Intel® System Studio 2018 Update 1 for FreeBSD* Release Notes

Published on March 28, 2018

This page provides the Release Notes for Intel® VTune™ Amplifier 2018 component of Intel® System Studio 2018 Update 1 for FreeBSD*.

To get product updates, log in to the Intel® Software Development Products Registration Center.

For questions or technical support, visit Intel® Software Products Support.

You can register and download the Intel® System Studio 2018 package here.

Intel® VTuneTM Amplifier 2018 for FreeBSD* Release Notes

Intel® VTune™ Amplifier 2018 provides an integrated performance analysis and tuning environment with graphical user interface that helps you analyze code performance on systems with IA-32 or Intel® 64 architectures. It provides a target package for collecting data on the FreeBSD* system that is then displayed on a host system supporting the graphical interface, either via the remote capability or by manually copying the results to the host.

This document provides system requirements, issues and limitations, and legal information for both the host and target systems.

System requirements

For an explanation of architecture names, see https://software.intel.com/en-us/articles/intel-architecture-platform-terminology/

Host Processor requirements

- For general operations with user interface and all data collection except Hardware event-based sampling analysis:
 - A PC based on an IA-32 or Intel® 64 architecture processor supporting the Intel® Streaming SIMD Extensions 2 (Intel® SSE2) instructions (Intel® Pentium® 4 processor or later, or compatible non-Intel processor).
 - For the best experience, a multi-core or multi-processor system is recommended.
 - Because VTune Amplifier requires specific knowledge of assembly-level instructions, its analysis may not operate correctly if a program contains non-Intel instructions. In this case, run the analysis with a target executable that contains only Intel® instructions. After you finish using VTune Amplifier, you can use the assembler code or optimizing compiler options that provide the non-Intel instructions.
- For Hardware event-based sampling (EBS) analysis:
 - EBS analysis makes use of the on-chip Performance Monitoring Unit (PMU) and requires a genuine Intel® processor for collection. EBS analysis is supported on Intel® Pentium® M, Intel® Core™ microarchitecture and newer processors (for more precise details, see the list below).

- EBS analysis is not supported on the Intel® Pentium® 4 processor family (Intel® NetBurst®
 MicroArchitecture) and non-Intel processors. However, the results collected with EBS can be analyzed
 using any system meeting the less restrictive general operation requirements.
- The list of supported processors is constantly being extended. In general, VTune Amplifier supports publicly launched desktop, mobile, server and embedded processors listed at https://ark.intel.com/. For pre-release processor support please file a support request at Online Service Center (https://www.intel.com/supporttickets).

System memory requirements

At least 2GB of RAM

Disk Space Requirements

900MB free disk space is required for all product features and all architectures.

Software Requirements

See <u>FreeBSD* Target Software Requirements</u> for information on supported operating systems, application programming languages, and other run-time environments.

Target FreeBSD* collection

See <u>FreeBSD* Targets</u> for information on FreeBSD* target setup and configuring data collection. See a video demonstration of <u>configuring VTune Amplifier to collect data on a FreeBSD* target</u>.

What's new

Support for Latest Processors:

New Intel® processors including Intel® Xeon® Scalable Processor (code named Skylake-SP)

Issues and limitations

For information on known issues and limitations, see Issues and Limitations.

Attributions

Attributions can be found here.

Disclaimer and Legal Information

Disclaimer and Legal information can be found <u>here</u>.

See Optimization Notice for more complete information about compiler optimizations.