
GemStone®

GemConnectTM **Release Notes**

Version 2.5.2

May 2025



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PATENTS

GemStone software is or has been covered by U.S. Patent Number 6,256,637 “Transactional virtual machine architecture” (1998-2018), Patent Number 6,360,219 “Object queues with concurrent updating” (1998-2018), Patent Number 6,567,905 “Generational garbage collector with persistent object cache” (2001-2021), and Patent Number 6,681,226 “Selective pessimistic locking for a concurrently updateable database” (2001-2021).

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Preface

About This Documentation

These release notes describe the changes in the GemConnect® version 2.5.2 release. We recommend that everyone using GemConnect read these release notes before beginning installation or development.

The Installation Guide has not been updated for this release. For installation, upgrade and conversion instructions, use the Installation Guide for version 2.5.1.

These documents are available on the GemTalk support website, as described below.

Technical Support

Support Website

<http://gemtalksystems.com>

GemTalk's website provides a variety of resources to help you use GemTalk products:

- ▶ **Documentation** for the current and for previous released versions of all GemTalk products, in PDF form.
- ▶ **Product download** for the current and selected recent versions of GemTalk software.
- ▶ **Bugnotes**, identifying performance issues or error conditions that you may encounter when using a GemTalk product.
- ▶ **TechTips**, providing information and instructions that are not in the documentation.
- ▶ **Compatibility matrices**, listing supported platforms for GemTalk product versions.

This material is updated regularly; we recommend checking this site on a regular basis.

Help Requests

You may need to contact Technical Support directly, if your questions are not answered in the documentation or by other material on the Technical Support site. Technical Support is available to customers with current support contracts.

Requests for technical assistance may be submitted online, by email, or by telephone. We recommend you use telephone contact only for more serious requests that require immediate evaluation, such as a production system down. The support website is the preferred way to contact Technical Support.

Website: <http://techsupport.gemtalksystems.com>

Email: techsupport@gemtalksystems.com

Telephone: (800) 243-4772 or (503) 766-4702

When submitting a request, please include the following information:

- ▶ Your name and company name.
- ▶ The version of GemConnect, the GemStone/S product and version, and Oracle version.
- ▶ The operating system and version you are using.
- ▶ A description of the problem or request.
- ▶ Exact error message(s) received, if any, including log files if appropriate.

Technical Support is available from 8am to 5pm Pacific Time, Monday through Friday, excluding GemTalk holidays.

24x7 Emergency Technical Support

GemTalk offers, at an additional charge, 24x7 emergency technical support. This support entitles customers to contact us 24 hours a day, 7 days a week, 365 days a year, for issues impacting a production system. For more details, contact GemTalk Support Renewals.

Training and Consulting

GemTalk Professional Services provide consulting to help you succeed with GemStone products. Training for GemStone/S is available at your location, and training courses are offered periodically at our offices in Beaverton, Oregon. Contact GemTalk Professional Services for more details or to obtain consulting services.

GemConnect 2.5.2 Release Notes

GemConnect version 2.5.2 is a new release of the GemConnect product. This release includes a new feature and changes in the interface to query for GemConnect version information..

These release notes provide changes between the previous version of GemConnect, version 2.5.1, and version 2.5.2. If you are upgrading from a version prior to 2.5.1, please review the release notes for each intermediate release to see the full set of changes.

Note that v2.5 contained significant changes, including in changes in the library name format and how the Oracle libraries are specified.

The Installation Guide has not been updated for this release. To install GemConnect v2.5.2, follow the instructions in the *GemConnect Installation Guide* for v2.5.1.

Platforms for Version 2.5.2

GemConnect version 2.5.2 is supported with GemStone/S 64-bit versions 3.6.x and 3.7.x versions through 3.7.4, on the following platforms:

- ▶ Ubuntu 22.04 and 24.04
- ▶ Red Hat-compatible Linux ES 7.9, 8.10, and 9.5, on x86.
GemStone testing is done on a mixture of Red Hat, CentOS, and Rocky installations; these are all considered equally certified platforms.

Changes in this release

Option to return NUMBER columns as ScaledDecimal

Columns with type NUMBER return values as integers, if the fractional part is zero. Due to the way Oracle returns data, very large and very small values (with more than 53 bits of precision) lose precision when converted to integers.

Now, you can specify the connection to have NUMBER values always return a SmallScaledDecimal or a ScaledDecimal. The following methods have been added:

```
GsOracleConnection >> numberAsScaledDecimal: aBoolean
    If aBoolean == true, values in columns of type NUMBER will always be returned as
    a SmallScaledDecimal or a ScaledDecimal. If false (the default, as in previous
    releases), values will be returned as Integers, Floats or ScaledDecimals depending
    on the specific values.
```

```
GsOracleConnection >> numberAsScaledDecimal
    Answer a Boolean indicating if values in columns of type NUMBER will always be
    returned as a SmallScaledDecimal or a ScaledDecimal.
```

Updated interface for GemConnect version information

```
GsOracleConnection class >> gcImageBranch
    Returns the version of Oracle used to build GemConnect image.
```

```
GsOracleConnection class >> gcImageBuildDate
    Returns a String which is the date GemConnect image was built.
```

```
GsOracleConnection class >> gcImageGemStoneVersion
    Returns a String which GemStone version used to build GemConnect image.
```

```
GsOracleConnection class >> gcImageSha
    Returns the git sha used to build GemConnect.
```

```
GsOracleConnection class >> gcImageVersion
    Returns concise GemConnect image version string.
```

```
GsOracleConnection class >> gcOracleVersion
    Returns the version of Oracle used to build GemConnect image.
```

```
GsOracleConnection class >> libraryMatchesImage
    Answer true if the GemConnect image version matches the GemConnect shared
    library version or false otherwise.
```

```
GsOracleConnection class >> libraryPatchInfo
    Returns an information String for the patch level of the GemConnect shared
    library.
```

```
GsOracleConnection class >> libraryPatchLevel
    Returns an integer representing the patch level of the GemConnect shared library.
```

```
GsOracleConnection class >> librarySha
    Returns the git SHA of the library.
```

```
GsOracleConnection class >> libraryVersion
    Returns a string representing the version of the GemConnect shared library.
```

```
GsOracleConnection class >> libraryVersionArray
```

Returns an Array of version information regarding the GemConnect shared library:

- 1: Version (String)
- 2: Patch level (SmallInteger)
- 3: Build kind (Official or private) (String)
- 4: Build timestamp (String)
- 5: Build type (slow or fast) (String)
- 6: git SHA (String)
- 7: git branch name (String)
- 8: Oracle version.

Existing methods that are replaced and pre-deprecated

The following methods are legacy; and the equivalent new methods should be used instead. They may be considered deprecated although they are not yet officially deprecated.

```
GsOracleConnection >> gcVersion is replaced by:
```

```
GsOracleConnection >> gcImageVersion
```

```
GsOracleConnection >> patchInfo is replaced by:
```

```
GsOracleConnection >> libraryPatchInfo
```

```
GsOracleConnection >> patchLevel is replaced by:
```

```
GsOracleConnection >> libraryPatchLevel
```

```
GsOracleConnection >> version is replaced by:
```

```
GsOracleConnection >> libraryVersion
```