



**ENTRUST**

Time Stamp Option Pack

# TSOP v8.0.0 SDK Release Notes

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# 1. Introduction

These release notes apply to version 8.0.0 of the Time Stamp Option Pack™ (TSOP) Software Development Kit (SDK). They contain information specific to this release such as new features, defect fixes, and known issues.

This release supports the following operating systems:

- Microsoft Windows Server 2012 R2 x64
- Microsoft Windows Server 2016 x64
- Microsoft Windows Server 2019 x64
- Oracle Enterprise Linux 7.1 x64
- Oracle Enterprise Linux 7.6 x64
- Oracle Enterprise Linux 8 x64
- Red Hat Enterprise Linux 7 x64
- Red Hat Enterprise Linux 8 x64
- SUSE Enterprise Linux 12 x64
- SUSE Enterprise Linux 15 x64

The Release Notes may from time to time be updated with issues that have come to light after this release has been made available. Please check Entrust nShield Support at <https://nshieldsupport.entrust.com> for the most up to date version of this document and the TSOP user documentation.

Access to support is available to customers under maintenance. Please contact Entrust nShield Support at [nShield.support@entrust.com](mailto:nShield.support@entrust.com) to request an account.

## 2. Purpose of this release

Time Stamp Option Pack™ Software Development Kit version 8.0.0 addresses a number of known issues and introduces a number of enhancements over the previous 7.20.0 release, including:

- 32-bit TSOP SDK support on Windows.
- Empty **certificate** field permitted in time stamp tokens.

## 3. Changes in this release

The TSOP SDK 8.0.0 release introduces a number of enhancements. These are discussed in the following sections.

### 3.1. 32-bit TSOP SDK support on Windows

To permit integration with some third-party applications, this release provides a 32-bit DLL, as well as associated header and library files, for Windows.

### 3.2. Empty certificate field permitted in time stamp tokens

Time stamp tokens with an empty `certificate` field no longer provoke an access violation when calling `TTI_GetTST_TimeAttributeCertEx()`, `TTI_GetTST_TSACertEx()` and `TTI_VerifyTST_SignatureEx()`.

## 4. Important information

Before deploying the TSOP SDK, the following should be considered:

- This release only supports the operating systems detailed in [Introduction](#).
- It is required that all client applications built with pre-6.20.00 versions of the TSOP SDK (both the C and Java APIs) are rebuilt to use the updated libraries in this release.
- On Linux, applications linking with `libtti.a` must also link with the `pthread` library.
- When `TTI_VERIFY_ESSCERTIDV2` is set to `0`, the first SHA-2 hash in `ESSCertIDv2` is checked - if no SHA-2 hashes are present - the first SHA-1 hash in `ESSCertID` is checked. If `TTI_VERIFY_ESSCERTIDV2` is set to `1`, or the environment variable is unset, only `ESSCertIDv2` is verified.
- The Java SDK requires a Java Development Kit (JDK) version 1.8 installation.
- Both the Java and C versions of the TSOP SDK include example code (the Java examples are accompanied by Javadoc documentation).
- On Windows, the Java and C versions of the TSOP SDK software are installed, respectively, in:
  - `C:\Program Files\Cipher\nfast\java\dsesdk\`
  - `C:\Program Files\Cipher\nfast\c\dsesdk\`
- On Unix-based operating systems, the Java and C versions of the TSOP SDK software are installed, respectively, in:
  - `/opt/nfast/java/dsesdk/`
  - `/opt/nfast/c/dsesdk/`

See the *TSOP SDK Reference Guide* for additional information.