# Intel<sup>®</sup> Software Guard Extensions Platform Software for Linux<sup>\*</sup> OS Release Notes

15 December 2016

Revision: 1.7 Open Source (Intel® SGX PSW version: 1.7.100.36470)

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## **1** Introduction

This document provides system requirements, installation instructions, limitations and legal information for Intel<sup>®</sup> Software Guard Extensions (Intel<sup>®</sup> SGX) Platform Software (PSW).

## **Product Contents**

The Intel<sup>®</sup> Software Guard Extensions PSW package includes:

- Intel<sup>®</sup> SGX Application enclaves
- Intel<sup>®</sup> SGX Runtime System Library
- Intel<sup>®</sup> SGX Application Enclave Service Manager (AESM)

## 2 What's New

Changes to Intel® Software Guard Extensions PSW include:

- Updated Intel<sup>®</sup> SGX Application Enclaves to use the Intel<sup>®</sup> Enhanced Privacy ID (Intel<sup>®</sup> EPID) SDK library version 2.0.0.
- Support for flexible provisioning.

• Support for retrieving enclave launch whitelist file from remote server.

# **3** System Requirements

#### **Hardware Requirements**

- 6th Generation Intel<sup>®</sup> Core<sup>™</sup> Processor (Intel<sup>®</sup> microarchitecture code name Skylake). If the system is using an Intel reference BIOS, you need a 6th Generation Intel<sup>®</sup> Core<sup>™</sup> Processor BIOS RC 0.7 or newer.
- 7th Generation Intel<sup>®</sup> Core<sup>™</sup> Processor (Intel<sup>®</sup> microarchitecture code name Kaby Lake)

## **Software Requirements**

- Supported Linux\* OS distributions:
  - Ubuntu\* 14.04.4 LTS 64-bit version (for desktop version only)

#### Note:

Please use the listed Linux\* OS distribution. Other distributions are not supported.

## 4 Installation Notes

Before installing Intel<sup>®</sup> SGX PSW, Intel<sup>®</sup> SGX must be enabled in BIOS. If the system is using an Intel reference BIOS, you may configure the BIOS options by following these steps:

Go to Intel Advanced Menu -> CPU Configuration -> SW Guard Extensions (SGX). Set SW Guard Extensions (SGX) to Enabled.

• You may need to configure Intel Advanced Menu -> CPU Configuration -> PRMRR. You can set it to 32MB, 64MB or 128MB. The default option is 128MB.

#### Note:

This step may only be applicable to Intel reference BIOS and may be not applicable to OEM BIOS.

To install the Intel<sup>®</sup> SGX driver and PSW, use the following steps:

1. To install the Intel® SGX driver in the default directory, enter the following command:

sudo ./sgx\_linux\_x64\_driver.bin

 To install the Intel<sup>®</sup> SGX PSW in the default directory, enter the following command. The platform software is installed at /opt/intel/sgxpsw

sudo ./sgx\_linux\_x64\_psw\_1.7.100.36470.bin

3. To uninstall the product, enter the following command:

```
sudo /opt/intel/sgxpsw/uninstall.sh
```

## 5 Known Issues and Limitations

- Intel<sup>®</sup> SGX platform service is unavailable
- Intel<sup>®</sup> SGX for Linux\* OS does not support power management.

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