LTTng: Status Update

David Goulet

dgoulet@efficios.com

What happened during 2013?

Releases

- 3 minor releases (2.2, 2.3, 2.4)

- +40 maintenance releases

- 17 contributors with ~1410 commits

- Lines of code
  - lttng-ust   (+12991, -8146)
  - babeltrace   (+14208, -4456)
  - lttng-modules (+17258, -8043)
  - userspace-rcu (+20452, -14684)
  - lttng-tools   (+60243, -23270)

LTTng stable 2.1 - Features

- LTTng 2.1 Basse Messe (December 2012)
    - Network Streaming (TCP)
    - Session daemon health check
    - Event field filtering (LTTng-UST)
    - ARM, MIPS sysem call tracing (LTTng modules)

LTTng stable 2.2 - Features

- LTTng 2.2 Cuda (June 2013)

  - Per user ID buffers (LTTng-UST)

    - Buffers used by default

  - On disk file rotation (maximum stream file size)

    ```
    -C, --tracefile-size SIZE
    -W, --tracefile-count COUNT
    ```

    Example -->
    ```
    channel0_0
    channel0_1
       ...
    ```
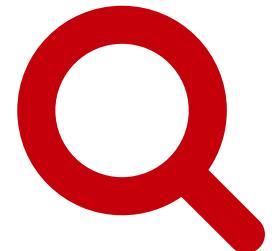
LTTng stable 2.3 - Features

- LTTng 2.3 Dominus Vobiscum (September 2013)
    - Flight recorder tracing
        - Stop and non-stop snapshots
        - Core dump handler integration
            - LTTng Tools extras/

```
lttng snapshot -h
```

LTTng stable 2.4 - Features

- LTTng 2.4 Époque Opaque (upcoming)
  - Java Util Logging (JUL) tracing
    - -j/--jul domain
  - Live streaming
    - Analysis of live traces
  - Consumer and relay daemon health check
  - Packet index generated by consumer daemon
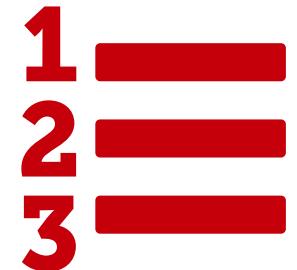   - Faster load of large traces in viewers afterward

Babeltrace

- Babeltrace 1.0 (initial release, October 2012)

- Babeltrace 1.1 (API namespacing fix, March 2013)

- Babeltrace 1.2 (upcoming)

  - Common Trace Format (CTF) Writer API

  - Python bindings

  - Live trace stream read support

    - Connect to LTTng relay daemon

LTTng Project Roadmap (1/2)

- Save/restore trace session configuration to/from files
    - System configuration (/etc/lttng.conf)
    - Trace configuration (mysession.lttng)
- Support Perf PMU counters from LTTng-UST
- Dynamic instrumentation of user-space
- Hardware tracing (ARM, Freescale, Intel, ...)
- Triggers and aggregation in LTTng-UST bytecode interpreter

LTTng Project Roadmap (2/2)

- LTTng modules bytecode interpreter

    - Kernel event filtering

- Per PID tracing

    - Finally! "`lttng trace CMD`" :)

- CTF works

    - Compression, Hardening, Format strings

- Python Logger support

- Log4j support

Questions ?

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🌐 https://lttng.org

💬 lttng-dev@lists.lttng.org

🐦 @lttng_project