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CHICAGO

.NET CLI, or: How I Learned to Stop Worrying & Love the Command Line

Jonathan "J." Tower

Partner & Principal Consultant

Trailhead Technology Partners

Level: Intermediate

#VSLive

Hi, I'm J.

Jonathan "J." Tower

Partner & Principal Consultant

Trailhead Technology Partners

TRAILHEAD
TECHNOLOGY PARTNERS

trailheadtechnology.com

- Microsoft MVP in ASP.NET
- Telerik/Progress Developer Expert
- Organizer of Beer City Code

- jtower@trailheadtechnology.com
- trailheadtechnology.com/blog
- jtowermi

github.com/jonathantower/dotnet-cli-vslive

What We'll Cover

INTRODUCTION

WHY A CLI?

BASIC OPERATIONS

ADVANCED: PACKAGING & TESTING

GLOBAL TOOLS

INTRODUCTION TO .NET CLI

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What is the CLI?

The .NET Core **command-line interface** (CLI) is a new **cross-platform** toolchain for developing **.NET** applications. The CLI is a **foundation** upon which higher-level tools, such as Integrated Development Environments (IDEs), editors, and build orchestrators, can rest.

Source: https://docs.microsoft.com/en-us/dotnet/core/tools

Command Structure

Driver

dotnet

Command

build

Arguments

my_app.csproj

Options

--output
/build_output

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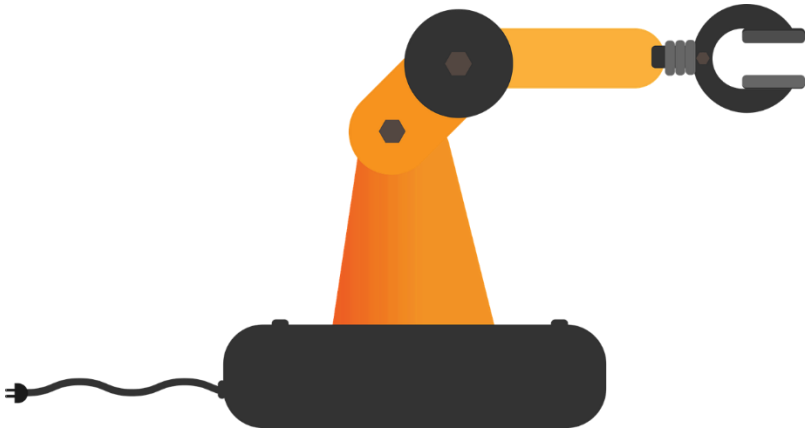
DEMO: DOTNET NEW, RUN

WHY A CLI?

Cross-Platform

- Tooling consistency
- Preferred platform
- Preferred editor

Automatable



- Easier for devops scripting
- Easier for automated testing

Extensible

- Community-driven project templates
- Community-driven tooling

BASIC COMMANDS

Basic Commands

NEW

RESTORE

BUILD

PUBLISH

RUN

TEST

VS TEST

MIGRATE*

CLEAN

HELP

STORE

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DEMO: DOTNET BUILD, CLEAN

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PROJECT COMMANDS

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Project Commands

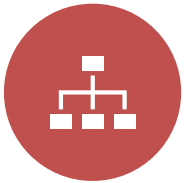
ADD PACKAGE

ADD REFERENCE

REMOVE PACKAGE

REMOVE REFERENCE

LIST REFERENCE



SLN

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DEMO: DOTNET SLN ADD

DEMO: DOTNET ADD REFERENCE

ADVANCED COMMANDS

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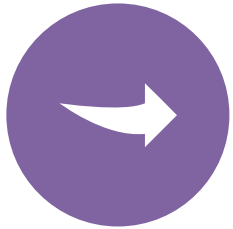
Advanced Commands

NUGET DELETE

NUGET LOCALS



NUGET PUSH

MSBUILD

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DEMO: DOTNET LOCALS

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Packaging

- Creates NuGet package
- Automatic restore and build
- --no-build option

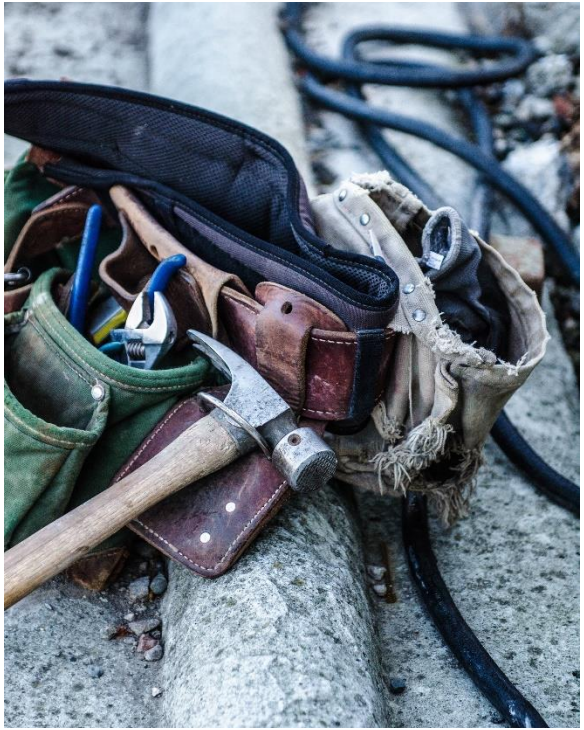
DEMO: PACK & PUSH TO NUGET.ORG

DEMO: RUN UNIT TESTS

DEMO: TAB COMPLETION

TOOLS

Global Tools



- Install/Uninstall
- Update
- List

- Find on Nuget.org, https://github.com/natemcmaster/dotnet-tools
- Make your own!

DEMO: DOTNET-GUID GLOBAL TOOL

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Recap

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Thank You! Questions?

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