

IDENTIV

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uTrust TS Key Tool

Installation and User Instructions

uTrust TS Key Tool

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Introduction

Identiv's uTrust TS Key Tool provides all necessary functions to generate and encrypt AES-128 keys to support the TS VIP Program. The tool is designed to enable a user to input existing proprietary keys or auto-generate new keys as needed to support the application. Identiv adopted a public key infrastructure (PKI)-enabled model using PGP encryption as a balance between affordability, usability, and security level. The output files from the tool are PGP encrypted so they can be shared over email or other file transfer means without sacrificing security.

Identiv recommends end-users generate their own VIP keys and share the encrypted key files with the Identiv team. However, Identiv can also use the uTrust TS Key Tool to generate VIP keys on an end-user's behalf and import them to our HSM (Hardware Security Module). Once imported to the HSM, the VIP keys are accessible to Identiv's TS Reader and Card Production teams to load the keys during production and ensure out of the box operability.

Software Requirements

1. TS Key Tool MSI Installer


Getting Started

To get started, follow the instructions below:

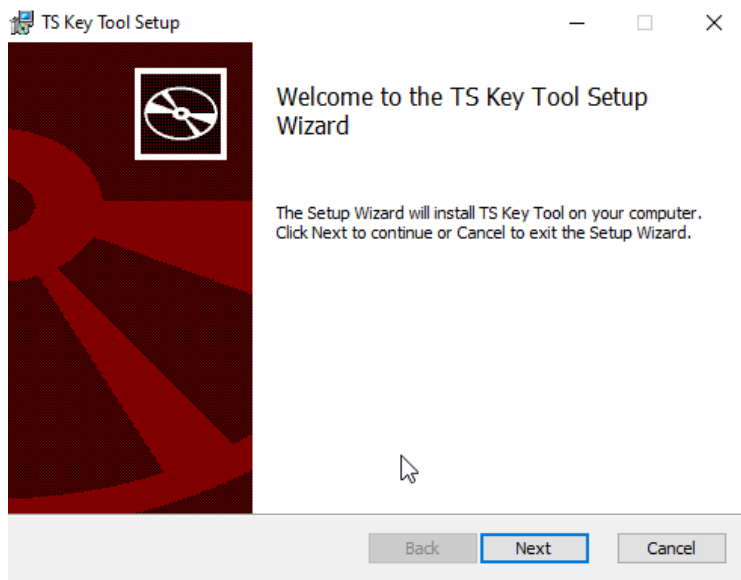
1. Download the uTrust TS Key tool installer from the Identiv website:
<http://files.identiv.com/products/credentials/ts-cards/TS-Key-Tool-v1.0.0.msi>
File Name: TS Key Tool-1.0.0.msi
2. Install the application on your local computer.
3. Launch the uTrust TS Key Tool to generate encrypted custom VIP key files.

Installation Steps

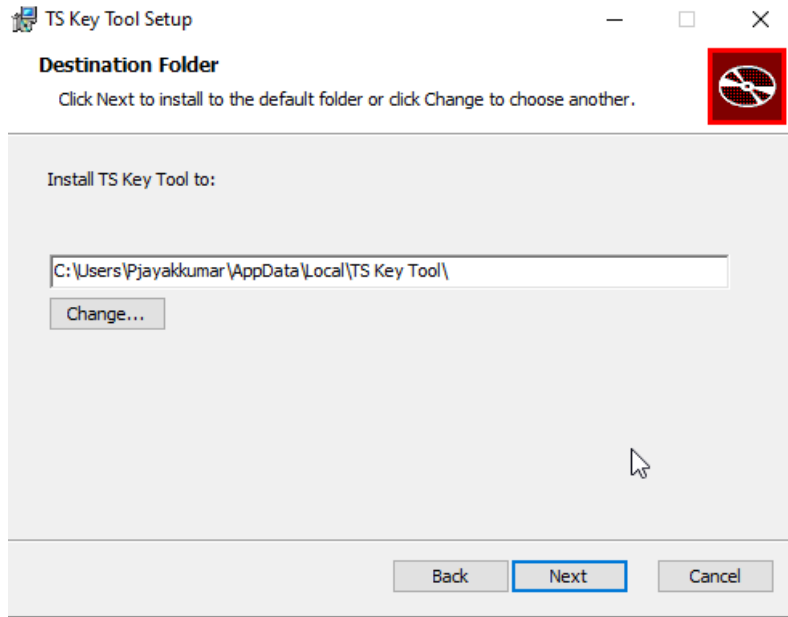
1. Locate the uTrust TS Key Tool Windows Installer file and double-click to launch.

| Name | Date modified | Type | Size |
|---|------------------|-----------------------|-----------|
|  TS Key Tool-1.0.0.msi | 28-06-2023 10:54 | Windows Installer ... | 39,732 KB |

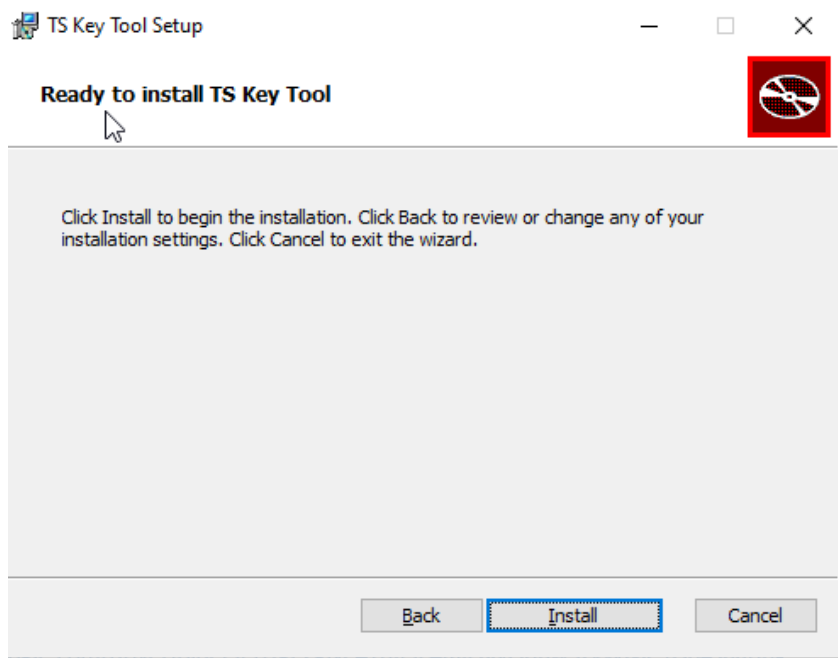
2. Click 'Next' on the installer screen to start the setup.



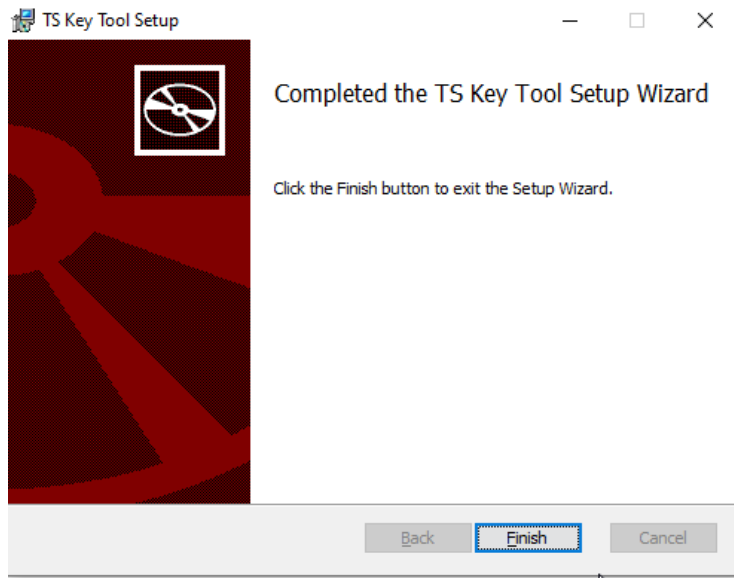
3. Choose or select the desired folder location and click 'Next' to continue.



4. Click 'Install' to begin the installation.

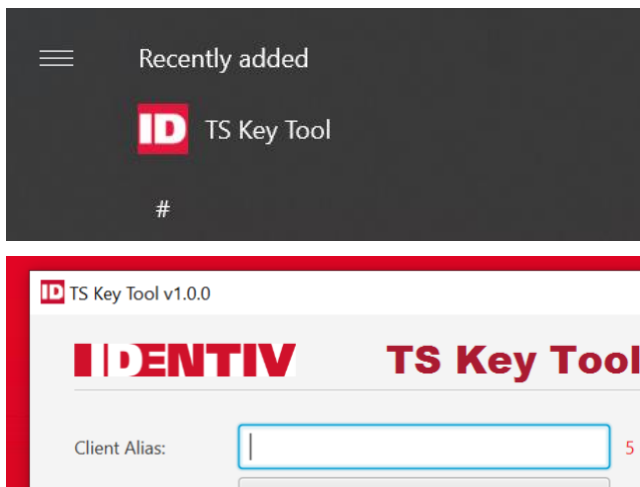


5. Click 'Finish' to complete the installation and exit the installer.



User Instructions

From the Windows Start menu, locate the **TS Key Tool application** and click the icon to launch.



Field Descriptions

| Field Name | Description |
|------------------------------|--|
| Client Alias | Unique string to identify VIP key and firmware files; 5 characters maximum. Allowed characters: letters A-Z (uppercase); numbers 0-9. |
| Version | Version number of the client keys; select '001' for initial keys and increment for future key rotations or changes. |
| Key Source | <p>Auto-generate key: Select this option when using the tool to create new keys. The key values will be displayed under 'Key Details'.</p> <p>Custom key: Select this option when using existing keys. The user must enter raw key values under 'Key Details'.</p> |
| PICC Key | Card Master key; enter AES 128-bit key into the textbox. |
| App Write Key | TS APP master key; enter AES 128-bit key into the textbox. |
| App Read Key | TS Read key; enter AES 128-bit key into the textbox. |
| Encrypted Download Path | Click "Browse" to select the file location to save the encrypted files. |
| Generate PGP Encrypted Files | Click to generate the PGP encrypted files. |
| Reset | Click to clear all values. |
| Close | Click to exit the application. |

Key Generation

Custom TS VIP Keys [AES 128-bit keys]

1. Enter the Client Alias (5 characters maximum).



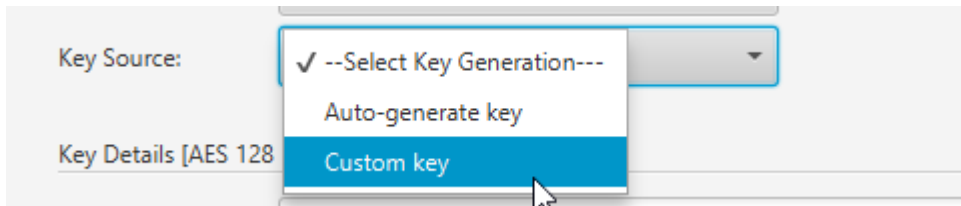
A screenshot of the 'Client Alias' input field. The text 'IDENT' is entered in the field. To the right of the field, there is a red text label that reads '5 characters max. (A-Z, 0-9)'.

2. Select the appropriate version number (start with '001' and increment for additional versions).



A screenshot showing two dropdown menus. The first dropdown is labeled 'Version:' and has a selection of '✓ --Select Version---'. The second dropdown is labeled 'Key Source:' and has a selection of '001'.

3. Select 'Custom key' for the Key Source.



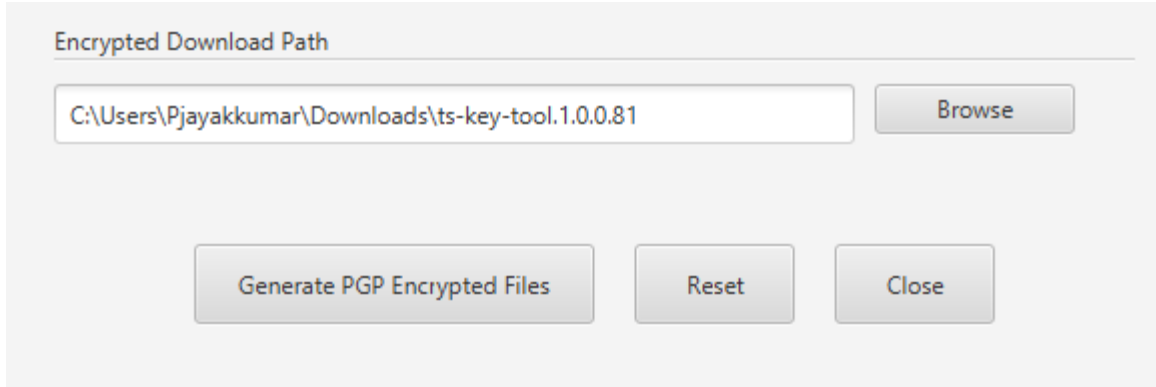
A screenshot of the 'Key Source:' dropdown menu. The dropdown is open, showing three options: '✓ --Select Key Generation---', 'Auto-generate key', and 'Custom key'. The 'Custom key' option is highlighted with a blue background.

4. Under 'Key Details', enter the AES 128-bit key values in the 'PICC Key', 'APP Write Key' and 'APP Read Key' text boxes.

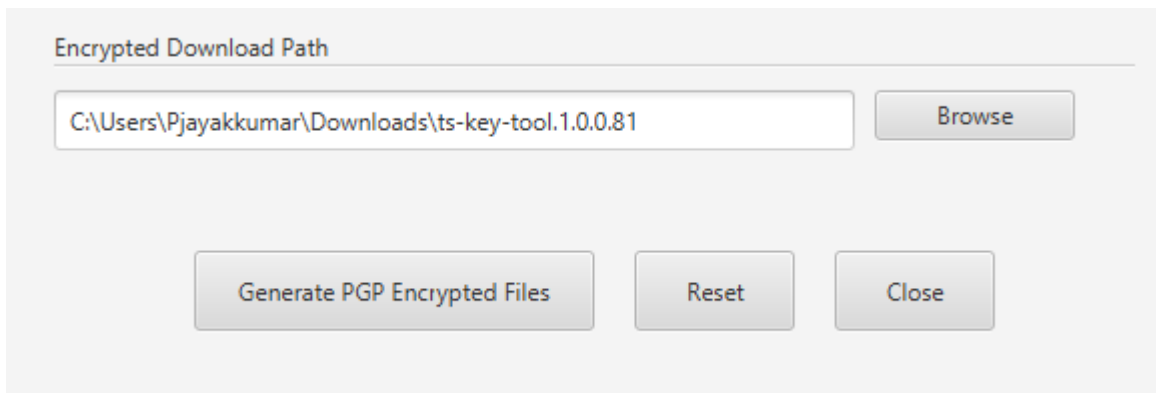


A screenshot of the 'Key Details [AES 128 bit keys]' section. It contains three text input fields, each with the same hexadecimal value: '00112233445566778899AABBCCDDEEFF'. The fields are labeled 'PICC Key:', 'App Write Key:', and 'App Read Key:'.

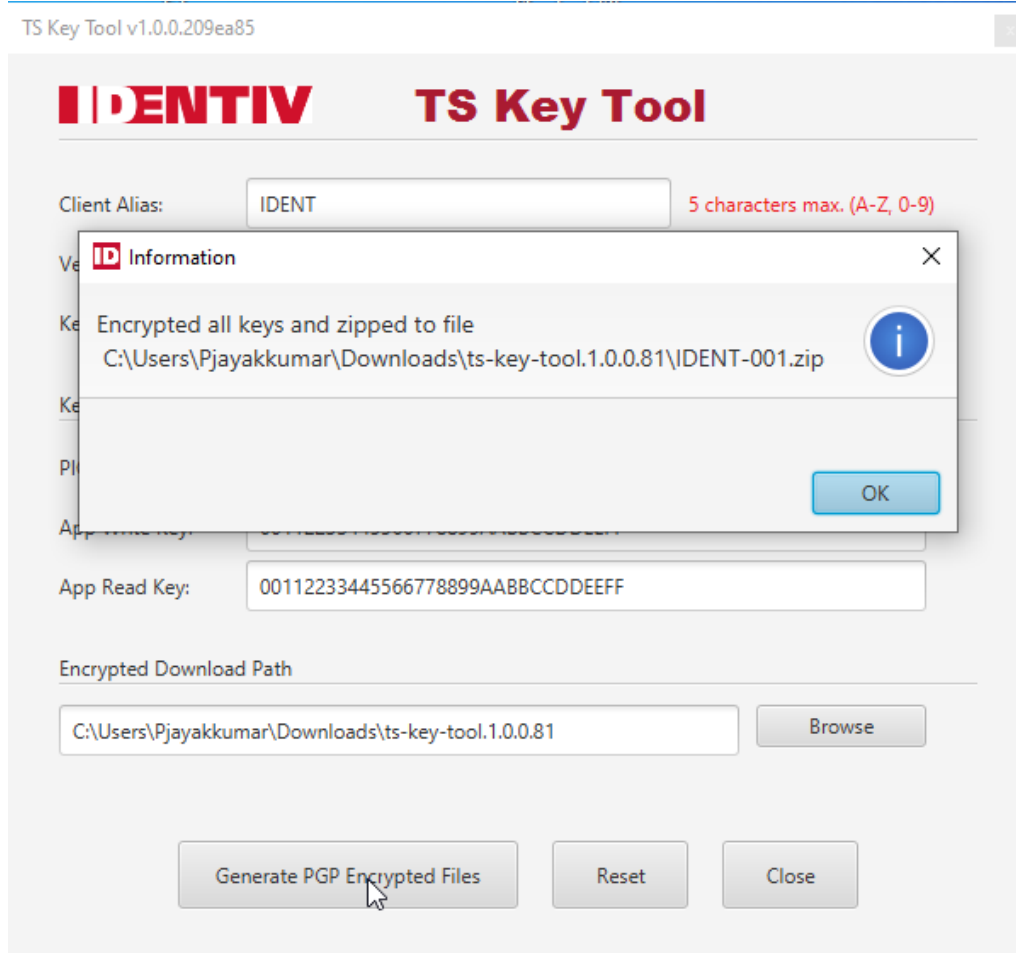
5. Click 'Browse' and select the output folder location for the encrypted files.



6. Click the 'Generate PGP Encrypted Files' button to create the PGP encrypted zip file.



7. A confirmation message displays after the VIP keys are created and stored to the designated folder location. Click 'OK' to close.



8. Click 'Reset' to clear the values or 'Close' to exit.
9. Send the output file to vipsupport@identiv.com for import into the HSM.

Auto-Generate TS VIP Keys [AES 128-bit keys]

1. Enter the Client Alias (5 characters maximum).

Client Alias: 5 characters max. (A-Z, 0-9)

2. Select the appropriate version number (start with '001' and increment for additional versions).

Version:

Key Source:

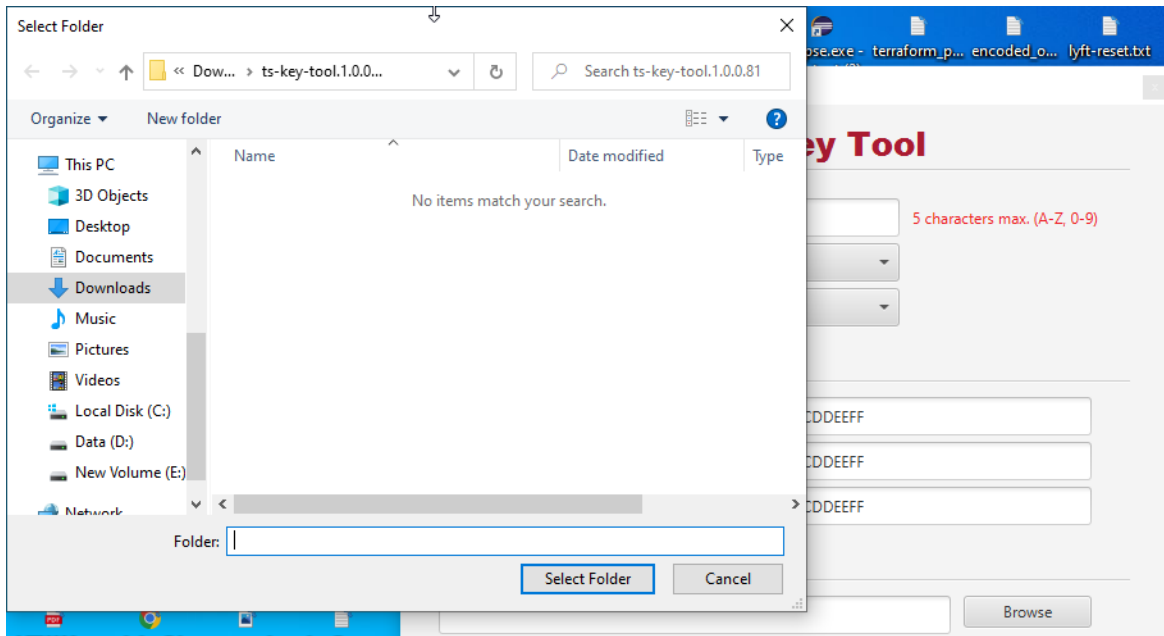
3. Select 'Auto-generate key' for Key Source.

Key Source:

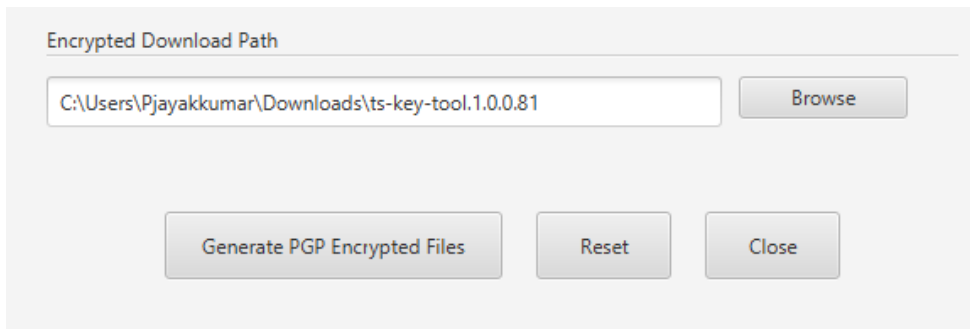
Key Details [AES 128]

4. Click 'Browse' to navigate to the desired output folder location for the encrypted files. Click the 'Select Folder' button to populate the Encrypted Download Path text box.

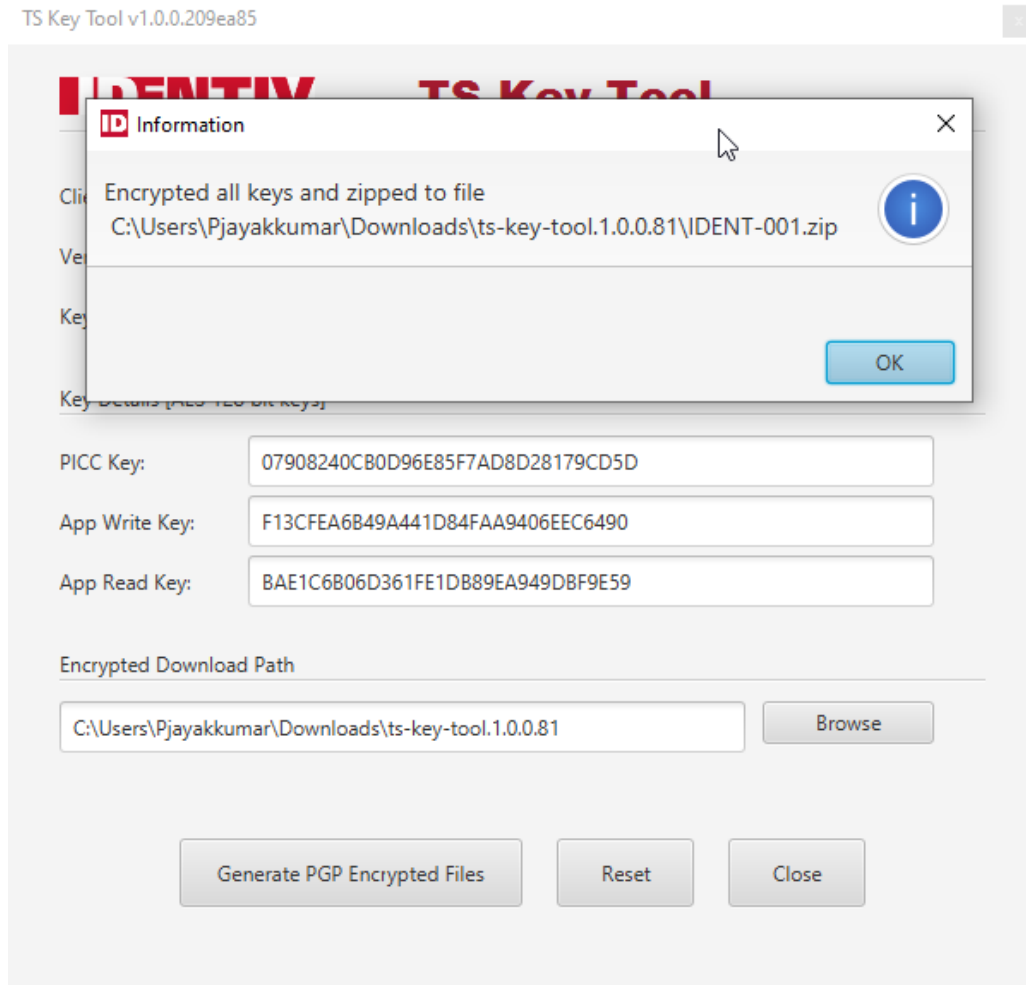
Encrypted Download Path



5. Click the 'Generate PGP Encrypted Files' button to create the PGP encrypted zip file.



6. A confirmation message displays after the VIP keys are created and stored to the designated folder location. Click 'OK' to close.



7. Note the raw key values and keep them safe.
8. Click 'Reset' to clear the values or 'Close' to exit.
9. Send the output file to vipsupport@identiv.com for import into the HSM.

| | | | |
|---|------------------|---------------------|------|
|  IDENT-001.zip | 19-06-2023 22:10 | Compressed (zipp... | 2 KB |
|---|------------------|---------------------|------|