TCP

• Now maintains TCP state across 60-second interval boundaries.
  – This required replacing fork-based memory management with arena-based memory management to maintain the state while still efficiently freeing temporary data.

• Implemented timeouts to avoid leaking memory for abandoned tcp state.

• Handles RST in TCP connections.
SQL Backend in Presenter

• All data is stored in SQL database

• Much friendlier to your filesystem, as it no longer stores tens of thousands of files per node per day.

• DB interface is modular, so support for multiple db engines can be added easily.
  – currently only PostgreSQL has been tested.

• Added tool to import old ”.dat” flat file data into database.
  – (A year of data for one node takes on the order of half an hour to import.)
  – Majority of import can run in parallel with old version of presenter, minimizing presenter downtime.

• Datasets are split into a small ”new” table optimized for fast insert of data every minute, and a large ”old” table optimized for fast queries; data is moved from new to old table daily.
SQL Backend in Presenter, Cont

- Data tables are created automatically on demand. Addition of new dataset types in the future will not require any additional database setup by user.

- Most filtering and calculations for plots are now done right in SQL queries, instead of postprocessing in perl.
The End

http://dns.measurement-factory.com/tools/dsc/