

Kinetis Expert Pins Tool Installation User's Guide

Contents

1 Introduction

The Kinetis Expert Pins Tool is a part of Kinetis Expert: a suite of evaluation and configuration tools that helps guide users from first evaluation to production software development. This document describes how to install the Kinetis Expert Pins Tool software. The tool is available an online version (using a web browser) and also as a desktop application installed on the host machine. The Kinetis Expert Pins Tool is used for pin routing configuration, validation, and code generatind, including pin functional/electrical properties, power rails (where applicable) and generating run-time functions.

The Kinetis Expert Pins Tool is for general use and aims to help hardware designers, software engineers, embedded engineers, and field application engineers (FAEs).

The Pins Tool supports:

- Graphical views to create and use pins configuration.
- Creation of C source code for device initialization which can be used in any IDE.
- Package view with all pins and routable peripherals.
- View of routed pins.
- Registers with initialization values.

1	Introduction.....	1
2	Minimum System Requirements.....	2
3	Supported Processors.....	2
4	Limitations.....	2
5	Online and Offline Installation.....	2
6	Installing the tool on Windows.....	3
7	Installing the tool on Mac.....	9
8	Installing the tool on Ubuntu.....	14
9	Installing the tool on Red Hat/CentOS.....	16
10	Installing on Linux using Command Line.....	17
10.1	Installing with Red Hat package manager (RPM)	18
10.2	Installing with Debian package manager (DEB)	18
11	Uninstalling the tool on Linux using Command Line.....	18
11.1	Uninstalling with Red Hat package manager (RPM)	18
11.2	Uninstalling with Debian package manager (DEB)	18



2 Minimum System Requirements

The following lists the minimum system requirements to install and run the software.

- One of these graphical operating systems:
 - Microsoft® Windows® 7, 8, 10 (32-bit and 64-bit versions supported)
 - Ubuntu 14.04 LTS, Red Hat® Enterprise Linux (RHEL)/CentOS 7. Linux-hosted variants of the Pins tools software are distributed as 64-bit binaries, which may not work on 32-bit systems.
 - Mac OS X operating system (10.11 or later)
- Java Runtime Environment (JRE) 1.8
- 4 GB RAM or more
- Display with resolution 1024 x 768 or more
- Internet connection for device information download

NOTE

For the online version of the Pins tool, the internet browser must be JavaScript enabled. The supported browsers are Internet Explorer (IE) 9+, Safari 5.1+, Firefox 33+, and Chrome 38+.

3 Supported Processors

The tool goes without any data and the additional supported devices. You can download the additional supported devices later. It requires internet connection to get the data for the supported processors.

4 Limitations

Refer to the Release Notes to see the limitations.

5 Online and Offline Installation

For the desktop setup/installer executable, there are two different versions available, which either have 'Offline' or 'Online' in the installer executable name:

1. **Offline version:** This version is about 120 MB in size and includes all the files required during the setup and does not need a connection to the internet during installation. You can use this method for slow network connections or for installing the software on multiple machines.
2. **Online version:** This version is about 400 KB in size and downloads all the required files from the internet during the installation. You can use this method for fast internet connections or to limit the data download (downloads only the required files) during the installation.

For both the versions, the missing device information files download from the internet when loading a configuration into the tool.

6 Installing the tool on Windows

For Windows, there are two different setup binaries:

- 64-bit version: This one has "x64" in the installer executable name. This setup is for 64-bit Windows systems.
- 32-bit version: This one has "x86" in the installer executable name. This setup executable is for 32-bit Windows systems.

Running a non-matching setup executable for a given host system, for example 64-bit setup on a 32-bit system, will give an error message dialog.

To install the software locally on a host as desktop application:

1. Run the Kinetis_Expert_Configuration_Tools_<version>_<architecture_<online/offline>.exe.

The **Kinetis Expert Tools Setup** wizard starts.

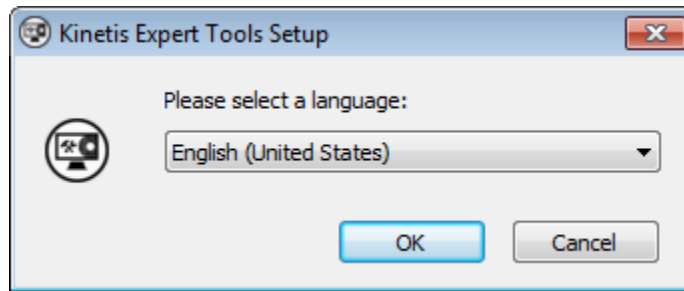


Figure 1. Kinetis Expert Tools Setup

2. Select the language in which you want to run the installer.
3. Click **OK**.

The **Custom Setup** page of the wizard appears. You can click on the icons in the tree to select the way you want to install the features.

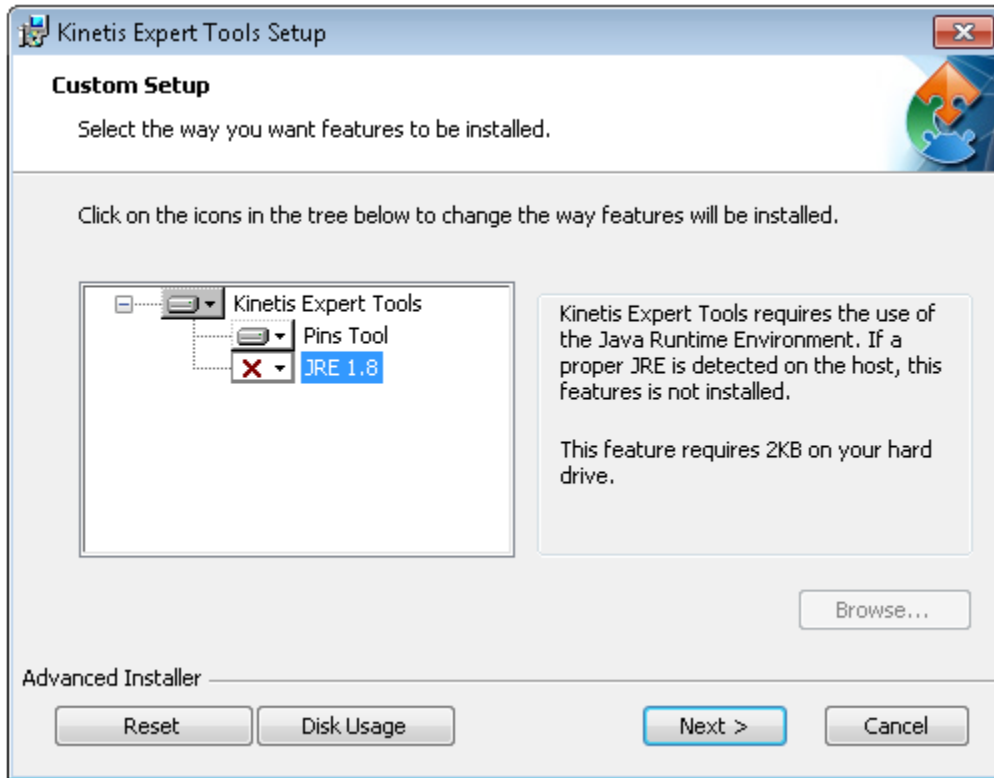


Figure 2. Custom Setup

NOTE

If the installation detects a proper JRE on the host, the setup will not install the feature and appears a red cross appears. If you think it is not installed, click on the icons in the tree and select the option to install the feature.

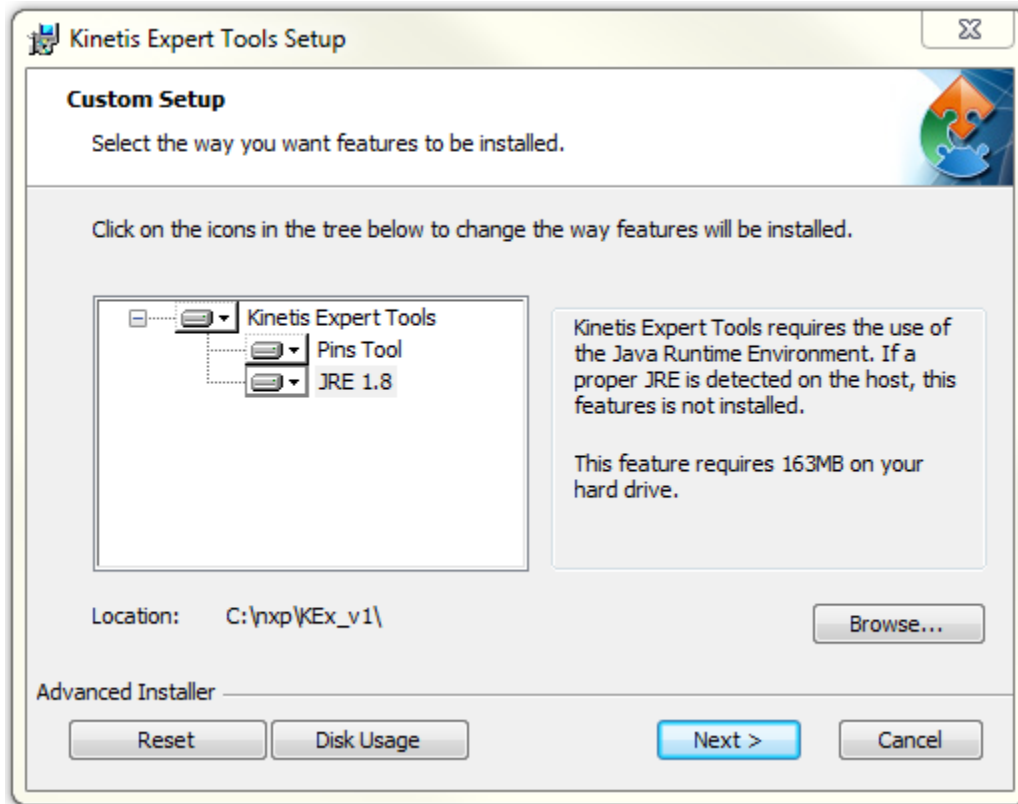


Figure 3. Custom Setup

4. Click **Browse** and navigate to a destination folder if you want to install the features different from the default folder.
5. Click **Next**.
The **Configure Shortcuts** page appears.

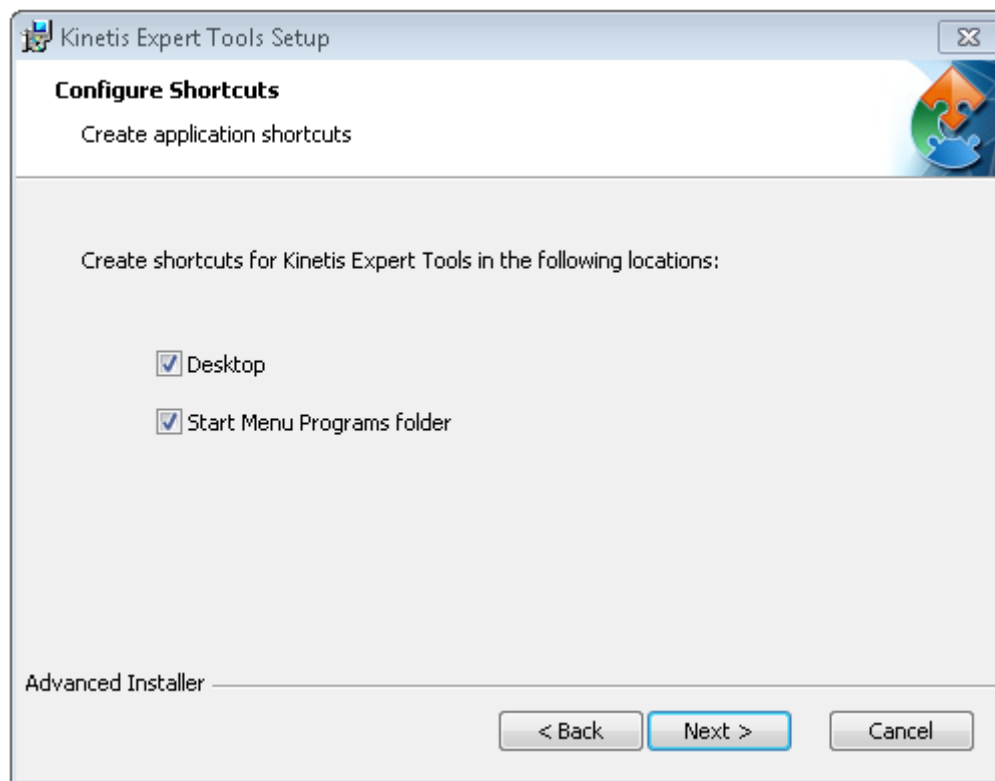


Figure 4. Configure Shortcuts

6. Click **Next**.
The **Ready to Install** page appears.

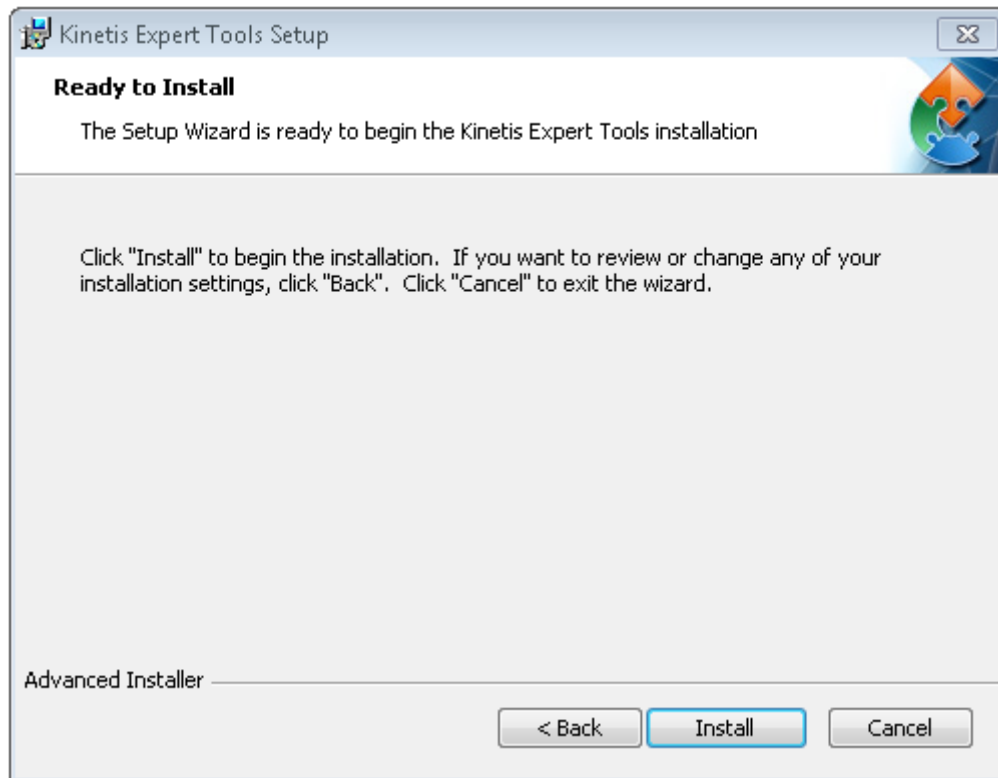


Figure 5. Ready to Install

7. Click **Install**.

The setup begins the installation.

NOTE

If you want to review or change any of your installation settings, click **Back**. Click **Cancel** to exit the wizard.

The installer prompts you when the installation completes.

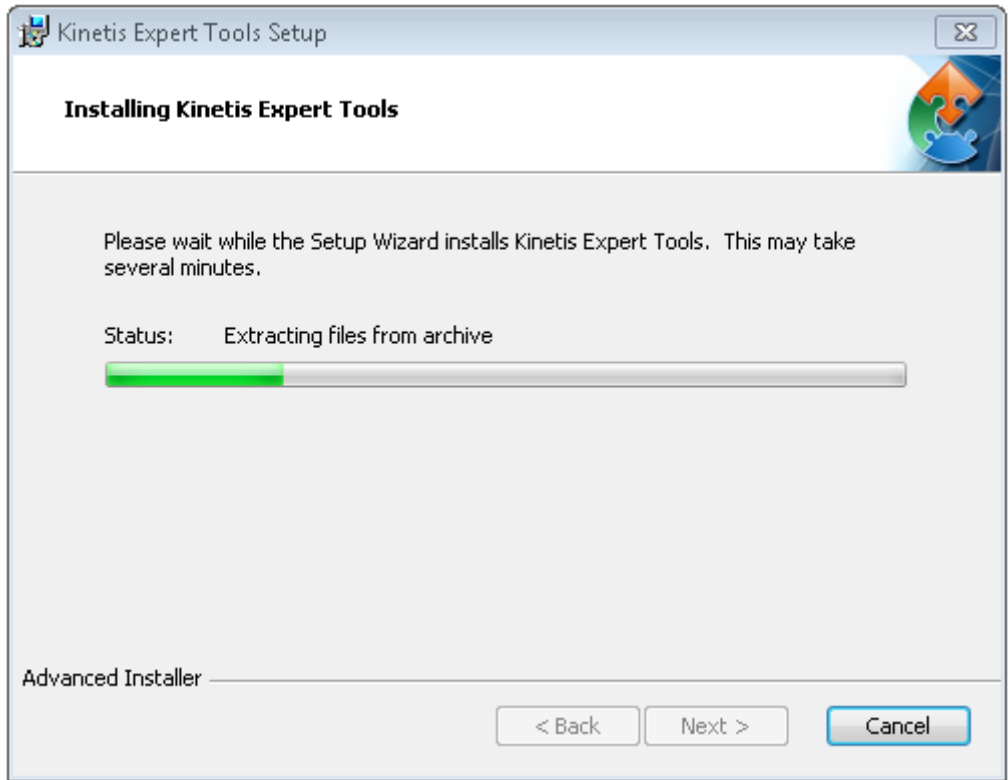


Figure 6. Installing Kinetis Expert Tools

NOTE

The setup displays an error message if the prerequisites (in Step 3) are missing or incorrectly installed or are missing .

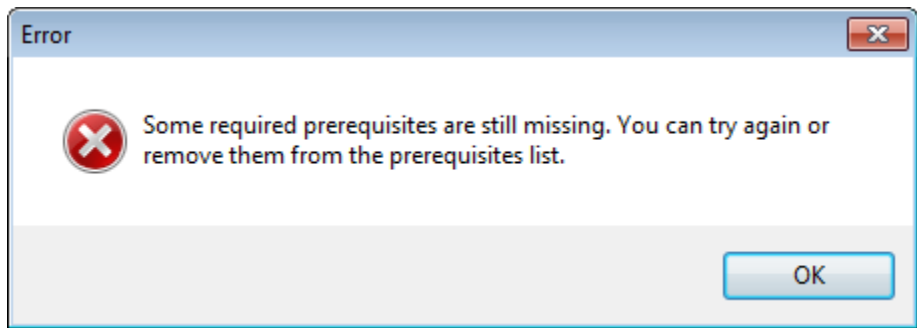


Figure 7. Prerequisites not found error

8. Click **Finish** to close and exit the setup wizard.

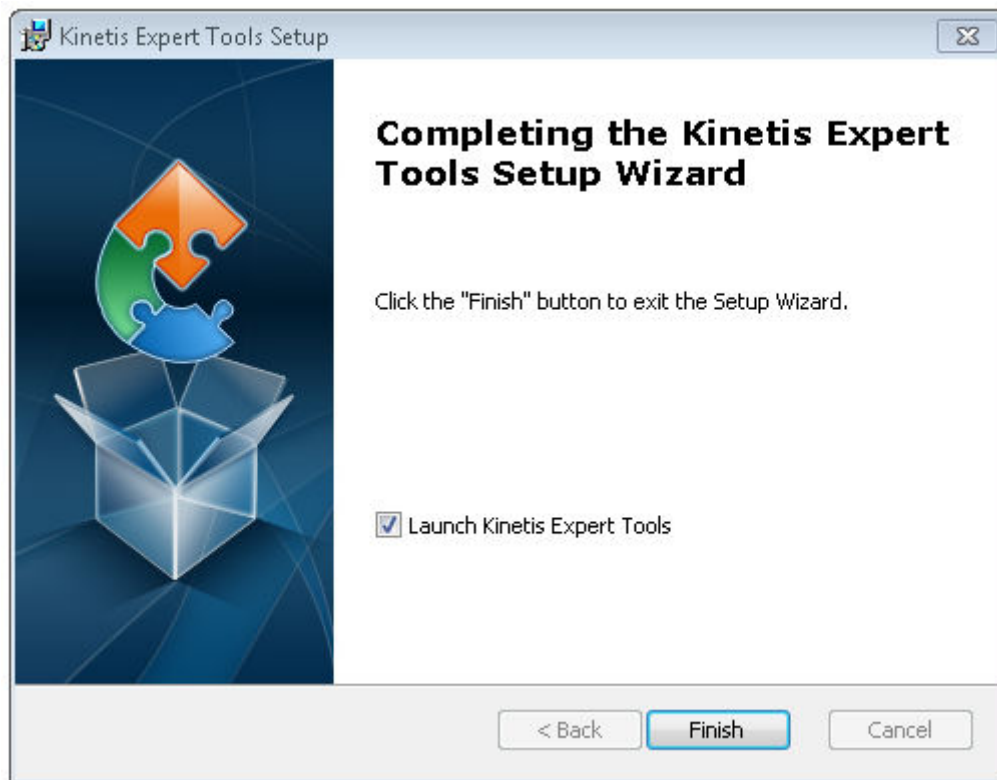


Figure 8. Complete Installation

9. To start using the Kinetis Pins tool software, run the tool from the shortcut on desktop or from the Start menu. You can also navigate to the <product installation folder>\bin\ folder and launch the tools.exe or launch the shortcut in the <product installation folder>.

7 Installing the tool on Mac

To install the Pins tool:

1. Click the Kinetis_Expert_Configuration_Tools_<version>_<online/offline>.pkg.
The **Install Kinetis Expert Tools** setup initiates and the **Introduction** page appears.

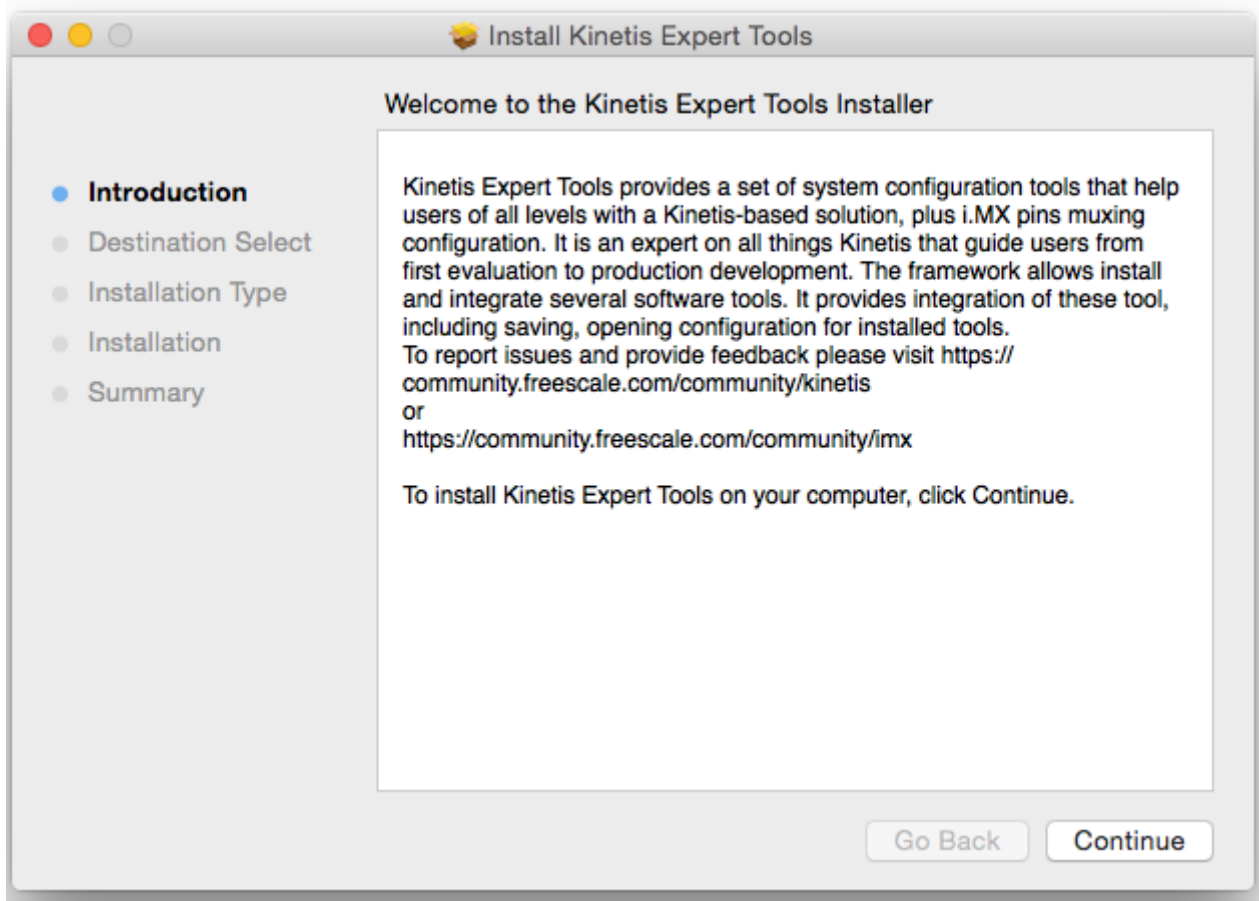


Figure 9. Introduction

2. Click **Continue**.

The **Destination Select** page appears.

3. Click the green down arrow to select the disk where you want to install the Kinetis Expert Tools software.

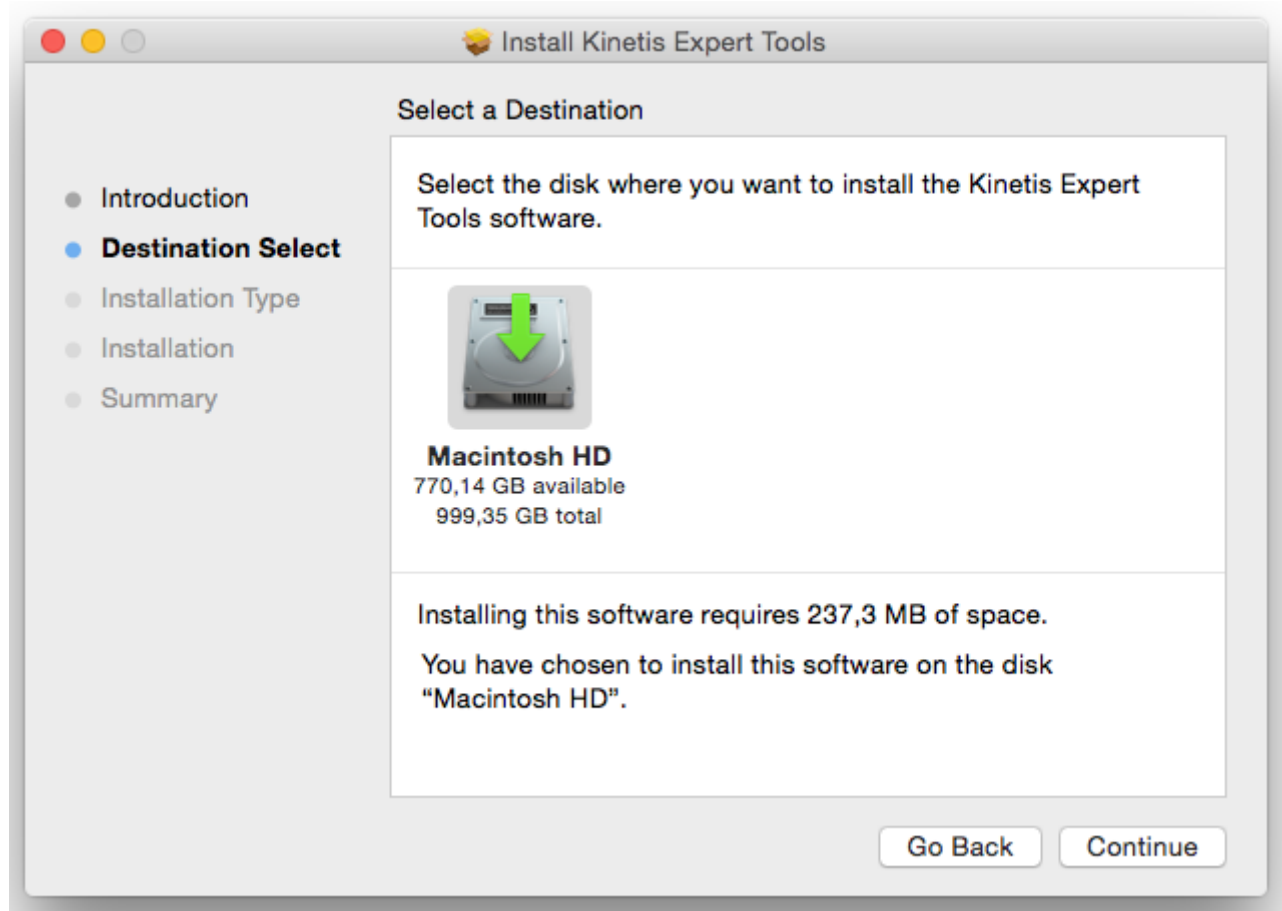


Figure 10. Select Destination

4. Click **Continue**.
The **Installation Type** page appears.

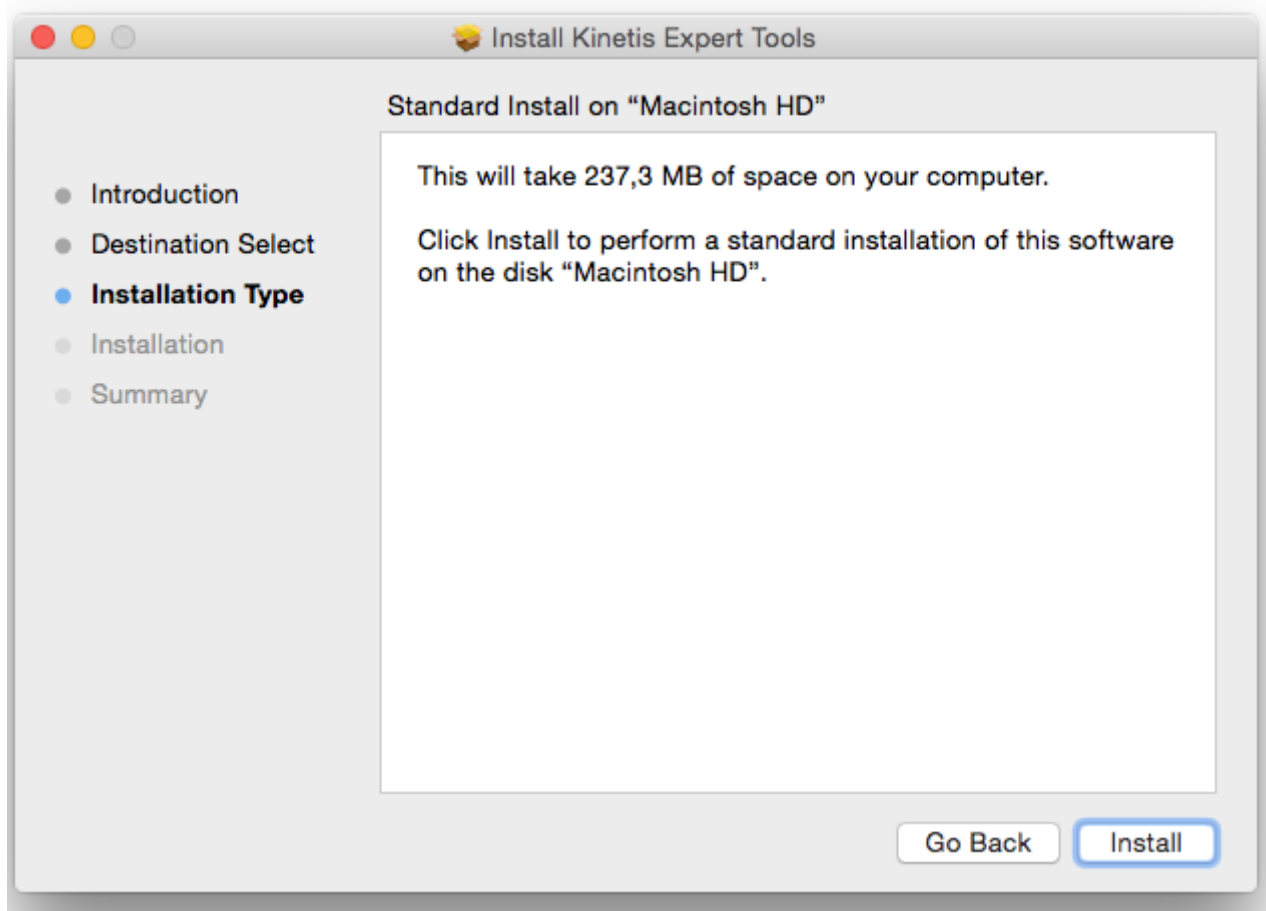


Figure 11. Installation Type

5. Click **Install**.

The **Installation** page appears.

6. Type in your login credentials to continue with the installation.
7. Click **Install Software**.

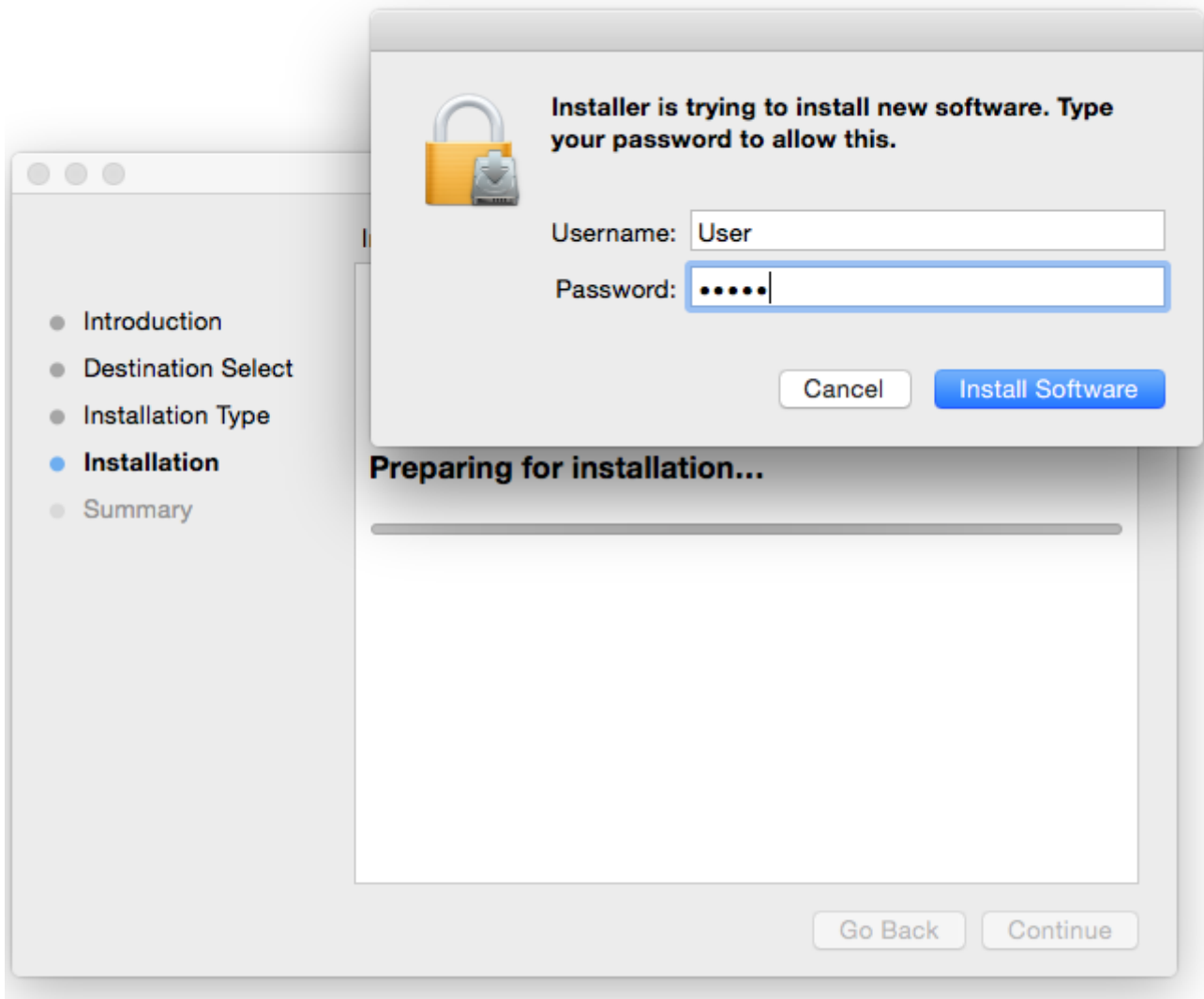


Figure 12. Install Software

8. Click **Continue**.

The **Summary** page prompts that the installation was successfully completed.

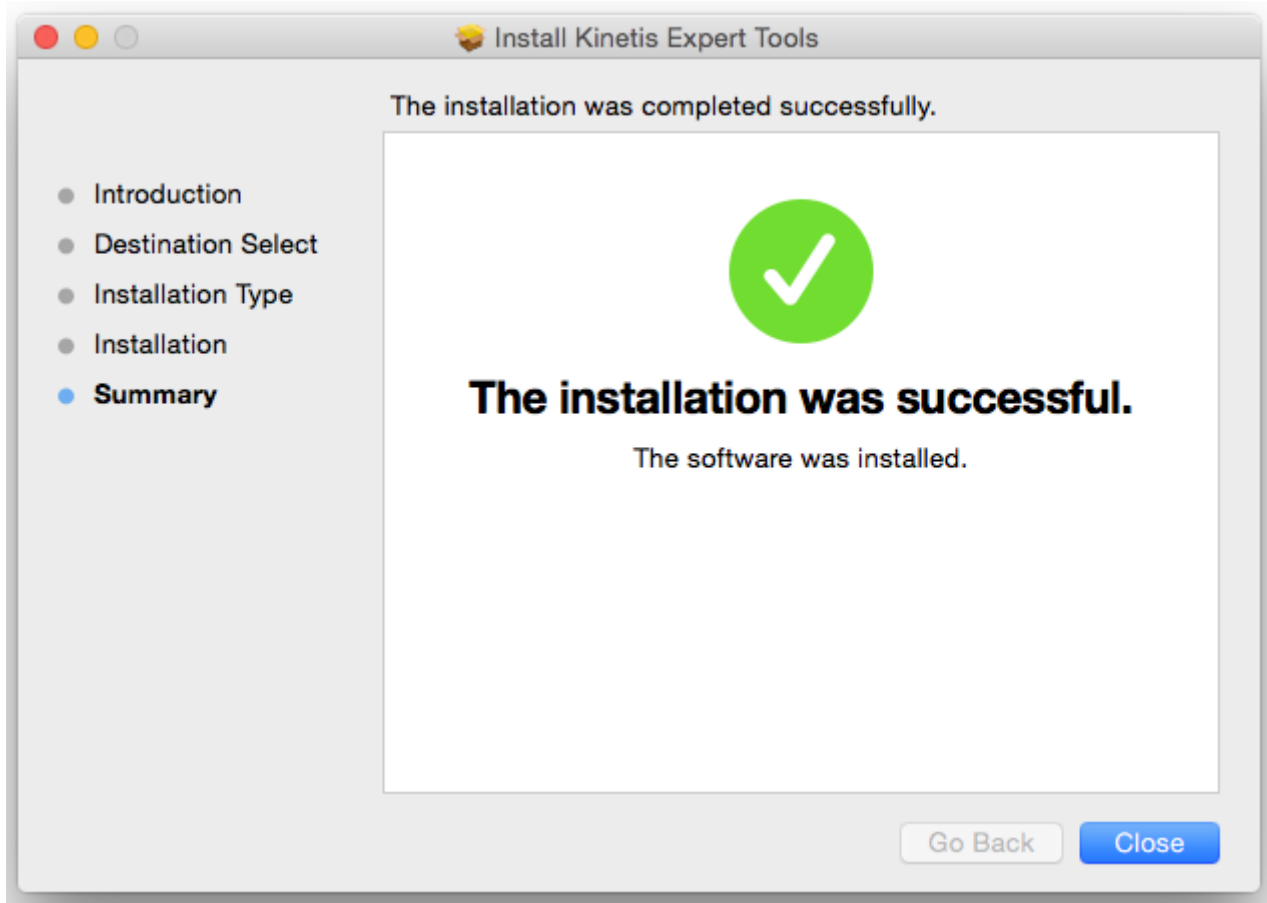


Figure 13. Summary

9. Click **Close** to exit the installation wizard.

8 Installing the tool on Ubuntu

To install the Pins tool using Ubuntu Software Center:

1. Click the Kinetis_Expert_Configuration_Tools_<version>-<pkg_revision>_amd64_<online/offline>.deb.
2. The installation prompts you to confirm that you trust the origin of the file.
3. Click **Install**.

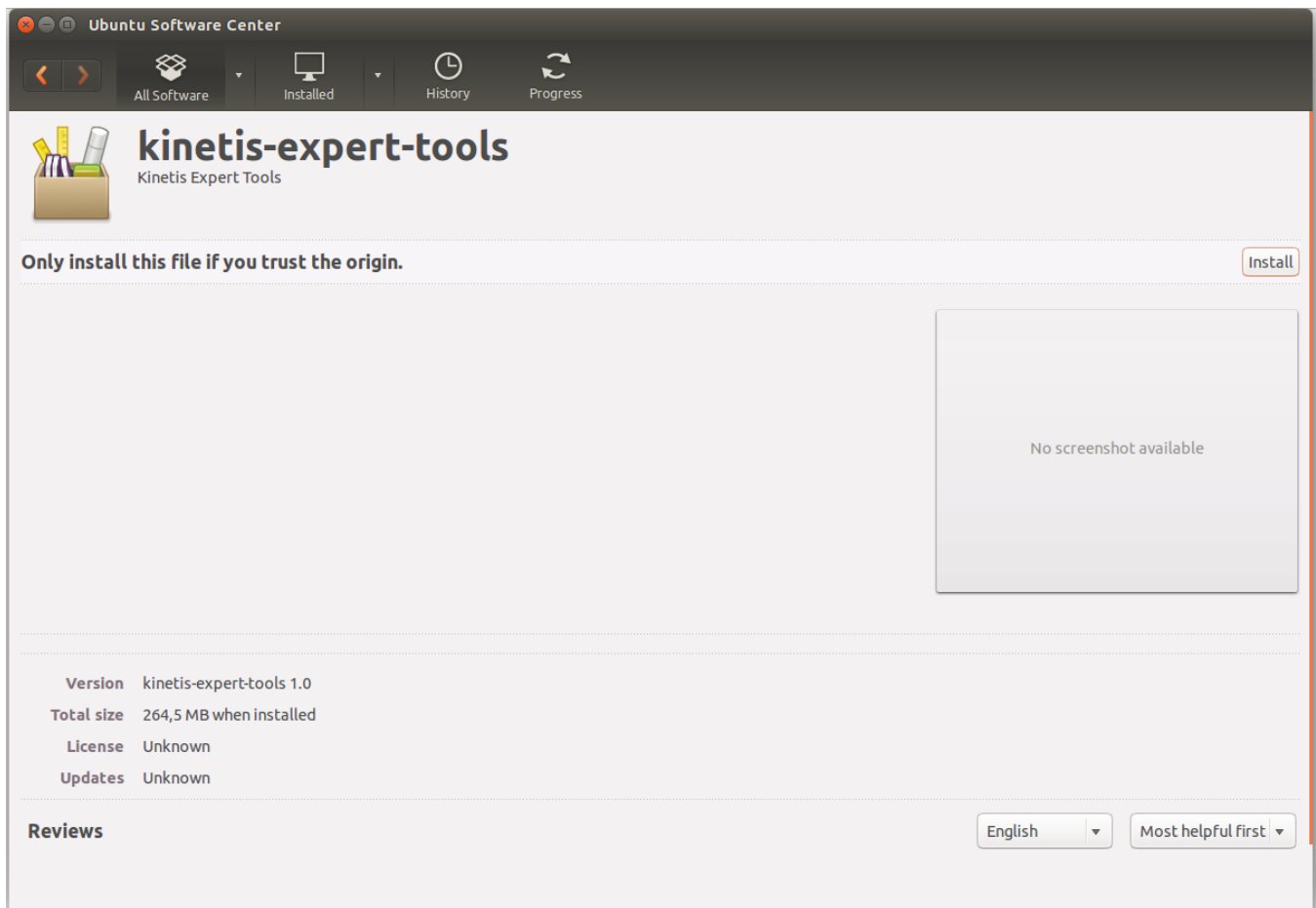


Figure 14. Trust the origin

The setup initiates. To install the package you need to authenticate yourself.

4. Specify your login credentials.
5. Click **Authenticate**.

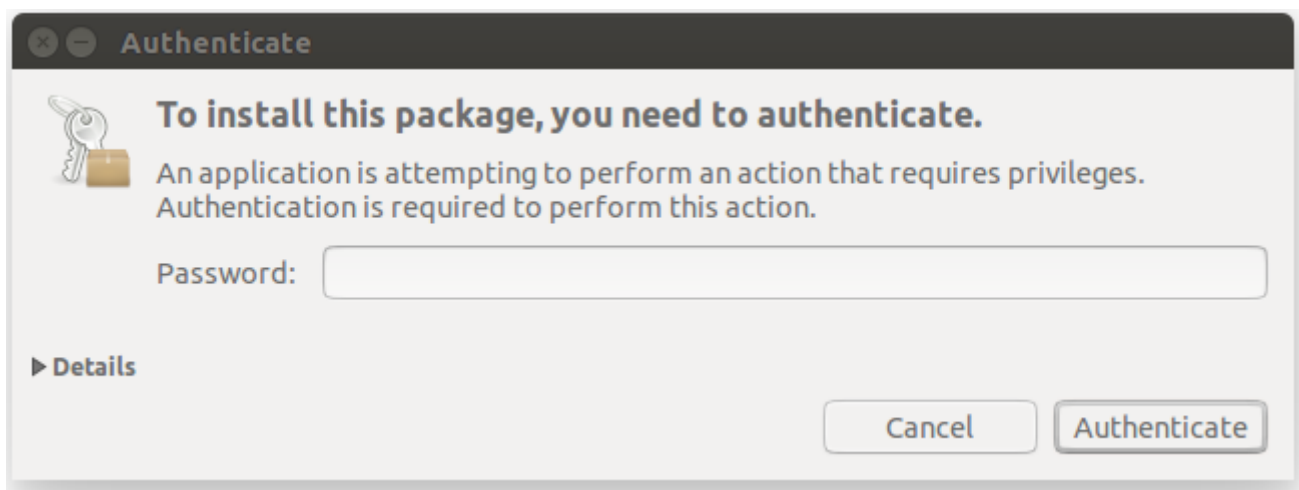


Figure 15. Authentication required

6. If the login is successful, the setup installs the Kinetis Expert Tools software.

Installing the tool on Red Hat/CentOS

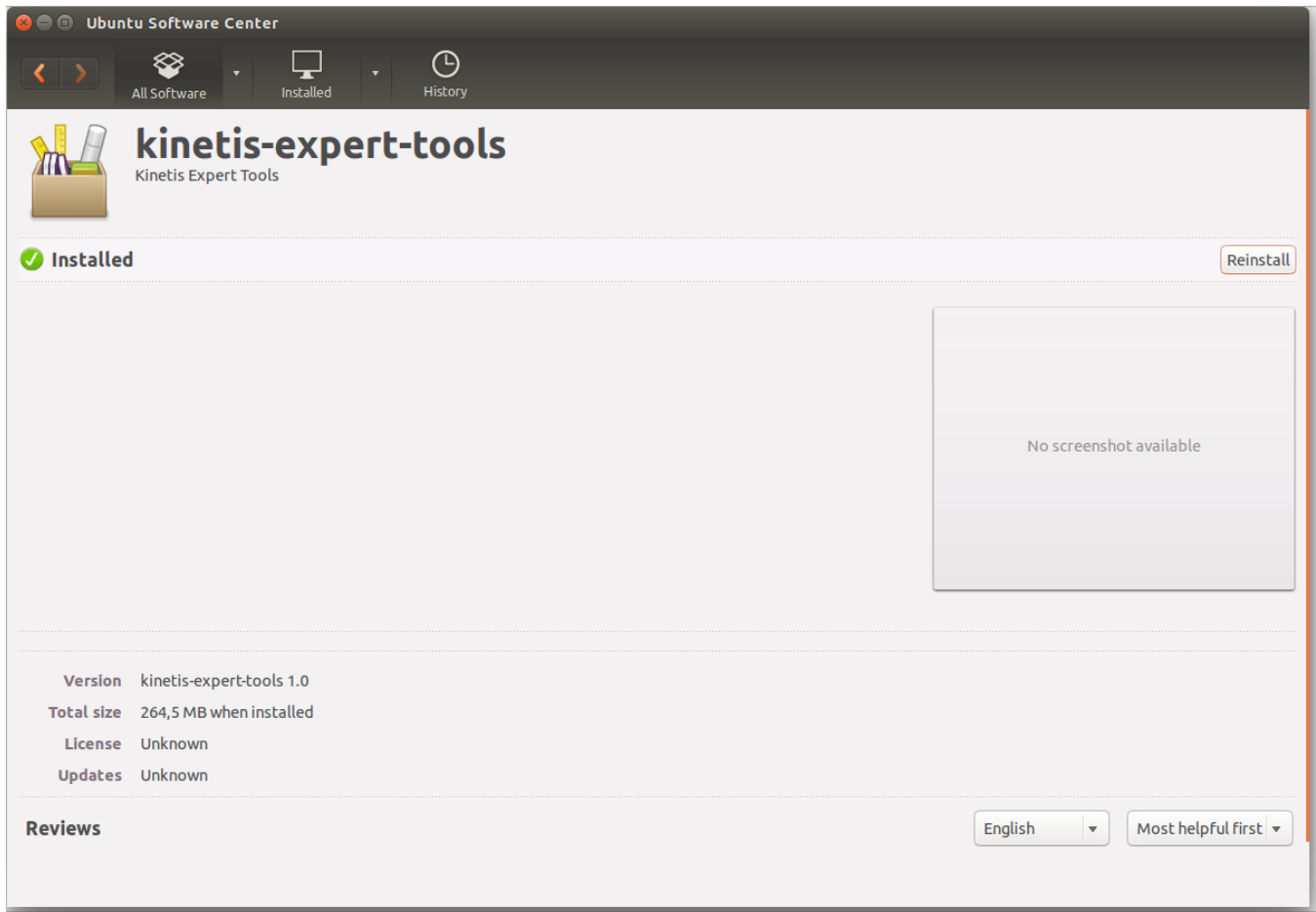


Figure 16. Installation successful

9 Installing the tool on Red Hat/CentOS

To install the Pins tool:

1. Click the `Kinetis_Expert_Configurations_Tools_<version>-<pkg_revision>.x86_64_<online/offline>.rpm`. The installer will prompt whether you want to install this file.

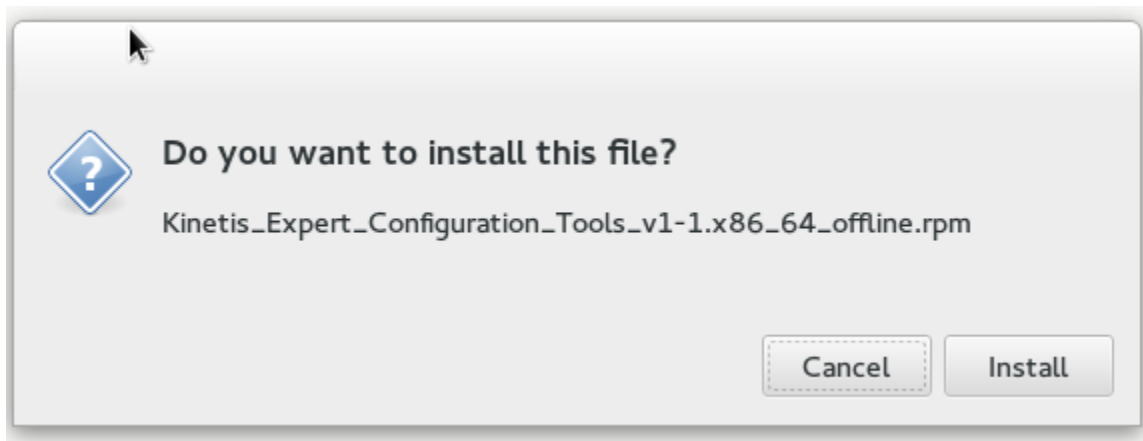


Figure 17. Initiate setup

2. Click **Install** to initiate the setup.
The **Authentication** dialog appears.
3. Provide your login credentials.
4. Click **Authenticate**.



Figure 18. Authenticate credentials

The Kinetis Expert Tools software is installed on your machine.

10 Installing on Linux using Command Line

Uninstalling the tool on Linux using Command Line

To install the tools on a Linux system, use the following package files:

- .rpm — Use .rpm to install software tools on systems using the RPM package manager. For example, Red Hat and CentOS.
- .deb — Use .deb to install software tools on systems that use the Debian package manager. For example, Ubuntu.

10.1 Installing with Red Hat package manager (RPM)

To install the tools on a Linux Standard Base (LSB)-compliant system, use the .rpm package file:

```
$ sudo rpm -Uvh <name>-<version>-<pkg_revision>.<architecture>.rpm
Preparing ... ##### [100%]
1: <name> ##### [100%]
```

This will install the tools to the default location (/opt/nxp/<default_path>).

10.2 Installing with Debian package manager (DEB)

To install the tools on Debian-like systems, including Ubuntu, use the .deb package file:

```
$ sudo dpkg -i <name>_<version>-<pkg_revision>_<architecture>.deb
(Reading database ... files and directories currently installed.)
Preparing to replace <name> <version> (using
<name>_<version>-<pkg_revision>_<architecture>.deb) ...
Unpacking replacement <name> ...
Setting up <name> (<version>) ...
```

This installs the tools to the default location (/opt/nxp/<default_path>).

11 Uninstalling the tool on Linux using Command Line

To uninstall the tools on a Linux system, use the following package files:

- .rpm — Use .rpm to install software tools on systems using the RPM package manager. For example, Red Hat and CentOS.
- .deb — Use .deb to install software tools on systems that use the Debian package manager. For example, Ubuntu.

11.1 Uninstalling with Red Hat package manager (RPM)

To uninstall the tools on a Linux Standard Base (LSB)-compliant system, use the .rpm package file:

```
$ sudo rpm -e <name>
```

11.2 Uninstalling with Debian package manager (DEB)

To uninstall the tools on Debian-like systems, including Ubuntu, use the .deb package file:

```
$ sudo dpkg -r <package-name>
(Reading database ... .. files and directories currently installed .)
Removing <name> (<version>)
Processing triggers for ...
Rebuilding /usr/share/applications/bamf-2.index...
```

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