



Product Roadmap

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Agenda

- GemStone become: GemTalk .
- GemStone/S 32
- GemStone/S 64
- MagLev

GemStone become: GemTalk

- What's Changing
 - Company Name – Now GemTalk Systems
 - Office Location: Upstairs from VMware (same building).
 - Domain Name: gemtalksystems.com
 - Emails: first.last@gemtalksystems.com
 - Phone Numbers
 - Licensing: more flexible options for customers and partners

GemStone become: GemTalk

- What's Not Changing
 - Product Names
 - GemStone/S, GemBuilder for Smalltalk, etc
 - Team: 100% Staff Retention
 - Licensing and Support Obligations
 - All contracts were assumed by GemTalk
 - World-class Technical Support

GemStone become: GemTalk

- What's Not Changing
 - Smalltalk Community Support
 - Smalltalk Industry Council
 - Gold Sponsor and Board Member
 - European Smalltalk Users Group
 - Platinum Sponsor
 - Fundacion Argentina de Smalltalk:
 - Platinum Sponsor
 - Pharo Consortium

GemStone/S 32

- GemStone/S 32 End of Life
 - VMware date: October 2015
 - Not So Fast!
 - GemStone/S 32 customers need more time to migrate to GemStone/64
 - EOL date is suspended indefinitely.
 - GemStone/32 still in maintenance mode.

GemStone/S 64 2.x

- Maintenance Mode
 - Urgent bug fixes only.
- Current Version: 2.4.5.3
 - Bug Fixes
 - AIX Performance Improvements

GemStone/S 64 3.1.x

- Current Version: 3.1.0.5
 - IPv4 and IPv6 Fixes
 - Repository Restore Performance Improvements
 - Hot Standby Fixes
 - ProcessScheduler Fixes
 - Reclaim during Backup problems.

GemStone/S 64 3.2

- New Target Date: Q4/2013 – Q1/2014
- New Features
 - Add support for Solaris 11
 - Update Open Source Software to latest stable versions
 - OpenLDAP
 - OpenSSL
 - Zlib
 - LibICU
 - Oniguruma (regular expressions)

GemStone/S 64 3.2

- New Features
 - Multi-threaded page reclaim sessions.
 - Additional multi-threaded garbage collection options.
 - Additional Unicode character features
 - Indexing Support
 - ICU package collators
 - Optimized Dictionary and SortedCollection classes
 - Replace old CharacterTable Support in favor of libicu functionality

GemStone/S 64 3.2

- New Indexing Features
 - Set-valued path terms
 - New Query API
 - New Index Creation API
 - Selector Path Terms
 - Date and DateTime Encoding and Caching in B-tree nodes
 - Unicode String Indexes
 - Concurrent Parallelized Index Creation
 - Wildcard String Query Examples

GemStone/S 64 3.2

- New Symmetric Encryption Methods
 - Support for AES Encryption
 - 128, 192 and 256 bit keys supported
 - Example:

```
category: 'Encryption'
```

```
method: CharacterCollection
```

```
aesEncryptWith256BitKey: aKey salt: aSalt into: aByteObjOrNil
```

```
"Encrypts the receiver using 256 bit AES encryption and places the result  
into aByteObjOrNil."
```

```
^ self _primEncryptDecryptWithKey: aKey
```

```
  salt: aSalt
```

```
  opCode: 2
```

```
  encrypt: true
```

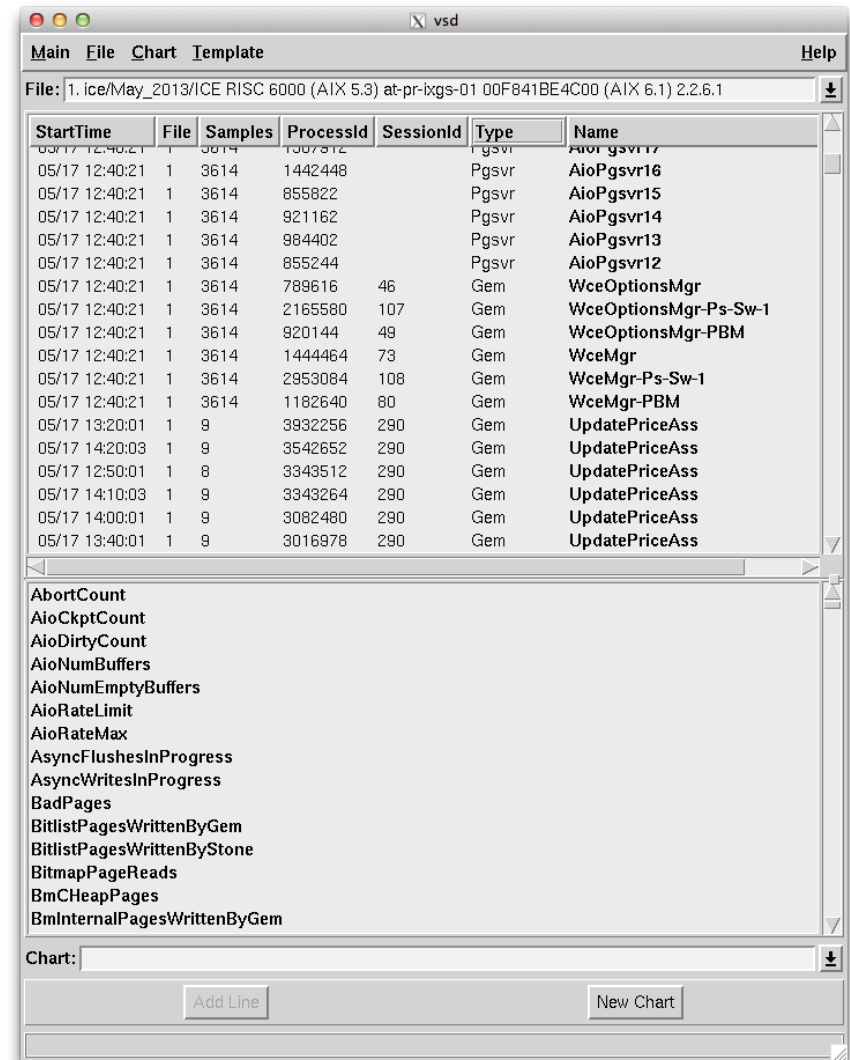
```
  into: aByteObjOrNil
```

GemStone/S 64 3.2

- New Hot Standby Features
 - Support for automated restore-complete status check during planned failover event.
 - Use SSL socket for communication with hot-standby nodes (optional)
- Thread-safe GCI C/C++ API

GemStone/S 64 3.2

- VSD Improvements
 - 64 bit program
 - (Much) Faster file loading
 - Session ID Column
 - Enable Mouse Wheel scrolling.



The screenshot shows the VSD application window with the following data:

StartTime	File	Samples	ProcessId	SessionId	Type	Name
05/17 12:40:21	1	3614	1442448		Pgsvr	AioPgsvr17
05/17 12:40:21	1	3614	855822		Pgsvr	AioPgsvr16
05/17 12:40:21	1	3614	921162		Pgsvr	AioPgsvr15
05/17 12:40:21	1	3614	984402		Pgsvr	AioPgsvr14
05/17 12:40:21	1	3614	855244		Pgsvr	AioPgsvr13
05/17 12:40:21	1	3614	855244		Pgsvr	AioPgsvr12
05/17 12:40:21	1	3614	789616	46	Gem	WceOptionsMgr
05/17 12:40:21	1	3614	2165580	107	Gem	WceOptionsMgr-Ps-Sw-1
05/17 12:40:21	1	3614	920144	49	Gem	WceOptionsMgr-PBM
05/17 12:40:21	1	3614	1444464	73	Gem	WceMgr
05/17 12:40:21	1	3614	2953084	108	Gem	WceMgr-Ps-Sw-1
05/17 12:40:21	1	3614	1182640	80	Gem	WceMgr-PBM
05/17 13:20:01	1	9	3932256	290	Gem	UpdatePriceAss
05/17 14:20:03	1	9	3542652	290	Gem	UpdatePriceAss
05/17 12:50:01	1	8	3343512	290	Gem	UpdatePriceAss
05/17 14:10:03	1	9	3343264	290	Gem	UpdatePriceAss
05/17 14:00:01	1	9	3082480	290	Gem	UpdatePriceAss
05/17 13:40:01	1	9	3016978	290	Gem	UpdatePriceAss

Below the table, the following statistics are listed:

- AbortCount
- AioCkptCount
- AioDirtyCount
- AioNumBuffers
- AioNumEmptyBuffers
- AioRateLimit
- AioRateMax
- AsyncFlushesInProgress
- AsyncWritesInProgress
- BadPages
- BitlistPagesWrittenByGem
- BitlistPagesWrittenByStone
- BitmapPageReads
- BmCHeapPages
- BmInternalPagesWrittenByGem

At the bottom, there is a 'Chart:' section with 'Add Line' and 'New Chart' buttons.

GemStone/S 64 v3.2 Platforms

- Object Server (Database)
 - Linux 64 bit
 - Apple Darwin 64 bit
 - Oracle Solaris 64 bit
 - Oracle Solaris SPARC 64 bit
 - IBM AIX 64 bit
- Cincom VisualWorks 7.9.1/7.10 Clients
 - MS Windows 7/8 32 bit
 - MS Windows 7/8 64 bit – COMING SOON
 - Linux 32/64 bit
 - Solaris SPARC 32/64 bit
- Instantiations VA Smalltalk 8.6 / 8.5.2 Clients
 - MS Windows 7/8 32 bit

GemStone/S Licensing Models

- Perpetual
 - Buy once, own it forever
- Annual Subscription
 - Pay annually, cancel any time.
 - Previously discontinued by VMware
- VAR (Value Added Reseller)
 - Embed GemStone/S in your product offering

GemStone/S Web Edition

Price	Free	\$7000/core	\$15000/core
Max. Cores	2	4	8
Max. SPC	2 GB	2 GB	4 GB
Support	Community	18% (optional)	18% (optional)
Repository Size	Unlimited	Unlimited	Unlimited

Questions?

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