

PROJECT ROSLYN

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INTERNATIONAL
SOFTWARE DEVELOPMENT
CONFERENCE

gotocon.com

Project Roslyn

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Project Roslyn

Compilers
Rich APIs
Extensibility
REPL
Scripting

CTP

VS2012 + N where N > 0



Fixing Common Code Problems

Issue

Avoid Count() > 0 on sequence

Fix

Change to Any()

How

Code Issue Provider and Code Action

Demo

Fixing Common Code Problems



Design Characteristics



Compiler Pipeline and APIs

Editor Services

Code Actions · Syntax Highlighting · Inline Rename

Language Services APIs

Workspace · Find References · Code Cleanup · Source Code Generation

Compiler APIs

Syntax · Semantic · Data and Control Flow Analysis · Scripting

Parser

Symbols Metadata

Binder

IL Emitter

Exploring Code using the REPL

Diagnostics

Syntactic vs. semantic errors

Workspace

Loading a Solution

Examining Types and Symbols

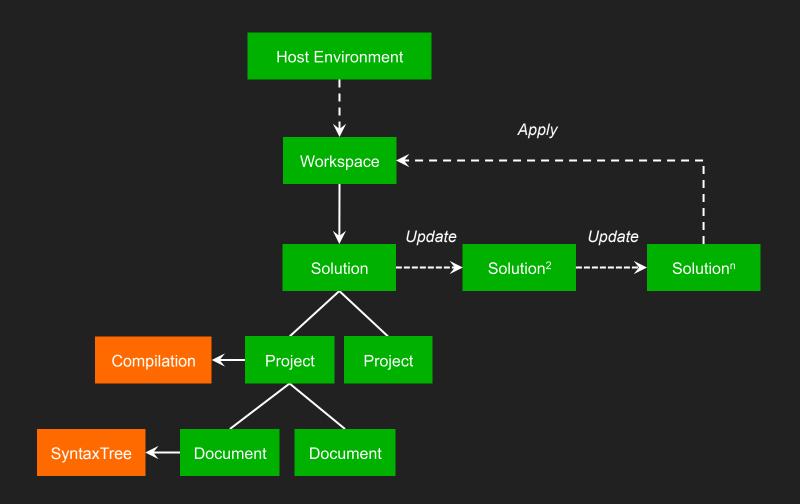
Looking up the type of a "var" Find References

Demo

The Roslyn APIs and C# Interactive



The Bigger Picture



Application Scripting with C#

Application XNA Animation

Executing C# Script Code
ScriptEngine and Session

Host Object Model
Interface between application and script

Demo

Scripting



Projects

Compilify.net

Compile and run C# from the browser

Live C# (http://screencast.com/t/dR0qobSLN)

Immediate feedback

LearnParallelism.net

How developers use parallel libraries

Resources

Sites

Roslyn site (http://msdn.microsoft.com/en-us/roslyn)

C# FAQ (http://blogs.msdn.com/b/csharpfaq/)

Channel 9 (http://channel9.msdn.com/search?term=roslyn)

Questions

Roslyn CTP (http://social.msdn.microsoft.com/forums/en-us/roslyn)

Stackoverflow.com (http://stackoverflow.com/questions/tagged/roslyn*)

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Thank You!

Q&A CTP Feedback Have Fun!

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