

BigMemory Max 4.3



BigMemory Max 4.3.7 is the latest release. It includes Ehcache 2.10.7.

Fixes are cumulative from version to version.

- [New Features](#)
- [Summary of Changes in 4.3.7](#)
 - [New in Terracotta BigMemory 4.3.7](#)
 - [Resolved](#)
 - [Known Issues](#)
- [Summary of Changes in 4.3.6.5](#)
 - [Resolved](#)
 - [Known Issues](#)
- [Summary of Changes in 4.3.6.4](#)
 - [Resolved](#)
 - [Known Issues](#)
- [Summary of Changes in 4.3.6.3](#)
 - [Resolved](#)
 - [Known Issues](#)
- [Summary of Changes in 4.3.6.2](#)
 - [Resolved](#)
 - [Known Issues](#)
- [Summary of Changes in 4.3.6.1](#)
 - [Resolved](#)
 - [Known Issues](#)
- [Summary of Changes in 4.3.6](#)
 - [Resolved](#)
 - [Known Issues](#)
- [Summary of Changes in 4.3.5.2](#)
 - [Resolved](#)
 - [Known Issues](#)
- [Summary of Changes in 4.3.5.1](#)
 - [Resolved](#)
 - [Known Issues](#)
- [Summary of Changes in 4.3.5](#)
 - [Resolved](#)
 - [Known Issues](#)
- [Summary of Changes in 4.3.4.6](#)
 - [Resolved](#)
 - [Known Issues](#)
- [Summary of Changes in 4.3.4.5](#)
 - [Resolved](#)
 - [Known Issues](#)
- [Summary of Changes in 4.3.4.4](#)
 - [Resolved](#)
 - [Known Issues](#)
- [Summary of Changes in 4.3.4.3](#)
 - [Resolved](#)
 - [Known Issues](#)
- [Summary of Changes in 4.3.4.2](#)
 - [Resolved](#)
 - [Known Issues](#)
- [Summary of Changes in 4.3.4](#)
 - [Resolved](#)
 - [Known Issues](#)
- [Summary of Changes in 4.3.3.1](#)
 - [Resolved](#)
 - [Known Issues](#)
- [Summary of Changes in 4.3.3](#)
 - [Resolved](#)
 - [Known Issues](#)
- [Summary of Changes in 4.3.2.2](#)
 - [Resolved](#)
 - [Known Issues](#)
- [Summary of Changes in 4.3.2.1](#)
 - [Resolved](#)
 - [Known Issues](#)
- [Summary of Changes in 4.3.2](#)
 - [Resolved](#)
 - [Known Issues](#)
- [Summary of Changes in 4.3.1.2](#)
 - [Resolved](#)
 - [Known Issues](#)
- [Summary of Changes in 4.3.1.1](#)

- Resolved
- Known Issues
- Summary of Changes in 4.3.1
 - Resolved
 - Known Issues
- Summary of Changes in 4.3.0.1
 - Resolved
 - Known Issues
- Known Issues in 4.3.0

New Features

BigMemory Max 4.3 introduces following new capabilities:

1. Terracotta Management Console (TMC) extended to support WAN Replication Service: The WAN tab enables monitoring of information about the following aspects of the WAN Replication Service:
 - a. WAN's topology and configuration information
 - b. Performance statistics and details of their deployment, such as the orchestrator topology, configuration, and status of each WAN-enabled cache.
2. Support for Java 8
3. Support for RedHat EL7 (server)
4. Ability to restrict TMC access to execute adhoc (BigMemory) SQL (BigMemory 4.3.1)
5. Support for SUSE Linux Enterprise 12 (BigMemory 4.3.1)
6. A simpler version (IP whitelist) of access restrictions has been added (restricting access to a list of provided IP addresses) (BigMemory 4.3.2)
7. Failover Tuning – Data consistency for cross-data center clustering (BigMemory 4.3.3)
8. Support for Tomcat 8 (BigMemory 4.3.3)
9. Quartz no longer supported (BigMemory 4.3.3)
10. Added Docker to Terracotta kit for SAG Install (BigMemory 4.3.4)
11. Support for Windows Server 2016 (BigMemory 4.3.4)

Summary of Changes in 4.3.7

New in Terracotta BigMemory 4.3.7

- Improvements and new options for Terracotta server start/stop commands to facilitate safer automation of operations

Resolved

- 7697 - Fixed issue with fully cleaning up SSE socket connections (from TMC) when connection is partially broken unexpectedly

Known Issues

- 4984 - Port 9540 is no longer valid. Actual IP address will show versus the loopback one.
- 5477 - When user kills Master Orchestrator and Replica Orchestrator, some caches in Region 1 return "OrchestratorAlive" to be "true".

Summary of Changes in 4.3.6.5

Resolved

- 7683 - Fixed a potential file descriptor leak in the TSA's management agent that was introduced in version 4.3.6.

Known Issues

- 4984 - Port 9540 is no longer valid. Actual IP address will show versus the loopback one.
- 5477 - When user kills Master Orchestrator and Replica Orchestrator, some caches in Region 1 return "OrchestratorAlive" to be "true".

Summary of Changes in 4.3.6.4

Resolved

- 7653 - Fixes Socket leak when unexpected requests appear on the tsaPort and groupPort
- 7666 - Disable HTTP TRACE on all server web interfaces

Known Issues

- 4984 - Port 9540 is no longer valid. Actual IP address will show versus the loopback one.
- 5477 - When user kills Master Orchestrator and Replica Orchestrator, some caches in Region 1 return "OrchestratorAlive" to be "true".

Summary of Changes in 4.3.6.3

Resolved

- 7626 – Resolved issue where an unhandled java.util.ConcurrentModificationException causes Terracotta Server Array to crash.
- 7592 – Resolved issue to always consider timeout settings and propagate them explicitly to the internal HttpClient.

Known Issues

- 4984 - Port 9540 is no longer valid. Actual IP address will show versus the loopback one.
- 5477 - When user kills Master Orchestrator and Replica Orchestrator, some caches in Region 1 return "OrchestratorAlive" to be "true".

Summary of Changes in 4.3.6.2

Resolved

- 7586 - The service wrapper has been modified to only ever automatically restart the Terracotta Server when it starts up as a passive and determines it has a dirty database. Please refer to server/wrapper/README.txt, Sect. 6 BASIS FOR DEFAULT CONFIGURATION for more details.

Known Issues

- 4984 - Port 9540 is no longer valid. Actual IP address will show versus the loopback one.
- 5477 - When user kills Master Orchestrator and Replica Orchestrator, some caches in Region 1 return "OrchestratorAlive" to be "true".

Summary of Changes in 4.3.6.1

Resolved

- 7563 – Expanded search monitoring to include oversized query results. Added system property (tc.searchmonitor.oversizedQueryLogging=N) which can be used to set a minimum at which point there will be a warning logged if a query result set on a server exceeds the amount.
- 7580 – Upgraded to netty 3.9.8 to resolve security vulnerability CVE-2015-2156

Known Issues

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- 5477 - When user kills Master Orchestrator and Replica Orchestrator, some caches in Region 1 return "OrchestratorAlive" to be "true".

Summary of Changes in 4.3.6

Resolved

- 7388 – Update httpclient libraries to resolve security vulnerability CVE-2015-5262
- 7429 – Addressed security vulnerabilities CVE-2017-7525, CVE-2014-0114, and CVE-2017-9735
- 7518 – Resolved security vulnerability CVE-2015-2080

Known Issues

- 4984 - Port 9540 is no longer valid. Actual IP address will show versus the loopback one.
- 5477 - When user kills Master Orchestrator and Replica Orchestrator, some caches in Region 1 return "OrchestratorAlive" to be "true".

Summary of Changes in 4.3.5.2

Resolved

- 7517 – Upgraded Jackson-Databind to version 2.9.5 to address security vulnerabilities

Known Issues

- 4984 - Port 9540 is no longer valid. Actual IP address will show versus the loopback one.
- 5477 - When user kills Master Orchestrator and Replica Orchestrator, some caches in Region 1 return "OrchestratorAlive" to be "true".
- 7373 – The bigmemory-max-4.3.4.3.15/README.txt file references "cmmon – Directory containing common libraries", however common directory no longer exists.
- 7375 - If you have Terracotta Integration for Designer fix 2 already installed on 10.1 installation, then applying this fix 3 may fail during installation.
 - *Workaround for this problem is to reinstall Terracotta Designer component using SAG Installer and apply this fix 3 directly*

Summary of Changes in 4.3.5.1

Resolved

- 7214 – Fixed memory leak caused by dynamically creating and removing caches
- 7450 - Fix for case where rapid intermixing of client rejoins and beginning paginated searches could crash the server.

- 7462 – Fixed issue where Command Central reports that Terracotta Server Array is "Unresponsive" when <failover-priority> configuration element is present in tc-config.xml. This issue is due to a XML validation-error, where Platform Manager is using an out-dated XML-schema.
- 7480 – Resolved hybrid storage mode race condition that may occur between appender and reader threads for doing fsync when there are read and writes in parallel; which then may lead to server crash.
- 7483 – Resolved ArrayIndexOutOfBoundsException error after TC node startup.
- 7507 – Resolved issue where Terracotta Active crashes when syncing search index data to Passive with "[java.io.FileNotFoundException](#)" error. This occurs when paginated searches are in-progress.

Known Issues

- 4984 - Port 9540 is no longer valid. Actual IP address will show versus the loopback one.
- 5477 - When user kills Master Orchestrator and Replica Orchestrator, some caches in Region 1 return "OrchestratorAlive" to be "true".
- 7373 – The bigmemory-max-4.3.4.3.15/README.txt file references "cmmon – Directory containing common libraries", however common directory no longer exists.
- 7375 - If you have Terracotta Integration for Designer fix 2 already installed on 10.1 installation, then applying this fix 3 may fail during installation.
 - *Workaround for this problem is to reinstall Terracotta Designer component using SAG Installer and apply this fix 3 directly*

Summary of Changes in 4.3.5

Resolved

- 7396/7423 – Resolved null pointer exception issue that occurs when the server tries to process an already applied replace operation that has been re-sent by a client on a server failover or a serverstart.

Known Issues

- 4984 - Port 9540 is no longer valid. Actual IP address will show versus the loopback one.
- 5477 - When user kills Master Orchestrator and Replica Orchestrator, some caches in Region 1 return "OrchestratorAlive" to be "true".
- 7373 – The bigmemory-max-4.3.4.3.15/README.txt file references "cmmon – Directory containing common libraries", however common directory no longer exists.
- 7375 - If you have Terracotta Integration for Designer fix 2 already installed on 10.1 installation, then applying this fix 3 may fail during installation.
 - *Workaround for this problem is to reinstall Terracotta Designer component using SAG Installer and apply this fix 3 directly*
- 7450 - This fix is not part of this version. (Fix for case where rapid intermixing of client rejoins and beginning paginated searches could crash the server.)
- 7480 - This fix is not part of this version.
- 7483 - This fix is not part of this version.
- 7507 - This fix is not part of this version.

Summary of Changes in 4.3.4.6

Resolved

- 7480 – Resolved hybrid storage mode race condition that may occur between appender and reader threads for doing fsync when there are read and writes in parallel; which then may lead to server crash.
- 7483 – Resolved ArrayIndexOutOfBoundsException error after TC node startup.
- 7507 – Resolved issue where Terracotta Active crashes when syncing search index data to Passive with "[java.io.FileNotFoundException](#)" error. This occurs when paginated searches are in-progress.

Known Issues

- 4984 - Port 9540 is no longer valid. Actual IP address will show versus the loopback one.
- 5477 - When user kills Master Orchestrator and Replica Orchestrator, some caches in Region 1 return "OrchestratorAlive" to be "true".
- 7373 – The bigmemory-max-4.3.4.3.15/README.txt file references "cmmon – Directory containing common libraries", however common directory no longer exists.
- 7375 - If you have Terracotta Integration for Designer fix 2 already installed on 10.1 installation, then applying this fix 3 may fail during installation.
 - *Workaround for this problem is to reinstall Terracotta Designer component using SAG Installer and apply this fix 3 directly*

Summary of Changes in 4.3.4.5

Resolved

- 7423 – Resolved null pointer exception issue that occurs when the server tries to process an already applied replace operation that has been re-sent by a client on a server failover or a server restart.
- 7450 - Fix for case where rapid intermixing of client rejoins and beginning paginated searches could crash the server.

Known Issues

- 4984 - Port 9540 is no longer valid. Actual IP address will show versus the loopback one.
- 5477 - When user kills Master Orchestrator and Replica Orchestrator, some caches in Region 1 return "OrchestratorAlive" to be "true".
- 7373 – The bigmemory-max-4.3.4.3.15/README.txt file references "cmmon – Directory containing common libraries", however common directory no longer exists.
- 7375 - If you have Terracotta Integration for Designer fix 2 already installed on 10.1 installation, then applying this fix 3 may fail during installation.
 - *Workaround for this problem is to reinstall Terracotta Designer component using SAG Installer and apply this fix 3 directly*

Summary of Changes in 4.3.4.4

Resolved

- 7394 - Fixed terracotta server startup issue encountered with recent IBM Java 1.8 update(Refresh 5 or later).

Known Issues

- 4984 - Port 9540 is no longer valid. Actual IP address will show versus the loopback one.
- 5477 - When user kills Master Orchestrator and Replica Orchestrator, some caches in Region 1 return "OrchestratorAlive" to be "true".
- 7373 – The bigmemory-max-4.3.4.3.15/README.txt file references "cmmon – Directory containing common libraries", however common directory no longer exists.
- 7375 - If you have Terracotta Integration for Designer fix 2 already installed on 10.1 installation, then applying this fix 3 may fail during installation.
 - Workaround for this problem is to reinstall Terracotta Designer component using SAG Installer and apply this fix 3 directly

Summary of Changes in 4.3.4.3

Resolved

- 7282 – Fixed minor issue with non-numeric strings being handled by Command Central plugin
- 7348 - Fixed potential concurrency problem with search results when multiple searches are performed simultaneously on two Caches within the same CacheManager
- 7359 - Changed default settings of Tanuki wrapper to avoid possible restart problems after a fail-over

Known Issues

- 4984 - Port 9540 is no longer valid. Actual IP address will show versus the loopback one.
- 5477 - When user kills Master Orchestrator and Replica Orchestrator, some caches in Region 1 return "OrchestratorAlive" to be "true".
- 7373 – The bigmemory-max-4.3.4.3.15/README.txt file references "cmmon – Directory containing common libraries", however common directory no longer exists.
- 7375 - If you have Terracotta Integration for Designer fix 2 already installed on 10.1 installation, then applying this fix 3 may fail during installation.
 - Workaround for this problem is to reinstall Terracotta Designer component using SAG Installer and apply this fix 3 directly

Summary of Changes in 4.3.4.2

Resolved

- 7287 – Resolved bug to allow clients to rejoin a cluster when both Active-Active and Security are configured.

Known Issues

- 4984 - Port 9520 is no longer valid. Actual IP address will show versus the loopback one.
- 5477 - When user kills Master Orchestrator and Replica Orchestrator, some caches in Region 1 return "OrchestratorAlive" to be "true".

Summary of Changes in 4.3.4

Resolved

- 7213 – Fixed server mistakenly kicking out clients with "Error hydrating message of type REQUEST_MANAGED_OBJECT_MESSAGE (12) java.lang.UnsupportedOperationException: Inserts out of order"
- 7244 - Fixed the issue of an exception being thrown while executing a query with key as search attribute. This issue was seen only on installations with WAN replication enabled.

Known Issues

- 4984 - Port 9520 is no longer valid. Actual IP address will show versus the loopback one.
- 5477 - When user kills Master Orchestrator and Replica Orchestrator, some caches in Region 1 return "OrchestratorAlive" to be "true".

Summary of Changes in 4.3.3.1

Resolved

- 7022 – Fixed TMC showing duplicates of Operator Events under some circumstances. E.g. Having multiple concurrent browser sessions.
- 7091 - Fixed bug causing TMC on same localhost is slow with Connection refused

Known Issues

- 4984 - Port 9520 is no longer valid. Actual IP address will show versus the loopback one.
- 5477 - When user kills Master Orchestrator and Replica Orchestrator, some caches in Region 1 return "OrchestratorAlive" to be "true".

Summary of Changes in 4.3.3

Resolved

- 6764 – Resolved issue where due to network issues, client connections were not cleared after clients were disconnected thereby causing the license policy to reject connections for new clients.
- 6785 – Resolved issue where excessive number of threads were created by Jersey Client causing issues with memory resources.
- 6996 - Documentation update to show BigMemory 4.1 and later versions now support the FRS "SizeBasedCompactionPolicy"
- 7019 - Fixed security-keychain bug that would sometimes not allow IS to start when connected to Terracotta
- 7034 – SSL documentation updated
 - Added a new section "Scope of the SSL documentation"
 - Added hints about -trustcacerts and the KeyStore Explorer GUI.

Known Issues

- 4984 - Port 9520 is no longer valid. Actual IP address will show versus the loopback one.
- 5477 - When user kills Master Orchestrator and Replica Orchestrator, some caches in Region 1 return "OrchestratorAlive" to be "true".

Summary of Changes in 4.3.2.2

Resolved

- 6785 – Resolved issue where excessive number of threads were created by Jersey Client causing issues with memory resources.
- 6764 – Resolved issue where due to network issues, client connections were not cleared after clients were disconnected thereby causing the license policy to reject connections for new clients.

Known Issues

- 4984 - Port 9520 is no longer valid. Actual IP address will show versus the loopback one.
- 5477 - When user kills Master Orchestrator and Replica Orchestrator, some caches in Region 1 return "OrchestratorAlive" to be "true".

Summary of Changes in 4.3.2.1

Resolved

- 6569 – Resolved startup error when terracotta is launched from wrapper script or Command Central
- 6636 - Resolved memory leak issue caused by Jersey 2.6 client listeners

Known Issues

- 4984 - Port 9520 is no longer valid. Actual IP address will show versus the loopback one.
- 5477 - When user kills Master Orchestrator and Replica Orchestrator, some caches in Region 1 return "OrchestratorAlive" to be "true".

Summary of Changes in 4.3.2

Resolved

- 6493 – Validated Websessions on Websphere
- 6542 – Resolved error when configuring Active Direction in TMC
- 6569 – Resolved startup error when terracotta is launched from wrapper script or Command Central.
- 6576 – Fixed issue handling special characters in connection URLs in keychains
- 6584 – Corrected TransactionSequencer shutdown due to connection closure

Known Issues

- 4984 - Port 9520 is no longer valid. Actual IP address will show versus the loopback one.
- 5477 - When user kills Master Orchestrator and Replica Orchestrator, some caches in Region 1 return "OrchestratorAlive" to be "true".

Summary of Changes in 4.3.1.2

Resolved

- 6576 – Fixed issue handling special characters in connection URLs in keychains
- 6636 - Resolved memory leak issue caused by Jersey 2.6 client listeners

Known Issues

- 4984 - Port 9520 is no longer valid. Actual IP address will show versus the loopback one.
- 5477 - When user kills Master Orchestrator and Replica Orchestrator, some caches in Region 1 return "OrchestratorAlive" to be "true".

Summary of Changes in 4.3.1.1

Resolved

- 3720 – Resolved exception error in TMC when user group is not found on LDAP.
- 4687 - The BeanShell feature, previously used for troubleshooting internal server issues, has been removed from the Terracotta Server as it was a security vulnerability.
- 5513 - Stopping terracotta server from TMC no longer fails if server is started as service.
- 6169 - Resolved issue where the debug-tool is not honoring the -z flag on Windows and generating thread dump on console
- 6174 - Resolved bug with CacheEventListener.notifyElementEvicted returning byte[] instead of actual Element object when using copy on read strategy
- 6184 - TMC reports cluster status as UNREACHABLE if any of of cluster nodes is not running. This happens when TMC is running on windows machine with stealth mode firewall option enabled.
- 6293 - Apache Shiro, security framework used in terracotta, is upgraded to 1.2.4
- 6347 – Added warning message in log when TC Server off heap is configured to less than 2GB
- 6357 - Resolved issue where TMC creates excessive "see-flush-timer" threads.

Known Issues

- 4984 - Port 9520 is no longer valid. Actual IP address will show versus the loopback one.
- 5477 - When user kills Master Orchestrator and Replica Orchestrator, some caches in Region 1 return "OrchestratorAlive" to be "true".

Summary of Changes in 4.3.1

Resolved

- 5036 – Resolved visual defect to align data points on graph in TMC
- 5249 – Fixed TMC log's pause button to correctly pause if there is a pending request in the background
- 5272 – Allows symmetrical, bidirectional cache replication
- 5462 – When the WAN Master Orchestrator of Region 1 is terminated, and using TMC, the Region 2 Master Orchestrator status is listed as unknown by the Replica option in the Topology configuration
- 5490 - User is now able to view off-line data in the TMC using IE11 browser
- 5531 – Increased TMS scalability (support larger number of clients) via JMX usage optimization
- 5548 – Corrected memory leak within TMC
- 5599 – Default off heap size set to 2GB along with warning message when size not specified
- 5602 - Resolved TMC issue to show number of filtered clients when filtering remote addresses of connected clients in a large cluster
- 5647 – Resolved issue where Terracotta cluster could not recover after a specific type of network interruption
- 5757 – Corrected issue for properly generating TimeoutBehavior element
- 6027 – Resolved deadlock possibility for cases with 2 threads and 2 locks when shutting down clustered cache manager
- 6134 – Fixed issue with Quartz MBeans not being exposed to the JMX server

Known Issues

- 4984 - Port 9520 is no longer valid. Actual IP address will show versus the loopback one.
- 5477 - When user kills Master Orchestrator and Replica Orchestrator, some caches in Region 1 return "OrchestratorAlive" to be "true".
- 5513 - Stopping of TSA from TMC fails when TSA is started as a service.

Summary of Changes in 4.3.0.1

Resolved

- 5503 - "Unresponsive script" dialog no longer appears, when connected with 560 clients.
- 5557 – Resolved issue that resulted in NullPointerException and server was terminated when large number of clients simultaneously connect with the TSA server.
- 5598 – Resolved issue where a restarted passive server may become stuck in initializing state when removing event listeners for dead clients.
- 5647 – Fixed rare situation where cluster does not recover after a specific type of network disruption.

Known Issues

- 4984 - Port 9520 is no longer valid. Actual IP address will show versus the loopback one.
- 5462 - When Master Orch of region 1 is terminated while using TMC for WAN, the region 2 Master Orch status in the replica option is listed as unknown in the Topology configuration.
- 5477 - When user kills Master Orch and Replica Orch, some caches in Region 1 return "OrchestratorAlive" to be "true".
- 5490 - When IE 11 browser, user is unable to view off-line data in TMC.
- 5513 - Stopping of TSA from TMC fails when TSA is started as a service.

Known Issues in 4.3.0

- 4941 - Resolved issue where Terracotta Server would not start when using IBM JDK 1.7.0 SR7.
- 4984 - Port 9520 is no longer valid. Actual IP address will show versus the loopback one.
- 5462 - When Master Orch of region 1 is terminated while using TMC for WAN, the region 2 Master Orch status in the replica option is listed as unknown in the Topology configuration.
- 5477 - When user kills Master Orch and Replica Orch, some caches in Region 1 return "OrchestratorAlive" to be "true".
- 5490 - When IE 11 browser, user is unable to view off-line data in TMC.
- 5503 - "Unresponsive script" dialog pops up, when observing the 560 caches listing in the management panel in TMC.

- 5513 - Stopping of TSA from TMC fails when TSA is started as a service.
- 5557 - When large number of clients simultaneously connect with the TSA server it could result in NullPointerException and server gets terminated.