

INTEL PUBLIC

HOW TO DEPLOY INTEL SoC WATCH

VERSION 2.0

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DRAFTED BY

CHUNBO HUA

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Introduction

Here we want to show steps for external customers to set up Intel SoC Watch software without CNDA. Generally, we provide two kinds of packages for external developers on Intel platforms:

- ❖ CNDA packages of SoC Watch are included in the Intel oneAPI System Bring-up Toolkit ([Intel® System Bring-up Toolkit, Powered by oneAPI](#)). It is available as a standalone download package. The CNDA version has restricted content that can be shared with external customers who have an appropriate NDA agreement with Intel in place.
- ❖ External packages of SoC Watch are contained within Intel VTune Profiler, which is included in the Intel oneAPI Base Toolkit (<https://www.intel.com/content/www/us/en/developer/tools/oneapi/base-toolkit.html>). There is no standalone download package from this source. After installing VTune Profiler, you will find a socwatch directory within that installation directory. You can move the SoC Watch directory in its entirety anywhere and use its command line interface to run collections.

Steps to Download and Deploy

Here are the latest instructions for Non-CNDA deploy steps:

1. Go to [Download the Intel® oneAPI Base Toolkit](#) page, you will get the supported OS (Windows or Linux) you want and the installer type (offline or online). Select the options as to your requirements. Take the following options as an example if you don't know what to choose.



Select options below to download

A screenshot of the download options interface. It features two dropdown menus. The first dropdown menu is labeled "Windows" and has a downward arrow. The second dropdown menu is labeled "Offline Installer" and has an upward arrow. Below the second dropdown menu, there are two more options: "Online Installer" and "Offline Installer". The "Offline Installer" option is currently selected and highlighted with a dark background.

- When you finish your options, scroll down to the Download section. You can input your Business Email Address and Region information. Or, you can do the download without Sign Up.

Download

Register your download to receive product updates plus hand-curated technical articles, tutorials, and training opportunities to help you optimize your code.

Business Email Address* **Country/Region***

Email Address Please Select

Sign Up & Download

Continue without signing up (download starts immediately) →

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- Click the Guest download link as shown in the red rectangle above to start your download.
- After a while, you shall finish your download depending on your network condition. Click the downloaded binary (w_BaseKit_p_2024.0.1.45_offline.exe for time being) to start the installation.
- It is recommended to use the default installation options as following:

intel. Intel® oneAPI Base Toolkit, v. 2024

Summary

What's Included

- Intel® DPC++ Compatibility Tool (2024.0.0)
- Intel® Distribution for GDB* (2024.0.0)
- Intel® oneAPI DPC++ Library (2022.3.0)
- Intel® oneAPI Threading Building Blocks (2021.11.0)
- Intel® oneAPI DPC++/C++ Compiler (2024.0.2)
- Intel® oneAPI Data Analytics Library (2024.0.1)
- Intel® Integrated Performance Primitives (2021.10.0)
- Intel® Integrated Performance Primitives Cryptography (2021.9.1)

Integrate with IDE
• Microsoft Visual Studio*

Installation Location
C:\Program Files (x86)\Intel\oneAPI

Required Space
Installation size: 19.3 GB

Select your installation mode

☒ I accept the terms of the [license agreement](#)

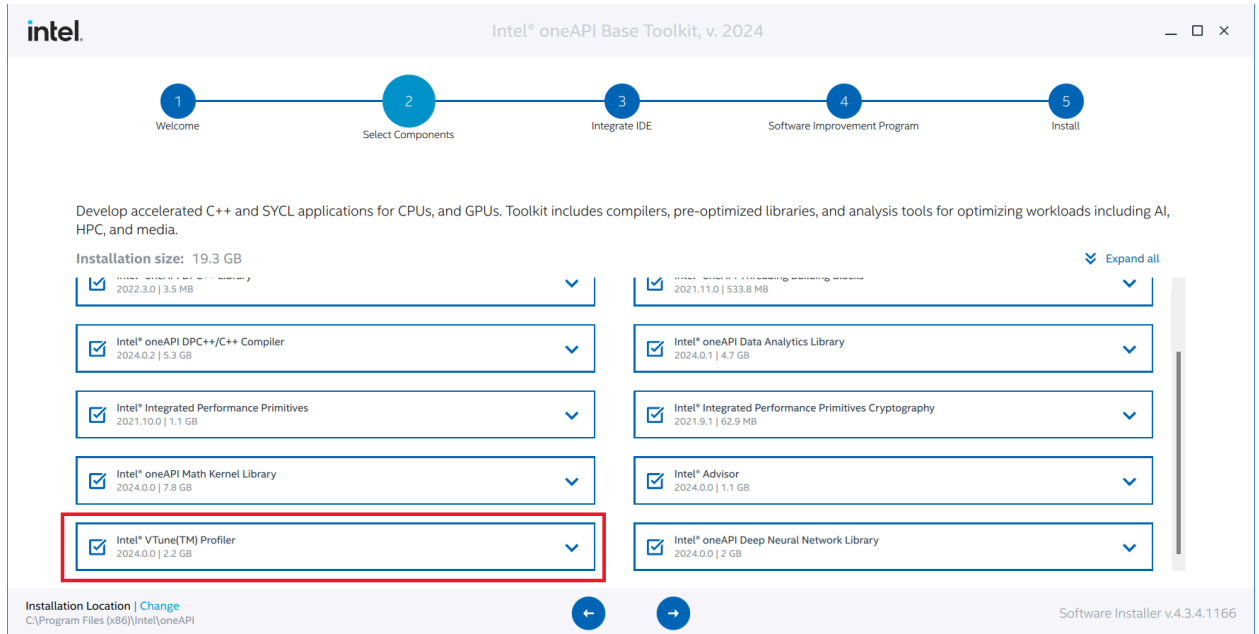
Recommended Installation
Install everything with commonly used features **Continue**

Custom Installation
Configure your installation **Customize**

[Create a customized offline package for future use](#)

*Other names and brands may be claimed as the property of others Software Installer v.4.3.4.1166

One thing that has to be brought up here is you can choose your own components as to your dev requirements during the installation process:



If you just want to use SoC Watch, go to the component list and select Intel VTune Profiler as a must.

6. After you finish your installation, go to your installation folder and find the SoC Watch binary there. For example, the default path to SoC Watch on Windows is as following:
`C:\Program Files (x86)\Intel\oneAPI\vtune\2024.0\socwatch\64.`
7. Use the “socwatch.exe” there for your SoC Watch adventure.

Q&A

Here comes the Q&A session.

1. Failed to run Intel SoC Watch

If you received following when you tried to run Intel SoC Watch:

FATAL: Failed to install Intel(R) socwatchdrv driver. Please run with administrator privileges.

Simple tip: Run the command line window with “Run as administrator”.

2. How to Collect Power for your application

It’s simple. Run the following command:

`.\socwatch.exe -t 120 -s 30 -f power -o D:\Projects\SoCWatch\sample`

-t: Data collection time slot. Here we want to collect power for 120 seconds.

-s: Delay time before starting data collection. For Chrome browser, we recommend 30 seconds when the test scenario becomes stable.

-f: Target feature. Power is the target here.

-o: Output file.

After running, you can go to “D:\Projects\SoCWatch” folder, find the output sample.csv file, then open it. Inside, you can find your “Package Power”.

You can always go to [Intel® SoC Watch for oneAPI Release Notes](#) for details.