

# **IEPM-BW and MAGGIE**

Presented by Warren Matthews (SLAC),  
to the NMWG, GGF5, Edinburgh,  
July 2002.

# Summary

- Short presentation on what we're doing (since Washington).
- IEPM-BW
- GridFTP
- Web Services
- MAGGIE

# IEPM-BW

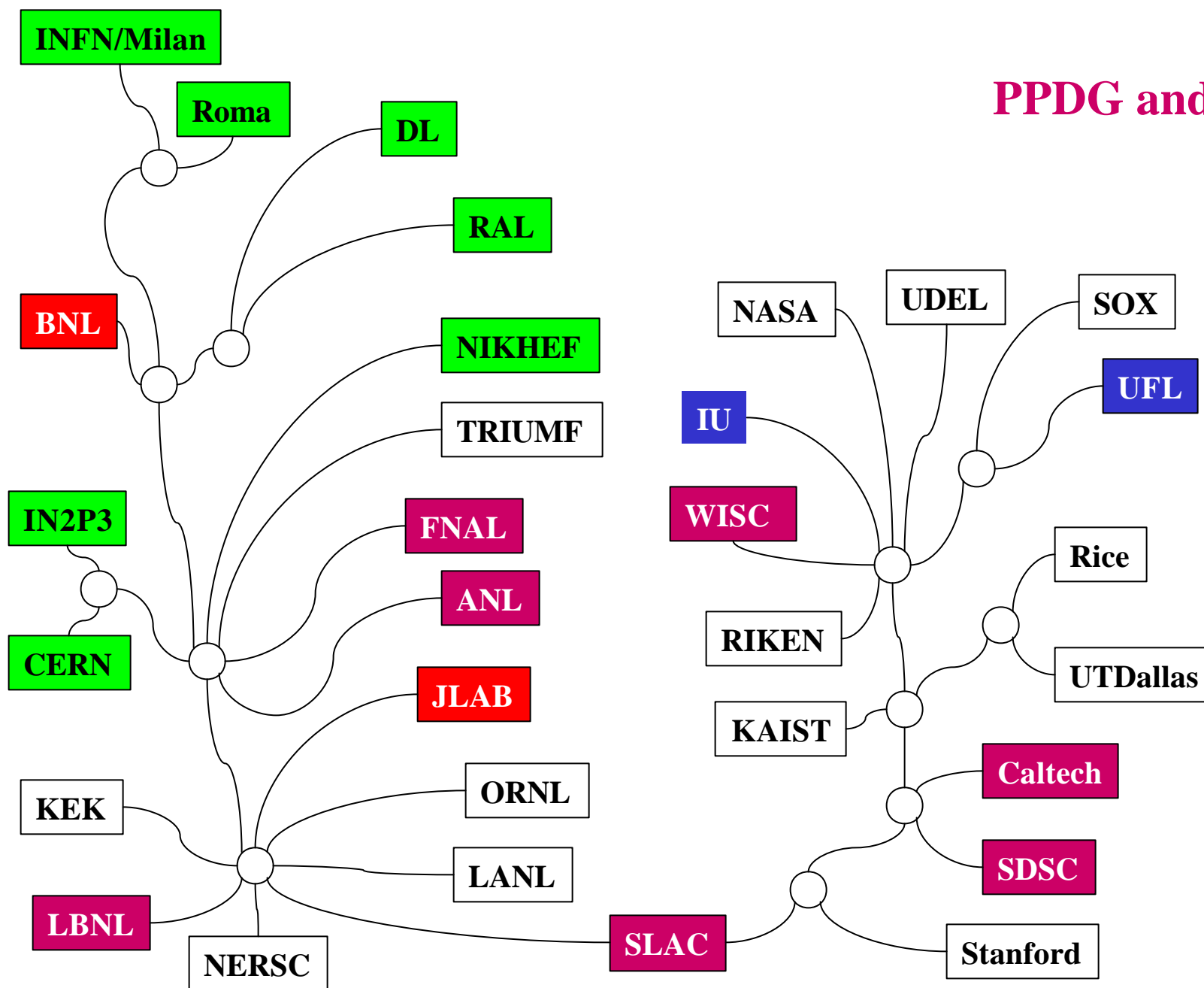
- Continuously operating high performance throughput measurement project.
- Poor mans AIME (not funded by SciDAC).
- Iperf, bbcp, bbftp, udpmon ...
- Track, compare, contrast
- 3 Monitoring Sites (SLAC, FNAL, UMan)
  - I2, UMich, NIKHEF, APAN/JP
- 33 Active Participants (US, Europe, Japan)

PPDG

Gripyhn

PPDG and Gryphyn

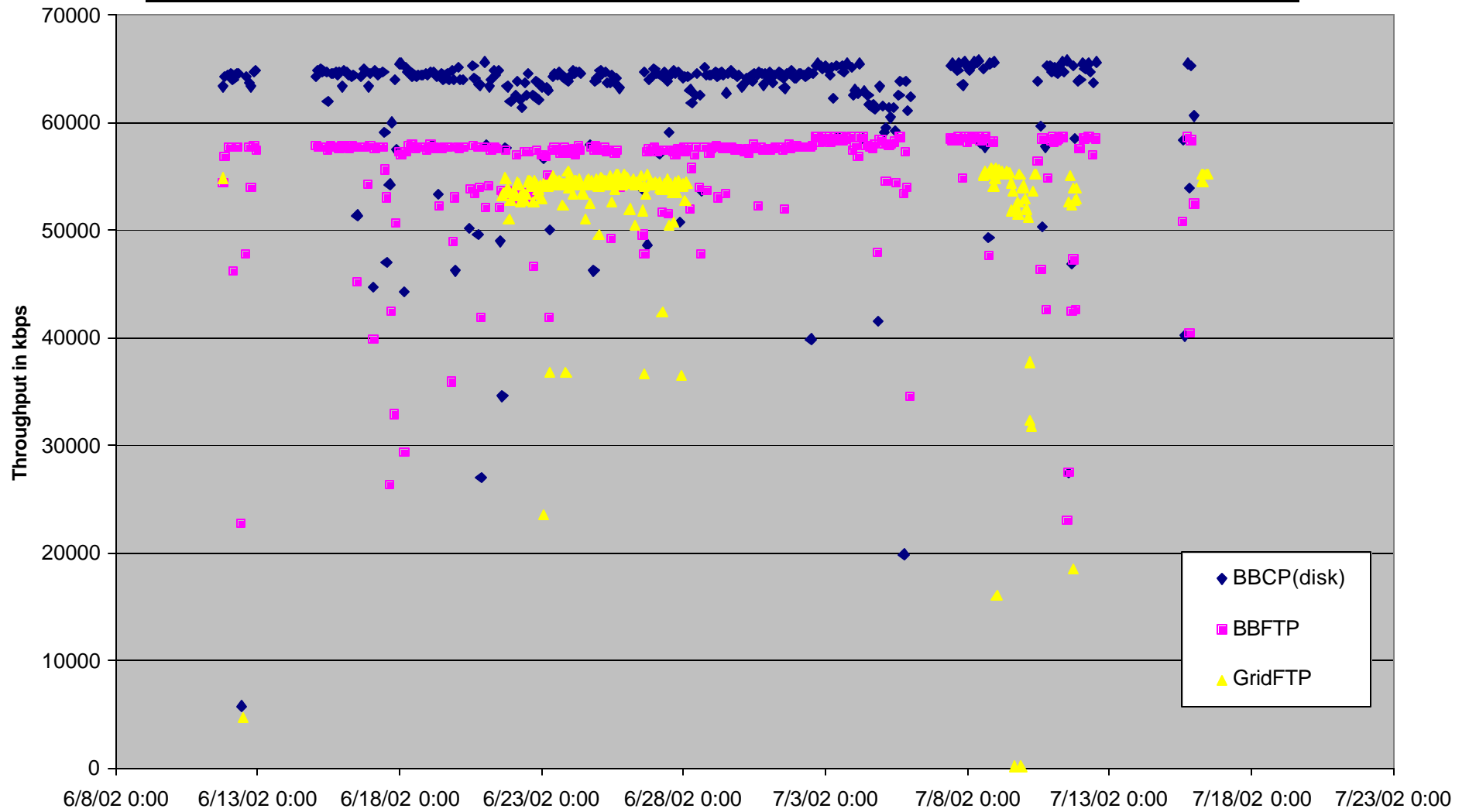
EDG



# GridFTP

- 6 sites
  - BNL, UMich (DoE)
  - ANL, JP/APAN (Globus)
  - IC, MAN (UKPP)
- MDS
  - server is up
  - provide data

# BBCP(Disk), BBFTP and GridFTP for SLAC to BNL in June and July 2002.



# Web Services

- Perl/SOAP services from SLAC WWW
  - Predictions
  - Data
  - Window/Streams Server (Enabled)
  - Node Details
- WSDL, UDDI, X509.

# Example: File Transfer

- Web service client wrapped around bbcp
- User does not know parameters, but monitoring does
- Catch is node must be known to monitoring

```
./bbcp-wrapper -G node2.ccs.ornl.gov  
Expected Throughput = 93209.34728 kbps
```

```
./bbcp-wrapper -A /u7/iepm-bw/temp/dummy.1024000 node2.ccs.ornl.gov  
bbcp: ANTONIA.SLAC.Stanford.EDU running version 02.05.22.01.0  
bbcp: firebird.ccs.ornl.gov running version 02.05.22.00.0  
bbcp: Creating /home/cottrell/pinger/bbcpdat/dummy.1024000  
File /home/cottrell/pinger/bbcpdat/dummy.1024000 created; 1024000 bytes at 1543.2 KB/s  
1 file copied at effectively 406.3 KB/s
```



# MAGGIE

- **M**easurement and **A**nalysis for the **G**lobal **G**rid and **I**nternet **E**nd-to-end Performance.
- Big sister of **A**ctive **I**nternet **M**onitoring for **E**Snet (AIME).
- 10-20+ NIMI hosts running periodic and on-demand measurements.
- Feedback results to instrument tools and troubleshoot issues.

# MAGGIE+

- Atlas
- Internet2
  - Performance Analysis Stations
  - I2 E2E PI PE
- PPDG
- Work with these and others to create co-operative framework
- Continue IEPM-BW work.

# Further Information

- <http://www-iepm.slac.stanford.edu/bw>
- <http://www-iepm.slac.stanford.edu/maggie>

***Any Questions ?***