EDK2Code: VSCODE Extension for EDK2

UEFI 2024 Webinar Series

February 20, 2024

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Meet the Presenter

Guillermo Palomino Sosa (Willy)
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Graduated from Tecnológico de Monterrey in 2012, Guadalajara, Mexico as an Electrical Engineer and has a Masters in Computer Science.

Has worked as a UEFI FW Engineer at Intel for more than 12 years developing UEFI FW for server products.

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Agenda

- Motivation
- Overview
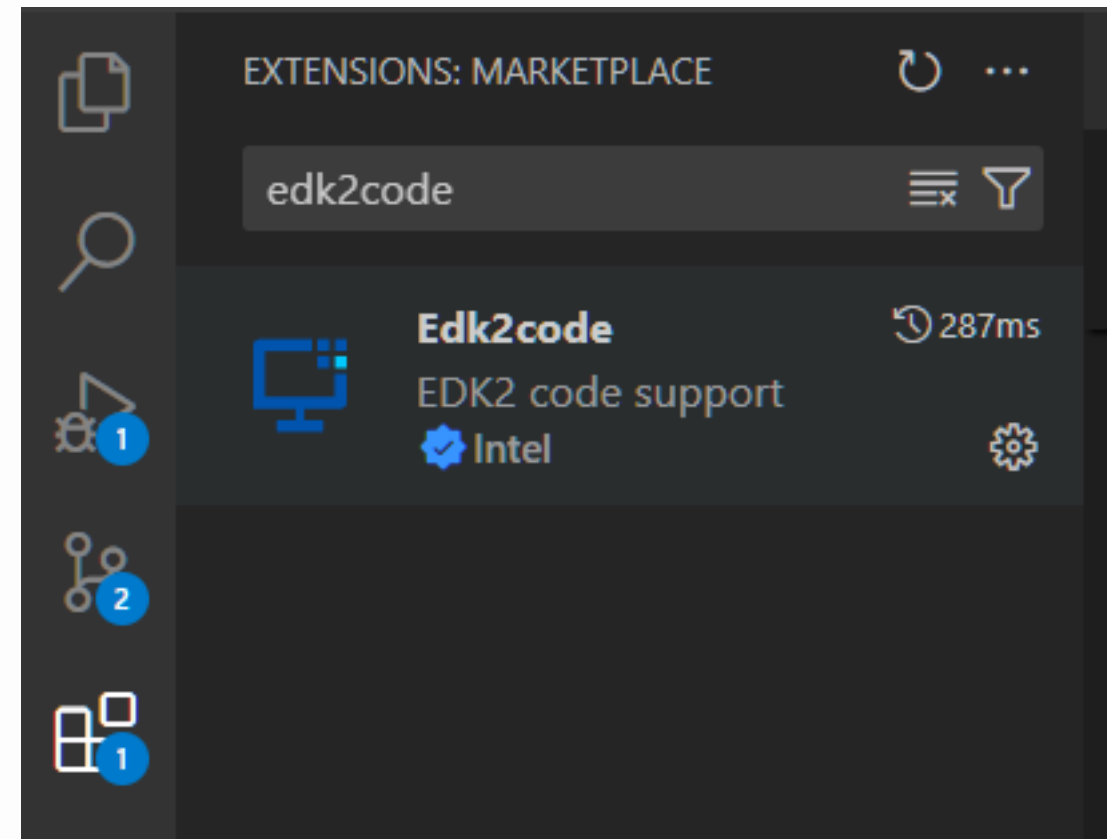- Installation
- Features
- Benefits
- Demo

Motivation

- UEFI projects can be massive and navigating through the source code is challenging

- Missing tools available in other development environments

- Visual Studio Code is one of the most popular editors

Installation

Install directly from VSCODE marketplace searching for "**edk2code**"

Documentation available through project repository wiki page:

https://github.com/intel/Edk2Code/wiki

Types of Source Index Accuracy

These levels describe how the source code index is created. This gives the user the ability to start using the extension by just opening a source folder **or** to get very accurate information from the **build folder**

Source Index	Description	Index Build	Injected Defines	Compilation Database	User Experience
Get build information with [compile information](#)	• EDK2 build command with: `–Y COMPILE_INFO -y BuildReport.log` • Specify a build folder in EDK2Code extension	DSC parsing	✅	✅	⭐⭐⭐⭐
Get build information	• Specify a build folder in EDK2Code extension	DSC parsing	✅		⭐⭐⭐
Configure specific DSC files	• Manually setup a DSC file in EDK2Code extension	DSC parsing			⭐⭐
Parse workspace with no configuration	• Just open a folder in Vscode	None			⭐

Features

Feature Type	Feature	Description
Interface	Status Bar	Displays a warning in the status bar if the opened file has been compiled or not.
Global Commands	EDK2: Open Library	Shows a list of all the libraries compiled. Accessible via the command palette.
Global Commands	EDK2: Open Module	Shows a list of all the modules compiled. Accessible via the command palette.
Global Commands	EDK2: Rebuild Index Database	Cleans up the current source index and creates a new one.
Global Commands	EDK2: Rescan Index Database	Recreates the index without changing the workspace settings using the previous index configuration.
EDK2 Language Support	INF Files	Provides syntax highlighting, outline tree, source go to definition, auto completion, go to DSC declaration, and library tree.
EDK2 Language Support	DSC Files	Provides syntax highlighting, outline tree, variable defines resolution, go to definition, and go to DSC inclusion.
EDK2 Language Support	DEC Files	Provides syntax highlighting and outline.
EDK2 Language Support	C Files	Provides call hierarchy, go to INF, and go to definition.
EDK2 Language Support	VFR	Provides syntax highlighting and outline.
EDK2 Language Support	ACPI	Provides syntax highlighting, outline, help, and auto complete.

Benefits

1. **Improved Productivity**: The extension provides a variety of features such as syntax highlighting, auto-completion, and go to definition, which can speed up coding and debugging processes.
2. **Better Code Navigation**: Features like call hierarchy, outline tree, and go to definition make navigating through complex EDK2 files much easier.
3. **Enhanced Understanding**: The extension provides help to understand complex EDK2 projects.
4. **Ease of Use**: The extension integrates seamlessly with VSCode. The user can decide the level of configuration/accuracy they want.
5. **Real time feedback.** Users can detect configuration/build errors while they edit the code instead of catching them after compilation.

Demo

- Index creation
- Reference tree
- Task bar
- C improvements
- Search improvements
- EDK files
- ACPI support

Questions?

More Questions?

Following today's webinar, join the live, interactive WebEx Q&A for the opportunity to chat with the presenter

- **Visit this link to attend**: https://bit.ly/424FX8r
- **Meeting number**: 2557 426 6742
- **Password**: YvubrsZ93f7 (98827799 from phones and video systems)

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