



Intel® IPT (Identity Protection Technology) based Token Provider Installation Guide

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Introduction

This paper presents an installation guide for the Intel® IPT based Token Provider for RSA SecurID® Software Token for Microsoft Windows as implemented using Intel® Identity Protection Technology (IPT) with Public Key Infrastructure (PKI). Intel® IPT with PKI provides hardware enhanced protection of RSA cryptographic keys in specific Intel® vPro™ processor-powered systems. The Intel® IPT based Token Provider for RSA SecurID Software Token provides hardware enhanced protection of the RSA Token Seed by using IPT with PKI cryptographic functions to encrypt and sign the token seed. This signed and encrypted token seed is used by the RSA SecurID Software Token to generate the OTP tokens. The Intel® IPT based Token Provider provides an additional layer of protection to the RSA OTP solution.

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Installation

Installation of the entire software stack includes the installation of three components: Intel® IPT with PKI, the Intel® IPT based Token Provider, and the RSA SecurID Software Token. In addition to installing all of the software components, the initial Token Seed must be imported to the Token Provider. This section describes each of these steps.

Prerequisites

This table describes the prerequisites and components that must be installed on the computer before you can install Intel® IPT with PKI, the Intel® IPT based Token Provider, and the RSA SecurID Software Token.

Prerequisite	Description
Intel® vPro	The computer must support Intel® Identity Protection Technology (Intel® IPT). The system must be a 4 th generation or later Core vPro system.
Firmware	The Firmware of the Intel® Management Engine (Intel® ME) must be version 9.0 or later. If installing on a system with ME 9.0, or 9.5, contact Intel IPT with PKI support (send an email to ipt-pki.support@intel.com) to request the correct installers.
Intel® MEI	The Intel® Management Engine Interface (Intel® MEI) must be installed and running. The Intel MEI (also known as “HECI”), is the software interface to the Intel ME. This driver is installed when you install the Intel ME software kit, and is usually located under “System devices” in the operating system.
Operating System	Windows 7, Windows 8.1, or Vista

Install Intel IPT with PKI

To request a copy of the installer files for the Intel IPT with PKI send an email to ipt-pki.support@intel.com, or download the product from the Intel Download Center:

<https://downloadcenter.intel.com/download/24801>

The software is provided as a zip file and the installers are located in the “Installer” folder:

- Installer – Run the *.msi installer file in this folder to install Intel IPT with PKI. Follow the instructions of the installer. Separate installers are provided for both 32-bit and 64-bit Operating Systems.

Install the Intel IPT based Token Provider

You can download the installers for the Intel® IPT based Token Provider for RSA SecurID Software Token at this site:

<https://downloadcenter.intel.com/download/24788>

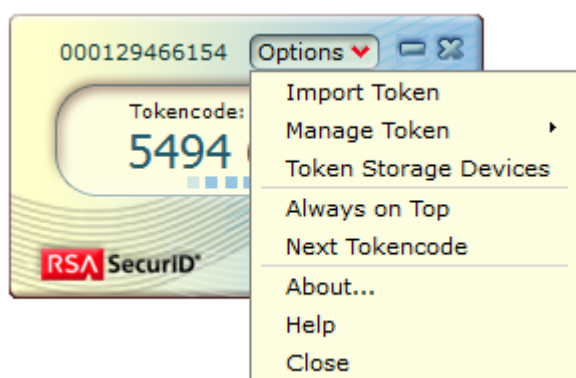
Run the *.msi installer file and accept the defaults. Separate installers are provided for both 32-bit and 64-bit Operating Systems.

Install RSA SecurID Software Token

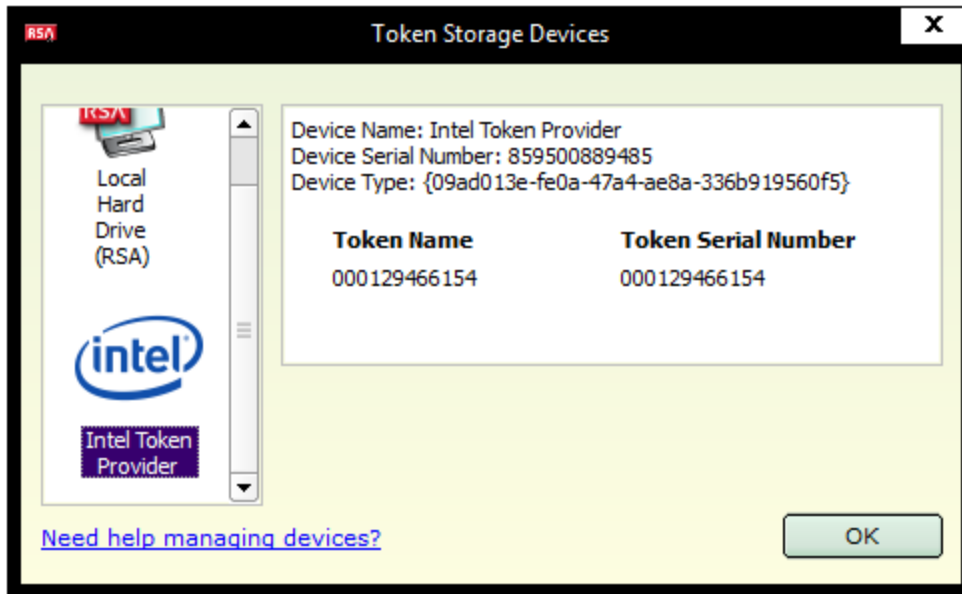
- If not already installed, download and install the RSA SecurID Software Token v~~54.1.2~~. The installation package is available from RSA at the following link:
<http://www.emc.com/security/rsa-securid/rsa-securid-software-authenticators/ms-windows.htm>
- Install the software per the instructions provided in the download. A default installation works fine.

Import the Token

- Obtain a copy of the Token Seed from your system administrator and copy it to the folder of your choosing.
- Launch the RSA SecurID Software Token application and import the Token Seed by selecting "Import Token" from the pull down as shown in the screenshot below. Select the folder where the token was initially stored and import the token to the Intel Token Provider.



- Once "Token Storage Devices" is selected, the RSA SecurID Token application will display all of the Token Storage devices that are available. By default, the RSA SecurID Token application uses the "Local Hard Drive (RSA)" Storage device. Intel has created the storage device labeled "Intel Token Provider".



Using RSA SecurID Software Token

- Launch the RSA SecurID Software Token application and you see a window similar to the screenshot below. . The RSA SecurID Software Token application will generate a new OTP every 60 seconds. Each time the new OTP is generated, the RSA SecurID Software Token application is reading the token seed from the Intel® IPT based Token Provider that was previously provisioned to the system. When provisioned, the token seed is encrypted and signed using the IPT with PKI cryptographic functions. Once encrypted and signed, the token seed is stored in the Intel Token Provider. Each time the RSA SecurID Token application generates a new OTP, it reads the signed and encrypted token seed from the Intel Token Provider, verifies its signature, and decrypts it using the IPT with PKI cryptographic functions that are implemented in the Intel Cryptographic Service Provider (CSP).
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Summary

The Intel® IPT based Token Provider for RSA SecurID Software Token provides hardware-enhanced protection of the RSA Token Seed by using IPT with PKI cryptographic functions to encrypt and sign the RSA SecurID Software token seed and bind it to the specific Intel platform.

Related Links for Intel® IPT with PKI

For more information on Intel® IPT with PKI and Protected Transaction Display visit:

- Intel® Identity Protection Technology documents:
 - <http://ipt.intel.com/welcome/protect-business-data.aspx>
- Microsoft CryptoAPI interface:
 - <http://technet.microsoft.com/en-us/library/cc962093.aspx>
- RSA SecurID Software Token for Microsoft Windows Page:
 - <http://www.emc.com/security/rsa-securid/rsa-securid-software-authenticators/ms-windows.htm>
- RSA SecurID/RSA Authentication Manager Page:
 - <http://www.emc.com/security/rsa-securid.htm>
- RSA Ready (Integration Partner) page:
 - <https://community.emc.com/community/connect/rsaxchange/rsa-ready>