MaxScale Release Notes 1.0.1 Beta

This document details the changes in version 1.0.1 since the release of the 1.0 beta of the MaxScale product.

New Features

CMake build system

Building MaxScale is now easier than ever thanks to the introduction of CMake into the build process. Building with CMake removes the need to edit files, specify directory locations or change build flags, in all but the rarest of the cases, and building with non-standard configurations is a lot easier thanks to the easy configuration of all the build parameters.

Here's a short list of the most common build parameters, their functions and default values.

Variable	Purpose	Default value
INSTALL_DIR	Root location of the MaxScale install	/usr/local/skysql/maxscale
STATIC_EMBEDDED	Whether to use the static or the dynamic version of the embedded library	No
OLEVEL	Level of optimization used when compiling	No optimization
INSTALL_SYSTEM_FILES	If startup scripts should be installed into /etc/init.d and ldconfig configuration files to /etc/ld.so.conf.d	Yes
BUILD_TYPE	The type of the build. 'None' for normal, 'Debug' for debugging and 'Optimized' for an optimized build.	None

Details on all the configurable parameters and instructions on how to use CMake can be found in the README file.

Enhancements

The polling mechanism in MaxScale has been modified to overcome a flaw which mean that connections with a heavy I/O load could starve other connections within MaxScale and prevent query execution. This has been resolved with a more fairer event scheduling mechanism within the MaxScale polling subsystem. This has led to improve overall performance in high load situations.

Bug Fixes

A number of bug fixes have been applied between the 1.0 beta release and this release candidate. The table below lists the bugs that have been resolved. The details for each of these may be found in bugs.skysql.com.

ID	Summary
462	Testall target fails in server/test to invalid MAXSCALE_HOME path specification
467	max_slave_replication lag is not effective after session creation
468	query_classifier : if parsing fails, parse tree and thread context are freed but used
469	rwsplit counts every connection twice in master - connection counts leak
466	hint_next_token doesn't detect <param/> = <value> pair if there are no spaces around '='</value>
470	Maxscale crashes after a normal query if a query with named hint was used before
473	Entering a hint with route server target as '=(' causes a crash
472	Using a named hint after its initial use causes a crash
471	Routing Hints route to server sometimes doesn't work
463	MaxScale hangs receiving more than 16K in input
476	mysql_common.c:protocol_archive_srv_command leaks memory and accesses freed memory
479	Undefined filter reference in MaxScale.cnf causes a crash
410	MaxScale.cnf server option is not parsed for spaces
417	Galera monitor freezes on network failure of a server
488	SHOW VARIABLES randomly failing with "Lost connection to MySQL server"

484	Hashtable does not always release write lock during add
485	Hashtable not locked soon enough in iterator get next item
493	Can have same section name multiple times without warning
510	Embedded library crashes on a call to free_embedded_thd
511	Format strings in log_manager.cc should be const char*
509	rw-split sensitive to order of terms in field list of SELECT
507	rw-split router does not send last_insert_id() to master
490	session handling for non-determinstic user variables broken
489	@@hostname and @@server_id treated differently from @@wsrep_node_address
528	Wrong service name in tee filter crashes maxscale on connect
530	MaxScale socket permission
536	log_manager doesn't write buffers to disk in the order they are written
447	Error log is flooded with same warning if there are no slaves present
475	The end comment tag in hints isn't properly detected.
181	Missing log entry if server not reachable
486	Hashtable problems when created with size less than one
516	maxadmin CLI client sessions are not closed?
495	Referring to a nonexisting server in servers= doesn't even raise a warning
538	maxscale should expose details of "Down" server
539	MaxScale crashes in session_setup_filters
494	The service 'CLI' is missing a definition of the servers that provide the service
180	Documentation: No information found in the documentation about firewall settings
524	Connecting to MaxScale from localhost tries matching @127.0.0.1 grant
481	MySQL monitor doesn't set master server if the replication is broken
437	Failure to detect MHA master switch

541	Long queries cause MaxScale to block
492	In dcb.c switch fallthrough appears to be used without comment
439	Memory leak in getUsers
545	RWSplit: session modification commands weren't routed to all if executed inside open transaction
543	RWSplit router statistics counters are not updated correctly
544	server with weight=0 gets one connection
525	Crash when saving post in Wordpress
533	Drupal installer hangs
497	Can't enable debug/trace logs in configuration file
430	Temporary tables not working in MaxScale
527	No signal handler for segfault etc
546	Use of weightby router parameter causes error log write
506	Don't write shm/tmpfs by default without telling the user or giving a way to override it
552	Long argument options to maxadmin and maxscale broke maxadmin commands
521	Many commands in maxadmin client simply hang
478	Parallel session command processing fails
499	make clean leavessoem .o files behind
500	"depend: no such file warnings during make
501	log_manager, query classifier rebuilds unconditionally
502	log_manager and query_classifier builds always rebuild utils
504	clean rule for Documentation directory in wrong makefile
505	utils/makefile builds stuff unconditionally, misses "depend" target
548	MaxScale accesses freed client DCB and crashes
550	modutil functions process length incorrectly

Packaging

Both RPM and Debian packages are available for MaxScale in addition to the tar based releases previously distributed we now provide

- CentOS/RedHat 5 RPM
- CentOS/RedHat 6 RPM
- Ubuntu 14.04 package