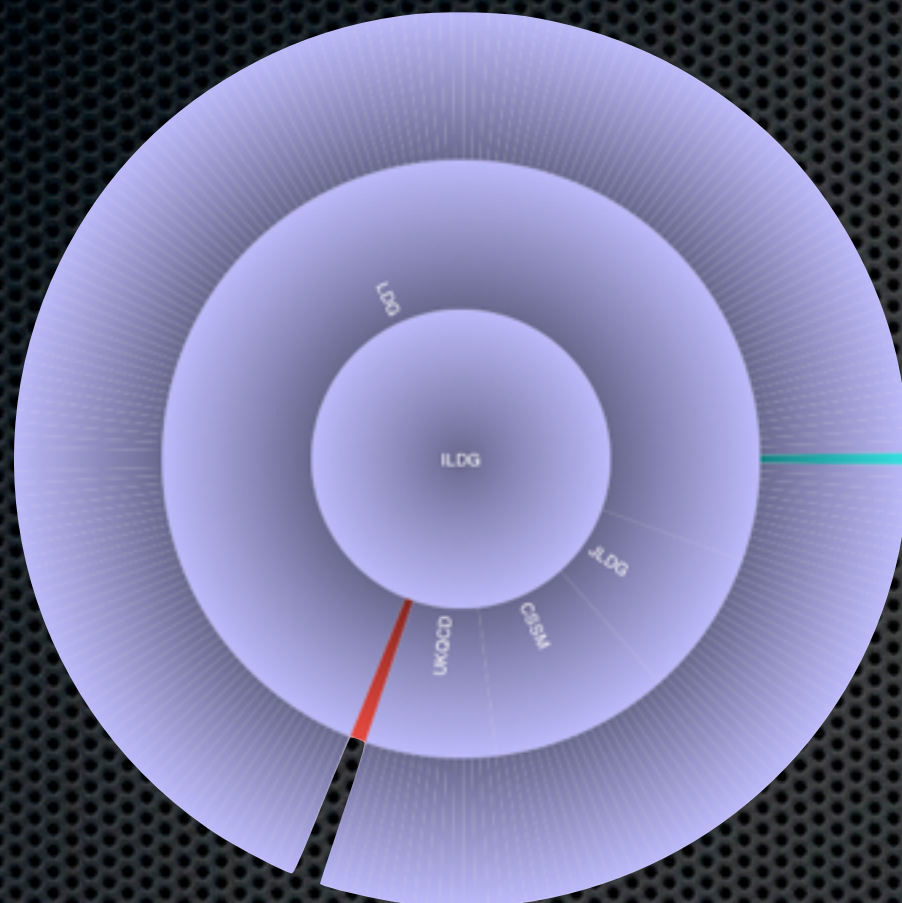# USQCD regional grid report

16 September 2011

ILDG/US

~42000 gauge configs
- MILC asqtad
- HISQ
- Nf=2 anisotropic clover
- RBC-UKQCD DW

Format
- ILDG

Access
- read-only (ILDG)
- read-write (LQCD)

Locations
- metadata@jlab (B. Joo)
- data@fnal (J.Simone)

http://usqcd.jlab.org/mdc-web-client
http://www.usqcd.org/ildg/

Fun facts

- Total direct US funding level for ILDG activities: $0

- ILDG activities funded out of USQCD or lab budgets

- Effort depends upon very small number of volunteers

- SciDAC proposals do not mention ILDG and the program only funds software development

- Most consumers of the US lattices do not use the ILDG infrastructure

NERSC

~44352 gauge configs

- 43298 from MILC asqtad copied from FNAL

Access

- read-only (web based)
- read-write (gridftp)

Location

- Lawrence Berkeley Lab

People

- Managed by J. Hetrick
- Developed by M. DiPierro

Storage

- HPSS (tape)

Format

- NERSC (similar to MILC)
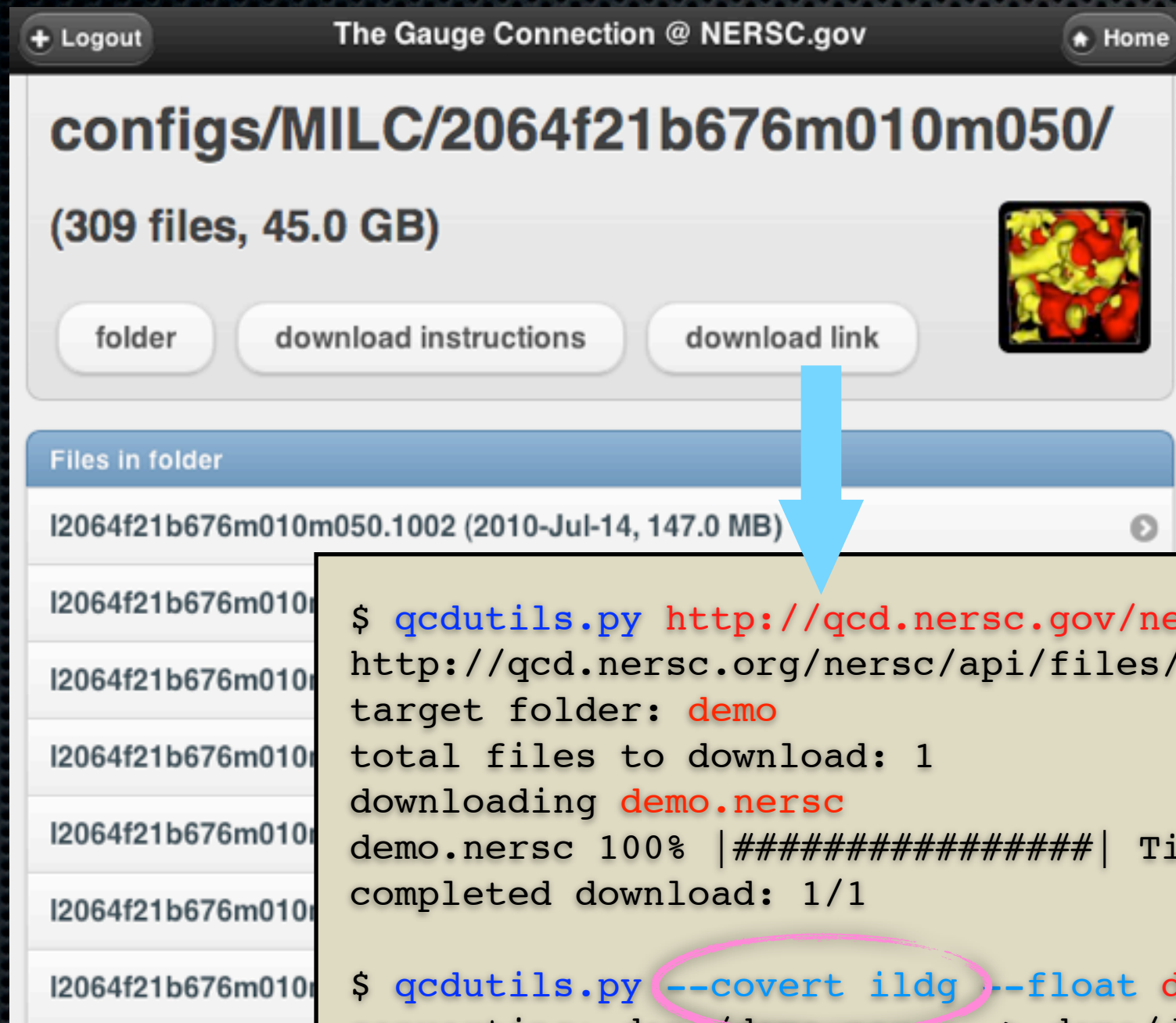
http://qcd.nersc.gov
http://www.nersc.gov/users/science-gateways/

Working on integration


```
$ qcdutils.py http://qcd.nersc.gov/nersc/api/files/demo
http://qcd.nersc.org/nersc/api/files/demo
target folder: demo
total files to download: 1
downloading demo.nersc
demo.nersc 100% |##############| Time: 00:00:00 654.52 K/s
completed download: 1/1

$ qcdutils.py --covert ildg --float demo/demo.nersc
converting: demo/demo.nersc -> demo/demo.nersc.ildg
   (precision: f, size: 4x8x8x8)
100% |################################|
```
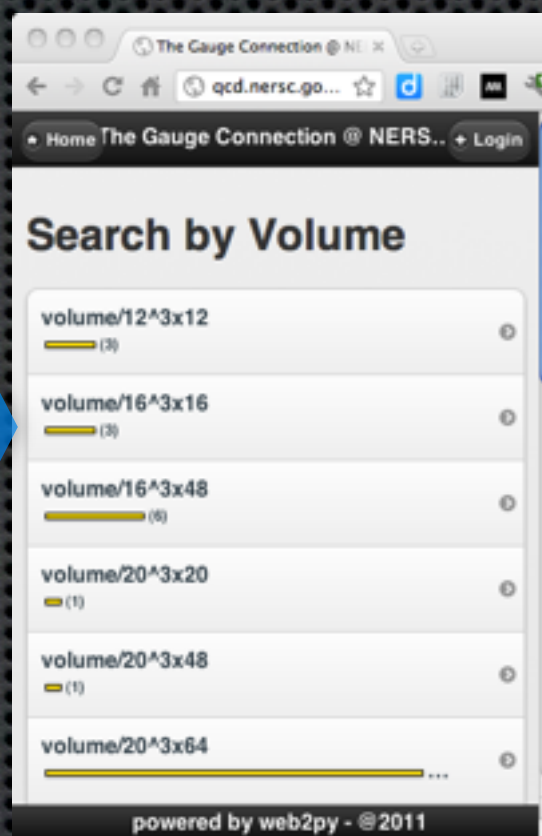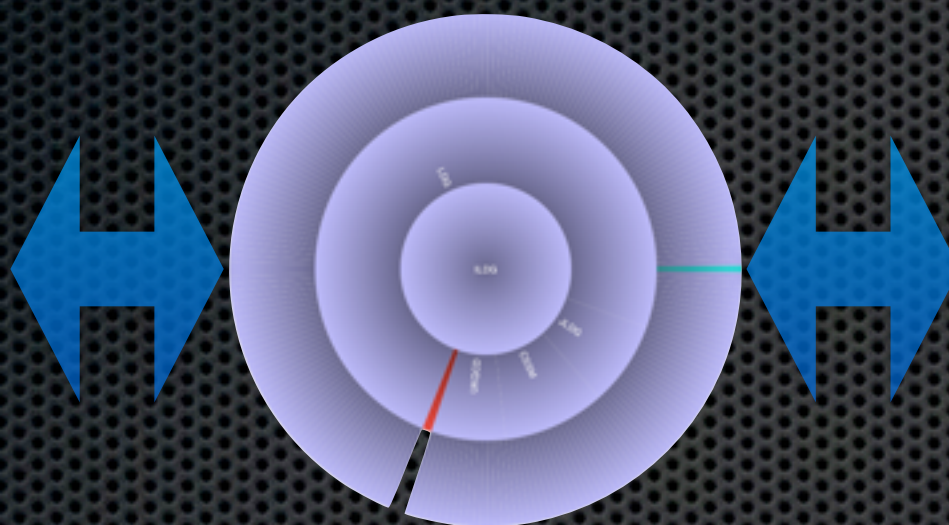
Possible future?

ILDG

NERSC

Grid
Tools
(Java)

Browser
curl/wget
(Python)

Protocols:
SOAP
XML
X.509

proxy?

increase usability and access

Protocols:
REST
JSON
OpenID