

# Testing with MSTest, NUnit, or xUnit

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# Module Outline



**Which test framework should you use?**

**Understand how test adapters work**

**Write and run your tests with**

- NUnit
- xUnit

# Which Test Framework Should You Use?

**MSTest**

**NUnit**

**xUnit**



# Which Test Framework Should You Use?

**MSTest, NUnit,  
and xUnit are  
all great choices**

**Personal  
preference**

**It's good to know  
all three**



# Understand How Test Adapters Work

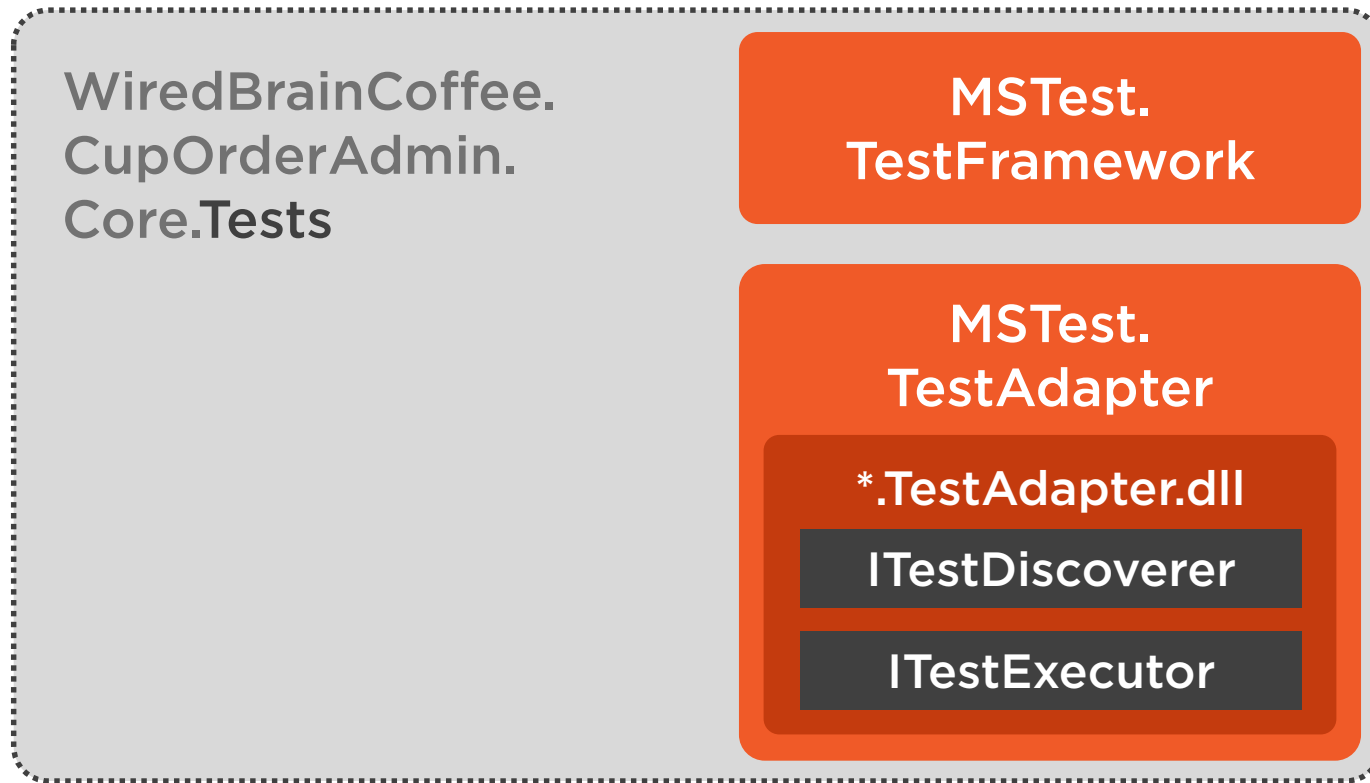
Visual Studio  
extension  
(VSIX)

NuGet package  
\*.TestAdapter.dll

Other  
ways  
(like Visual Studio's  
Extension folder)



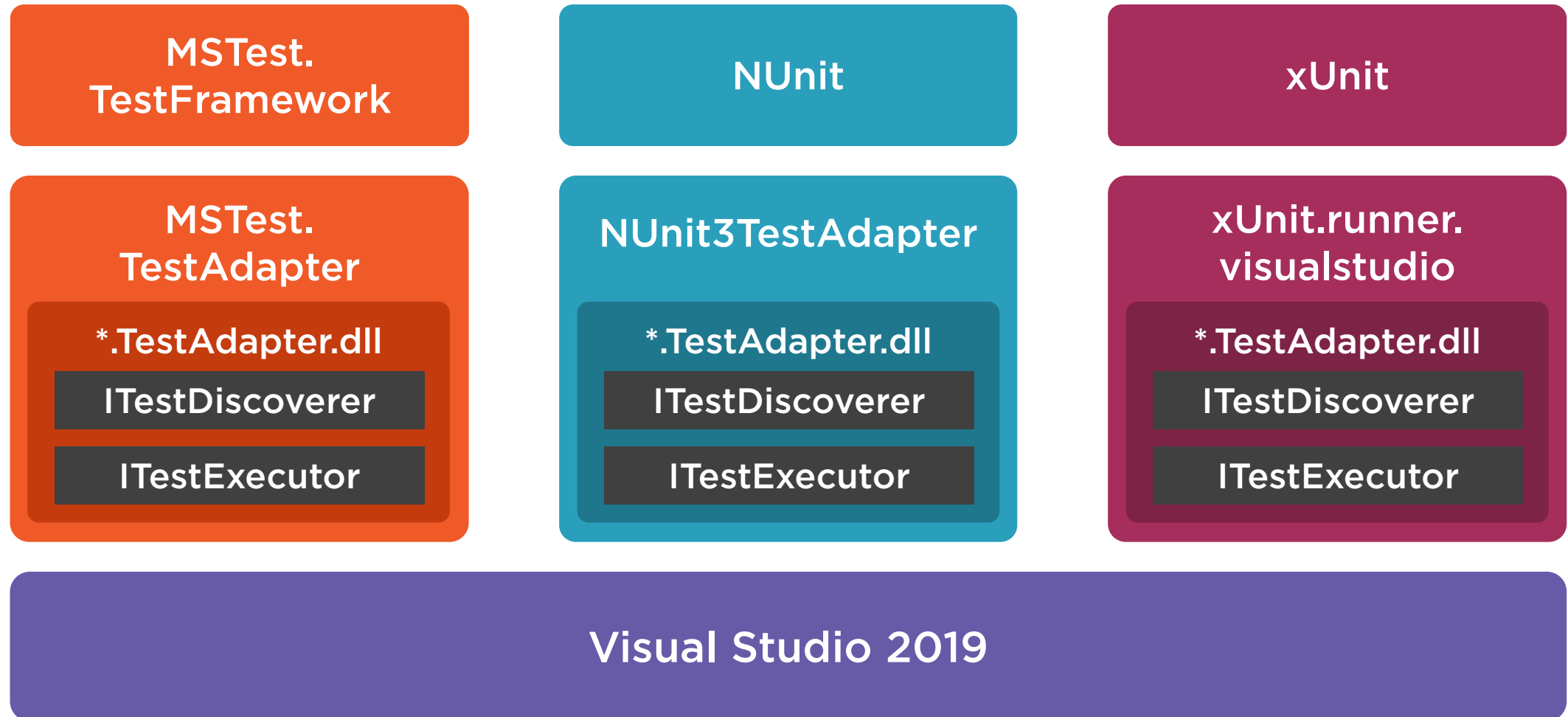
# Understand How Test Adapters Work



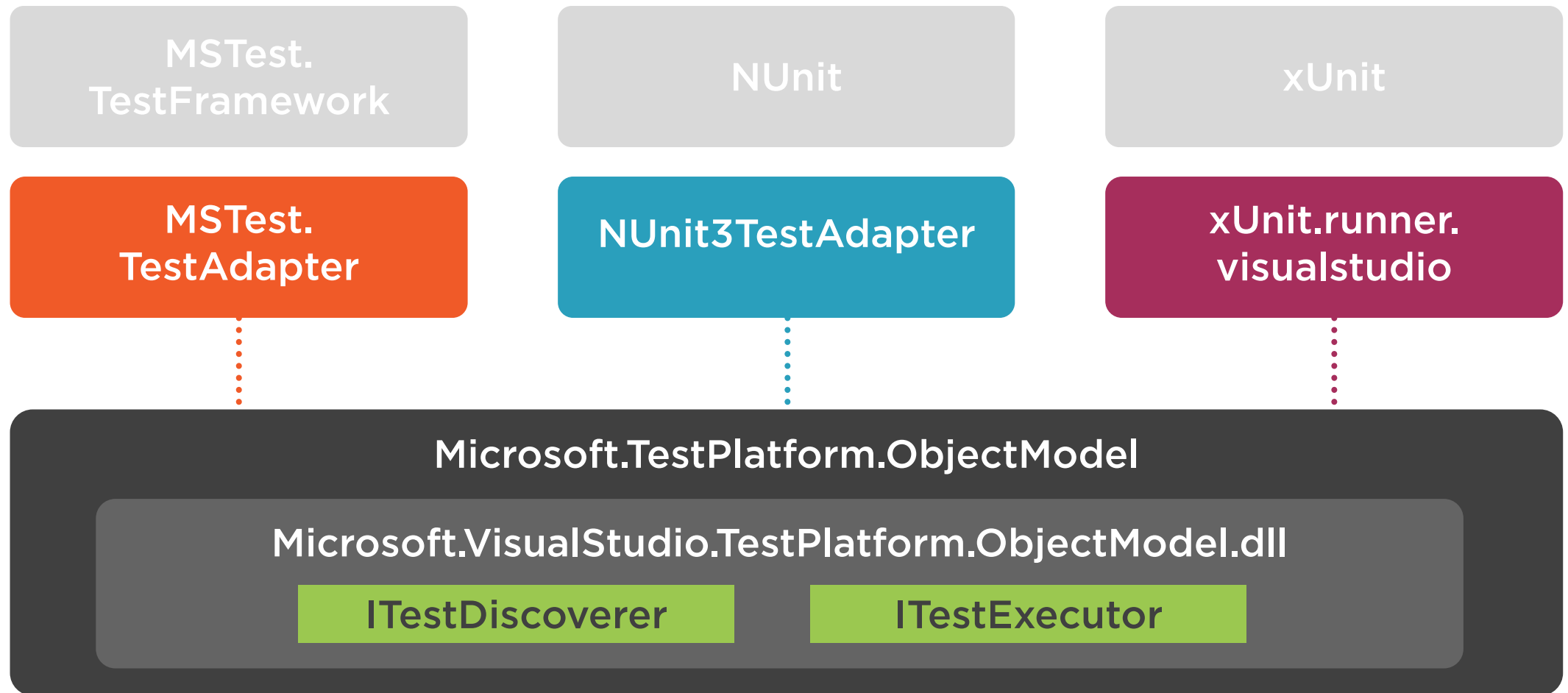
Visual Studio 2019



# Understand How Test Adapters Work



# Understand How Test Adapters Work





# Demo



The test adapter of MSTest in action

Real-time test discovery



# Write Tests with NUnit

WiredBrainCoffee.  
CupOrderAdmin.  
Core.Tests

MSTest.  
TestFramework

NUnit

MSTest.  
TestAdapter

NUnit3TestAdapter



# Write Tests with NUnit

WiredBrainCoffee.  
CupOrderAdmin.  
Core.Tests

MSTest.  
TestFramework

NUnit

MSTest.  
TestAdapter

NUnit3TestAdapter



# Demo



Migrate to NUnit

Write tests with NUnit



# Write Tests with xUnit

WiredBrainCoffee.  
CupOrderAdmin.  
Core.Tests

MSTest.  
TestFramework

xUnit

MSTest.  
TestAdapter

xUnit.runner.  
visualstudio



# Write Tests with xUnit

WiredBrainCoffee.  
CupOrderAdmin.  
Core.Tests

MSTest.  
TestFramework

xUnit

MSTest.  
TestAdapter

xUnit.runner.  
visualstudio



# Demo



Migrate to xUnit

Write tests with xUnit



# Summary



**MSTest , NUnit, and xUnit are all great**

**How test adapters work**

**Write and run your tests with**

- NUnit
- xUnit