
GemStone®

GemStone/S 64 Bit Release Notes

Version 2.2.5.4.1

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GEMSTONE[™] S 64

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PATENTS

GemStone is covered by U.S. Patent Number 6,256,637 "Transactional virtual machine architecture", Patent Number 6,360,219 "Object queues with concurrent updating", and Patent Number 6,567,905 "Generational Garbage Collector". GemStone may also be covered by one or more pending United States patent applications.

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Overview

GemStone/S 64 Bit 2.2.5.4.1 is a new special build release of the GemStone/S 64 Bit object server. This release includes a redesign of the AIO wait behavior, fixing a serious GemStone bug resulting from incorrect OS system call behavior.

No separate Installation Guide is provided with this special build release. For installation instructions, use the Installation Guide for version 2.2.5.2.

This special build is available for Solaris and Linux.

Changes in this release

AIO wait behavior

To avoid Solaris problems when `aiio_suspend()` is called on an AIO request that had completed, error return codes from `aiio_suspend()` are no longer used.

If the return from the `aiio_suspend()` function is not 0, meaning AIO completed, then `aiio_error()` is called to determine the actual status. `aiio_suspend()` is only called a second time if `aiio_error` returns `EINPROGRESS`.

Previously AIO requests for which `aiio_suspend()` returned `EINPROGRESS` for more than 30 seconds were cancelled. This timeout has been increased to 60 seconds.

Previously, if a AIO request did not complete within the timeout period, all outstanding AIO requests were cancelled. Now only the specific request is cancelled, and that request is retried using synchronous write. (#39738)

