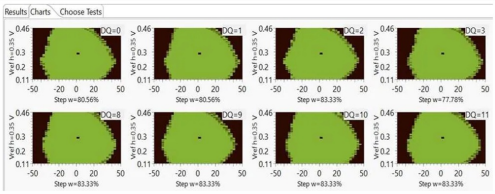
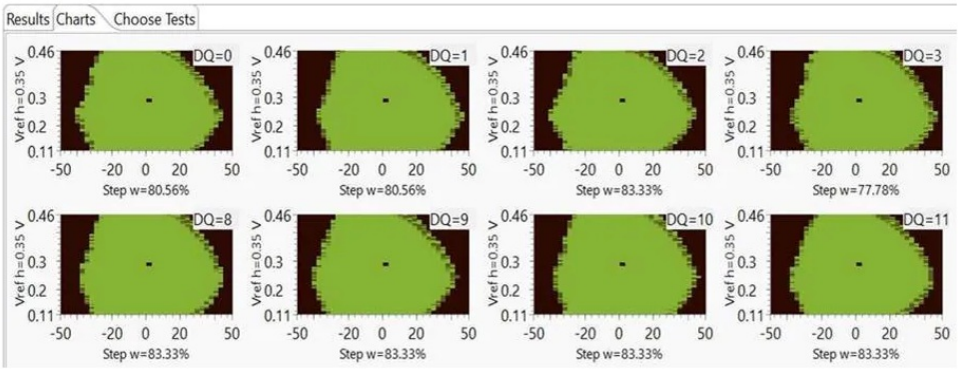


NXP IMXIUG Config Tools for i.MX User Guide

Contents

NXP IMXIUG Config Tools for i.MX



Introduction

- The Pins Tool for i.MX Processors is a tool that helps guide users from first evaluation to production software development. This document describes how to install the Pins Tool for i.MX Processors software.
- The Pins Tool for i.MX Processors is available offline (local) installed on the host machine for pin routing configuration, validation and code generation, including pin functional/electrical properties, power rails, and run-time functions.
- The tool is for general use and aims to help hardware designers, software engineers, embedded engineers, and field application engineers (FAEs).
- The Pins tool main features are:
    - Graphical views to create and change pins configuration
    - Creation of C source code and Device Tree snippet (DTS) for device initialization
    - Package with all pins and routable peripherals
    - Registers with initialization values

      NOTE

      If the Mac OS is set to Traditional Chinese, Pins Tool for i.MX Processors starts in English and not Chinese. This is intended.

Minimum System Requirements

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

- One of the following graphical operating systems:
    - Microsoft® Windows® 10 (64-bit)
    - Ubuntu 20.04 LTS

      NOTE

      Linux-hosted variants of tools are distributed on Linux as 64-bit binaries, which may not work on 32-bit systems.
        - Supported desktop environments: GNOME
    - Mac OS X (11.x)
- 4 GB RAM
- Display with resolution 1024 x 768
- Internet connection for dynamic download from processor database

Supported Processors

The tool goes with limited data and the supported devices. You can download the additional supported devices later. It requires internet connection to get the data for the supported processors.

Limitations

Refer to the Release Notes to see the limitations.

Installation

- An ‘Offline’ installer is available for Config Tools for i.MX.
- This installer file includes all the files required during the setup and does not need an internet connection for

installation to complete.

- You can use this method for slow network connections or for installing the software on multiple machines.
- The missing device information files are downloaded from the internet when loading a configuration into the tool.

Installing on Windows

- A setup binary is available for Microsoft Windows:
  - 64-bit version: Contains “x64” in the installer executable name.
- Running a non-matching executable for a given host system, for example 64-bit setup on a 32-bit system, will give an error message dialog.
- To install Config Tools for i.MX as a desktop application on a local host:
  1. Run the Config_Tools_for_i.MX_<version>_<architecture>.exe. The Config Tools for i.MX Setup wizard will initiate.
  2. Select the language in which you want to run the installer.

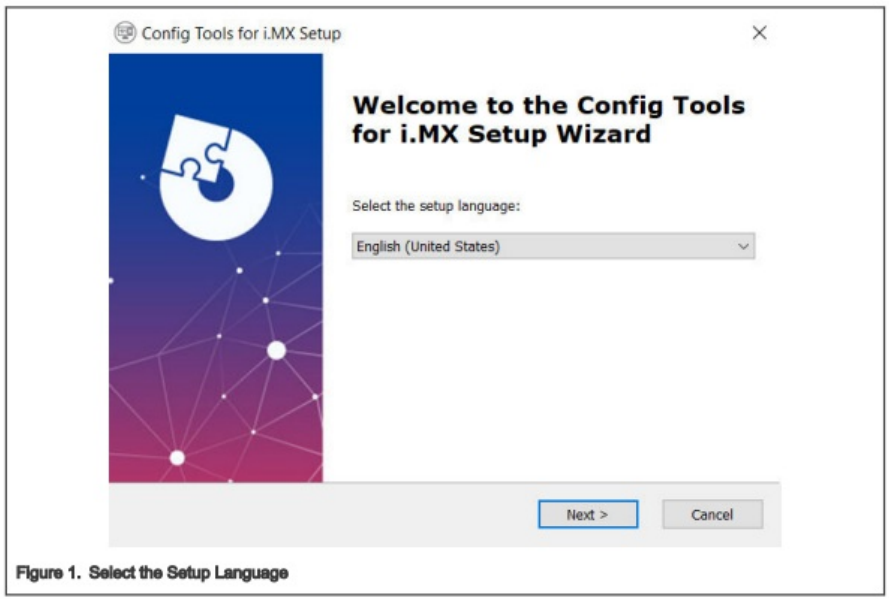


Figure 1. Select the Setup Language

  3. Click Next.
  4. On the next page, click Next.
  5. On the End-User License Agreement page of the wizard, select I accept the terms of the License Agreement.

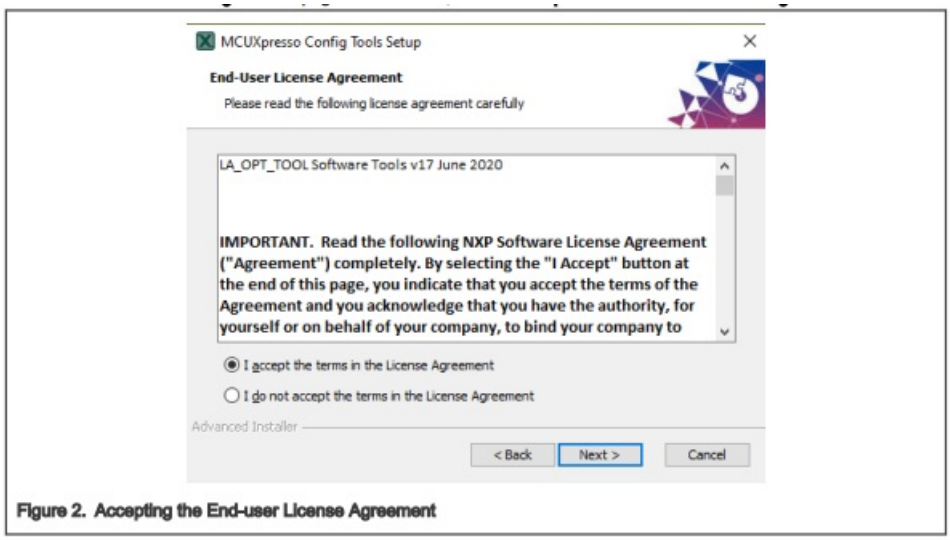


Figure 2. Accepting the End-user License Agreement

  6. Click Next.

7. On the Select Installation Folder page of the wizard, select Browse and navigate to a destination folder you want the Config Tools for i.MX to install to.

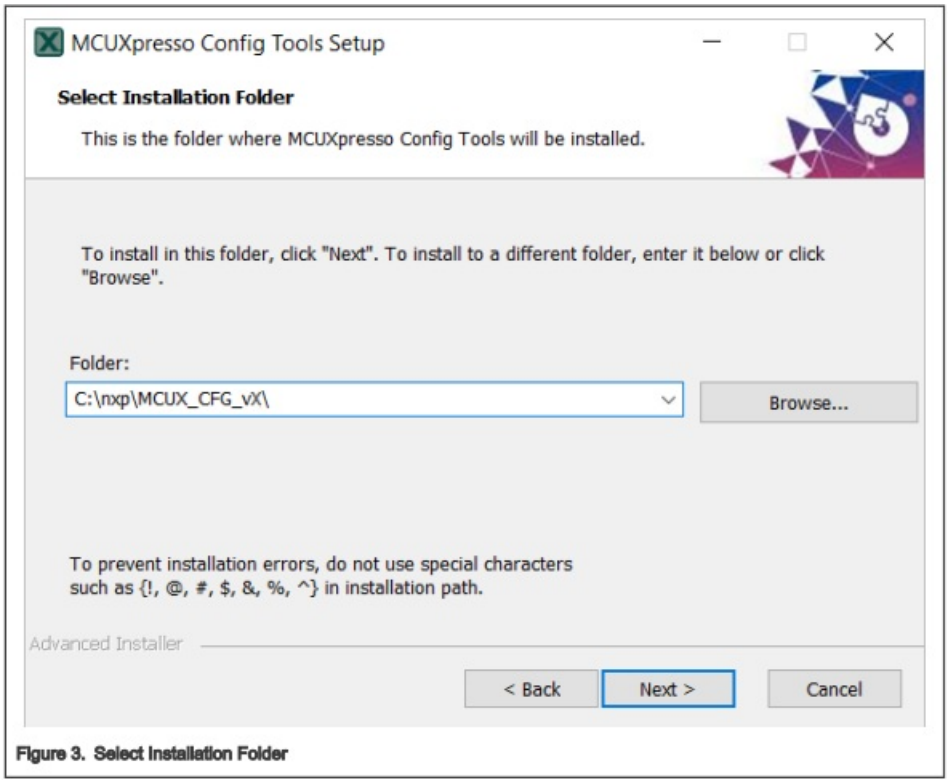


Figure 3. Select Installation Folder

8. Click Next.
9. On the Configure Shortcuts page of the wizard, select shortcuts you want to be created for Config Tools for i.MX.

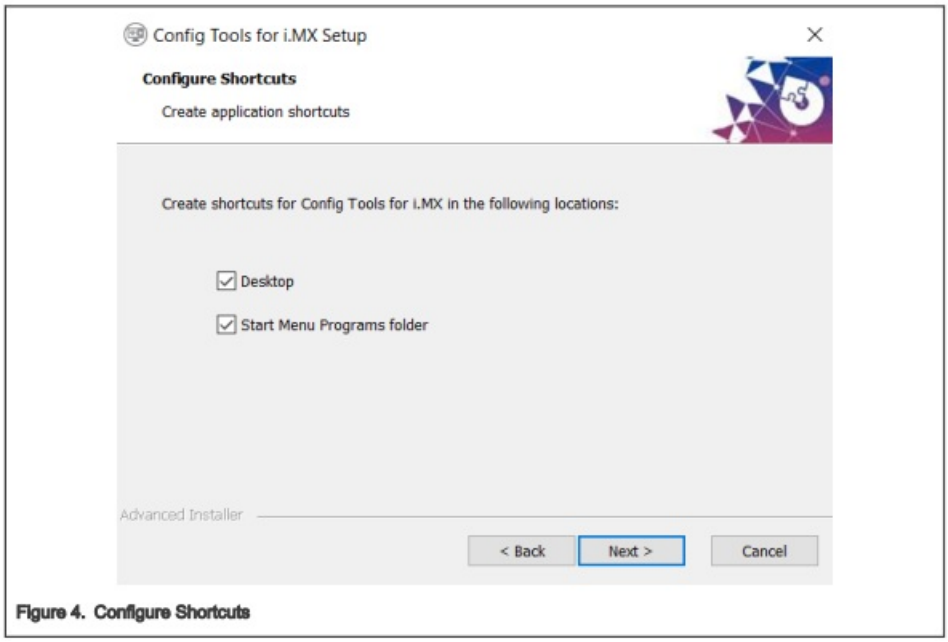


Figure 4. Configure Shortcuts

10. Click Next.
11. On the Ready to Install page of the wizard, select Install.

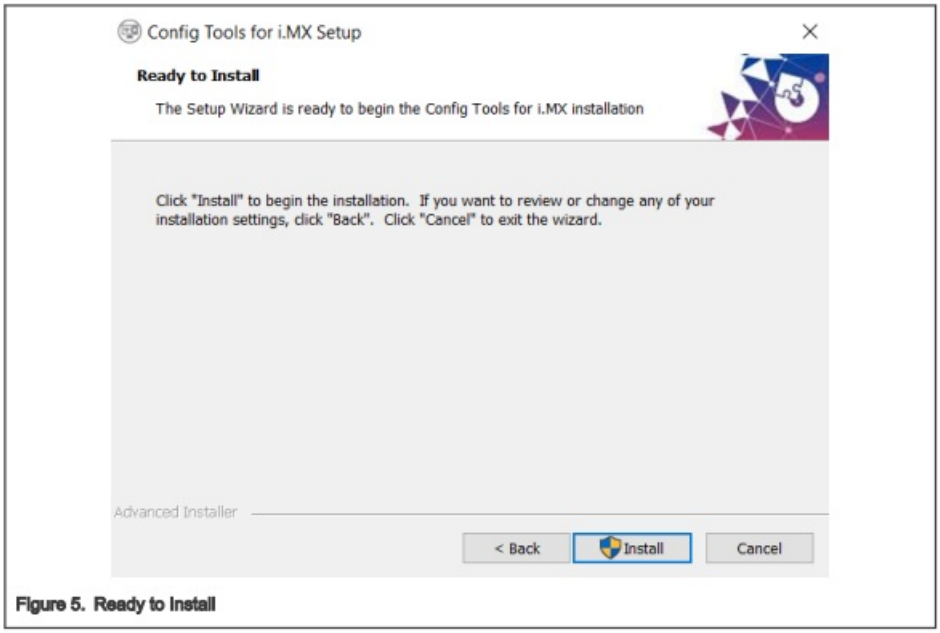


Figure 5. Ready to Install

The setup will begin 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.

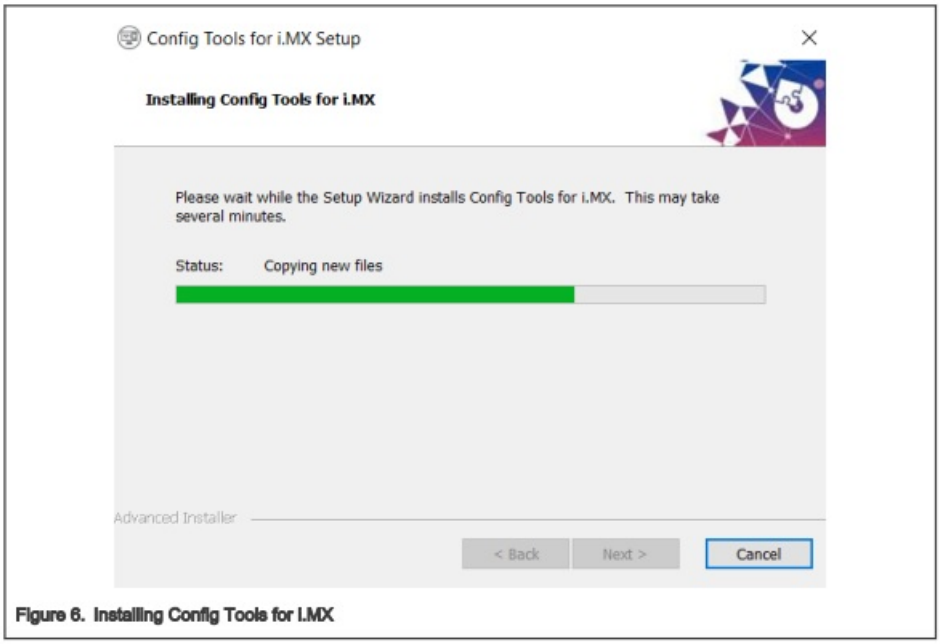


Figure 6. Installing Config Tools for i.MX

12. Click Finish to close and exit the setup wizard.

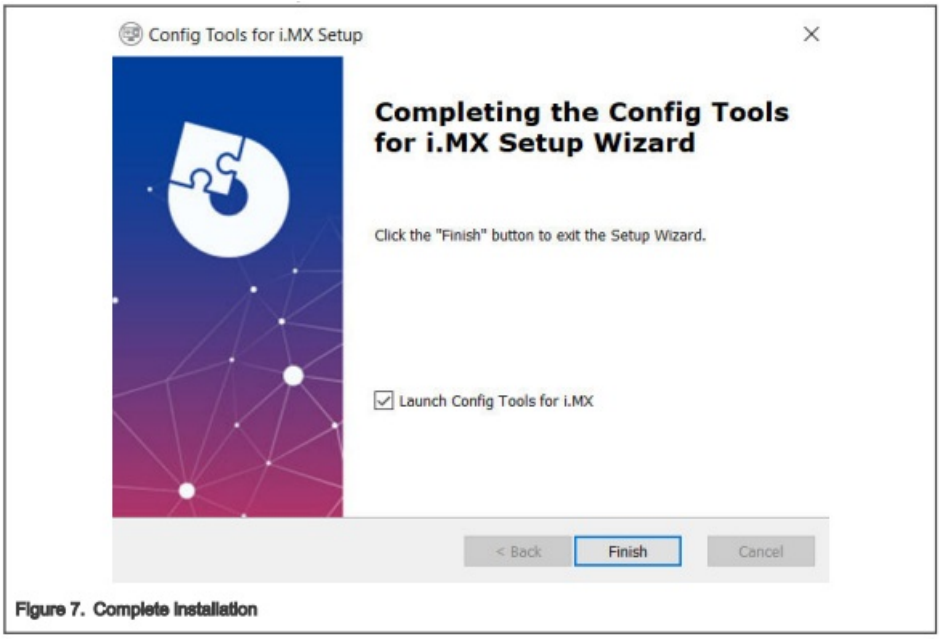


Figure 7. Complete installation

13. To start using the Config Tools for i.MX, 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>.

Installing on Mac

To install Config Tools for i.MX as a desktop application on a local host, do the following:

1. Double-click the Config_Tools_for_i.MX_<version>_<architecture>.pkg to start the Install Config Tools for i.MX setup

   NOTE

   When you try to open the MacOS installer you may receive and error. To avoid it, manually select the option Mac App Store and identified developers in the Security & Privacy menu.

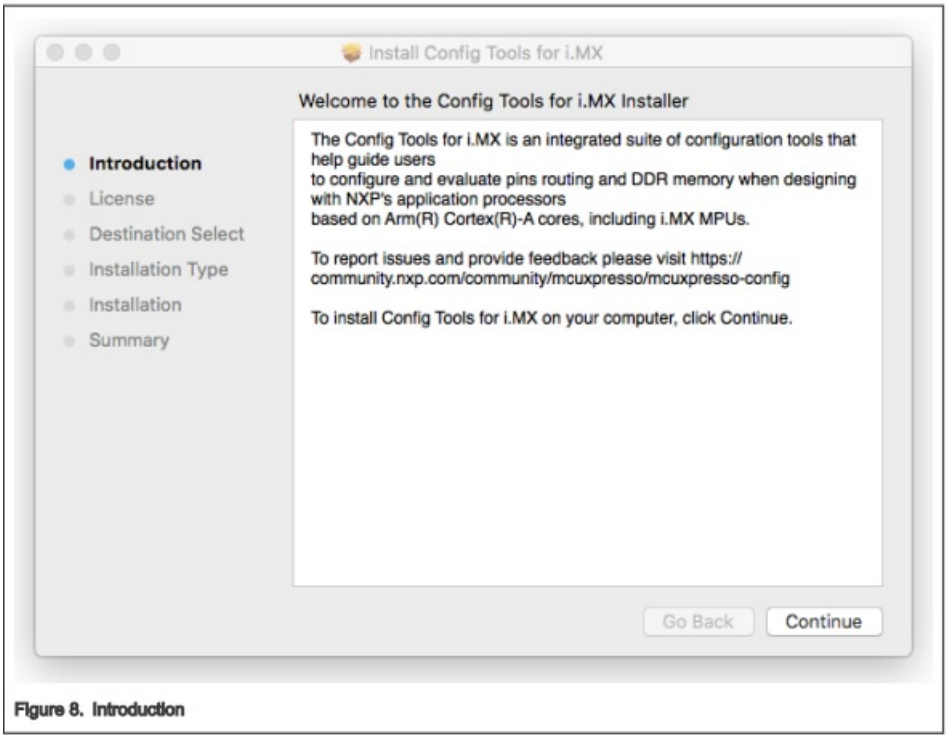


Figure 8. Introduction

2. On the Introduction page, click Continue.
3. On the Software License Agreement page, click Continue.

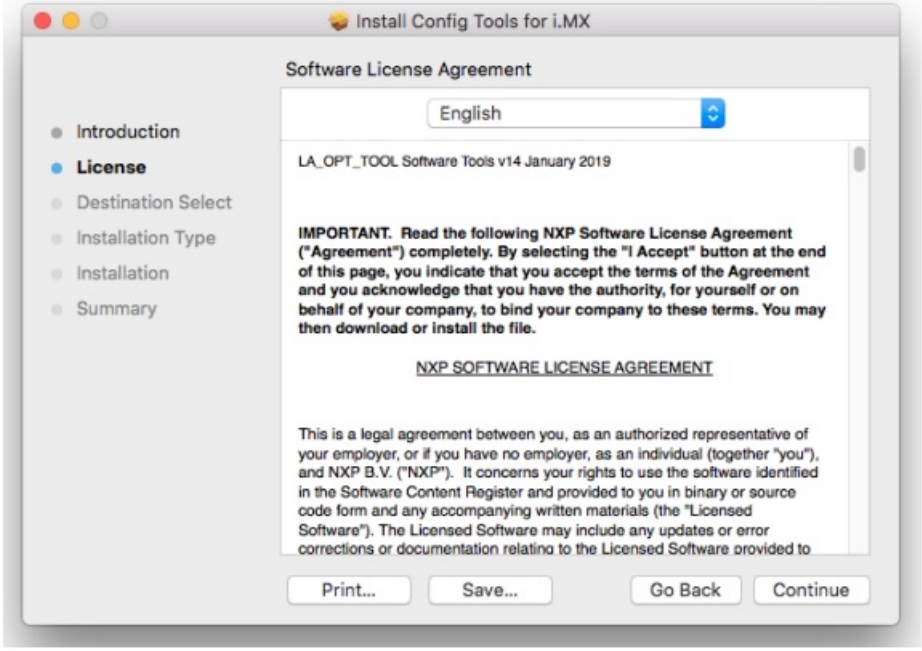


Figure 9. Software License Agreement

4. Confirm that you have read and agreed to the terms of the Software License Agreement by clicking Agree.

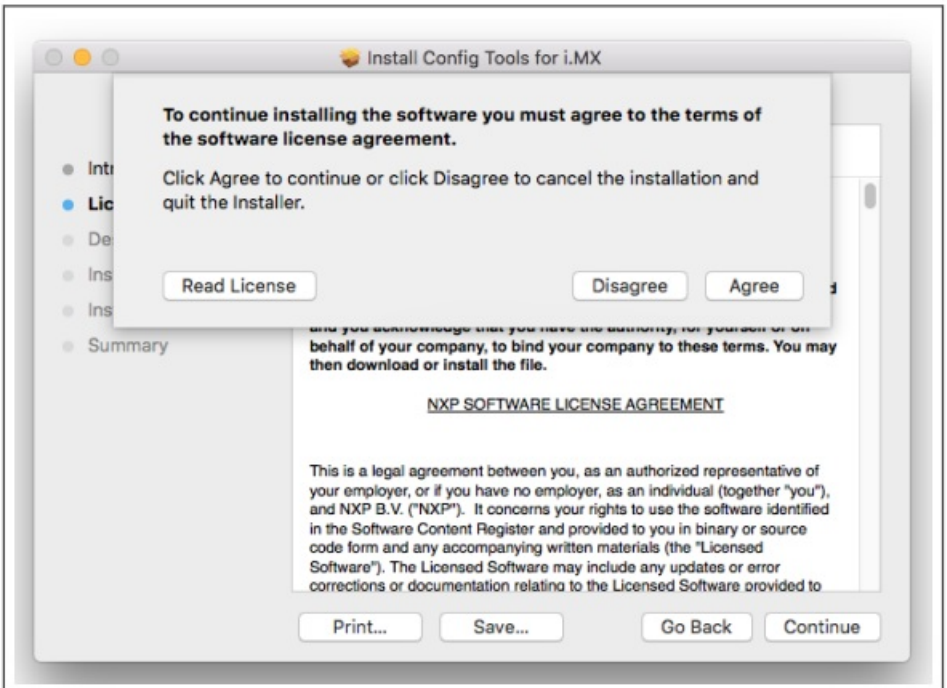


Figure 10. Software License Agreement

5. On the Destination Select page, click the green arrow to select the installation folder.

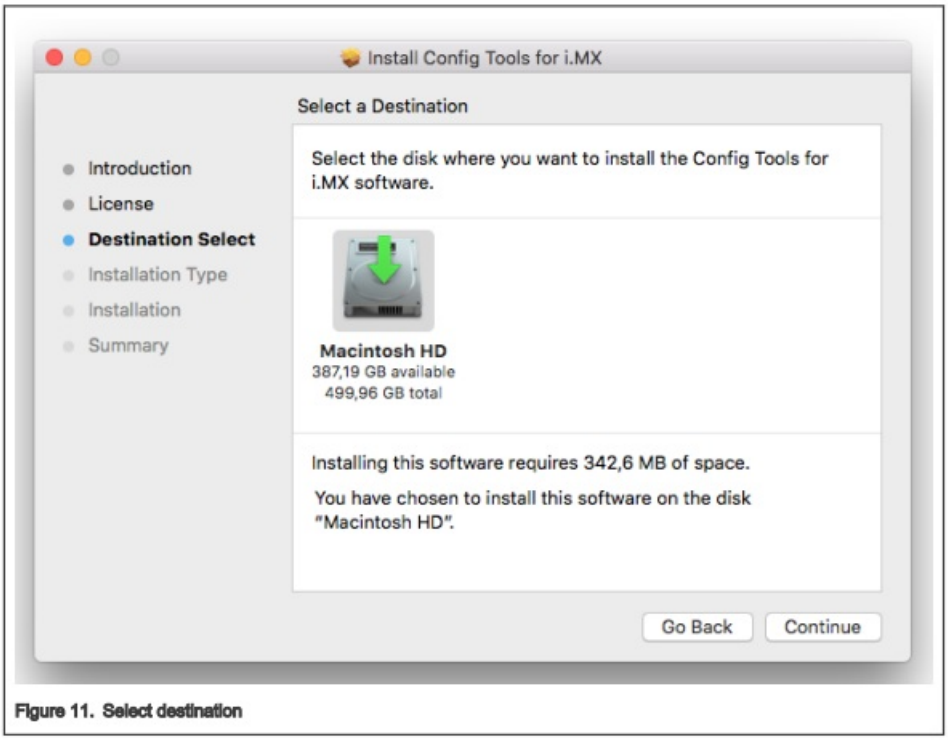


Figure 11. Select destination

6. Click Continue.
7. On the Installation Type page, click Install.

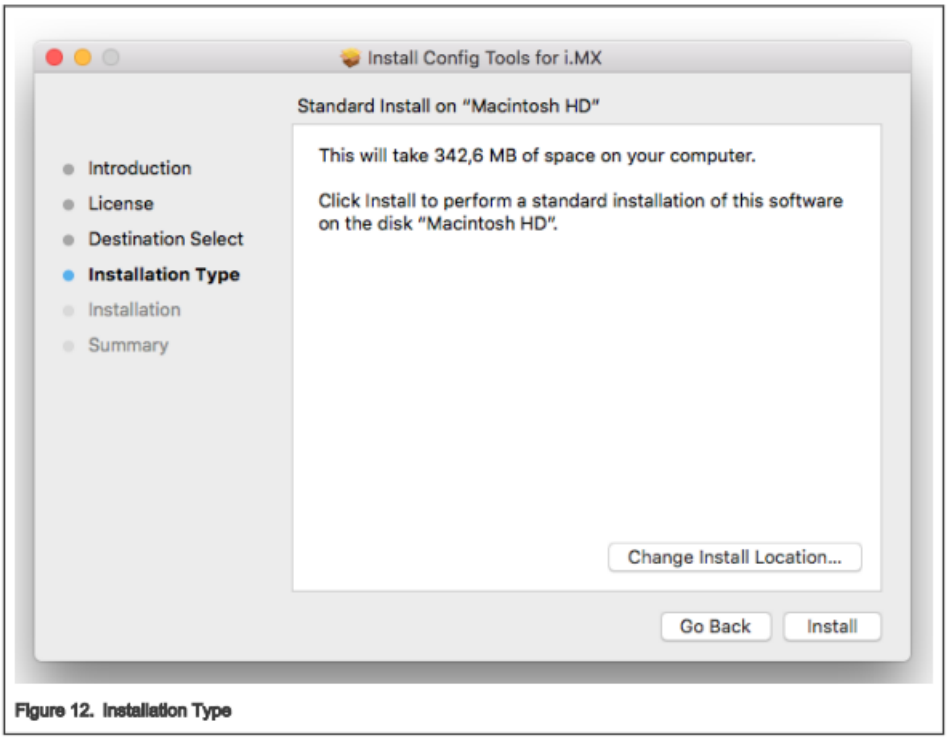


Figure 12. Installation Type

8. Type in your login credentials to continue with the installation.
9. Click Install Software.

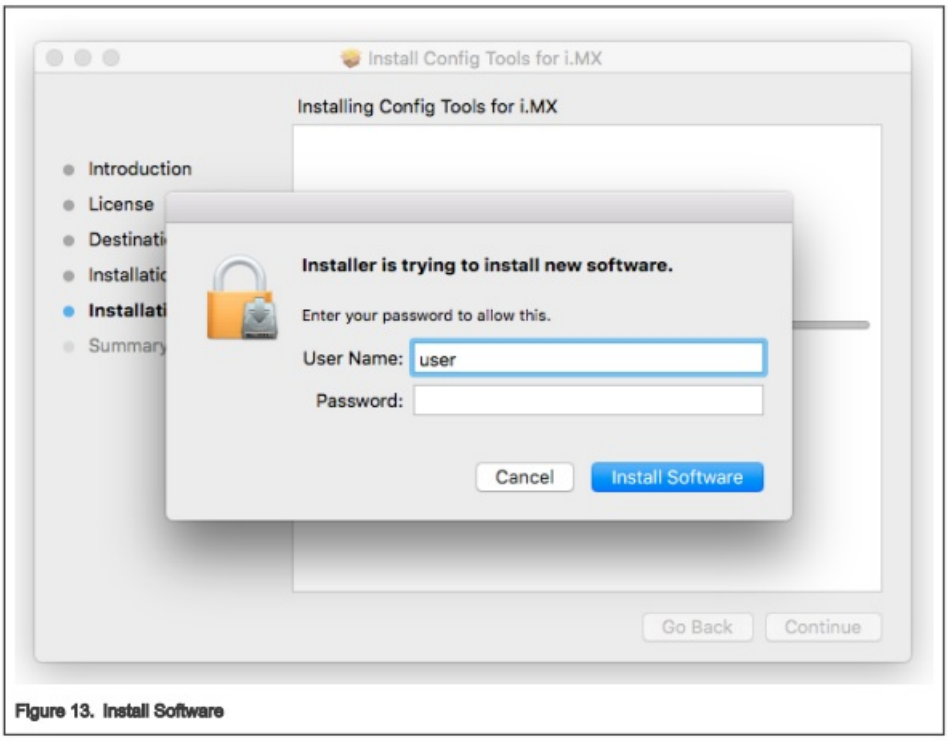


Figure 13. Install Software

10. **Click Continue.**

    Unless errors are reported, the Summary page will confirm that the installation was completed successfully.

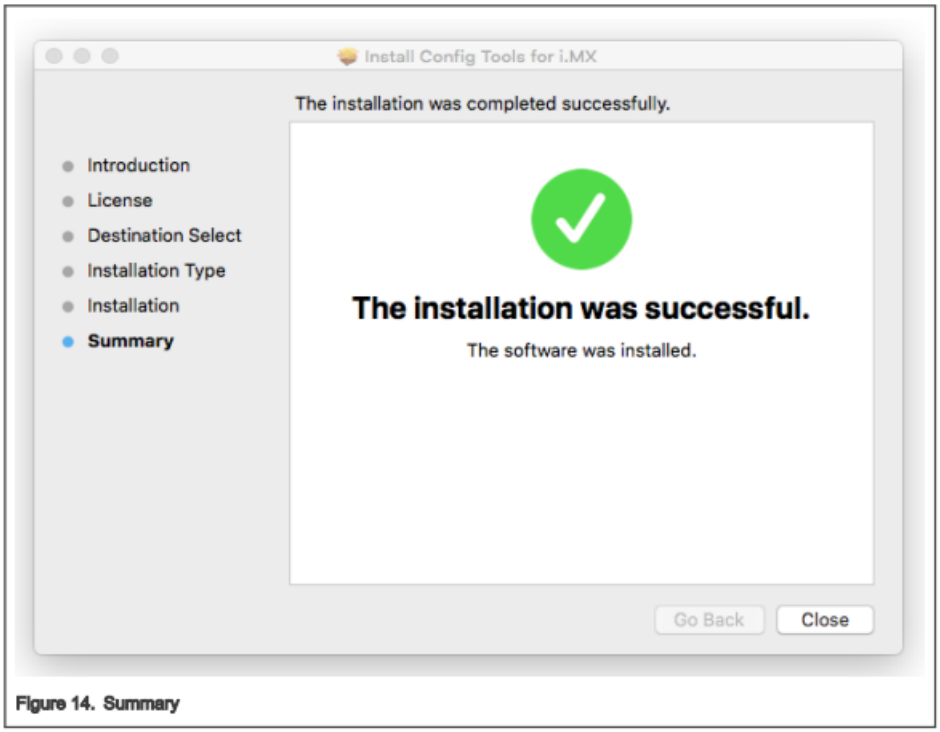


Figure 14. Summary

11. Click Close to exit the installation wizard.

Installing on Linux

1. **Installation Prerequisites**

   There are two possible methods to satisfy installation prerequisites:

   - **Method 1:**
     1. Open the terminal.
     2. Execute the commands:

```
sudo apt-get update
sudo apt-get upgrade
sudo apt-get install -f
sudo dpkg --configure -a
```

- **Method 2:**

  Install directly from terminal/command-line, described in Installing with Debian package manager (DEB).

2. **Installing Using Command Line**

   To install Config Tools for i.MX on a Linux system, use the following package files: .

   - .DEB.BIN — Use config-tools-for-imx-<version>_<architecture>.deb.bin to install software tools on systems that use the Debian package manager, such as Ubuntu.

     1. **Installing uisng 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>).

3. **Uninstalling Using Command Line**

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

   - .DEB.BIN — Use .DEB.BIN to install software tools on systems that use the Debian package manager. For example, Ubuntu.

     1. **Uninstalling using 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...
```

Revision history

Table 1. Revision history

Revision number	Date	Substantive changes
0	23 June 2021	Initial release
1	22 December 2021	Screenshots are updated

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Documents / Resources

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