

Jini Intelligent Computing Tools Installation Guide

1. Vivado/Vitis HLS Software Installation

【施作環境為Windows】

首先至 Xilinx 官方下載頁面。

鏈結網址：<https://www.xilinx.com/support/download.html>

欲下載開發套件前必須先註冊一個使用者帳號，並 email 回覆啟動使用者帳號，之後要登入帳號才能下載。

教學參考鏈結：<https://isite.tw/2015/09/30/13717>



The image shows the AMD login page in Chinese (zh-TW). At the top is the AMD logo. Below it is the title "登入 (zh-TW)". There are two input fields: "電子郵件地址" (Email Address) and "密碼" (Password). Below these is a "登入" (Login) button. Further down is a "創建密碼" (Create Password) button. At the bottom, there is a link "忘記/重設密碼?" (Forgot/Reset Password?). At the very bottom, there are links for "Help", "隱私權" (Privacy Policy), and "Terms of Use".

1.1. Download Xilinx Vivado/Vitis HLS 2021.2

【施作環境為Windows】

本實驗施作均以 2022.1 版本，請選擇下載對應版本。安裝 Vivado Design Suite 時選擇 Xilinx Unified Installer 2022.1: Windows Self Extracting Web Installer。

Support / Downloads

Downloads

[Log4j Vulnerability Patch](#)[Licensing Help](#)[NIC Software & Drivers](#)

[Vivado \(HW Developer\)](#)[Vitis \(SW Developer\)](#)[Vitis Embedded Platforms](#)[Alveo Packages](#)[PetaLinux](#)[Device Models](#)[Documentation Navigator](#)

Version

[2022.1](#)[2021.2](#)[2021.1](#)[Vivado Archive](#)[ISE Archive](#)[CAE Vendor Libraries Archive](#)

Vivado ML Edition - 2022.1 Full Product Installation

Important Information

Vivado ML 2022.1 is now available for download:


- 5-8% Versal QoR improvement
- Introducing ML-based resource estimation
- ML Strategy Runs now available for Versal devices
- Devices enabled in the Enterprise & Standard Editions of Vivado ML
 - Artix® UltraScale+™ devices: XCAU15P and XCAU10P
 - Additional Versal® Prime, Premium, AI Core, and AI Edge series devices

We **strongly recommend** to use the web installers as it reduces download time and saves significant disk space.

Please see [Installer Information](#) for details.

Note:

- Download verification is only supported with Google Chrome and Microsoft Edge web browsers.
- Beginning 2021.1 release we are offering only 2 Editions for Vivado ML. Please go to product page for more details.
- Vivado ML 2021.1 and later versions require upgrading your license server tools to the Flex 11.17.2.0 versions.

 Xilinx Unified Installer 2022.1: Windows Self Extracting Web Installer (EXE - 205.92 MB)

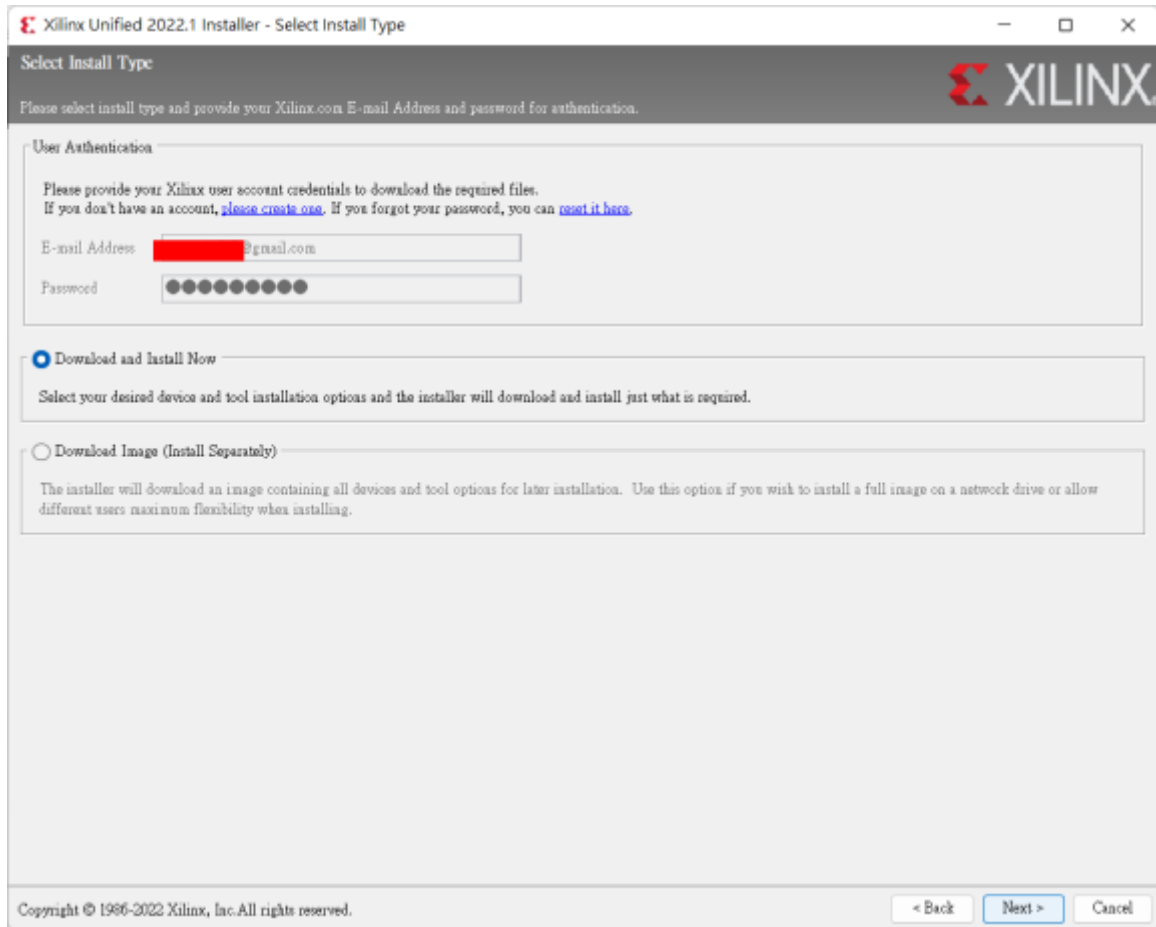
MD5 SUM Value : 76a6221ea8eed8c635c654cc100a1cae

Download Verification ⓘ

[Digests](#)[Signature](#)[Public Key](#)

| | |
|-------------------|--|
| Download Includes | Vivado ML Edition |
| Download Type | Full Product Installation |
| Last Updated | Apr 26, 2022 |
| Answers | 2022.x - Vivado Known Issues |
| Documentation | Release Notes OS Support Update What's New in Vivado |
| Support Forums | Installation and Licensing |

登入後在, 在 Select Product 請選擇 “Vitis” 下載完整的 design tools。



Xilinx Unified 2022.1 Installer - Select Install Type

Select Install Type

Please select install type and provide your Xilinx.com E-mail Address and password for authentication.

User Authentication

Please provide your Xilinx user account credentials to download the required files.
If you don't have an account, [please create one](#). If you forgot your password, you can [reset it here](#).

E-mail Address: [redacted]@gmail.com

Password: [redacted]

☒ Download and Install Now

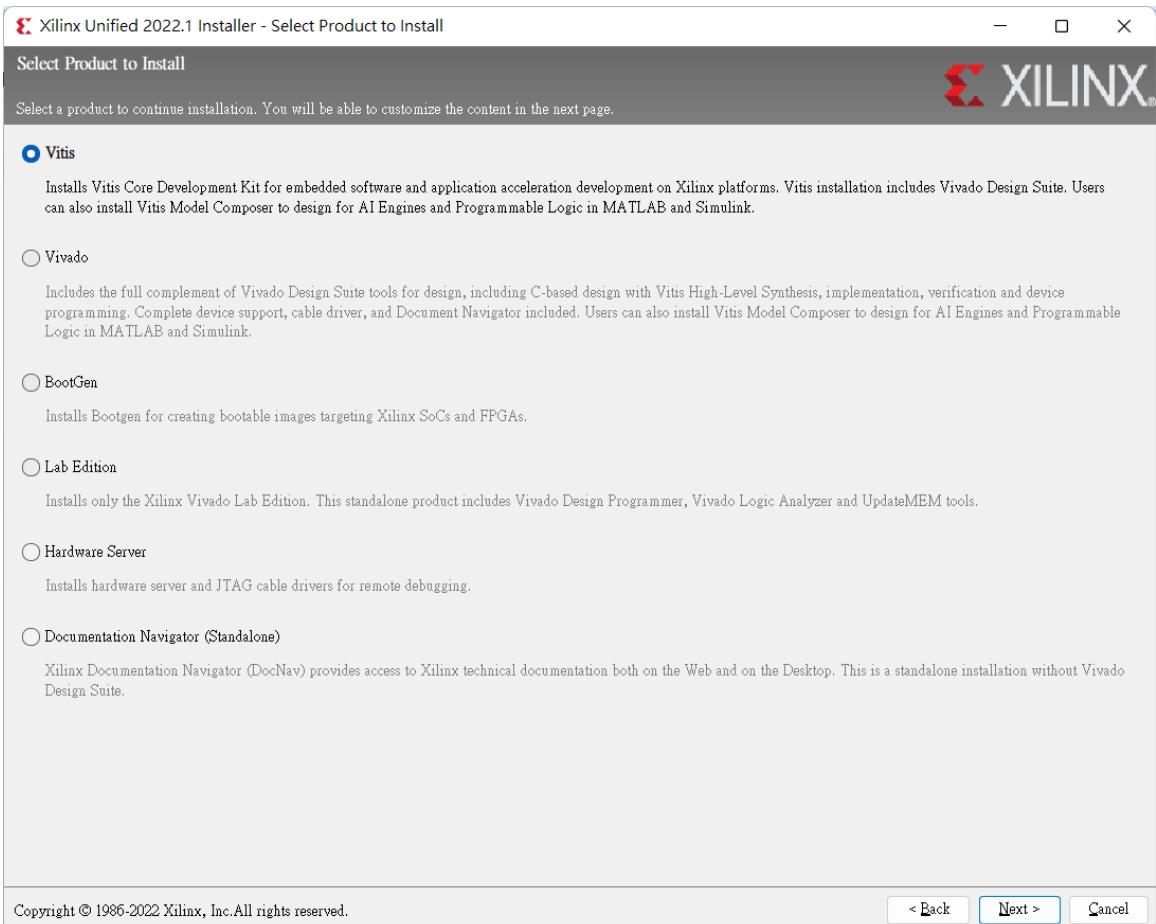
Select your desired device and tool installation options and the installer will download and install just what is required.

☐ Download Image (Install Separately)

The installer will download an image containing all devices and tool options for later installation. Use this option if you wish to install a full image on a network drive or allow different users maximum flexibility when installing.

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< Back Next > Cancel



Xilinx Unified 2022.1 Installer - Select Product to Install

Select Product to Install

Select a product to continue installation. You will be able to customize the content in the next page.

☒ Vitis

Installs Vitis Core Development Kit for embedded software and application acceleration development on Xilinx platforms. Vitis installation includes Vivado Design Suite. Users can also install Vitis Model Composer to design for AI Engines and Programmable Logic in MATLAB and Simulink.

☐ Vivado

Includes the full complement of Vivado Design Suite tools for design, including C-based design with Vitis High-Level Synthesis, implementation, verification and device programming. Complete device support, cable driver, and Document Navigator included. Users can also install Vitis Model Composer to design for AI Engines and Programmable Logic in MATLAB and Simulink.

☐ BootGen

Installs Bootgen for creating bootable images targeting Xilinx SoCs and FPGAs.

☐ Lab Edition

Installs only the Xilinx Vivado Lab Edition. This standalone product includes Vivado Design Programmer, Vivado Logic Analyzer and UpdateMEM tools.

☐ Hardware Server

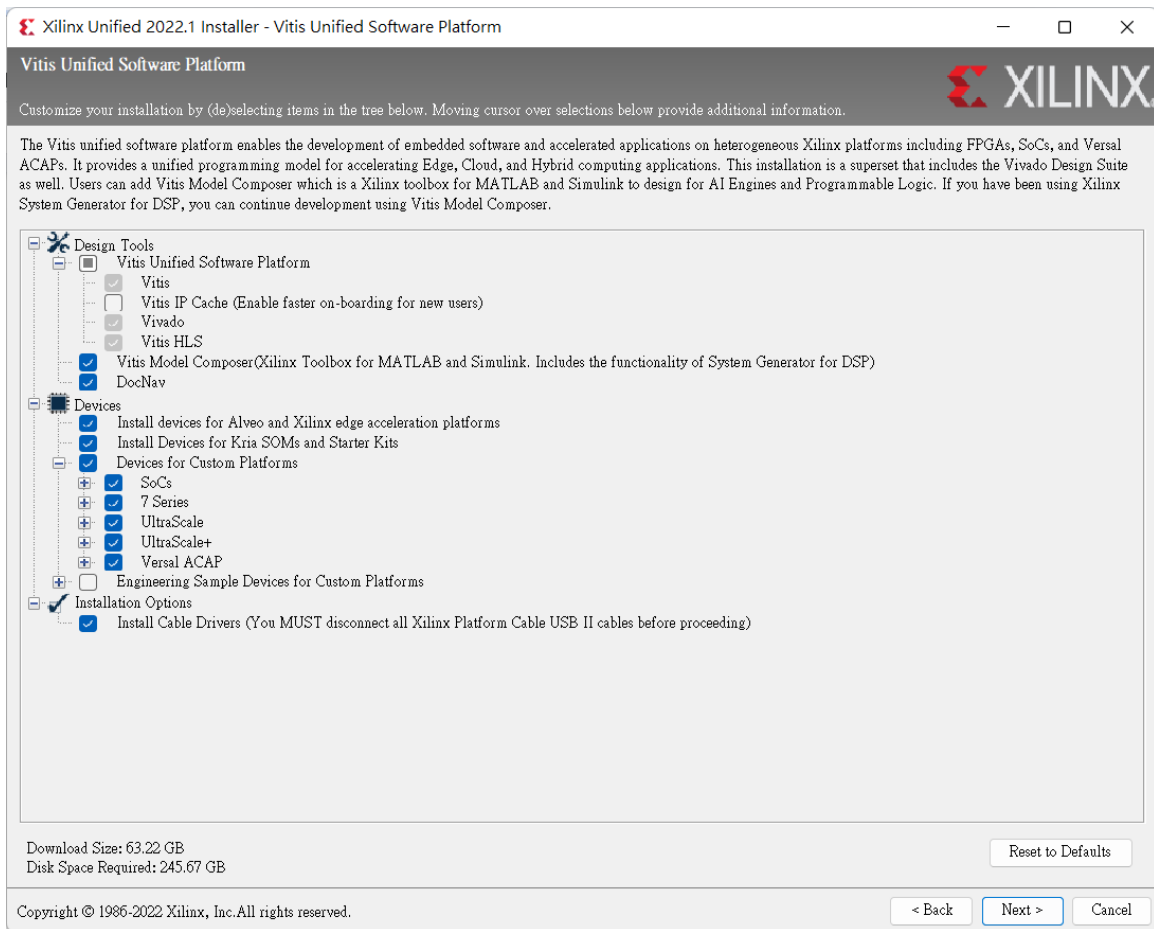
Installs hardware server and JTAG cable drivers for remote debugging.

☐ Documentation Navigator (Standalone)

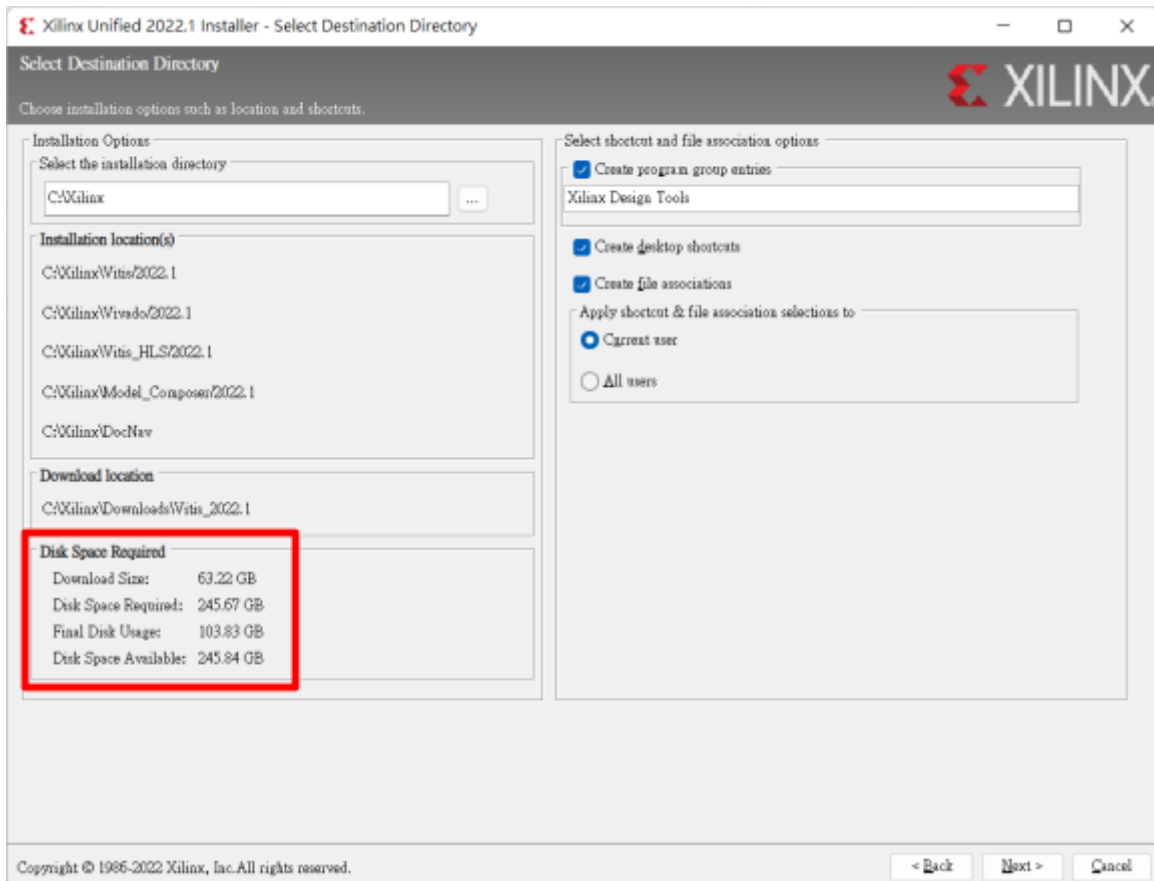
Xilinx Documentation Navigator (DocNav) provides access to Xilinx technical documentation both on the Web and on the Desktop. This is a standalone installation without Vivado Design Suite.

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< Back Next > Cancel

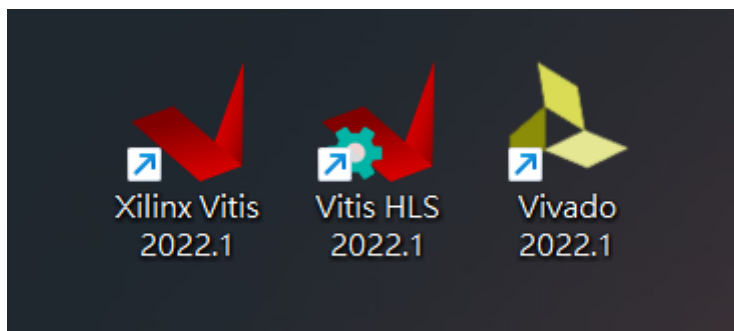


注意安裝過程中會需要約 240 GB 的硬碟空間。



(通常會需安裝數小時，需在網路穩定的地方下載)

安裝完成後會在桌面看到 Vivado/Vitis HLS 的圖示。

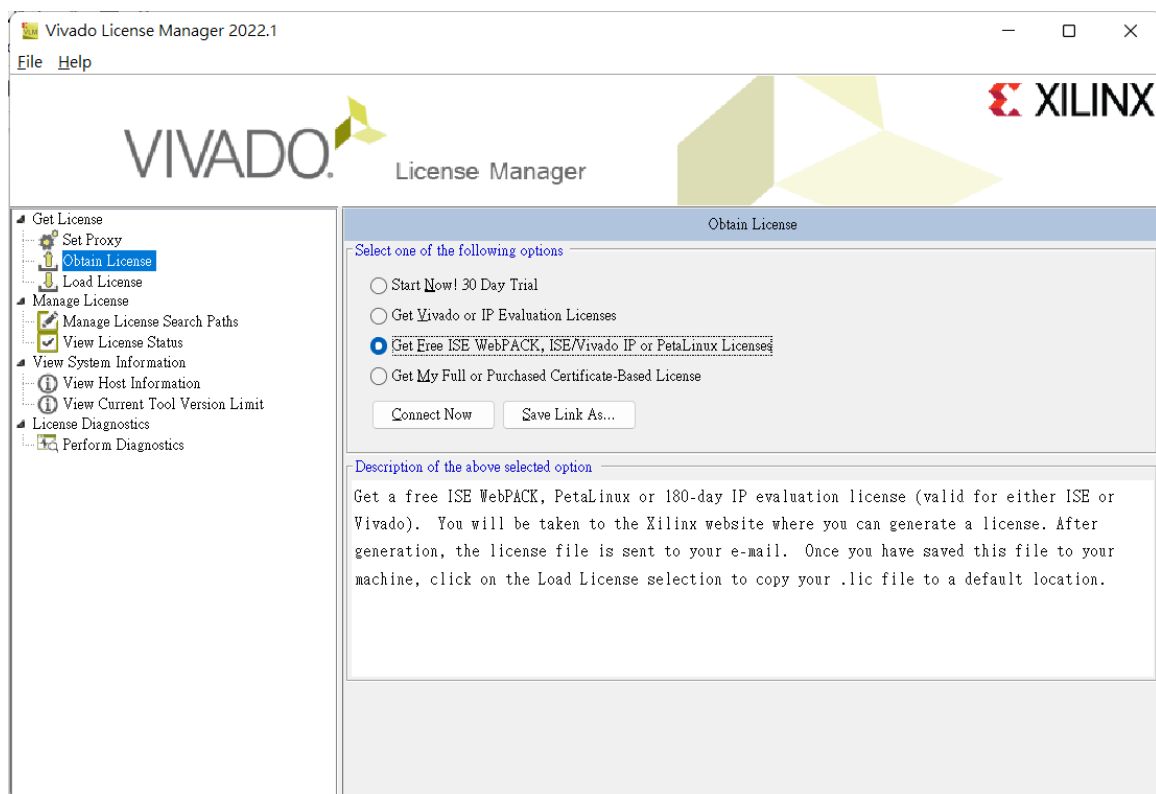


1.2. Apply WebPack License

【施作環境為Windows】


在開始運行 Vivado/Vitis HLS 必須先取得 license 授權, WebPack License 可免費取得授權。在 Windows 系統 “開始” 啟動 Xilinx Design Tools 中的 Manage Xilinx Licenses 2022.1。






按下 Connect Now 鍵後會跳到產生 license 的網頁，選擇 WebPack License 並開始產生。

[Create New Licenses](#)
[Manage Licenses](#)



Have a Voucher to Redeem? [?](#)
XXXX-XXXXXX-XXXX-XXXXXX
enter voucher code [Redeem Now](#)



Evaluation and No Charge Cores [?](#)
Search the **Evaluation** and **No Charge** cores catalog and add specific cores to table below [Search Now](#)

Create a New License File

Create a new license file by making your product selections from the table below. [?](#)

Certificate Based Licenses

| Product | Type | License | Available Seats | Status | Subscription End Date |
|--|--------------------------|---------|-----------------|---------|-----------------------|
| <input type="checkbox"/> ISE Embedded Edition License | Certificate - No Charge | Node | 1/1 | Current | None |
| <input type="checkbox"/> Model Composer : 90-day Evaluation License | Certificate - Evaluation | Node | 1/1 | Current | 90 days |
| <input type="checkbox"/> Vivado Design Suite: 30-Day Evaluation License | Certificate - Evaluation | Node | 1/1 | Current | 30 days |
| <input type="checkbox"/> SDSoC Environment, 60 Day Evaluation License | Certificate - Evaluation | Node | 1/1 | Current | 60 days |
| <input type="checkbox"/> SDAccel OpenCL Development Environment: 30 Day Node Locked Evaluati... | Certificate - Evaluation | Node | 1/1 | Current | 30 days |
| <input type="checkbox"/> Vivado Design Suite: HL WebPACK 2015 and Earlier License | Certificate - No Charge | Node | 1/1 | Current | None |
| <input type="checkbox"/> Xilinx MicroBlaze/All Programmable SoC Software Development Kit -- Stand... | Certificate - No Charge | Node | 1/1 | Current | None |
| <input type="checkbox"/> PetaLinux Tools License | Certificate - Evaluation | Node | 1/1 | Current | 365 days |
| <input type="checkbox"/> Vivado HLS Evaluation License | Certificate - Evaluation | Node | 1/1 | Current | 30 days |

[Generate Node-Locked License](#)

Generate Node License

*Fields marked with an asterisk * are required.*

1 PRODUCT SELECTION

| Product Selections * | Product | Type | Available Seats | Subscription End Date | Requested Seats | Borrowed Seats |
|-------------------------------------|------------------------|-----------|-----------------|-----------------------|-----------------|----------------|
| <input checked="" type="checkbox"/> | Vivado Design Suite... | No Charge | 1/1 | None | 1 | |

2 SYSTEM INFORMATION

| | |
|-----------|------|
| License | Node |
| Host ID * | Any |

3 COMMENTS

Comments ?

Next Cancel

Generate Node License

4 REVIEW LICENSE REQUEST

Product Selections

| Product | Subscription End Date | Available Seats | Requested Seats |
|---|-----------------------|-----------------|-----------------|
| Vivado Design Suite: HL WebPACK 2015 and Ear... | | 1/1 | 1 |

System Information

| | |
|---------|------|
| License | Node |
| Host ID | ANY |

Note: WebTalk is always enabled for WebPACK users. WebTalk ignores user and install preference when a bitstream is generated using the WebPACK license. If a design is using a device contained in WebPACK and a WebPACK license is available, the WebPACK license will always be used. To get additional information on WebTalk, go to www.xilinx.com/webtalk.

Previous Next Cancel

產生完成後，可選擇將license 下載到電腦或者郵寄到電子郵件信箱，如下圖左下角圖示。

Create New Licenses Manage Licenses

| Host Name | Host Type | Host ID | License Type | OS | Created By | Created Date |
|-----------|-----------|---------|--------------|----|--------------|--------------|
| * | * | * | Node | * | DOUGLAS SHAW | 05 AUG 2020 |
| * | * | * | Node | * | DOUGLAS SHAW | 06 JUL 2020 |

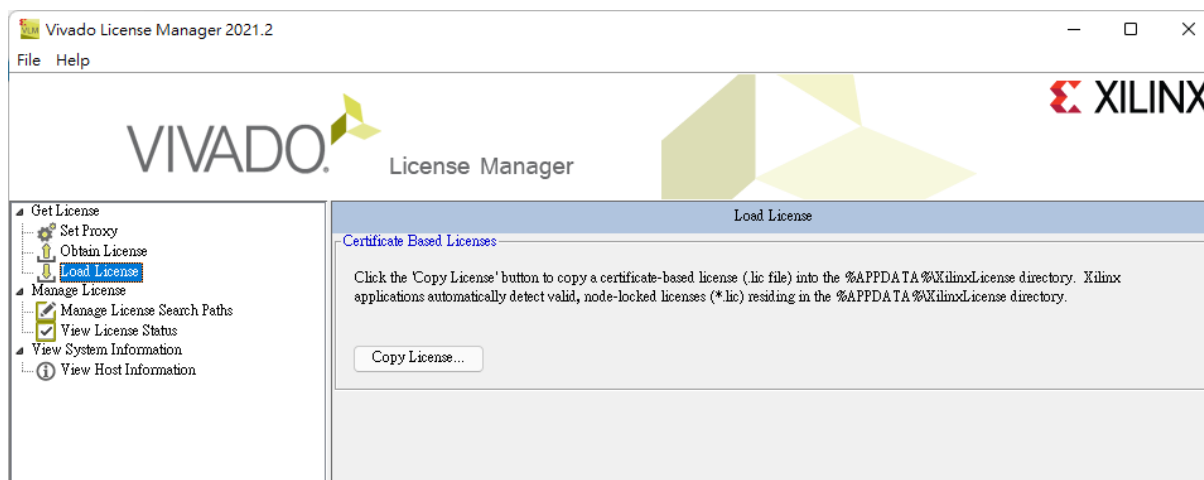
Page 1 of 1 | Displaying 1 - 2 of 2

Comments

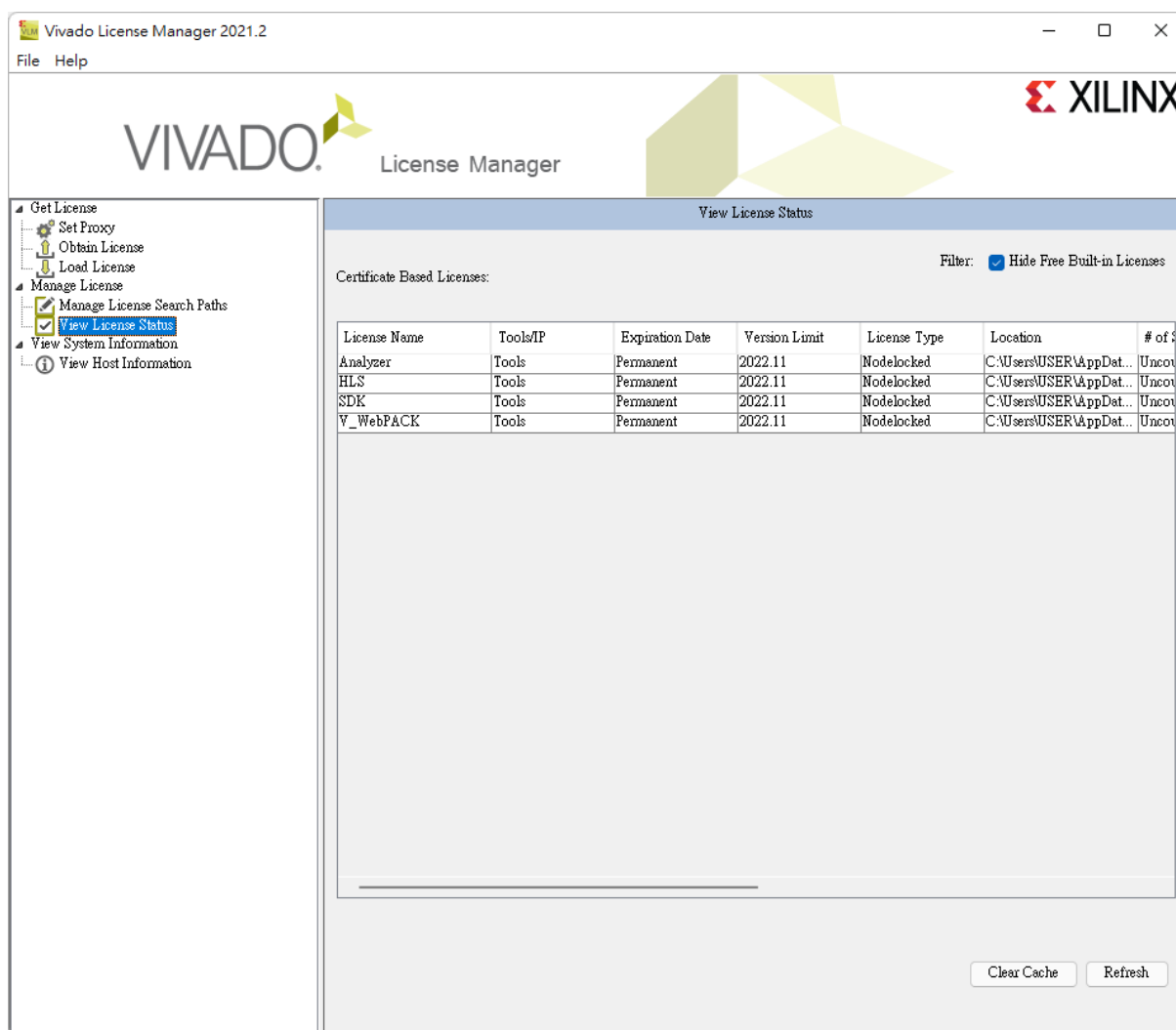
| Product | Type | Status | Subscription End Date | Activated Seats |
|---|-------------------------|---------|-----------------------|-----------------|
| Vivado Design Suite: HL WebPACK 2015 and Earlier Lic... | Certificate - No Charge | Current | None | 1 |

Modify License

回到 Manage Xilinx Licenses 2021.2 將獲取到的 xxx.lic 由load licence處匯入。



再到view licenece status檢查是否完成授權狀態。



2. SSH Software Installation

【施作環境為Windows】

下載並安裝 MobaXterm 應用程式。

下載網址：<https://mobaxterm.mobatek.net/download.html>