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PROS AND CONS OF THE MODERN DEVELOPMENT ENVIRONMENT

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AGENDA

- Basics of C/AL Development
- What is an Extension and why do we need them?
- What is the Modern Development Environment?
- Creating an extension without problems
- Creating an extension WITH problems
- Common issues/limitations
- Q&A

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BASICS OF C/AL DEVELOPMENT

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C/AL

- NAV Development language since the start
- Everything is C/AL – Standard and Custom Code
- Quick and Powerful
- Written in C/Side (the development environment)
- Difficult to separate standard from custom code
- Limited Source Code Management

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EXTENSIONS

WHAT AND WHY?

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WHAT ARE EXTENSIONS

- A way to deliver changes/additional functionality to NAV/BC
- Sits on top of C/AL
- Doesn't change standard code

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WHY DO WE NEED EXTENSIONS

- Makes Upgrading Really Easy
- Code is reusable
- AppSource becomes possible
- Less risky to install (but not without risk!)

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“C/AL is End Of Life in 2 Years”

Microsoft

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THE MODERN DEVELOPMENT ENVIRONMENT

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WHAT IS AL

- Extension Development Language
- Custom Built for NAV/BC
- A lot like C/AL
- New Concepts to make Extensions Easy

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WHAT IS VSCODE

- New Industry Leading Development Environment
- Written by Microsoft
- Runs on Windows/Mac/Linux
- Support for Javascript/Python/Powershell etc
- Support for **AL**

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CREATING AN EXTENSION

Without problems!

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OUR EXAMPLE

Loan Machines

- New Table
- New Page
- Adds field to Customer Table
- Adds field to Customer Page

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CREATING AN EXTENSION

With some problems!

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OUR EXAMPLE

Brands

- New Table
- New Page
- Adds Field to Item Table/Card
- Adds Field to Item Ledger Entries Table/Card
- Adds Code to Item Journal Posting Codeunit

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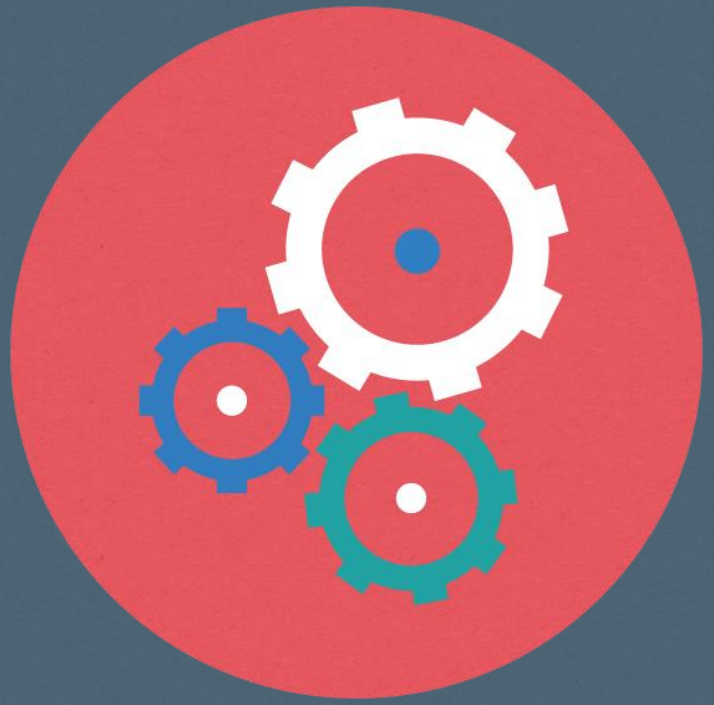
COMMON ISSUES AND LIMITATIONS



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ISSUES/LIMITATIONS

- Can't delete things (Fields/Pages etc)
  - Hide and replace instead
- Can't change existing code
  - Events/Subscribers to the rescue
- Events are sometimes missing
  - Make C/AL change
  - Ask Microsoft to add
  - Rethink problem
- Need to consider dependencies
  - Must be planned ahead of development
- Can't use DotNet variables
  - Standard libraries are now built in
  - Use Azure functions
- No Access to File System/SQL/Server
  - Can make integration difficult
  - Use Web Services instead
- Source Control is needed
  - "Proper" source control is great
  - Git is used by everyone else
  - Has a learning curve

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Q&A

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