

# Intel® SGX Data Center Attestation Primitives for Linux\* OS

## Release Notes

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## 1 Introduction

Attestation is a process of demonstrating that a software executable is properly instantiated on a platform. The Intel® Software Guard Extensions (Intel® SGX) attestation allows a remote party to ensure that a particular software is securely running within an enclave on an Intel SGX enabled platform. This document provides system requirements, limitations, and legal information.

## 2 What's New

Intel® Software Guard Extensions Data Center Attestation Primitives (Intel® SGX DCAP) includes the following changes in version 1.3.1:

- Fixed bugs.

### Changes in Previous Releases

Intel® Software Guard Extensions Data Center Attestation Primitives (Intel® SGX DCAP) includes the following changes in version 1.3:

- Added Intel® Quote Verification library and enclave.
- Added support for new version Intel® Provisioning Certificate Service interfaces.
- Fixed bugs.

Intel® Software Guard Extensions Data Center Attestation Primitives (Intel® SGX DCAP) includes the following changes in version 1.1:

- Fix bugs.

Intel® Software Guard Extensions Data Center Attestation Primitives (Intel® SGX DCAP) includes the following changes in version 1.0.1:

- Updated the cryptography library to the Intel® Integrated Performance Primitives Cryptography 2019 Update 1.

Intel® Software Guard Extensions DCAP includes the following changes in version 1.0 (Intel® SGX DCAP 1.0 Gold release):

- Provided the Quote Verification Library and a corresponding sample project. Note that this library is only provided in source code in the Intel® SGX DCAP project repository.
- Provided the Quote Generation Library and a corresponding sample project.
- Provided a sample project for the Platform Provider Library.

### 3 System Requirements

#### Hardware Requirements

- Intel® Xeon® E Processor based Server
- Intel® SGX option enabled in BIOS with the Flexible Launch Control support.

#### Software Requirements

- Supported Linux\* OS distributions:
  - Ubuntu\* 16.04 LTS 64-bit Server version
  - Ubuntu\* 18.04 LTS 64-bit Server version.

**NOTE:** It is highly recommended to use the listed Linux\* OS distributions. Other distributions have not been tested.

### 4 Known Issues and Limitations

- After installing SGX DCAP Provisioning Certificate Caching Service (PCCS) .deb installer, it would fail when user executes install.sh. To fix this, user needs to execute “sudo npm install pm2 -g ” before executing install.sh.

- During the current release we have learned that the DKMS infrastructure uses the driver version as an arbitrary string and not as a numeric value. As a result, installing an old version on top of a new version will work, moreover, when more than one version is installed and a kernel update occurs there is no guarantee that the new version will be used in the new kernel – apparently either of the existing versions may be used.

To address these issues, the 1.10 driver installer will uninstall a previously installed driver if exists.

**Note:** The uninstall may fail if the driver is in use by an enclave or the AESM, in this case the user will be notified and will be required to manually uninstall the driver.

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