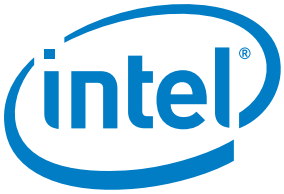

Intel® System Debugger 2018 for System Trace Linux* host

Release Notes

26 February 2018

Contents:

1 Introduction

This document covers the Intel® System Debugger 2018 for System Trace components and provides release specifics and information on

- new features/bug fixes
- known issues
- where to find related documentation
- system requirements
- legal information

2 New in This Release / Bug Fixes

This section lists new features of the current release of the Intel® System Debugger 2018 for System Trace. The sub-chapter History will provide new features of previous releases.

New Features

- No changes

Bug Fixes

- No changes

3 Change History

Intel® System Debugger 2018 Initial Release

New Features

- Support to trace Intel Atom Processor C3xxx(Denverton)
- New Target Connection Assistant feature to connect, disconnect and manage target connections

Bug Fixes

- Several Bug fixes around TCA and System Trace integration

Update 1716 release

New Features

- No updates

Bug Fixes

- No updates

Update 1633

New Features

- New **TRace Analysis and Mining** (TRAM) feature
- Rework of search and filter user interface
- Performance improvements for search and filtering

Bug Fixes

- Fixed an issue with USB3 trace streaming that could cause trace data loss under certain circumstances

Update 1629 release

New Features

- System Trace on Linux host now supports BXT-P targets, using a DbC connection through the host and target system.

4 Known Issues

Installation into an user-provided Eclipse

- To install Intel® System Debugger – System Trace into an user-provided Eclipse, the necessary prerequisites must be installed manually by running the following commands on the command-line from within the user-provided Eclipse installation – this requires an Internet connection:

  Eclipse Mars

  ```
  ./eclipse -nosplash -application org.eclipse.equinox.p2.director -installIUs
  org.eclipse.jdt.feature.group -repository
  http://download.eclipse.org/releases/mars

  ./eclipse -nosplash -application org.eclipse.equinox.p2.director -installIUs
  org.eclipse.jetty.websocket.api -repository
  http://download.eclipse.org/jetty/updates/jetty-bundles-
  9.x/9.2.13.v20150730/

  ./eclipse -nosplash -application org.eclipse.equinox.p2.director -installIUs
  org.eclipse.jetty.websocket.client -repository
  http://download.eclipse.org/jetty/updates/jetty-bundles-
  9.x/9.2.13.v20150730/
  ```

  Eclipse Neon

  ```
  /eclipse -nosplash -application org.eclipse.equinox.p2.director -installIUs
  org.eclipse.jdt.feature.group -repository
  http://download.eclipse.org/releases/neon

  ./eclipse -nosplash -application org.eclipse.equinox.p2.director -installIUs
  org.eclipse.pde.feature.group -repository
  http://download.eclipse.org/releases/neon

  ./eclipse -nosplash -application org.eclipse.equinox.p2.director -installIUs
  org.eclipse.jetty.websocket.api -repository
  http://download.eclipse.org/jetty/updates/jetty-bundles-9.x/9.3.9.v20160517/

  ./eclipse -nosplash -application org.eclipse.equinox.p2.director -installIUs
  org.eclipse.jetty.websocket.client -repository
  http://download.eclipse.org/jetty/updates/jetty-bundles-9.x/9.3.9.v20160517/
  ```

Event Distribution View not showing all data under certain circumstances

- When doing a target power-off/power-on cycle, the Event Distribution View might only show events after the power on.

Message View Display issues with horizontal scrolling

- The Message View has display rendering issues related to horizontal scrolling. The selected cell contents in the table may get painted at wrong positions, hiding the contents underneath it. This issue is caused by a following unresolved Eclipse platform bug entry for Linux GTK based systems: https://bugs.eclipse.org/bugs/show_bug.cgi?id=383492. A solution for this issue is under development and will be deployed using a product update.
  The current workaround is avoid the horizontal scrolling of the Message View. Most rendering issues disappear if the horizontal scrollbar remains at its leftmost position. This can be achieved by maximizing the Eclipse window, reducing the width of columns or by moving required columns to the left side of the view.

Configuration

- **BIOS and CSME checkboxes not fully functional**
  - Some BKC images program the SWDEST registers for BIOS and CSME after a target reset automatically. This causes BIOS and CSME traces to be always switched on regardless of the selection made for the BIOS/CSME configuration checkboxes in the configuration area.

Other

- **The installation must be done as root to guarantee correct functionality of System Trace.**
  - For connection functionality to hardware, files need to be install in /lib/udev and /opt/intel locations, which can only be done with super-user rights.
- **Target platform re-connect not reliable**
  - Disconnecting and re-connecting to the target may work unreliable, which causes the capture process not to work.
- **Previous System Trace feature workspace data not supported**
  - If you used an older version of the Intel® System Studio NDA System Trace feature, the workspace used previously will no longer be usable with the current update. Either delete the previously used workspace (e.g. $HOME/workspace) or ensure to use a different workspace together with the System Trace feature.
- **Ordering of time stamps during live decode and file decode may differ.**
- **Power states problems**
  - When the target transitions into a low power state configuration (attempts), starting and stopping trace fails. If attempted, the GUI may fail to detect this and end up in an inconsistent state where no further target interaction is possible.
- **Incorrect target connection status after reset**
  - In some rare cases it may happen that after a target reset the target status shown in the "Target Connection" view is incorrect and still reports that the target is in reset state. In this case please reset the target again, which triggers an update of the target status
- **Trace Viewer may become unresponsive after workspace upgrade**
  - After workspace upgrade you may encounter something like the following error:
    ```
    16:07:36 [ERROR] Cannot send message, target connection server is not
    running.
    16:07:36 [ERROR] Server is unresponsive
    16:07:36 [ERROR] Unable to restore API state. Target may be incompatible. See
    server logfile for details.
    ```
    To overcome the issue, just re-select the current target to perform live trace capture.

- **Incorrect Target Power status indication**
    - For some Targets, upon successful connection “No Power” status is indicated in Target Connection Panel and hence tracing operations fail. To overcome this issue, please set option "Allow target access without power indication" in Window/Preferences/System Trace.

5 Related Documentation

The following documentation provides more information about the Intel® System Debugger 2018 for System Trace and its features.

All documents can be found after a successful installation in `/opt/intel/system_studio_2018/documentation_2018/en/debugger/iss2018/system_debugger/system_trace`

- **Intel® System Debugger 2018 - System Trace User Guide (system-trace-user-guide.pdf)**
  This document provides a step by step introduction to important system trace features and functionality.

6 Where to Find the Release

If you did not register your debugger during installation, please do so at the Intel® Software Development Products Registration Center. Registration entitles you to free technical support, product updates and upgrades for the duration of the support term.

To submit issues related to this product please visit the Online Service Center webpage and submit issues under the product Intel® System Studio.

Additionally you may submit questions and browse issues in the Intel® System Studio User Forum.

For information about how to find Technical Support, product documentation and samples, please visit http://software.intel.com/en-us/intel-system-studio

7 System Requirements

This chapter describes the minimum requirements.

Host Software Requirements

- Ubuntu* 16.04 LTS (64bit)
- libstdc++ 6.4.7
    - The following command sshould output the version of GLIBCXX greater or equal 3.20:
      ```
      strings /usr/lib/x86_64-linux-gnu/libstdc++.so.6 | grep GLIBCXX_3
      ```
    - If the above command doesn't provide a version greater or equal 3.20, please execute the following:
      ```
      sudo add-apt-repository ppa:ubuntu-toolchain-r/test
      sudo apt-get update
      sudo apt-get install libstdc++6
      ```

Only when integrating into own Eclipse* IDE:

- Eclipse* 4.4 Luna 64bit C/C++ Edition, Eclipse* 4.5 Mars 64bit C/C++ Edition or Eclipse* 4.6 Neon 64bit C/C++ Edition.
- Java* Runtime Environment (JRE) 1.8 (64bit) or higher

Host Hardware Requirements

- Second generation Intel® Core™ i5 processor or Intel® Core™ i7 processor.
- 2GB RAM
- 10GB free disk space for all product features and all architectures
- USB 3.0 host interface

Target System Requirements

The following target systems are supported by Intel® System Debugger 2018 Linux host for System Trace:

- Broxton P, Steppings A0, B0

Additional Hardware

- **For Broxton specific target connections**
  To connect to connect to a target mentioned above a DbC USB cable is required. Such cables can be order e.g. here: http://www.datapro.net/products/usb-3-0-super-speed-a-a-debugging-cable.html

8 Installation Notes

Installation

For installation of the debugger on the development host please follow the steps below:

- Unpack the tool suite package in a directory to which you have write access.
  > tar -zxvf l_sys_dbg_p_2018.x.xxx.tgz
- Upon registering for the program you will receive a serial number and email with a license file. You will need either of these two to complete the installation process. If you want to use the license file you can point to it during install, but you can also copy it to /opt/intel/licenses/for automatic pickup by the installer.
- Change into the directory the tar file was extracted to
  > cd ./l_sys_dbg_p_2018.x.xxx
- Execute one of the installation scripts in the directory where the tar file was extracted.
  >./install.sh
  or
  >./install_GUI.sh
  The later one will provide you with a full-GUI assisted installation experience. We will base the rest of this installation outline on the GUI install.
- To be able to install the Intel® System Debugger it is necessary to select "install as root" or "install as root using sudo". Without root privileges the option to install the Intel® System Debugger will not be offered during install.
- Follow the on-screen instructions.

The default installation directory is `/opt/intel/system_studio_2018/`

For detailed steps on how to install the product, please refer to the Intel® System Debugger 2018 - System Trace User Guide.

Uninstall

To uninstall, simply go to the Intel® System Debugger installation directory <INSTALLDIR>/system_studio_2018 and run the uninstall.sh or uninstall_GUI.sh script. Follow the on-screen instructions.

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