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# Whats New with DSC (since last time)

Ken Keys, CAIDA

Duane Wessels  
The Measurement Factory/CAIDA

DNS-OARC  
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# 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.

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## 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.

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## 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.

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# The End

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