BIND 9 Statistics

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We All Like Statistics

- *What is my server doing?*
- Operational
- Planning
- Verification (contracts, etc)
- Peace of mind
- Pretty graphs

Status Reporting

- *Why is my server doing that?*
- Status is different than statistics
- Verify server believes it is healthy
- Reasons for when it is not
- Better than log file analysis

Constraints

- Interference with operation (locks)
- History (BIND 8, BIND 9)
- Development time and funding
- Security
- Memory
- CPU

Reporting Format

- XML over HTTP
- Currently, entire dataset
  - client-side filtering
- Eventually, subsets
  - server-side filtering
- Server-side implies parsing XML

Security

- Disabled by default
- port + address
- Planned HTTP-based authentication

Consumers

- Automated monitoring tools
- Fancy realtime display client

- HTML? Not directly.
- BIND 9 does provide an XSLT transformation for modern browsers.

Implemented

- Server (uptime, boottime)
- Socket statistics (UDP in/out)
- Memory usage
- Views
- Zone status
- List of tasks
- Minimal query statistics

Probable Additions

- Query types
  - A, MX, ...
- Top N lists
  - clients, zones, names
- Zones
  - last reload, query rate
- Resolver status/statistics

Possible additions

- CPU utilization within BIND 9
- Bottom N lists
  - Least queried records
  - Least queried domains
- Detailed but more focused data

Future Work

- Not all will be internal to BIND 9
- Tools to use the XML output
- rndc access to the same data
- Fancy real-time display client

When can you get it?

- BIND Forum members can use CVS to get it today
- 9.5.0a6 (latest alpha)
- … which means 9.5.0 will have stats

What do you think?

- We want to hear from you!
  - What to add
  - Importance
  - Usefulness as designed

- Feedback will help us