

The GemFire logo consists of the word "GEMFIRE" in a bold, black, sans-serif font, with a small orange triangle above the letter "I". A thin green horizontal line is positioned below the word. Below "GEMFIRE" is the word "ENTERPRISE" in a smaller, black, sans-serif font. The logo is centered within a large, light gray diamond shape that is part of a repeating pattern of similar diamonds in the background.

GEMFIRE[®]
ENTERPRISE

Release Notes

Version 5.8 Limited Availability

November 2008

Send comments on this manual to docs@gemstone.com

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PATENTS

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GemStone Systems, Inc.

1260 NW Waterhouse Avenue, Suite 200
Beaverton, OR 97006

Product Overview

GemFire Enterprise version 5.8 Limited Availability (LA) is a new release of the distributed caching system from GemStone. GemFire Enterprise is a high-performance, distributed operational data management infrastructure that sits between your clustered application processes and back-end data sources to provide very low-latency, predictable, high-throughput data sharing and event distribution.

GemFire harnesses the memory and disk resources across a network to form a real-time data fabric or grid. By primarily managing data in memory, GemFire enables extremely high-speed data sharing that turns a network of machines into a single logical data management unit - a data fabric.

GemFire is used for managing operational data. Unlike a traditional centralized disk-based database management system used for managing very large quantities of data, GemFire is a real-time data sharing facility specifically optimized for working with operational data needed by real-time applications - it is the “now” data, the fast-moving data shared across many processes and applications. It is a layer of abstraction in the middle tier that collocates frequently-used data with the application and works with back-end databases behind the scenes.

This document includes the following sections:

- ▶ [Product Overview \(page 3\)](#)
- ▶ [New Features and Product Changes in GemFire 5.8 LA \(page 4\)](#)

For detailed information on using GemFire Enterprise to develop applications, please refer to the programming API documentation included with the product and the `index.html` file in the `docs` directory that directs you to the complete GemFire documentation set available on the GemStone web site. For information on administering GemFire Enterprise systems, see the *GemFire Enterprise System Administrator's Guide*. See the *GemFire Enterprise Developer's Guide* for information on programming with GemFire Enterprise.

To contact GemStone Technical Support:

- ▶ on the web: <http://support.gemstone.com>
- ▶ by e-mail: support@gemstone.com
- ▶ by phone: 800/243-4772 or 503/533-3503

New Features and Product Changes in GemFire 5.8 LA

GemFire Enterprise 5.8 LA includes the new function execution service as an early access feature. Other new early access features include entry eviction, overflow, and expiration capabilities for partitioned regions. Support has also been removed for version 1.4.2 of the Sun Java JSE.

For this version of GemFire, these release notes, the *GemFire Enterprise Early Access Features* document, and portions of the online API were updated for the documentation. The product manuals reflect GemFire version 5.7.

Descriptions of the new 5.8 LA product features and changes are included in the following list.

Added Function Execution Service

The new data-aware function execution service in GemFire permits execution of arbitrary data-dependent application functions on the data fabric members where the data is striped for scale. The fundamental premise is to route the function transparently to the member that carries the data subset required by the application function and avoid moving data around on the network.

Function execution is an Early Access feature in this release, so it is not included in the product manuals. See the GemFire Enterprise Early Access Features document for a complete description.

Added Entry Eviction, Overflow, and Expiration for Partitioned Regions

Partitioned regions (PR) now support the eviction, overflow, and expiration of least-recently-used (LRU) entries, based on user-specified capacity limits.

PR eviction, overflow, and expiration are Early Access features in this release, so they are not included in the product manuals. See the GemFire Enterprise Early Access Features document for a complete description.

Sun Java JSE 1.4.2 No Longer Supported

GemFire Enterprise 5.8 LA does not support version 1.4.2 of the Sun Java JSE platform.

This product change is not documented in the manuals accompanying this release. This information replaces Table 1.1 and Table 1.2 in the Product Installation chapter for the GemFire Enterprise System Administrator's Guide. In addition, any references in the manuals for version 1.4.2 support should be considered as version 1.5.0.

GemFire 5.8 LA supports the following 32-bit and 64-bit platform configurations.

Table 1.1 Support Matrix for 32-Bit Platforms

Operating System	JDKs and JREs				
	Sun JSE 1.5.0_16	Sun JSE 1.6.0_10	BEA JRockit JSE 1.5.0_14 B27.5 or higher	BEA JRockit JSE 1.6.0_3 B27.5 or higher	IBM J9 1.5.0
Solaris 9	x	x			
Solaris 10	x	x			
Red Hat EL 4	x	x			x
Red Hat EL 5	x	x	x	x	x
SLES 9	x	x	x	x	x
SLES 10	x	x	x	x	x
Windows XP SP3	x	x			x
Windows 2003 Server SP2	x	x			x
AIX 5.3 (pure Java)					x

Table 1.2 Support Matrix for 64-Bit Platforms

Operating System	JDKs and JREs			
	Sun JSE 1.5.0_16	Sun JSE 1.6.0_10	BEA JRockit JSE 1.6.0_3 B27.5 or higher	IBM J9 1.5.0
Solaris 10	x	x		
Red Hat EL 5	x	x	x	x
SLES 10	x	x	x	x
Windows 2003 Server SP2 (pure Java)	x	x		x
AIX 5.3 (pure Java)				x

