

# Diagnostic Tool Known Issues

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**Diagnostic Tool Status** 

- Core functionality is up and running.
  - https://egee.epcc.ed.ac.uk:28443/npm-dt/
- Allows access to:
  - GÉANT2, Esnet and Abilene (Internet2) backbone data.
  - Some e2emonit data from the test bed.
- Code has been frozen.
  - No further development until EGEE2.
  - Currently working of documentation for future developers.
- Bug reports and feature requests can be submitted to CERN's Savannah:
  - <u>http://savannah.cern.ch/bugs/?group=jra4npm</u>



- Easy to submit cumbersome queries.
  - perfSONAR requests default to the highest resolution data sets.
    This can cause long pauses (and even out-of-memory errors) while very large datasets are being processed for presentation.
- Easy to get back zero results.
  - Capability data does not match actual measured data well.
  - At this stage, there are quite a few gaps in the data, so it is easy to choose paths and timeframes for which no data has been measured.
- Consequences of Max Results not obvious from UI.
- Queries cannot be saved and re-loaded.
  - Have to re-enter queries of interest every time.
  - List of NMP's is rather awkward requires filters at least.
- Other missing functionality...



- The DT will present information on the tools and parameters used to measure the network performance (if present).
- The DT does not allow the user to choose which parameters are required or preferred.
- Not a significant problem at present, but will become necessary as the volume of data available increases.
- This section of the DT query page is greyed out at present.



- Data Table returns all measured properties.
  - e.g. utilization as bytes, and as percentage.

#### • Visualization chooses the property to plot arbitrarily.

- You cannot choose to view the percentage utilization.
- Generally, the mappings from data to charts require refinement.

#### • Overlays measurements from different paths.

- Good for comparison, e.g. diurnal variation in Internet2 data.
- But can be confusing for some data sets using semitransparent lines may help.
- No way to 'dig' through to the individual data sets.

## Visualizations



- Data Table [working]
  - Raw data shown all fields included.
  - Data not always ordered by date.
  - No CSV export at present.
- Line Graph [working]
  - Clean line graphs for all data type. Exportable as SVG.
  - 'Gaps' are shown as straight-line joins, should just be empty.

### Matrix [not working]

- Comparing multiple paths on one page.
- Some code is in place, but it is not complete.
- Histogram [not working]
  - Frequency plot of measurement values.
  - No code is present.

![](_page_6_Picture_0.jpeg)

![](_page_6_Picture_1.jpeg)

- Currently, users are authenticated via their X.509v3 certificate, but authorised manually.
- Should use VOMS, and pass identity down the chain of services to allow local authorization.

![](_page_7_Picture_0.jpeg)

- Satisfies requirement to access historical data across administrative domains.
- No 'weathermap'.
- No on-demand measurement capability.