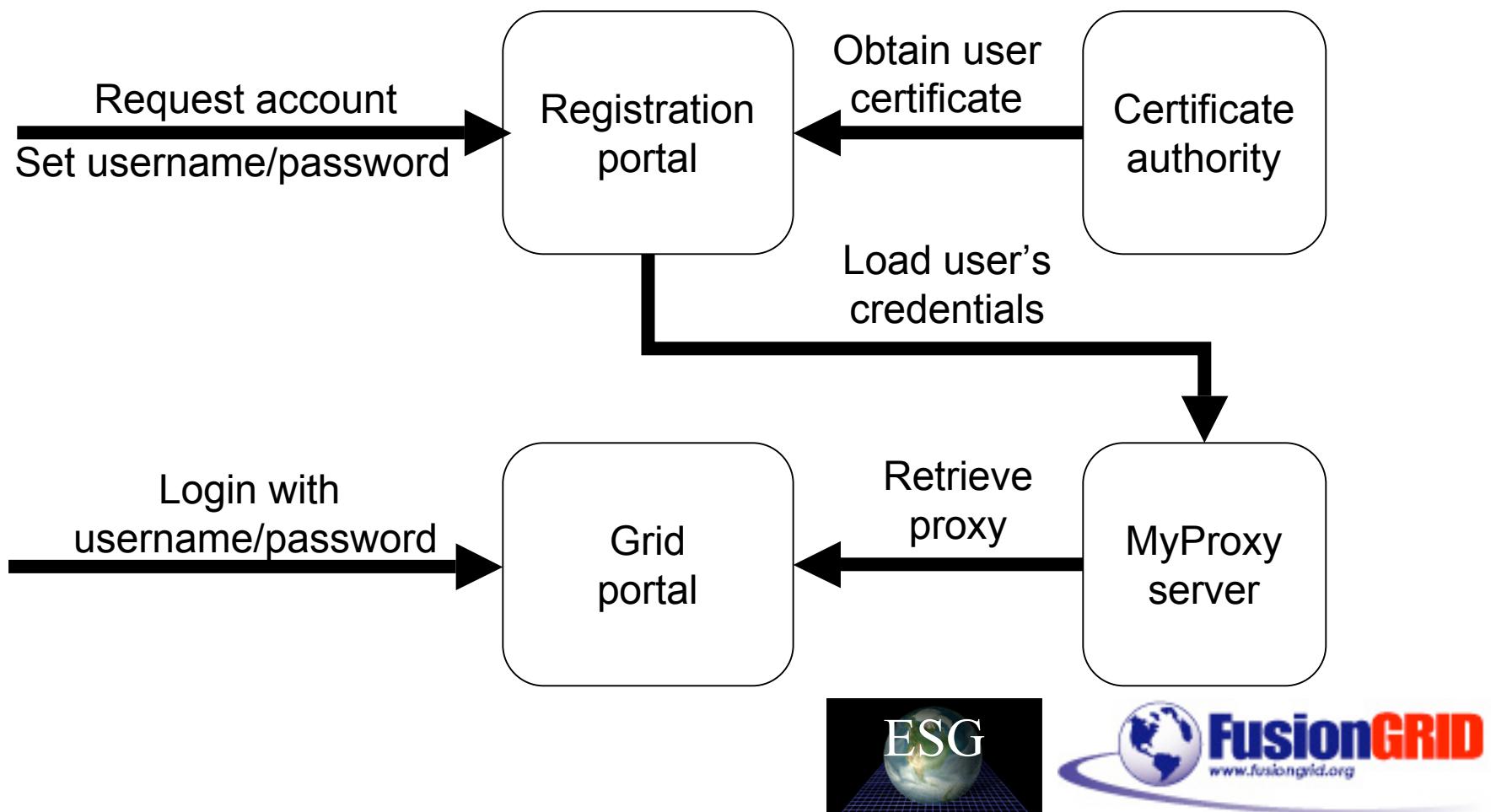
# MyProxy and Grid Portals



NEESgrid



# MyProxy: User Registration





## MyProxy Installation (Unix)

- As an add-on component to GT 3.x

```
$ gpt-build myproxy*.tar.gz <flavor>
```

- Set \$MYPROXY\_SERVER environment variable to myproxy-server hostname

```
$ export MYPROXY_SERVER=myproxy.ncsa.uiuc.edu
```

- Set Globus Toolkit environment

```
$ . $GLOBUS_LOCATION/etc/globus-user-env.sh
```

- Client installation/configuration complete!



## MyProxy Commands

- **myproxy-init**: store proxy
- **myproxy-get-delegation**: retrieve proxy
- **myproxy-info**: query stored credentials
- **myproxy-destroy**: remove credential
- **myproxy-change-pass-phrase**:  
change password encrypting private key



# MyProxy Server Administration

- Install server certificate
- Configure `/etc/myproxy-server.config` policy
  - ◆ Template provided with examples
- Optionally:
  - ◆ Configure password quality enforcement
  - ◆ Install cron script to delete expired credentials
- Install boot script and start server
  - ◆ Example boot script provided
- Use `myproxy-admin` commands to manage server
  - ◆ Reset passwords, query repository, lock credentials



## MyProxy CoG Clients

- Commodity Grid (CoG) Kits
  - ◆ Provide portable (Java and Python) MyProxy client tools & APIs
  - ◆ Support Windows
- For more information:
  - ◆ <http://www.cogkit.org/>



## MyProxy Community Support

- [myproxy-users@ncsa.uiuc.edu](mailto:myproxy-users@ncsa.uiuc.edu) mailing list
- Bug tracking:  
<http://bugzilla.ncsa.uiuc.edu/>
- Anonymous CVS access  
`:pserver:anonymous@cvs.ncsa.uiuc.edu:/CVS/myproxy`
- Contributions welcome!
  - ◆ Feature requests, bug reports, patches, etc.



Thank you!

Contact:

<http://myproxy.ncsa.uiuc.edu/>  
[jbasney@ncsa.uiuc.edu](mailto:jbasney@ncsa.uiuc.edu)

Questions/Comments?