

Ignite Technologies
Information Technology Solutions

Gensym G2

The World's Leading Software Platform for Real-Time Expert System Applications

Product Release Notes

Gensym G2 2018.4

October 2018



COPYRIGHT AND DISCLAIMER

While every attempt has been made to ensure that the information in this document is accurate and complete, some typographical, technical or other errors may exist. Gensym Inc. does not offer any warranty for fitness for a particular purpose regarding any information contained in this document and will not under any circumstances accept responsibility for any kind of loss or damages that either directly or indirectly results from the use of this document.

This page shows the original publication date. The information contained in this document is provided for information purposes only, and subject to change without notice. Any improvements or changes to the product will be documented in subsequent editions.

This document is protected by copyright. All Rights Reserved. No part of this document should be photocopied, reproduced, or translated into another language without the prior written consent of Gensym Inc.

U.S. Government Restricted Rights. The software and accompanying materials are provided with Restricted Rights. Use, duplication, or disclosure by the U.S. Government is subject to restrictions as set forth in subparagraphs (c) (1) and (2) of Commercial Computer Software - Restricted rights at Federal Acquisition Regulation, 48 C.F.R. 52.227-19 (July 1987 or current version), and the limitations as set forth in Gensym Inc. standard license agreement for this documentation.

This edition published October 2018.

Table of Contents

Table of Contents	2
1. Overview	3
2. Changes in Release (2018.4)	4
3. Release Summary (2018.4)	4
3.1 Enhancements (Enterprise only)	5
3.2 Issues	5
4. Release Details (2018.4)	6
4.1 Enhancements (Enterprise only)	6
4.2 Issues	7
5. Release Summary (2018.3)	9
3.1 Enhancements (Enterprise only)	9
3.2 Issues	9
6. Release Summary (2018.2)	10
7. Release Summary (2018.1)	10
8. G2 2018 Platform Matrix	12

1. Overview

This current **G2 2018.4** update is the latest release of the new major edition of the G2 platform - i.e. G2 2018. G2 2018 comes in two editions Standard (STD) and Enterprise (ENT), both 64-bit.

This document is a consolidated release note document for G2 2018. It contains information about issues fixed (as reported by customers and/or discovered internally) and product enhancements that are incorporated into the platform **since the release of G2 2018.3**.

Product defects are generally fixed in both editions of G2. Feature or Function enhancements (if any) that are reserved for Enterprise will be duly highlighted in the release note. A brief summary of Enterprise and STD edition is attached below. For additional details please contact your account manager or contact Ignite Support

The Gensym G2 2018 Platform is available in both Standard and Enterprise Editions. The following table provides the differences between these editions.

Feature	G2 2018 Standard Edition	G2 2018 Enterprise Edition
Real Time Reasoning Engine	✓	✓
Natural Language Rule Definition	✓	✓
Graphical Design of Business Processed	✓	✓
Mission-Critical Reliability	✓	✓
Object Modeling	✓	✓
Rapid Prototyping	✓	✓
Unified Modeling & Simulation	✓	✓
Task Priority Scheduling	✓	✓
Support for 64-bit environments	✓	✓
Unlimited Deployment Instance Licensees		✓
Mobile Solution Consulting Services		✓
Cloud Deployment Solution Services		✓
Includes License for Development, Test, High Availability and Disaster Recovery Environments		✓

Customers can continue to provide their valuable feedback to our support through our support portal at

<https://support.ignitetech.com>.

❖ Latest Release Version	Gensym.2018.4
❖ As of Release Date	October 15 th , 2018
❖ Release Type	Public Release
❖ Deliverables	Product Release Software (SHA1 checksums as below) 541f27cb69f1b31155f77dcd89931741d78e1960 Windows 64-bit b379837ccdb5f6d889c016e8f830f3794b16560b Linux 64-bit Release Notes Documentation
❖ Other Information	None

2. Changes in Release (2018.4)

- 3 enhancements since 2018.3
- 20 customer-identified or internally identified issues since 2018.3
- Improved product quality due to additional internal fixes.
- G2-no-GUI binary is provided for Linux platform, removing the dependency on X11 libraries

3. Release Summary (2018.4)

3.1 Enhancements

Key	Customer Issue ID	Summary
GENSYMCID-5823	-	Enable text magnification in icons
GENSYMCID-7898	-	A new sysproc g2-get-type-of-file-system, which returns the actual type of FS, is added
GENSYMCID-7899	-	A new sysproc g2-uname, which returns OS info, is added

3.2 Issues

Key	Customer Issue ID	Summary
GENSYMCID-6920	-	No check when closing G2 from TaskBar in Windows 10
GENSYMCID-6959	-	Trailing space in contents of the text of a name box
GENSYMCID-6960	-	No error if change of font size (format) not possible for g2-set-font-of-text-box
GENSYMCID-6961	-	System procedure g2-write-code-coverage-report uses a non-existent system call
GENSYMCID-7044	-	If Icon is inherited, one can't edit it in the text editor, only in Icon Editor
GENSYMCID-7288	-	G2 procedure editor silently discards changes when closing with 'x' button
GENSYMCID-7294	293091	HTML View crash TWNG
GENSYMCID-7403	293360	Oracle bridge crash
GENSYMCID-7549	-	G2 XL Spreadsheet: A false truth-value Updates the Views after Deleting the Columns/Rows
GENSYMCID-7591	-	G2 STD 64 crashes via G2COM icon reading if the icon text contains Japanese
GENSYMCID-7746	300771	Size of spreadsheet cell is changing when editing
GENSYMCID-7771	-	TW/TWNG closes when attempting to connect to G2 which is loading a particularly large kb

GENSYMCID-7774	300776	Scroll-escalator disappears
GENSYMCID-7794	302602	Reconcluding png background image for ws aborts G2
GENSYMCID-7818	-	G2 on Windows silently exits when there is a problem with the ok file
GENSYMCID-7828	-	No way to inhibit KB start when running G2 with a "-kb" argument
GENSYMCID-8002	-	G2 file selector cannot complete repeating directory names
GENSYMCID-8052	308434	When an error occurs in a procedure that deletes an instance the reference to a deleted instance gets redirected to the signaled error
GENSYMCID-8426	393506	Label control type not supporting text wrapping
GENSYMCID-8461	393500	Null values at the end of a data series in charts cause issues for the other series

4. Release Details (2018.4)

4.1 Enhancements

GENSYMCID-5823: Enable text magnification in icons

Enhancement: Added support for x and y scaling of text in icon(s), by enabling grammar such as:

```
"text to show" `at ( ` some-x `, ` some-y ` ) in ` valid-font-size ` scaled ` txt-x-scale ` by ` txt-y-scale
```

Both scaling options are new and optional - if not specified, 1 is used as the default for both.

GENSYMCID-7898: A new system procedure `g2-get-type-of-file-system` which returns the actual type of FS is added

Enhancement: a new sysproc `g2-get-type-of-file-system`, which returns the actual type of FS, is added. It returns a symbol of file system type: UNKNOWN_FS, ROMFS, PIPEFS, RAWFS, FATFS, NFS, CDROMFS, FTPFS, HOSTFS_LINUX, HOSTFS_WINDOWS, SMBFS, NTFS, UNIXFS.

GENSYMCID-7898: A new sysproc `g2-uname` which returns OS info is added

Enhancement: A new sysproc `g2-uname`, which returns OS info, is added. It returns a structure which contains an output of `uname`, that is, `sysname`, `nodename`, `release`, `version`, `machine`.

4.2 Issues

GENSYMCID-6920: No check when closing G2 from TaskBar in Windows 10

Issue: When a users tried to close G2 via TaskBar, it just closed, with no regards to the state of G2.

Solution: Closing through taskbar sends a WM_CLOSE message, so custom WM_CLOSE handling in wndproc was added.

GENSYMCID-6959: Trailing space in contents of the text of a name box

Issue: The text attribute of a name-box is "seen" to the Inspect command with a trailing space.

Solution: The excessive space was removed.

GENSYMCID-6960: No error if change of font size not possible for g2-set-font-of-text-box

Issue: No error if change of font size (format) not possible for g2-set-font-of-text-box.

Solution: Added a check.

GENSYMCID-6961: System procedure g2-write-code-coverage-report uses a non-existent system call

Issue: System procedure g2-write-code-coverage-report uses a non-existent system call.

Solution: Removed it altogether.

GENSYMCID-7044: If Icon is inherited, one can't edit it in the text editor, only in Icon Editor

Issue: If Icon is inherited, one can't edit it in the text editor, only in Icon Editor.

Solution: Text editor has the whole (inherited) description, so that user can change it. If she doesn't actually change it and/or exits the text editor w/out saving, it's left *inherited*.

GENSYMCID-7288: G2 procedure editor silently discards changes when closing with 'x' button

Issue: The editor is closed, changes are discarded.

Solution: User is asked about discarding edits, like when pressing the 'Cancel' button.

GENSYMCID-7294: HTML View crash TWNG

Issue: Opening an HTML view and then jumping between menu items in the main menu, causes TWNG to completely crash. TWNG never actually recovers.

Solution: TWNG used the GetMessage() which would block, potentially dead-locking TWNG. It was replaced with PeekMessage() which does not block.

GENSYMCID-7403: Oracle bridge crash

Issue: Gensym uses unicode line breaks internally, so the length of text was reported differently in Notepad++ and G2 editor, resulting in exceeding the maximum length of a SQL query.

Solution: A new system procedure g2-native-length-of-text was added.

GENSYMCID-7549: G2 XL Spreadsheet: A false truth-value Updates the Views after Deleting the Columns/Rows

Issue: Column/row removal procedures ignored the argument which was supposed to prevent them from removing rows/columns on existing views and removed them anyway.

Solution: It works as expected now.

GENSYMCID-7591: G2 STD 64 crashes via G2COM icon reading if the icon text contains Japanese

Issue: If the text in the icon contained a Japanese character, then the attempt to obtain this icon via G2Com caused G2 to abort.

Solution: A check was added for eastern fonts.

GENSYMCID-7746: Size of spreadsheet cell is changing when editing

Issue: After editing, some of the cells are larger than the others.

Solution: Size of spreadsheet cell no longer changes size after editing.

GENSYMCID-7771: TW/TWNG closes when attempting to connect to G2 which is loading a particularly large kb

Issue: There was an issue in TW connection and timeout.

Solution: This was fixed.

GENSYMCID-7774: Scroll-escalator disappears

Issue: The scroll-escalator disappeared, when using GUIDE Tab Dialog, with a DropDown Edit box.

Solution: An old kludge for scroll areas on tabbed dialogs messed up component order.

GENSYMCID-7794: Reconcluding png background image for ws aborts G2

Issue: When loading PNGs with an alpha channel memory overwrite would happen: G2 does not support alpha channel and does not allocate memory for the fourth byte per pixel.

Solution: The alpha channel is now stripped while loading, avoiding this.

GENSYMCID-7818: G2 on windows silently exits when there is a problem with the ok file

Issue: User was not really alerted about OK file trouble.

Solution: G2 dialog stating the problem is displayed.

GENSYMCID-7828: No way to inhibit KB start when running G2 with a "-kb" argument

Issue: When loading a kb normally there is an option to not start the KB. However there was no such option when specifying kb file from the command line.

Solution: A switch "-never-start" was added to rectify this.

GENSYMCID-8002: G2 file selector cannot complete repeating directory names

Issue: Editor handling routines would incorrectly consider text already inserted when dealing with repeating subdirectories.

Solution: It works as expected now.

GENSYMCID-8052: When an error occurs in a procedure that deletes an instance the reference to a deleted instance gets redirected to the signaled error

Issue: Computational environment were not validated when error occurred, so when actions such as item deletion occurred down the execution stack artifacts, such as one described in the ticket could happen.

Solution: It works as expected now.

GENSYMCID-8426: Label control type not supporting text wrapping

Issue: Custom drawing code did not have wrapping enabled.

Solution: It was fixed.

GENSYMCID-8461: Null values at the end of a data series in charts cause issues for the other series

Issue: An update in Gigasoft charting library introduced a rendering bug.

Solution: Gigasoft provided a hotfix.

5. Release Summary (2018.3)

3.1 Enhancements (Enterprise only)

Key	Customer Issue ID	Summary
GENSYMCID-5821	-	Enable setting the symbol shrink-wrap in dialog definition
GENSYMCID-5824	-	Enable text magnification for name boxes
GENSYMCID-5825	-	Enable text magnification for attribute displays
GENSYMCID-5826	-	Control position of Horizontal scrollbar of a workspace
GENSYMCID-5827	-	Control position of Vertical scrollbar of a workspace
GENSYMCID-5832	-	Ability to utilize the latest features offered by Gigasoft v7
GENSYMCID-6445	-	Ability to utilize the latest features offered by Gigasoft v8

3.2 Issues

Key	Customer Issue ID	Summary
GENSYMCID-5917	-	TWNG abruptly exits if dialog-width of a dialog is not an integer
GENSYMCID-5918	-	When dialog-width of custom dialog is <0 TWNG erred
GENSYMCID-6415	-	Make TW/Linux closeable again
GENSYMCID-6425	-	G2 abort reporting to file and (not to) email
GENSYMCID-6465	-	Normalize directory and symlink behavior
GENSYMCID-6536	-	g2-spawn-process-with-args ignored non-existing binary on Linux
GENSYMCID-6591	279957	Multiline label for push buttons
GENSYMCID-6780	-	Editor losing chars after paste
GENSYMCID-6787	-	Impossible to add on error to end of for
GENSYMCID-6918	-	G2 "internal" shutdown is too shy about KBs w/unsaved changes
GENSYMCID-6919	-	Shutdown from Windows TrayBar doesn't respect changes/running

GENSYMCID-6949	-	GSI 64-bit error
GENSYMCID-7100	-	Telewindow's "-tcptimeout" command line switch didn't work

6. Release Summary (2018.2)

Key	Customer Issue ID	Summary
GENSYMCID-5920	-	Posting custom/dynamic dialogs does little error checking
GENSYMCID-6021	-	G2-2018.1 STD 64 issues with libiconv.dll
GENSYMCID-6083	260208	G2-2015.20 fatal error

7. Release Summary (2018.1)

Key	Customer Issue ID	Summary
GENSYMCID-2043	-	Unicode filenames not working for G2 Linux due to the use of C locale
GENSYMCID-3615	-	G2 OPC bridge doesn't handle OPC timestamps correctly
GENSYMCID-4501	-	Saving in XML doesn't save the change log
GENSYMCID-5234	227430	TW flicker on Windows 8.1
GENSYMCID-5414	228466	problem changing font of text dialog control
GENSYMCID-5415	228360	is there a way to make grey lines around workspace control be black or gone
GENSYMCID-5514	230422	Concluding integers to float-parameter initial values

GENSYMCID-5515	230342	win32-styles dialog component specification behavior is inconsistent
GENSYMCID-5533	230658	Large SOAP requests result in G2 Abort
GENSYMCID-5537	230744	G2 allows setting a negative time interval
GENSYMCID-5539	230795	Setting of a symbolic attribute to the value of none results in an error
GENSYMCID-5589	-	Text-font-size does not use the Windows font point size
GENSYMCID-5637	-	Remove hostlookup binary
GENSYMCID-5711	236945	Trend chart traces still have gaps
GENSYMCID-5735	241513	The content of the native message board displayed in twng.exe does not smoothly scroll when using a mouse wheel
GENSYMCID-5817	-	Enable setting dialog dimension for the client area
GENSYMCID-5818	-	User can set custom/dynamic dialog width to be auto-sized on posting
GENSYMCID-5819	-	User can set custom/dynamic dialog height to be auto-sized on posting
GENSYMCID-5820	-	Provide options for rendering custom/dynamic dialogs that can't fit into TWNG window
GENSYMCID-5831	-	Include ability to wrap-text inside the cells of a grid-view control
GENSYMCID-5999	-	Unable to display text in labels dialog

8. G2 2018 Platform Matrix

G2 STD/ENT (2018)	Windows 7	Windows 8.1	Windows 10	Windows Server 2008 / 2008R2	Windows Server 2012 R2	Windows Server 2016	LINUX Distributions
G2 Server (STD, 64-bit)	Yes	Yes	Yes	Yes	Yes	Yes	G2 STD and ENT are LSB (Linux Standard Base) 4.0 Compliant.
G2 Server (ENT, 64-bit)	Yes	Yes	Yes	Yes	Yes	Yes	The product is supported on several Linux distributions e.g RHEL 5.6, RHEL 6.4, RHEL 7.1, SuSE Linux Enterprise 11, Ubuntu 8.04, 9.04, 16.04 and others
G2 Classic Client (Telewindows)	Yes	Yes	Yes	Yes	Yes	Yes	Please see here for full list
G2 Next Gen Client (Telewindows NG)	Yes	Yes	Yes	Yes	Yes	Yes	N/A

Notes:

1) Gensym Enterprise and Standard Editions include x64 versions of GSI, JavaLink bridge, G2 Oracle bridge for Oracle 10g, Oracle 11g and Oracle 12c, G2 ODBC bridge, G2 ActiveX bridge and G2 Sybase bridge.

