

# Use Roslyn to validate your Sitecore code and data

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#sugcon



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- About Roslyn
- Demo of runtime compilation
- Demo of building your own analyzer/code fix
- Inner workings of RainbowDataAnalyzer

# Demo of RainbowDataAnalyzer

[https://github.com/hermanussen  
/RainbowDataAnalyzer](https://github.com/hermanussen/RainbowDataAnalyzer)



- Validate Sitecore IDs and paths
- Validate Sitecore field names and IDs
- Validate if field names or IDs match templates
- Get path or ID information in a popup in VS

- Runtime compilation before Roslyn
  - Call csc.exe directly
  - Use CodeDom
- Use StyleCop/FxCop

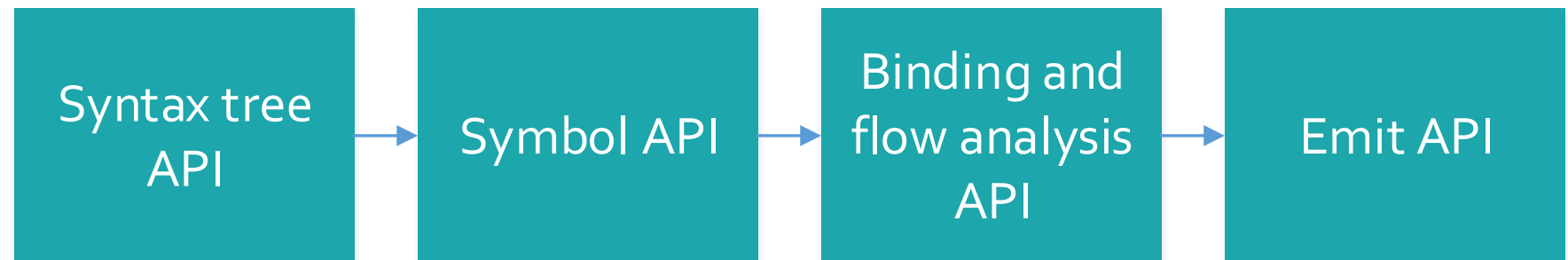


- The .NET Compiler Platform ("Roslyn") provides open-source C# and Visual Basic compilers with rich code analysis APIs.
- Self-hosting compilers
- Provides APIs for compiling, code analysis and refactoring
- Integration with Visual Studio

Traditional compiler pipeline



New compiler API



## Feature APIs

Refactorings

Code fixes

## Workspaces APIs

Code  
formatting

Find all  
references

Go to  
definition

Other...

## Compiler APIs

Syntax tree  
API

Symbol API

Binding and  
flow analysis  
API

Emit API

Diagnostic  
APIs

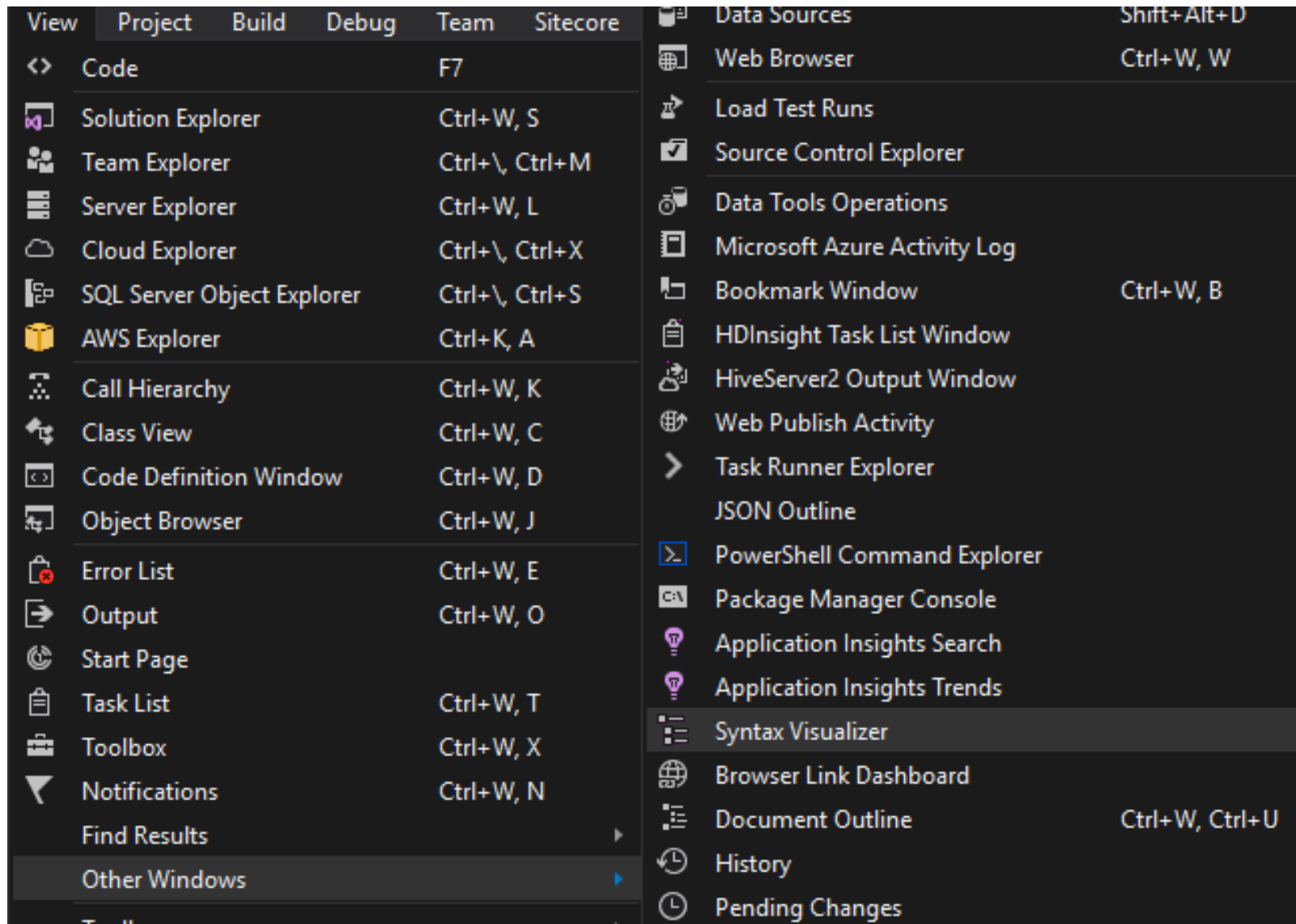
Scripting APIs



# Demo of runtime compilation



# Demo of building your own analyzer/code fix



# Inner workings of RainbowDataAnalyzer

<https://github.com/hermanussen/RainbowDataAnalyzer>



## Josh Varty's "Learn Roslyn Now" videos on YouTube

<https://www.youtube.com/playlist?list=PLxk7xaZWBdUT23QfaQTCJDG6Q1xx6uHdG>



## Free ebook "Roslyn Succinctly"

<https://www.syncfusion.com/resources/techportal/ebooks/roslyn>

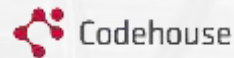
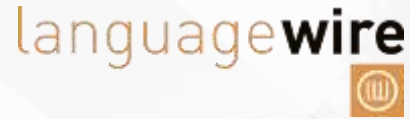


## Roslyn source code browser

<http://source.roslyn.io/>







# Thank you!

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