GFI 4.3.0 Known Issues

Document Purpose

GIT for Industry (GFI) is a software tool, provided by Smart DCC, for anybody that wishes to check whether their interpretation of the Great Britain Specification Companion for smart meters (GBCS) is consistent with Smart DCC's.

This document describes the known issues and limitations and corresponding solutions or workarounds for version 4.3.0 Stable Release of the GFI testing tool.

Warning: The user is strongly advised to review these known issues thoroughly before performing any update as existing information or functionality may be disrupted after performing the update.

If updating from GFI 1.3.*E or previous releases, please note that this release requires the new dual-band ZigBee USB dongle to operate with dual-band support. To operate in single-band mode it requires either the new Dual-band ZigBee USB dongle (recommended) or an old GFI 1.3.XE dongle provided that before being used the dongle firmware is upgraded to the new ZigBee stack version.

For technical support please contact the GFI Support Team: GFISupport@smartdcc.co.uk

Release Information

Version Number	Release Date
4.3.0 Stable Release	28th January 2021

Report Date

This report presents the known issues and limitations at the date of 16th March 2021.

Before Updating GFI versions

The scenario file format in version 4.3.0 is incompatible with versions prior to 1.3.2E.

The user may still use the Export functionality for backup purposes – However, the tests will need to be re-created using version 1.3.*E or later of the tool.

Users updating from a GFI version prior to 1.3.2E are strongly advised to read the updated documentation in order to be familiar with the architectural and user interface changes, namely in order to configure and start the Communication Hub service.

Known Issues

This section describes known issues that users may run into with this release of GFI that will be fixed in future versions.

Reference	Description
G4I-4299	The GBCS use case ECS46d has parameters that are not checked after a test, and hence GFI may display an incorrect PASS result. Fix planned for future release.
G4I-4294	According to Table 13.2.4.1 of GBCS, the value of the trustAnchorCellKeyUsage shall be the digitalSignature unless trustAnchorCellRemotePartyRole = accessControlBroker. For this reason, the iteration 4 of the CS02f use case is not correct. Fix planned for future release.
G4I-4281	The ECS61d command is not aligned with the specification, allowing only 60 switching calendar entries instead of 120. Fix planned for future release.
G4I-4278	When the only device on a HAN is a sleepy device, the Network Key update is not accomplished. Dependency: Silabs Stack
G4I-3192	GPF Alternative Historical Consumption and Historial Cost Consumption are not correctly updated when the GPF receives the current consumption, the currentWeek and also the currentMonth consumption value from GSME on the same ReportAttributes transaction. Dependency: Silabs Stack limitation
G4I-2059	Get Top Up Log and Get Debt Repayment Log is not set after communication outage (30min). This is the default Silabs stack implementation. Dependency: This issue requires an update from the Silabs Stack.

Known Limitations

This section describes known limitations that users may run into with this release of GFI. These limitations will not be fixed as part of any future release.

Reference	Description
G4I-3278	Due to a stack limitation, GFI only partially supports Change of Tenancy. GFI supports binding for the Data management cluster, supports the Change of Tenancy Zigbee Commands, removes the supplier message and restricts access to consumer data via the "GetSampledData" command on the HAN but allowing it to be read from the Remote Party as per GBCS. Dependency: Silabs stack limitation
G4I-3044	For a JSON value, if the test is sent with an empty JSON, it may fail. Workaround: Try to fill the field with "[ ]".
G4I-3007	Attempting to manipulate the GFI CH date/time by changing the OS date/time while running the GFI makes the Silabs stack to stop firing some internal events which may lead to clock stop and other undefined behaviors. Dependency: Silabs stack limitation
G4I-2973	There is a limitation when sending display messages to the bound devices. If the message generates more than one fragment it can only be sent to the first device of the binding table. Dependency: Silabs stack limitation
G4I-2455	After a message is decrypted GFI should fail if the total number of bytes of the message is higher than the declared total number of bytes. However, GFI will just truncate the decoded message up to the declared length of the payload.
G4I-2449	GFI is auto-correcting the encoding in alignment with IRP205 when it's not following the specification. Auto-correction of encodings not following the IRP205 does not take the signature validation into consideration, causing failure.
G4I-2423	Installation of Debian packages on Ubuntu14 may require an upgraded version of the "dpkg" package manager.

	Solution: Run the following commands in a command line before installing or updating GFI: sudo apt-get download dpkg sudo dpkg -i dpkg_1.17.5ubuntu5.8_amd64.deb sudo apt-get update sudo apt-get -f install sudo apt-get update
G4I-2062	GFP mirror attribute 0x0306 from cluster 0x0702 is protected and only accessible for GPF whitelisted devices if it is read with a read attribute command with multiple attributes. Solution: Read the attribute individually using a read attribute command containing only this attribute. Dependency: This issue requires an update from the Silabs Stack.
G4I-1472	The emulators do not fully support the CSR and certificate signing functionality of the use cases CS02c and CS02d. If a CS02d command contains a valid certificate, the response code will be SUCCESS and the emulator will update its certificate without further validation. This will cause a signature validation error if the payload of the CS02d is not a certificate already installed in the emulator. This does not affect the behaviour of the test cases when used in physical scenarios.
G4I-1468	GFI uses a set of example values as reference inputs for Use Cases iterations that may not have a functional meaning for the specific manufacturer's device under test. Solution: Users of GFI are requested to validate and modify if needed, the specific Use Case example values, prior to running it.
G4I-1466	It is not possible to rename files using the GFI GUI. Any change in file names or folders or in the structure of the eclipse workspace may render the GFI GUI inoperable. Solution: All files created using the GFI GUI should not be manipulated in any other way apart from using the options offered by the GFI GUI.
G4I-1465	GFI's GUI uses its own perspective and workspace. Although possible, it is strongly advised not to use GFI's workspace to hold any other files or folders other than GFI's. Solution: Do not use GFI's workspace to hold projects of any other type (e.g. C++), as these files might be lost in future updates.
G4I-1464	Performance issues were observed when the contents of the reports/logs/output produced yield very large file sizes. As the output varies depending on the chosen tests, care should be taken when building the test.

	Solution: To avoid performance issues that may render the tool unresponsive, the largest number of test-cases in one test should be limited. Editors or views not needed should also be immediately closed.
G4I-1463	When running the GFI GUI, it was observed that occasionally, upon starting the application, an error message was displayed stating 'No editor descriptor'. This may happen if the application was not closed properly in a previous execution. Solution: This error should be ignored and the Editor/View closed, after which the application can be safely used.
G4I-1462	1.0RC3 introduced changes in the file formats used, and as a consequence, properties and scenario files created using past releases are not usable anymore. Additionally, all test case specifications were revised, resulting in changes in parameter values/expected results and iterations. A test created using an older version may not necessarily yield the same outcome. Solution: Discard tests created with old releases and create new ones with 1.0RC4 or later releases instead. If needed, the export option is available for both tests and campaigns.
G4I-1460	The graphical test editor does not enforce any rules or make any validations regarding data entered in the fields. This means the user may enter invalid input data deliberately (e.g. to make the test fail deliberately) but should be extremely careful not to do so inadvertently, especially with enumerated and JSON fields.
G4I-1459	There is a known issue experienced on certain hardware configurations caused by the graphics drivers. The symptoms are that the installation completes successfully and the computer boots into the GFI Testing Application, however, upon the next boot the computer boots into a blank screen. This is caused by the need of proprietary drivers of the underlying Linux system for the graphics hardware. Solution: Currently, it is suggested that the user manually installs the relevant drivers upon the first installation. Due to licencing, these drivers cannot be distributed as part of the GFI Testing Application, but end users are free to download them. In the case of an AMD graphics card, please see the following link: [http://support.amd.com/en-us/download] In the case of an Nvidia graphics card, please see the following link: [http://www.nvidia.com/object/unix.html]