What's New in v6.0.x

These are the highlights of new features or additions to existing features in 6.0.0. For the complete list of all changes see this JIRA Release Notes.

- Overview
- New Features
 - ° HTTP/2
 - Logging Additions
 - Wiretracing TLS
 - PCRE Jit
- Deprecated Features
- Future Deprecated Features
- New Configuration Options
- New Metrics
- New Plugins (in experimental)

Overview

- ATS 6.0.0 Release Notes
 - o 21 New Features
 - o 92 Improvements
 - 172 Fixed Bugs
 - o 4 Tasks

New Features

HTTP/2

HTTP/2 in this release is stable. Not everything from the H2 specifications is supported. In particular

- Priorities
- Server PUSH
- HTTP/2 over non-TLS

are not supported. In addition, **HTTP/2** is only supported on the client side, outbound HTTP/2 is not supported yet (i.e. we only support proxying H2 to an HTTP/1.1 backend server (*origin*)). For some details on the implementation, see the TS-2729 Jira.

The following records.config settings are needed to enable HTTP/2 on trafficserver in 5.3.x:

```
CONFIG proxy.config.http2.enabled INT 1
```

Additionally, there should be at least one TLS port configured in proxy.config.http.server_ports.

For example,

```
CONFIG proxy.config.http.server_ports STRING 80 443:ssl
```

Logging Additions

- Application protocol (HTTP/2, HTTP/1, SPDY/3.1), with %<cqpv>.
- Milestones/state times of a transactions to get a better understanding of where time for responses is spent.
- SSL session hit or miss
- · Connection reuse or new connection for the request
- · Pre-configured log formats removed in favor of logs_xml.config

Wiretracing TLS

• Ability to wire trace and log TLS connections. See "New Configuration Options" below.

PCRE Jit

 Added support for PCRE Jit for regex_map. Automatically used when compiled on a system that supports it. There is a speed improvement over normal PCRE matching.

Deprecated Features

- Removed support for RHEL5
- · Removed predefined log formats and reproduced in default logs_xml.config

Future Deprecated Features

- traffic_line command line program will be removed in the 7.0.0 release and is replaced by the command line program traffic_ctl
- SPDY support will be removed in the 7.0.0 release and is replaced by only supporting HTTP/2

New Configuration Options

- proxy.config.cop.init_sleep_time
- proxy.config.http.websocket.max_number_of_connections
- proxy.config.net.max_connections_active_in
- proxy.config.http.max_post_size
- proxy.config.http.cache.generation
- proxy.config.http.cache.open_write_fail_action
- proxy.config.net.inactivity check frequency
- proxy.config.net.event_period
- proxy.config.net.accept_period
- proxy.config.net.retry_delay
- proxy.config.net.throttle_delay
- proxy.config.cache.read_while_writer.max_retries
- proxy.config.cache.read_while_writer_retry.delay
- proxy.config.log.periodic_tasks_interval
- proxy.config.ssl.handshake_timeout_in
- proxy.config.ssl.wire_trace_enabled
- proxy.config.ssl.wire_trace_addrproxy.config.ssl.wire_trace_percentage
- proxy.config.ssl.wire_trace_server_name
- proxy.config.http2.accept_no_activity_timeout
- proxy.config.http2.no_activity_timeout_in
- proxy.config.allocator.hugepages

New Metrics

- HTTP/2 Metrics
 - o proxy.process.http2.total_client_streams
 - proxy.process.http2.total_transactions_time
 - proxy.process.http2.total_client_connections
 - proxy.process.http2.connection_errors
 - $^{\circ} \hspace{0.1cm} \textbf{proxy.process.http2.stream_errors}$
 - $^{\circ} \ \ proxy.process.http2.current_client_sessions$
 - $^{\circ} \hspace{0.1cm} proxy.process.http2.current_client_streams$

New Plugins (in experimental)

- stream_editor Plugins for modifying the content of a response using a string or regular expression substitution
- mp4 Allows for starting at the offset of a mp4 video stream
- cache_promote Give better granularity on when an object is allowed to be written into the cache.