

Dev/Test a DevOps multiplatformně v cloudu



	.NET	Java	JS	Python	Golang
DocumentDB API					
MongoDB API					
Graph API					
Table API					



Praha, 15.11.2017

Program

- Ptejte se
- Dotazníky
- Losování
- Brožury
- PPT ke stažení
- L100 vs. L400
- Telefony
- Občerstvení

Od	Čas	Do	Popis	Přednáší
8:30	0:30	9:00	Registrace, občerstvení	
9:00	0:30	9:30	Úvod. DevTest a DevOps v cloudu. Dev/Test benefity, Azure DevTest pro Enterprise prostředí, partnerské výhody, novinky, nějaké tipy ...	Jiří Burian
9:30	0:15	9:45	Otestuje bezpečnost komponent vašich OSS aplikací: VSTS + Whitesource Bolt (Úvod do Visual Studio Team Services formou CI/CD mini dema)	Jiří Burian
9:45	0:50	10:35	Azure DevOps "end to end demo" od nuly až do produkce formou kontinuálního nasazení pomocí VSTS	Michael Juřek
10:35	0:15	10:50	Přestávka, káva	
10:50	0:15	11:05	Azure DevTest Labs: školicí a testovací VM prostředí v Azure	Jiří Burian
11:05	0:30	11:35	Jak automatizovat procesy v Azure, varianty a možnosti. Využití Azure Resource Manageru, CLI, Bash, CloudShell, PowerShell, šablony atd.	Martin Šimeček
11:35	0:30	12:05	Serverless computing. Úvod do tvorby aplikací bez serveru s Microsoft Azure, příklady využití	Miroslav Holec
12:05	0:30	12:35	Možnosti a způsoby využití technologie Docker kontejnerů v Azure	Tomáš Kubica
12:35	0:40	13:15	Oběd	
13:15	1:00	14:15	Monitoring a Telemetrie nejen cloudových systémů ale i onpremise řešení: Služby Log Analytics, Application Insights, Azure Monitor, ...	Miroslav Holec
14:15	0:30	14:45	Microsoft Mobile Center pro automatizaci procesů mobilního vývoje a kontinuálního nasazení vašich Android, iOS a Windows/UWP aplikací	Martin Šimeček
14:45	0:15	15:00	Přestávka, káva	
15:00	0:50	15:50	Databáze v Azure a představení CosmosDB: globálně distribuovaná multimodel a multi API databáze	Valdemar Závadský
15:50	0:50	16:40	Azure Multiplatform DevOps: Jenkins, GitHub, Java, PostgreSQL, PHP, MongoDB, Kubernetes cluster, ... aneb Azure opravdu není jen Microsoft	Valdemar Závadský
16:40	0:10	16:50	Odpovědi na otázky, losování, závěr	

Microsoft DevTest a DevOps v cloudu
Benefity pro vývojáře a IT profesionály
Visual Studio pronájemem v CSP
Azure kredity pro DevTest
DevTest benefity



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Proč cloud a testování

65% Vývojářů říká, že je velmi komplikované a časově náročné získat Dev/Test zdroje

10% Průměrné využití tradičního on prem DevTest prostředí

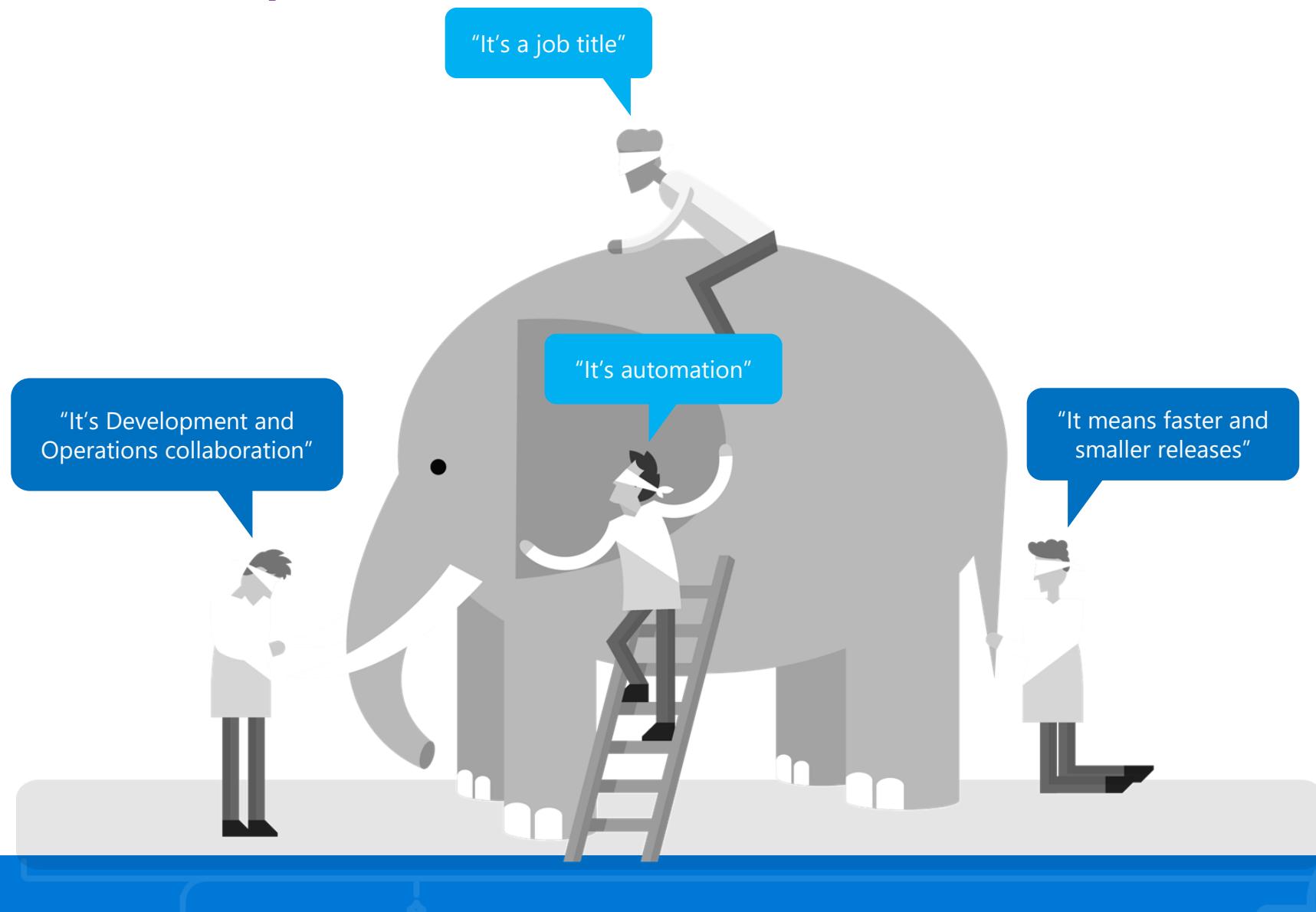
50% Infrastrukturních nákladů tvoří finanční náklady na neprodukční prostředí

Source: Business Case for Test Environment Management Whitepaper, Cognizant

Když cloud, proč Azure

- Je jediný konsistentní hybridní cloud
- Azure je cloud pro vytváření inteligentních aplikací
- Cloud, kterému můžete důvěřovat
- Azure má globální dosah s největším počtem oblastí
- Tvořen pro produktivitu vývojářů jak MS, tak i OSS
- Partnerský obchodní model a ISV co-sell modelu
- Lokální i globální podpora

Co to je DevOps?



Sjednocení a propojení životního cyklu Dev+Ops

„DevOps is the union of people, process and products to enable continuous delivery of value to end users.“



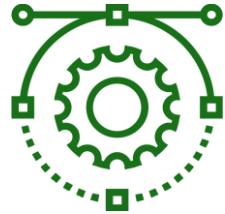
Moderní scénáře pro vývoj a nasazení aplikací

U našich tradičních zákazníků a partnerů



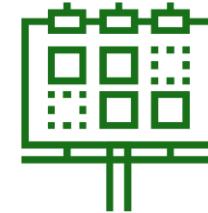
Ušetřit peníze, čas a práci s využitím neprodukčních cloud prostředí a benefitů.

Vývojové a testovací prostředí s využitím cloutu



Automatizace buildů a nasazení pro zkrácení doby dodání hodnoty zákazníkům.

Automatizace, CI/CD v tradičním Microsoft prostředí



Integrace nebo použití nejrůznějších OSS nástrojů a technologií třetích stran a jejich samotné použití.

DevOps s Open Source nástroji a technologiemi, Mobile DevOps



Complexity

Moderní scénáře pro vývoj a nasazení aplikací

U našich tradičních zákazníků a partnerů



Ušetřit peníze, čas a práci s využitím neprodukčních cloud prostředí a benefitů.

Vývojové a testovací prostředí s využitím cloutu

- Vývojářské nástroje výkonné a levné
- ... a také pro non MS vývojáře
- Nic nekupovat ale pronajmout
- Testovací prostředí on-pem
- Cloud benefity a kredity provozu v cloudu
- ... něco navíc když jsem partner Microsoftu
- Co po Adminy , třeba Office 365
- A také prosím nějaké školení zdarma
- ... a ještě pás SW gadgetů

Visual Studio : nejenom vývojářské nástroje !!!

V rámci **Visual Studio/MSDN Subscription** benefitu získávají IT profesionálové, vývojáři a testeri:

Tools

1. Tools - nástroje pro vývoj a testování multiplatformních aplikací.

Software

2. Práva na neomezenou softwarovou testovací infrastrukturu Microsoft.

DevOps

3. Komplexní "All-In-One" ALM a DevOps týmové prostředí.

Hardware

4. Virtuální Hardware v hodnotě až 1 800\$ ročně na každého uživatele.

Podpora

5. Technickou Podporu, slevy a další nadstandardní služby.

Visual Studio / MSDN Subscription	Professional	Platforms	Enterprise
Nástroje pro vývoj, testování, nasazení, ... - Pokročilé nástroje, architektura, QA, bezpečnost, ...	Vývoj Tools	Testování	Vše
Právo licencovat testovací infrastrukturu - Licence Windows OS, MS SQL Server...	•	•	•
- Další firemní software Microsoft - Office 365 Developer Subscription, 25 x O365 E3 - Power BI Pro - Microsoft Office Pro Plus i pro plné použití	•	•	Vše
Agilní týmové ALM/DevOps prostředí - Release management, Package management	•	•	•
Windows Azure Dev/Test kredit/rok - Enterprise Azure Dev/Test podmínky a ceny	hodnota 480 €	hodnota 900 €	hodnota 1380 €
Technické Support Incidenty	•	•	•
Další benefity, slevy, technický support, školení	základní	základní	rozšířené
Přibližné pozicování vhodnosti edic (určeno pro:)			
Kodéři a autoři jednoduchých aplikací	•		
Admini, Project manažeři, IT Pro, Testeri		•	
Běžní firemní vývojáři, SQA, Architekti, Team leaderi			•
Orientační ROČNÍ ceny licencí bez DPH v maloobchodním modelu OPEN VALUE			
Zcela nová licence Open Value NL L+SA 1Y	574 €	1 294 €	3 772 €
Prodloužení licence Open Value NL SA 1Y	503 €	1 294 €	1 755 €

DevTools

Visual Studio

Free tools

Visual
Studio
Community
2015

Visual
Studio
Code

Visual
Studio
Team
Services

Visual Studio Community is a full-featured IDE that is free for students, open source contributors, and small teams. **Not licensed for commercial use in Enterprise customers**

Stand-alone tool

Visual
Studio
Professional

Team collaboration

Team
Foundation
Server

Team Foundation
Server User CAL

VS Team
Services
+ Addons

VS/MSDN Subscriptions

Visual
Studio
Enterprise
with MSDN

Visual
Studio
Professional
with MSDN

Visual
Studio Test
Professional
with MSDN

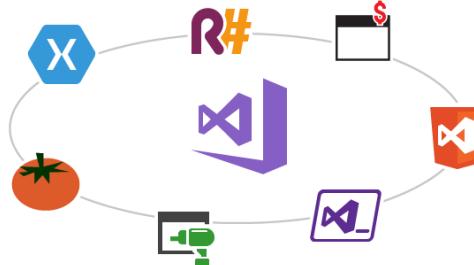
MSDN
Platforms

(MSDN) ->Subscription Benefits

Visual Studio Community, Visual Studio Code

- VS Community 2017

- Full featured IDE
- ~ VS Professional equivalent
- Free for OSS
- Student and individual use
- Unrestricted for training
- Licensing limitations (Enterprises)



<https://www.visualstudio.com/vs/community/>

- Visual Studio Code

- Code editor
- Linux, Mac, Windows
- OSS
- Extensible and customizable
- Free



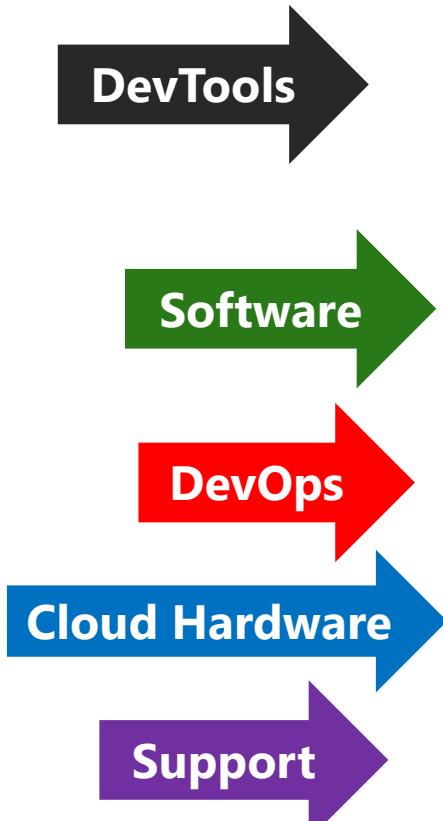
<https://code.visualstudio.com/>

Microsoft Dev Essentials

- Free tools, cloud services, and training
- Get everything you need to build and deploy your app on any platform.
- It's our most comprehensive free developer program ever.
- 300\$/Y Azure credit
- my.visualstudio.com

The screenshot shows the Microsoft Dev Essentials landing page. At the top right, there's a purple banner for "Visual Studio 2017 Available now!" with a "Download" button. Below the banner, the main heading is "Welcome to your Visual Studio Dev Essentials". A section titled "Featured (6)" lists several services: Visual Studio Community, Visual Studio Code, Visual Studio for Mac, Visual Studio Team Services, Azure (which is circled in yellow), and Xamarin University Training. Another section titled "Tools (10)" includes Microsoft R Server, Microsoft SQL Server, Azure App Service, Application Insights, HockeyApp, and Universal Windows Platform. The bottom section, "Education (7)", features links to Opsgility, Pluralsight, Linux Academy, WintellectNOW, Microsoft Virtual Academy, and MSDN Magazine.

Visual Studio/MSDN subscriptions benefit



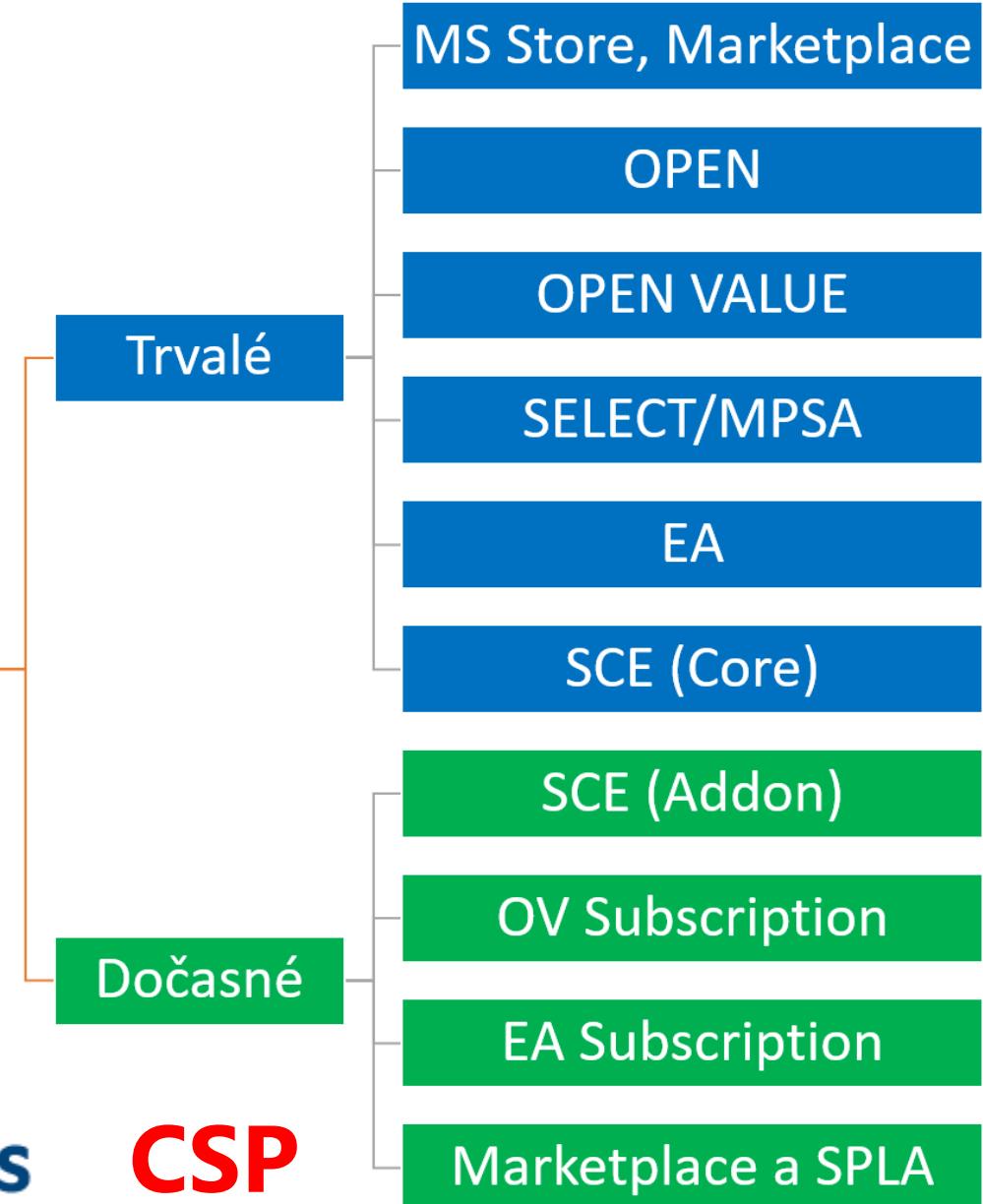
Visual Studio / MSDN Subscription	Professional	Professional Subscription	TestPro Subscription	Platforms Subscription	Enterprise Subscription
Development and Testing tools	Dev	Dev	Test	Test	Dev+Test
- Architecture and Modeling					•
- Advanced testing scenarios (Coded UI, Load test,...)					•
- Advanced development and debugging features					•
VS/MSDN Subscription and Software Assurance Benefits					
Historical, actual and future software versions		•	•	•	•
Microsoft Dev-Test infrastructure and UAT licenses		•	•	•	•
- Windows OS, MS SQL Server...		•	•	•	•
- Microsoft Enterprise Software				•	•
- Power BI Pro				•	•
- Office 365 Developer Subscription, 25 x O365 E3					•
- Microsoft Office Pro Plus (full use rights)					•
Agile Team Collaboration Tools and Services		•	•	•	•
- Release management					•
- Package management					•
Windows Azure DevTest credits		\$50/month	\$50/month	\$100/month	\$150/month
- Enterprise Azure Dev/Test rates		•	•	•	•
Technical Support Incidents		2	2	2	4
Microsoft e-learning collections		1	1	1	2
Discounts and other subscriber benefits		•	•	•	All
Audiences and expected scenarios					
Ad-hoc coders and non-critical application	•				
Junior Coder, OS Tester, Non-critical projects		•			
Admin, Product Owner, IT Pro, Non-MS Dev, Tester			•	•	
Enterprise Developer, Team Leader, Critical application					•

Vývojářské licence

- Nově pronájem
- Cloud Subscriptions

Vývojářské licence
Microsoft

- Také zdarma jako partner MPN benefit



CSP

MPN Visual Studio benefit pro partnery

- <https://partner.microsoft.com/cs-cz/membership/msdn-subscriptions>
- 5 nebo 10 VSEnterprise v základu Certified
- Další dle kompetencí
- Max 50 per country

Core membership opportunity			
Community	Microsoft Action Pack Subscription ¹	Silver competency	Gold competency
Not applicable	3 Visual Studio Professional (MPN) subscriptions	5 Microsoft Visual Studio Enterprise with MSDN subscriptions	10 Microsoft Visual Studio Enterprise with MSDN subscriptions

Incremental Visual Studio license grants by competency		
Competency	Silver competency license grants	Gold competency license grants
Application Development	5 Microsoft Visual Studio Enterprise with MSDN subscriptions	25 Microsoft Visual Studio Enterprise with MSDN subscriptions
Cloud Customer Relationship Management	5 Microsoft Visual Studio Enterprise with MSDN subscriptions	25 Microsoft Visual Studio Enterprise with MSDN subscriptions
Cloud Platform	5 Microsoft Visual Studio Enterprise with MSDN subscriptions	25 Microsoft Visual Studio Enterprise with MSDN subscriptions
Cloud Productivity	5 Microsoft Visual Studio Enterprise with MSDN subscriptions	25 Microsoft Visual Studio Enterprise with MSDN subscriptions
Dev Ops	1 Microsoft Visual Studio Enterprise with MSDN subscription	5 Microsoft Visual Studio Enterprise with MSDN subscriptions

Licence Silver/Gold partnerů na projektech

Nelze použít na
placené zákaznické
projekty a
outsourcing testování !!!

<http://aka.ms/mpnmsdn>

Existují plnohodnotné
licence pro MPN
partnerky s trvalou
slevou 20%

<https://blogs.msdn.microsoft.com/vyvojari/p/promo/>

How partner MSDN subscriptions differ from paid subscriptions

Subscription comparison

Purchased MSDN subscriptions

MSDN subscriptions offered
through the Partner Network

Internal or external development and testing

Internal development and testing only; no
projects for external customers or other direct
revenue-generating activities

MSDN technical support incidents

No MSDN technical support incidents, although
general technical support is provided as part of
the Microsoft Partner Network core benefits

Priority support in MSDN Forums

No priority support in MSDN Forums, although
general technical support is offered as part of
the Microsoft Partner Network core benefits

Windows Store and Windows Phone Store
benefits (depending on subscription level)

No Windows Store or Windows Phone Store
accounts available without a MSDN
subscription, although Windows Phone discount
offers are available as part of the Microsoft
Partner Network core benefits

Visual Studio je v CSP levnější než v běžných licenčních modelech

- Zejména kvůli jednotné WW ceně vs. EU ceny
- Praktický příklad:

	Vše od ledna do stávající OV, trvalé licence	Vše v CSP Azure pruběžně na rok plovoucí licence od doby potřeby netrvalé	Kombinace, nechat doběhnout stávající OV smlouvu nové přes Azure
OV ročně	Azure ročně		Kombinace OV Azure
Ročně v EUR bez DPH	27 253 €	19 402 €	20 033 €

Visual Studio pronájemem v CSP

<https://marketplace.visualstudio.com/subscriptions>

The screenshot shows the Microsoft Marketplace interface for Visual Studio Subscriptions. At the top, there's a navigation bar with links for Visual Studio, Visual Studio Team Services, Visual Studio Code, and Subscriptions (which is highlighted with a red arrow). Below the navigation, there are three main sections:

- Visual Studio**: Contains two plans:
 - Visual Studio Professional**: A green icon, \$539/year*, \$45/month. Includes dev/test software, monthly Azure credits and additional subscriber benefits. [Compare](#)
 - Visual Studio Enterprise**: A purple icon, \$2,999/year*, \$250/month. An integrated, end-to-end enterprise-grade solution for teams of any size with demanding quality and scale needs. [Compare](#)
- HockeyApp**: Contains a plan:
 - HockeyApp Business Plans**: A blue icon. Distribute your builds, collect live crash reports, get feedback from real users and analyze test coverage.

10 Apps Free	15 Apps \$30/month	45 Apps \$60/month
120 Apps \$120/month	250 Apps \$250/month	500 Apps \$500/month
- Xamarin University**: Contains a plan:
 - Xamarin University**: A dark blue icon. Go mobile and stay ahead of the competition with live, interactive mobile development led by Xamarin experts. \$999/year (billed monthly)

At the bottom right of the screenshot, there's a large yellow X mark over the \$45/month price.

- **Měsíční vs. Roční VStudio Cloud Subscriptions**

- **Měsíční neobsahuje DevTest benefity,**
- **Roční je obsahuje**

* Includes dev/test software, monthly Azure credits and additional subscriber benefits. [Compare](#)

Aktivace VS-MSDN benefitů (per user)

1. Koupit nebo získat Visual Studio Subscriptions
 - Různé licenční modely nebo Partner network atd.
2. Administrátor přiřadí práva vývojářům
 - = vloží email v Administraci uživatelů, pozor na MSA vs. Corp account
3. Vývojář jde na <https://my.visualstudio.com>
 - Loguje se stejným emailem co vložil jeho admin
4. Downloaduje si produkty nebo generuje klíče
5. Může aktivovat další služby a benefity
6. Po ukončení subskripce se mu vše deaktivuje



Návod na objednání Visual Studio v CSP



Visual Studio => služba Azure



- Visual Studio se v programu CSP nakupuje jako služba v Azure.
- Není tedy možné si je zakoupit jako produkt v modelu License-Based (jako známe u Office 365, Dynamics 365, atd).
- Je nutné si objednat subskripci Azure, ve které Visual Studio bude hrazeno v režimu Usage-Based (po konzumaci).
- (Samotná založení subskripce Azure je zdarma.)



Objednání Azure v systému Cloud.DAQUAS



Objednávka Microsoft Azure probíhá standardně jako u každého jiného produktu na nákupním portálu DAQUAS (cloud.daquas.cz).

Po objednání Microsoft Azure budou do e-mailu doručeny přihlašovací údaje do portálu Azure (portal.azure.com). Tyto přihlašovací údaje budou dále sloužit k přihlášení do Visual Studio Marketplace.

A screenshot of the DAQUAS Cloud Marketplace website. The header features the DAQUAS logo, navigation links (Home, Apps & Services, My WorkSpace, Billing 15, Support), and account links (My Account | Logout | CSP Portal Guide). A shopping cart icon shows 1 item. The main content area shows a three-step process: 1. Basket Items (selected), 2. End Customer, 3. Confirmation. Below this, a section titled 'My Basket' displays a single item: Microsoft Azure, represented by a cloud icon. The item details are: Quantity: -, Unit Price: 0.00 € / Month, Discount: 0.00 %, Total: 0.00 €. To the right is a 'Checkout >>' button and a portrait of a smiling man in a blue shirt. A note at the bottom left states: 'If they are for reselling, the services will be provisioned to the end customer you will select at the next step. If they are for personal usage, the services will be provisioned directly to you.'

Objednání Visual Studio

S přihlašovacími údaji můžeme vstoupit do
Visual Studio Marketplace (VSM)

<https://marketplace.visualstudio.com/>





Na úvodní stránce VSM vybereme záložku Subscriptions.

A screenshot of the Visual Studio Marketplace website. The top navigation bar includes links for "Visual Studio" (highlighted in red), "Marketplace", "Sign in", and a search icon. Below the navigation, there are tabs for "Visual Studio", "Visual Studio Team Services", "Visual Studio Code", "Subscriptions" (which has a large blue arrow pointing to it), "Build your own", and "Publish extensions". The main content area features the text "Extensions for the Visual Studio family of products" and a search bar with the placeholder "Search Visual Studio extensions". To the right of the search bar is a portrait of a smiling man with his hand to his chin. Below the search bar, there's a section titled "Featured" with six icons representing different extension categories: gears, a person icon, a circular arrows icon, a terminal window icon, a puzzle piece icon, and a grid icon.

Volba edice



- Na záložce Subscriptions je možnost vybrat si jednu z verzí ([obsah](#) je rozdílný!!!) a frekvenci plateb za službu.

The screenshot shows the Microsoft Visual Studio Marketplace interface. The top navigation bar includes links for Visual Studio, Visual Studio Team Services, Visual Studio Code, and Subscriptions, with the Subscriptions tab currently selected. Below this, a section titled "Visual Studio" displays two subscription plans:

- Visual Studio Professional**: Represented by a green square icon with the white Visual Studio logo. Description: "A comprehensive collection of software, tools and services for building professional applications with individual and team productivity." Pricing: \$539/year* and \$45/month. Note: * Includes dev/test software, monthly Azure credits and additional subscriber benefits. [Compare](#)
- Visual Studio Enterprise**: Represented by a purple square icon with the white Visual Studio logo. Description: "An integrated, end-to-end enterprise-grade solution for teams of any size with demanding quality and scale needs." Pricing: \$2,999/year* and \$250/month. Note: * Includes dev/test software, monthly Azure credits and additional subscriber benefits. [Compare](#)

Vlastní objednávka



- Po vlastním výběru produktu a frekvenci platby jsme přesměrováni na stránku s popisem vybraného produktu. Je potřeba potvrdit výběr produktu (tlačítkem Get).
- Následuje přihlášení do VSM.

A screenshot of the Microsoft Visual Studio Marketplace. The top navigation bar shows "Visual Studio | Marketplace" on the left and "Sign in" with a search icon on the right. Below the bar, the URL "Subscriptions > Visual Studio Professional - monthly subscription" is visible. A yellow banner at the top of the main content area contains the text: "You are leveraging the new acquisition experience for this resource. To switch back to the previous experience, click here." On the left side of the main area, there is a large white icon of the Visual Studio logo. To its right, the product name "Visual Studio Professional - monthly subscription" is displayed in large white text. Below the name, it says "Microsoft | Paid". A descriptive paragraph follows: "Turn your ideas into apps for iOS, macOS, Android, Linux, and Windows. Share code, track work, and ship software both on premises and using the cloud. Visual Studio Professional monthly is a cost-effective solution that gives you the tools and services you need to get started quickly, on PC and Mac." At the bottom of this section is a green rectangular button with the word "Get" in white. The background of the main content area is dark green.

Visual Studio Professional - monthly subscription

Microsoft | Paid

Turn your ideas into apps for iOS, macOS, Android, Linux, and Windows. Share code, track work, and ship software both on premises and using the cloud. Visual Studio Professional monthly is a cost-effective solution that gives you the tools and services you need to get started quickly, on PC and Mac.

Get



Určete počet licencí



- Po přihlášení je produkt automaticky svázán se subskripcí Azure (máte-li více subskripcí, budete vyzváni k výběru). Je třeba vybrat množství požadovaných licencí.

The screenshot shows the Microsoft Marketplace interface for selecting a Visual Studio Professional monthly subscription. At the top, there are tabs for Billing, Quantity, Review, and Done. The Quantity tab is active, showing a count of 1 paid user selected. Below this, there's a section for Total cost and a note about pricing being available through Azure usage-based price lists for CSP. A message at the bottom states that the first charge will be prorated. A blue "Continue" button is at the bottom left. On the right side of the page, there's a portrait of a smiling man with his hand to his chin.

Visual Studio | Marketplace

Martin Jirkal (testcspazurecustomer.onmicrosoft.com) Sign out

Billing Quantity Review Done

Select Quantity

Paid users ① Total cost

- 1 + Pricing available through Azure usage based price list for CSP

ⓘ We will prorate your first charge. Then we will charge you on the 1st each month. [Learn more](#)

Continue

Na rekapitulační stránce provedete závěrečnou kontrolu.



Review and confirm order

Azure subscription

Microsoft Azure (bcdbe8c1-be5f-4f76-8206-727b9a11b869)

Users

1 Paid

Total cost

Pricing available through Azure usage based price list for CSP

By proceeding, you agree to [Visual Studio subscription agreement](#).

Confirm

← Čtěte!



Administrace a přiřazení licencí



Po zakoupení licencí => v Manage Visual Studio Subscriptions
[\(https://manage.visualstudio.com/\)](https://manage.visualstudio.com/)

A screenshot of the Microsoft Visual Studio Subscriptions Administration interface. The top navigation bar includes 'Visual Studio' and 'Subscriptions Administration' on the left, and 'You are viewing this page as martin@daquas.cz in' with a dropdown and 'Sign out' on the right. Below the navigation is a blue header bar with 'Manage Subscribers' and 'Contact Support'.

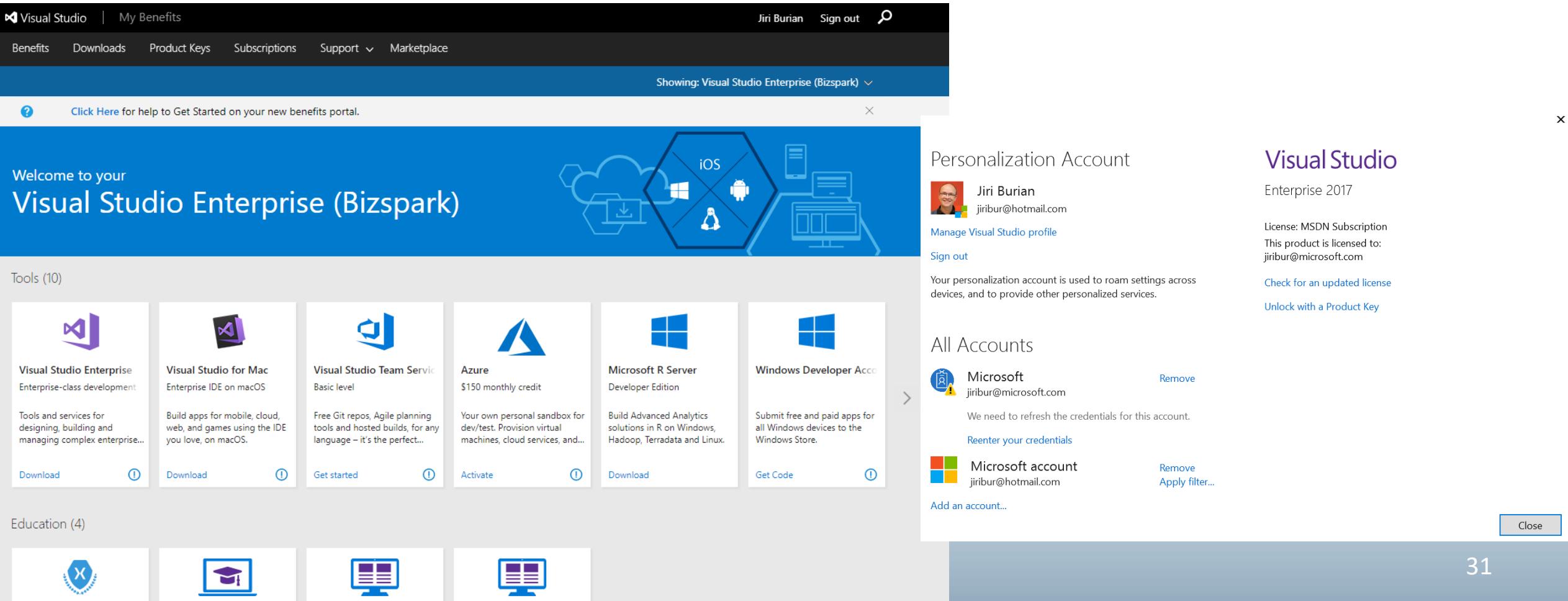
The main content area shows a summary for a Microsoft Azure subscription:

Microsoft Azure (632e8bb1-dd0c-4bd4-bfb9-)	Microsoft Azure	Azure Subscription Guid : 632e8bb1-dd0c-4bd4-bfb9-
--	-----------------	--

Below this, there's a 'Subscribers' section with an 'Overview' card showing 1 assigned | 0 of 1 available. The 'Licence Summary' section shows a single assignment for Visual Studio Professional - monthly, valid through 12/1/2017. At the bottom are buttons for 'Buy more' and 'Reduce'.

At the bottom of the screenshot, there's a small watermark of a smiling man with his hand to his chin.

- Zde si vývojáři generují vlastní klíče, stahují software pro vývoj a testování, aktivují další výhody předplatného



The screenshot shows the Microsoft Visual Studio Benefits portal. At the top, there's a navigation bar with links for Visual Studio, My Benefits, Benefits, Downloads, Product Keys, Subscriptions, Support, Marketplace, and a sign-out link. A banner at the top says "Showing: Visual Studio Enterprise (Bizspark)". Below the banner, a message encourages users to click for help starting on the new benefits portal.

The main area features a "Welcome to your Visual Studio Enterprise (Bizspark)" message. To the right of this is a "Personalization Account" section for Jiri Burian, showing his profile picture, name, email (jiribur@hotmail.com), and links to manage his profile and sign out. It also notes that his personalization account is used for roaming settings across devices.

On the left, there's a "Tools (10)" section with cards for Visual Studio Enterprise, Visual Studio for Mac, Visual Studio Team Services, Azure, Microsoft R Server, and Windows Developer Account. Each card includes a brief description and download/activation links.

To the right of the tools section is an "All Accounts" section. It lists a Microsoft account (jiribur@hotmail.com) which needs its credentials refreshed, and a Microsoft account (jiribur@hotmail.com) which can be removed or filtered. There's also a link to add a new account.

At the bottom left, there's a "Education (4)" section with cards for various educational resources. A "Close" button is located at the bottom right corner of the main content area.

msdn@daquas.cz (Jitka Frolíková)

nebo

CLOUDportal@daquas.cz

(Martin Jirkal, Daniela Petrželová)





DAQUAS

Vývojáři se logují do my.visualstudio.com kde si generují vlastní klíče, stahují DevTest sw, aktivují benefity

Visual Studio | My Benefits

Jiri Burian Sign out

Benefits Downloads Product Keys Subscriptions Support Marketplace

Showing: Visual Studio Enterprise

Click Here for help to Get Started on your new benefits portal.

Welcome to your Visual Studio Enterprise (Bizspark)

Tools (10)

Visual Studio Enterprise Enterprise-class development Tools and services for designing, building and managing complex enterprise...	Visual Studio for Mac Enterprise IDE on macOS Build apps for mobile, cloud, web, and games using the IDE you love, on macOS.	Visual Studio Team Service Basic level Free Git repos, Agile planning tools and hosted builds, for any language – it's the perfect...	Azure \$150 monthly credit Your own personal sandbox for dev/test. Provision virtual machines, cloud services, and...	Microsoft R Server Developer Edition Build Advanced Analytics solutions in R on Windows, Hadoop, Terradata and Linux.	Windows I Submit free all Windows Windows St...
Download	Download	Get started	Activate	Download	Get Code

Personalization Account

Jiri Burian jiribur@hotmail.com

Manage Visual Studio profile

Sign out

Your personalization account is used to roam settings across devices, and to provide other personalized services.

Visual Studio

Enterprise 2017

License: MSDN Subscription
This product is licensed to: jiribur@microsoft.com

[Check for an updated license](#)

[Unlock with a Product Key](#)

All Accounts

Microsoft jiribur@microsoft.com We need to refresh the credentials for this account.	Remove
Windows I Reenter your credentials	
Microsoft account jiribur@hotmail.com Submit free all Windows Windows St...	Remove Apply filter...
Add an account...	

[Close](#)

Visual Studio : nejenom vývojářské nástroje !!!

V rámci **Visual Studio/MSDN Subscription** benefitu získávají IT profesionálové, vývojáři a testeri:

Tools

1. Tools - nástroje pro vývoj a testování multiplatformních aplikací.

Software

2. Práva na neomezenou softwarovou testovací infrastrukturu Microsoft.

DevOps

3. Komplexní "All-In-One" ALM a DevOps týmové prostředí.

Hardware

4. Virtuální Hardware v hodnotě až 1 800\$ ročně na každého uživatele.

Podpora

5. Technickou Podporu, slevy a další nadstandardní služby.

Visual Studio / MSDN Subscription	Professional	Platforms	Enterprise
Nástroje pro vývoj, testování, nasazení, ... - Pokročilé nástroje, architektura, QA, bezpečnost, ...	Vývoj Tools	Testování	Vše
Právo licencovat testovací infrastrukturu - Licence Windows OS, MS SQL Server...	•	•	•
- Další firemní software Microsoft - Office 365 Developer Subscription, 25 x O365 E3 - Power BI Pro - Microsoft Office Pro Plus i pro plné použití	•	•	Vše
Agilní týmové ALM/DevOps prostředí - Release management, Package management	•	•	•
Windows Azure Dev/Test kredit/rok - Enterprise Azure Dev/Test podmínky a ceny	hodnota 480 €	hodnota 900 €	hodnota 1380 €
Technické Support Incidenty	•	•	•
Další benefity, slevy, technický support, školení	základní	základní	rozšířené
Přibližné pozicování vhodnosti edic (určeno pro:)			
Kodéři a autoři jednoduchých aplikací	•		
Admini, Project manažeři, IT Pro, Testeri		•	
Běžní firemní vývojáři, SQA, Architekti, Team leaderi			•
Orientační ROČNÍ ceny licencí bez DPH v maloobchodním modelu OPEN VALUE			
Zcela nová licence Open Value NL L+SA 1Y	574 €	1 294 €	3 772 €
Prodloužení licence Open Value NL SA 1Y	503 €	1 294 €	1 755 €

Software

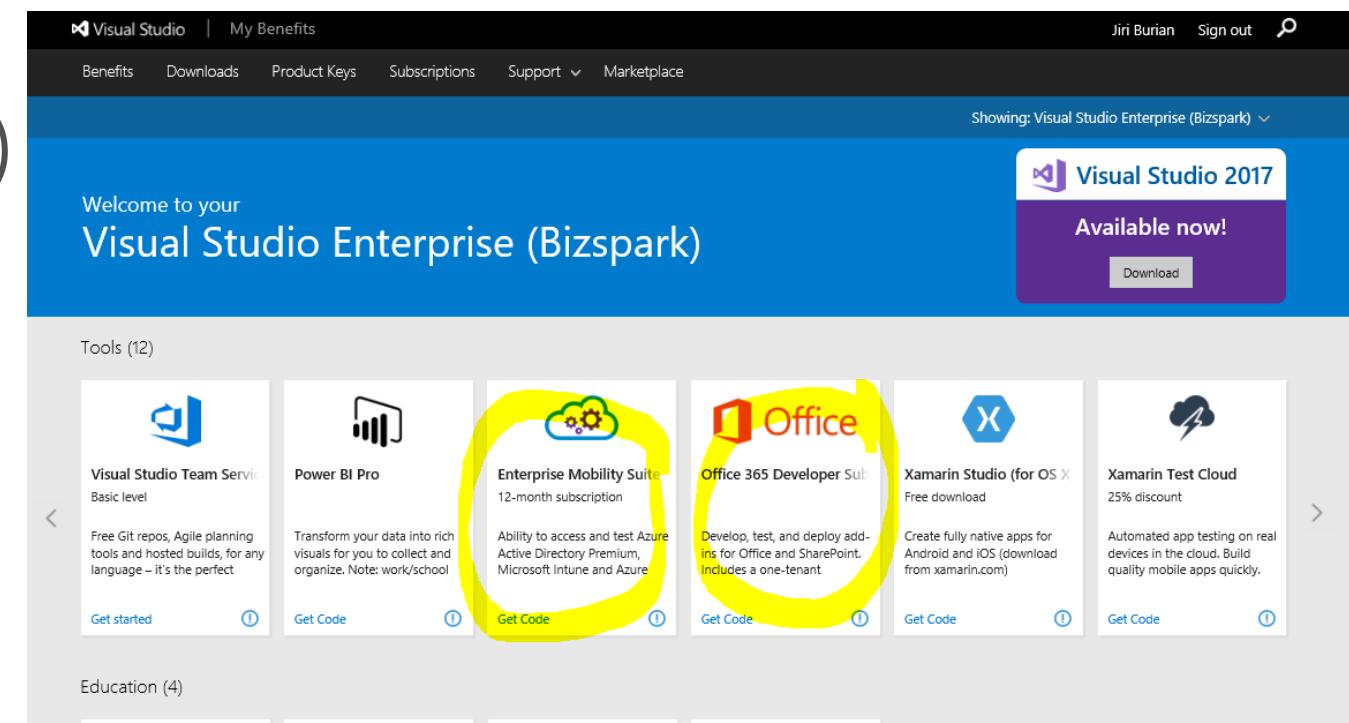
“Per Admin” unlimited Dev/Test licenses

- Unlimited testing servers or clients
 - MS SQL, SharePoint, WinDatacenter, WinOS (12 TB Microsoft, all edition all versions)
 - Special DevTest cloud mobility MSDN rights for Azure VMs and WinOS in Azure VM
- Unlimited number of UAT end users
 - Without any additional Microsoft licenses
- MSDN Subscription licenses for Devs or ITPros
 - Developing or installing Dev-Test company environment



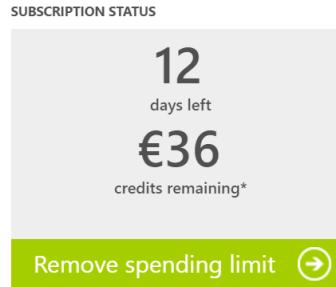
Office 365 developer account + 25 seats + EMS

- VS Enterprise Subscription benefit
- Office 365 Development and Testing, one tenant
- Enterprise Mobility Suite (Intune, AAD Premium, ...)
- PowerBI Pro
- Office 2016 full use



VS Subscriber Individual Azure credits

- Prepaid 50\$, 100\$, 150\$/month for dev/test non production
 - (VS/MSDN Pro = ~ 550\$/Y license cost, Additional Azure benefit $50 \times 12 = 600 \text{ \$/Y}$
- Experiments, trainings, lightweight test workloads
- Individual Cloud Developer Workstation
- Secured by spending limit
 - Remove via Credit Card



Individual Credits

Each Visual Studio subscriber gets up to a \$150 credit per month to use on Microsoft Azure

PROFESSIONAL/TEST PROFESSIONAL

\$50/month

MSDN PLATFORMS

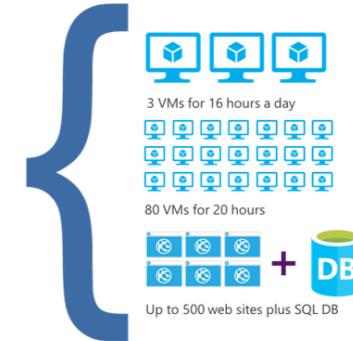
\$100/month

ENTERPRISE

\$150/month

No Software Charges

No charge for Microsoft software installed for dev and test, plus exclusive access to MSDN images



Great Rates for Teams

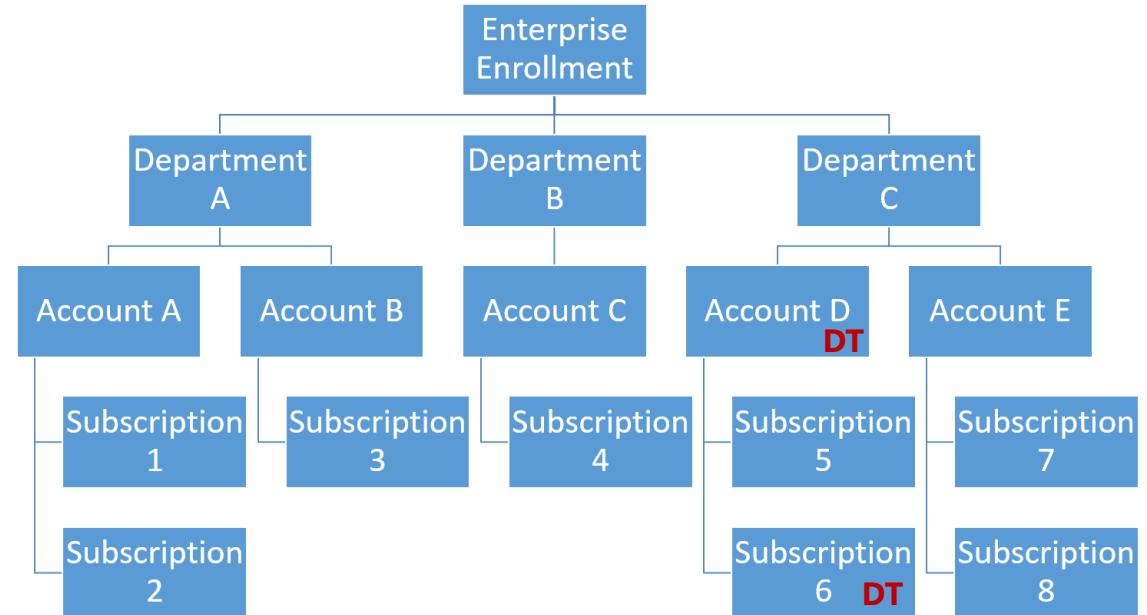
Special dev/test rates apply to VMs, HDInsight, Websites, and Cloud Services

Helps you get more from your monthly credits on Microsoft Azure + Team rates

Hardware

VS/MSDN Azure Dev/Test Team discounts

- Special pricing for Dev/Test Azure VMs for teams
 - Teams with active VS/MSDN subscriptions
- Up to 90+% down
- Enterprise EA DevTest rates
 - Centralized management in Enterprise Portal
 - No separate payment
 - Exclusive Windows OS images
 - Best option for Enterprise teams
 - ... but overcomplicated setup



<https://blogs.msdn.microsoft.com/vyvojari/2015/04/28/azure-ea-devtest-subscription/>

Cloud Hardware

VS/MSDN Azure Dev/Test discounts

<http://aka.ms/azuredvtestpricing>

Dev/Test pricing discounts

SHOW DEV/TEST PRICING [i](#)

Estimated monthly cost

Azure Dev/Test Pricing

Dev/Test pricing applies only when you run the resources within an Azure subscription that is based on one of the Dev/Test offers. [Learn more](#)

Windows Virtual Machines

Billed at [Linux VM](#) rates

BizTalk Virtual Machines ([Enterprise](#) and [Standard](#))

Billed at [Linux VM](#) rates

SQL Server Virtual Machines ([Enterprise](#), [Standard](#), and [Web](#))

Billed at [Linux VM](#) rates

Logic Apps Enterprise Connection

50 % discount

[App Service](#) instances (Basic, Standard, and Premium)

22 %-50 % discount (varies by instance size/type)

[Cloud Services](#) instances

4 %-56 % discount (varies by instance size/type)

[HDInsight](#) instances

2 %-59 % discount (varies by instance size/type)

Support/ Training

Opsgility professional Cloud Trainings

- Free for all registered developers (Dev Essentials)
- 3-month subscription

Microsoft Cloud-Focused Training for the Enterprise

By investing in Opsgility's cloud training, you're empowering yourself or your team to stay competitive in a cloud-first world.



Microsoft Azure

[View Learning Path](#)



Dynamics CRM Online

[View Learning Path](#)



Microsoft Office 365

[View Learning Path](#)



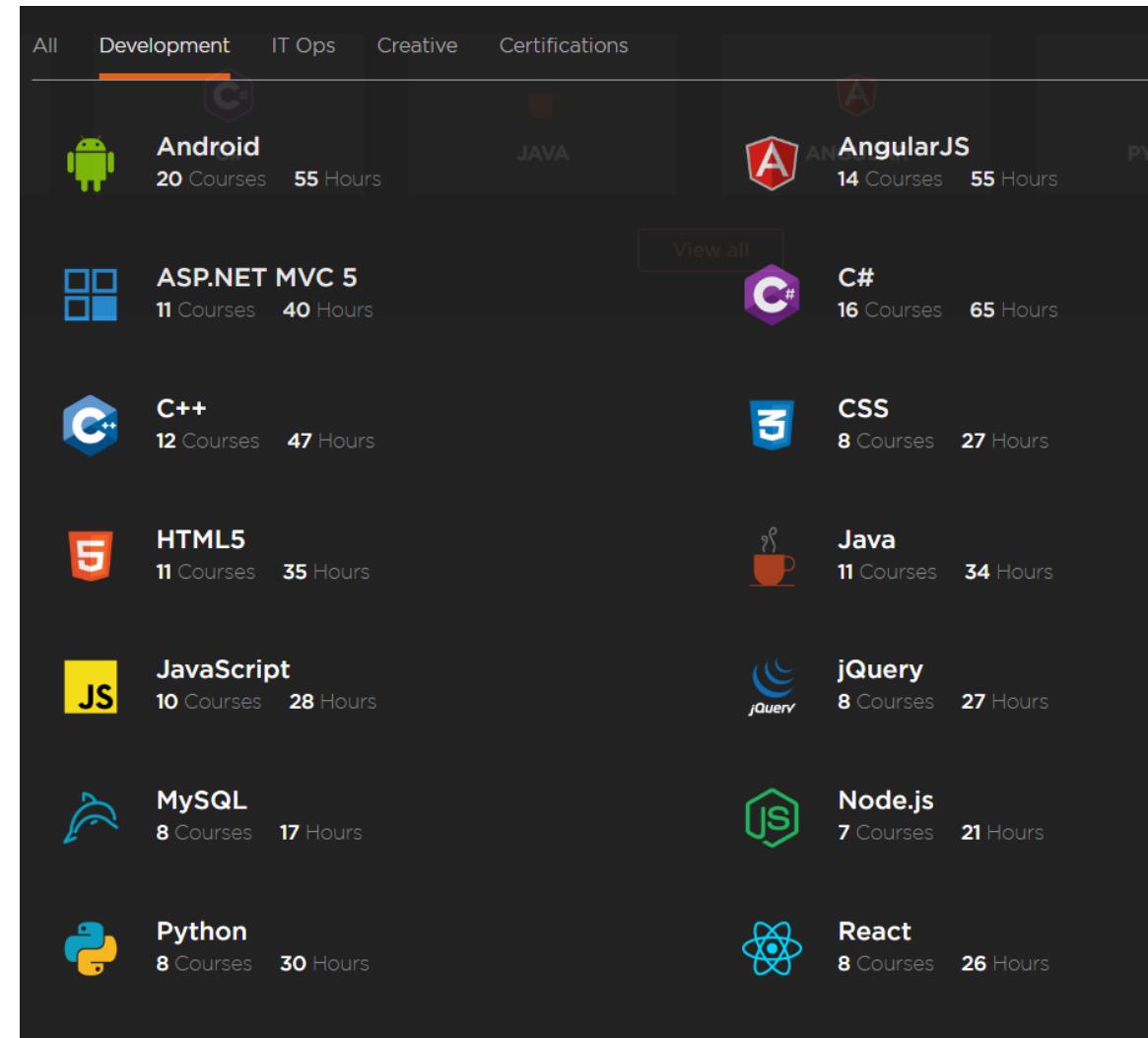
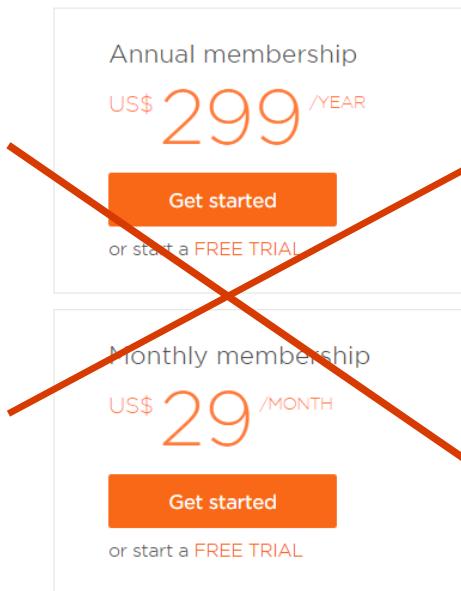
Foundational Courses

[View Learning Path](#)

Support/ Training

Pluralsight professional Trainings

- 40 courses for 12 months:
Visual Studio subscribers
- Full subscription / 12 months:
VS/MSDN Enterprise subscr.



Visual Studio : nejenom vývojářské nástroje !!!

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Právo licencovat testovací infrastrukturu - Licence Windows OS, MS SQL Server...	•	•	•
- Další firemní software Microsoft - Office 365 Developer Subscription, 25 x O365 E3 - Power BI Pro - Microsoft Office Pro Plus i pro plné použití	•	•	Vše
Agilní týmové ALM/DevOps prostředí - Release management, Package management	•	•	•
Windows Azure Dev/Test kredit/rok - Enterprise Azure Dev/Test podmínky a ceny	hodnota 480 €	hodnota 900 €	hodnota 1380 €
Technické Support Incidenty	•	•	•
Další benefity, slevy, technický support, školení	základní	základní	rozšířené
Přibližné pozicování vhodnosti edic (určeno pro:)			
Kodéři a autoři jednoduchých aplikací	•		
Admini, Project manažeři, IT Pro, Testeri		•	
Běžní firemní vývojáři, SQA, Architekti, Team leaderi			•
Orientační ROČNÍ ceny licencí bez DPH v maloobchodním modelu OPEN VALUE			
Zcela nová licence Open Value NL L+SA 1Y	574 €	1 294 €	3 772 €
Prodloužení licence Open Value NL SA 1Y	503 €	1 294 €	1 755 €

ALM / DevOps

Microsoft DevOps Solution

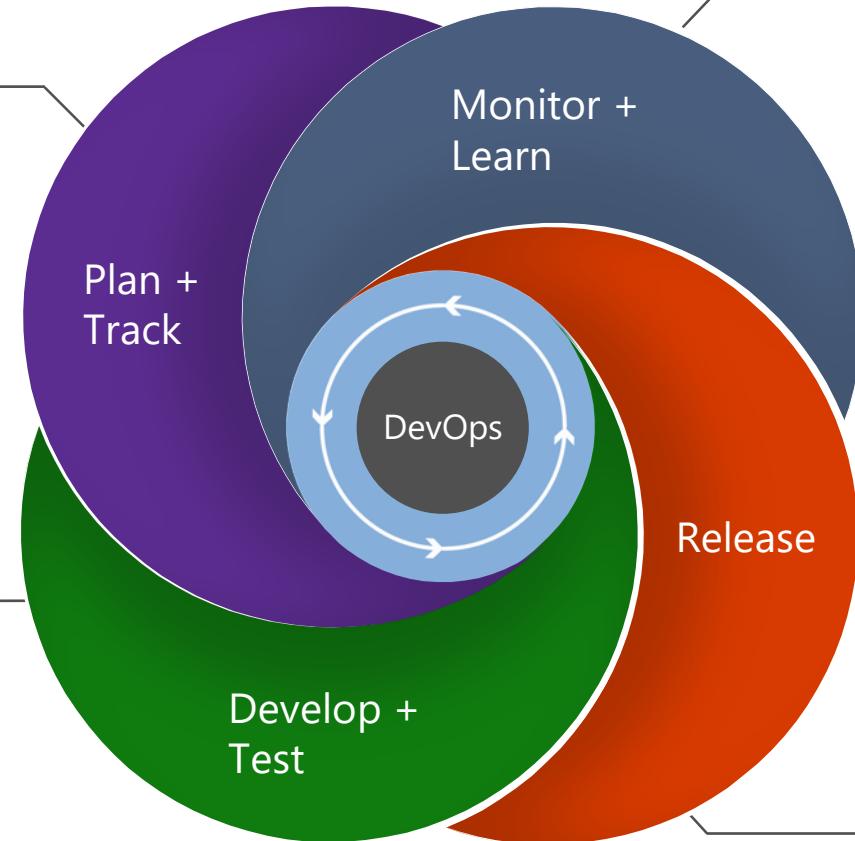
Enterprise-grade, trusted & scalable

Agile Planning

Delivery plans
Dashboards
Kanban boards

Build and Test

Git source control
Continuous integration
Security scanning
Open source compliance
Cloud-based device testing



Monitor and Learn

Application analytics
Logging & operations analytics
Mobile crash reporting

Release

Continuous delivery
Functional testing
Release management

ALM / DevOps

Agile & DevOps

Gartner Magic Quadrant for Enterprise Agile Planning Tools

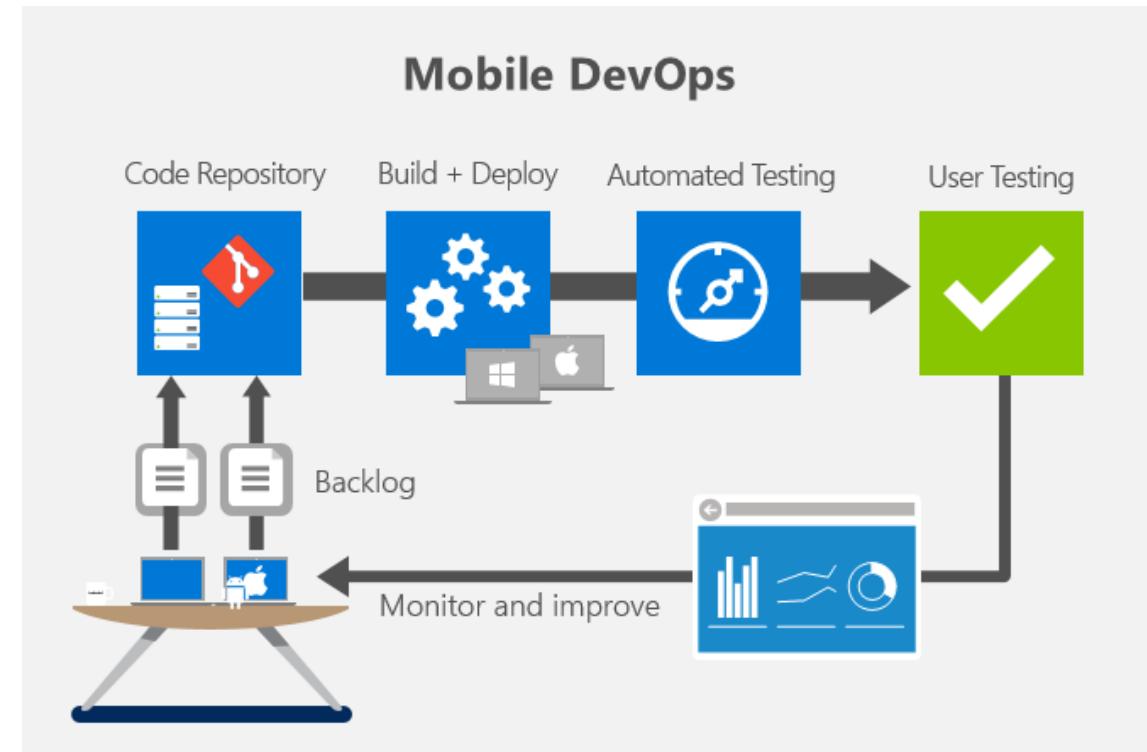
- Microsoft understands agile principles better than most integrated ADLM suite vendors on the market do, and has strong integration and contribution to leading DevOps pipeline projects.



This graphic was published by Gartner, Inc. as part of a larger research document and should be evaluated in the context of the entire document. The Gartner document is available upon request from Microsoft. Gartner does not endorse any vendor, product or service depicted in its research publications, and does not advise technology users to select only those vendors with the highest ratings. Gartner research publications consist of the opinions of Gartner's research organization and should not be construed as statements of fact. Gartner disclaims all warranties, expressed or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose.

Visual Studio Mobile Center ... mobile.azure.com

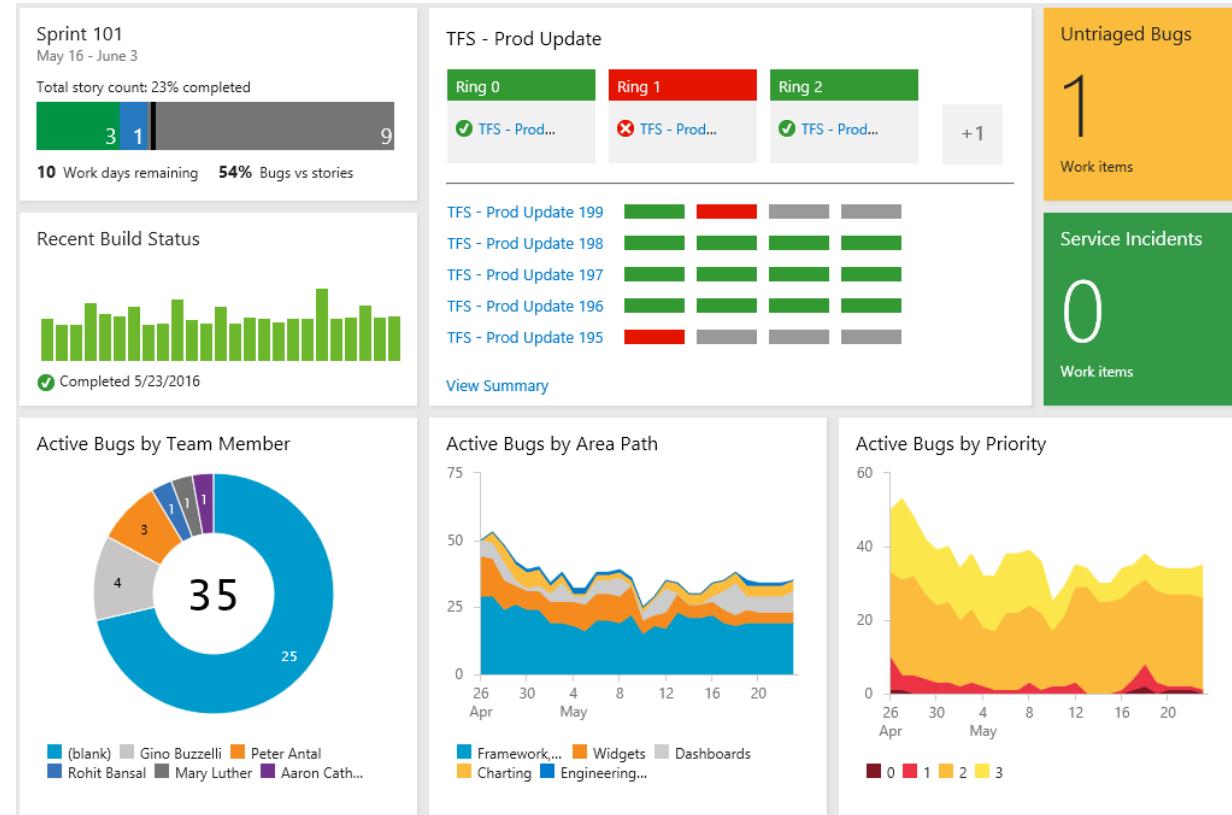
- Continuous everything
 - Automate your entire mobile app lifecycle in a few easy steps.
- Mobile platforms:
 - Objective-C, Swift, Java, Xamarin, React Native
- Lifecycle features:
 - Build, Test, Crash, Beta Distribution, Analytics
- Cloud features:
 - Authentication, Easy tables, Offline sync
- =XTC + HockeyApp



ALM / DevOps

Visual Studio Team Services

- All in One ALM + DevOps
- Agile Tools, Git, Testing
- CI/CD, Open, Extensible
- Free for small teams
- Free for Stakeholders
- Free for MSDN Subscribers
- Azure SLA +
- Team Foundation Server onprem



.NET Java Xcode



<https://www.visualstudio.com/team-services/>

Microsoft ALM/DevOps Hands-On-Labs

<https://almvm.azurewebsites.net/>

Visual Studio & Team Foundation Server Labs



[View Details](#)

Visual Studio Team Services Labs



[View Details](#)

DevOps with Visual Studio Team Services for Java Labs



[View Details](#)

Recent News

DevOps for Node.js with Visual Studio Team Services and Azure

I am happy to announce that we have a new set of hands-on-labs for [DevOps for Node.js with Visual Studio Team Services and Azure](#).

⌚ September 14, 2017 | 🚩 Sachin Hridayraj | 🔗 [Link](#)

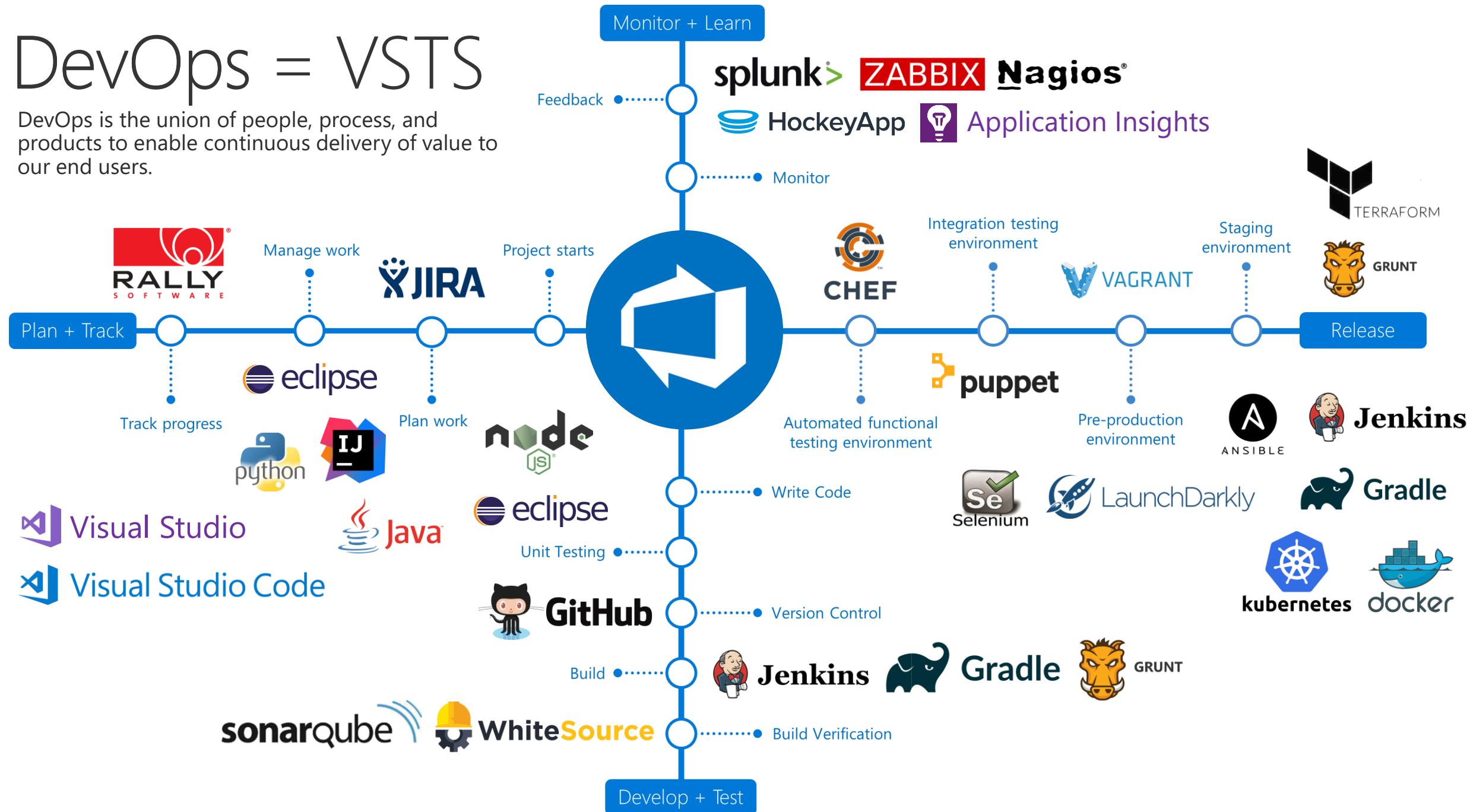
DevOps for Java with VSTS

I am happy to announce that we have a new set of hands-on-labs - [DevOps with Visual Studio Team Services for Java](#), that will give you a first-hand, technical experience on how you can leverage the Microsoft DevOps platform for Java development. Find out [more](#)

⌚ September 7, 2017 | 🚩 Sachin Hridayraj | 🔗 [Link](#)

DevOps = VSTS

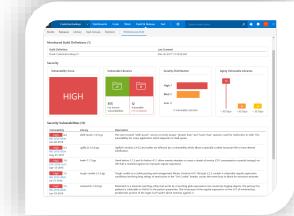
DevOps is the union of people, process, and products to enable continuous delivery of value to our end users.



Představení Visual Studio benefitů formou dema

Scénář: Potřebuji otestovat dodávaný software, zda a kolik má v sobě bezpečnostních chyb způsobených použitím zastaralých nebo neopravených OSS komponent.

1. <https://my.visualstudio.com/> portál VS a benefity
2. Založení Visual Studio Team Services accountu (tenantu)
3. Vytvoření projektu, git repo na test OSS bezpečnosti
4. Azure a měsíční 150 USD kredit, vytvoření webu 
5. Generování CI-CD, Build a Release pipeline z Azure
6. Přidání Whitesource Bolt z Marketplace do buildu
7. Reporting bezpečnosti a jiných problémů OSS modulů



Demo

Backup WhiteSource Bold



Integrate WhiteSource Bolt

Install WhiteSource Bolt from [Visual Studio MarketPlace](https://marketplace.visualstudio.com/items?itemName=whitesource.ws-bolt)

The screenshot shows the Visual Studio Marketplace page for the "WhiteSource Bolt" extension. The page has a blue header with the product name and a green "Install" button. Below the header, there's a brief description: "WhiteSource Bolt is an integrated product within the Visual studio team services product. It automatically detects all open source components in your build and alerts on vulnerable open source components, outdated libraries, and licenses compliance issues." Further down, instructions for activation and trial information are provided. On the right side of the page, there are sections for "Categories", "Tags", "Works with", "Resources", and "More Info". A large Microsoft logo is at the bottom left.

Already installed?
[Get Started!](#)



Integrate WhiteSource Bolt



Select your VSTS account and click Confirm

The screenshot shows the Visual Studio Team Services extension store interface. On the left, there's a sidebar with a 'WhiteSource' icon and a green 'Install' button. The main area displays the 'WhiteSource Bolt' extension by WhiteSource. It has a blue header with the extension name and a sub-header 'Select Account'. Below this, a sub-instruction reads 'Select a Visual Studio Team Services account where you would like to install this extension.' A dropdown menu labeled 'AccountName' is shown. The bottom section is titled 'Confirm' and lists the permissions the extension will be granted: Agent Pools (read), Build (read and execute), Code (read), Packaging (read), Service Endpoints (read, query and manage), and User profile (read). A note at the bottom states: 'This extension is offered to you for your use by a third party, not Microsoft. By clicking Confirm, you agree to the publisher's terms, if any, for this extension.' At the very bottom are two buttons: a green 'Confirm' button and a grey 'Cancel' button.

Integrate WhiteSource Bolt



Activate your WhiteSource account

The screenshot shows a Microsoft DevOps interface. At the top, there's a navigation bar with 'CustomerLookup' (selected), 'Dashboards', 'Code', 'Work', 'Build & Release', 'Test', and a gear icon. Below this is a secondary navigation bar with 'Builds', 'Releases', 'Library', 'Task Groups', 'Explorer', and 'WhiteSource Bolt' (selected). A message in the center says 'WhiteSource Bolt has not been activated for this project, please submit an activation code'. There's a text input field followed by a blue 'Activate' button. Below this, text mentions VSE subscribers can get a free activation code and provides links to 'Get Code', 'Buy Now', and a '14-Day Free Trial'. At the bottom, there's a link to 'Click Here' for more information.

CustomerLookup ▾ Dashboards Code Work Build & Release Test | ⚙

Builds Releases Library Task Groups Explorer | WhiteSource Bolt

WhiteSource Bolt has not been activated for this project, please submit an activation code

Activate

If you're a Visual Studio Enterprise (VSE) subscriber you're entitled to a free activation code for 6 months: [Get Code](#)

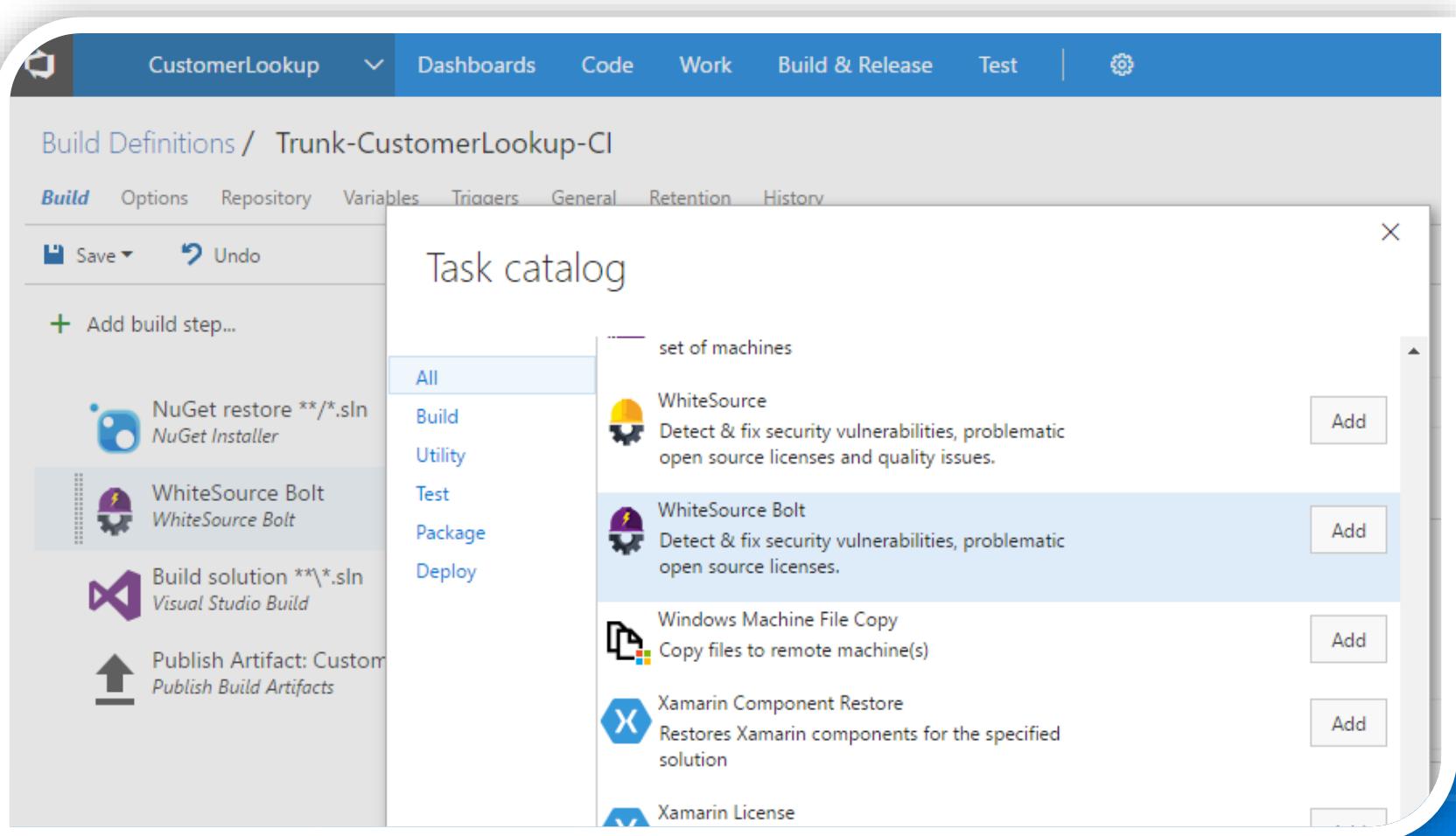
To purchase an annual subscription for your project [Buy Now](#) Not sure? Check out our [14-Day Free Trial](#)

For more information about how to activate [Click Here](#)

Integrate WhiteSource Bolt



Edit your Build Definition and add  **WhiteSource Bolt** as a build step



The screenshot shows the Microsoft DevOps interface for editing a build definition. The top navigation bar includes CustomerLookup, Dashboards, Code, Work, Build & Release, Test, and a settings gear. The current view is under the Build tab for the build definition "Trunk-CustomerLookup-Cl". On the left, there's a sidebar with options like Save, Undo, and Add build step..., followed by a list of tasks: NuGet restore, WhiteSource Bolt (which is selected), Build solution, and Publish Artifact. A modal window titled "Task catalog" is open, showing a list of available tasks under the "All" category. The "WhiteSource Bolt" task is listed twice, both described as "Detect & fix security vulnerabilities, problematic open source licenses and quality issues." Each listing has an "Add" button to the right. Other visible tasks include Windows Machine File Copy, Xamarin Component Restore, and Xamarin License.

Build Definitions / Trunk-CustomerLookup-Cl

Build Options Repository Variables Triggers General Retention History

Save Undo

+ Add build step...

NuGet restore **/*.sln
NuGet Installer

WhiteSource Bolt
WhiteSource Bolt

Build solution ***.sln
Visual Studio Build

Publish Artifact: Custom
Publish Build Artifacts

Task catalog

All

set of machines

WhiteSource
Detect & fix security vulnerabilities, problematic open source licenses and quality issues.

WhiteSource Bolt
Detect & fix security vulnerabilities, problematic open source licenses.

Windows Machine File Copy
Copy files to remote machine(s)

Xamarin Component Restore
Restores Xamarin components for the specified solution

Xamarin License

Integrate WhiteSource Bolt



Enter the open source component location path and save the build definition

Build Definitions / Trunk-CustomerLookup-CI

Queue new build... Summary Security Help

Build Options Repository Variables Triggers General Retention History

Save Undo

+ Add build step...

NuGet restore ** NuGet Installer

WhiteSource Bolt WhiteSource Bolt X

Build solution *** Visual Studio Build

Publish Artifact: Publish Build Artifact

WhiteSource Bolt Version 1.*

Root working directory: \$/CustomerLookup/CustomerLookup/oss

Advance settings

Control Options

Enabled:

Continue on error:

Always run:

Timeout: 0

<http://www.whitesourcesoftware.com>

Use WhiteSource Bolt



Queue a new build (manually or via CI Check-In/Commit)

Screenshot of the Microsoft DevOps interface showing the build history and logs for a WhiteSource Bolt task.

The build history shows:

- Build 20170329.8
- Build 40%
 - Initialize Agent
 - Get Sources
 - NuGet restore **/*.sln
 - WhiteSource Bolt** (selected)
 - Build solution ***.sln
 - Publish Artifact: CustomerLookup
 - Post Job Cleanup

The build log for the WhiteSource Bolt task shows the following output:

```
1 2017-03-29T19:06:35.0409707Z ##[section]Starting: WhiteSource Bolt
2 2017-03-29T19:06:35.0639705Z =====
3 2017-03-29T19:06:35.0639705Z Task : WhiteSource Bolt
4 2017-03-29T19:06:35.0639705Z Description : Detect & fix security vulnerabilities, problematic open source licenses.
5 2017-03-29T19:06:35.0639705Z Version : 1.0.7
6 2017-03-29T19:06:35.0639705Z Author : WhiteSource
7 2017-03-29T19:06:35.0639705Z Help : http://www.whitesourcesoftware.com
8 2017-03-29T19:06:35.0639705Z =====
9 2017-03-29T19:06:37.1778136Z Working directory is C:\a\1\s\CustomerLookup\oss
10 2017-03-29T19:06:37.1791209Z Identifying extra folders to scan.
11 2017-03-29T19:06:37.1798135Z Scanning all WhiteSource supported code extensions.
12 2017-03-29T19:06:37.1798135Z Identifying excluded folders.
13 2017-03-29T19:06:37.3228164Z Finished discovering files.
14 2017-03-29T19:06:37.3698173Z Discovering npm components. This may take a few minutes.
15 2017-03-29T19:06:45.8405789Z Adding npm open source components.
16 2017-03-29T19:06:45.9061131Z Finished getting all open source components.
17 2017-03-29T19:06:47.0775571Z Data is being uploaded. Please wait a few minutes for the inventory report to load.
18 2017-03-29T19:06:47.6386327Z ##[section]Finishing: WhiteSource Bolt
19
```

Use WhiteSource Bolt



View your WhiteSource Bolt dashboard

CustomerLookup > Dashboards Code Work Build & Release Test | 🔍 ⚙️ T ...

Builds Releases Library Task Groups Explorer | WhiteSource Bolt

Monitored Build Definitions (1)

Build Definition	Last Scanned
Trunk-CustomerLookup-CI	Mar-30-2017 12:10:26 AM

Security

Vulnerability Score

HIGH

Vulnerable Libraries

Icon	Count
Green folder with checkmark	555
Red folder with X	12

No Known Vulnerabilities

Vulnerable (12 Outdated)

Severity Distribution

Severity	Count
High	7
Med	5
Low	0

0 Vulnerable Libraries

Aging Vulnerable Libraries

Age Range	Count
> 90 Days	12
< 90 Days	0
< 30 Days	0

Security Vulnerabilities (13)

Vulnerability	Library	Description
High 8.4 WS-2016-0039 Jun-20-2016	shell-quote-1.4.3.tgz	The npm module "shell-quote" cannot correctly escape "greater than" and "lower than" operator used for redirection in shell. This vulnerability for many application which depends on shell-quote.
High 8.3 WS-2015-0024 Aug-23-2015	uglify-js-2.3.6.tgz	UglifyJS versions 2.4.23 and earlier are affected by a vulnerability which allows a specially crafted Javascript file to have altered minification.
High 7.8 CVE-2016-2515 Apr-12-2016	hawk-1.1.1.tgz	Hawk before 3.1.3 and 4.x before 4.1.1 allow remote attackers to cause a denial of service (CPU consumption or partial outage) via URI that is matched against an improper regular expression.
High 7.5 WS-2016-0035 Jul-21-2016	tough-cookie-2.2.2.tgz	Tough-cookie is a cookie parsing and management library. Versions 0.9.7 through 2.2.2 contain a vulnerable regular expression conditions involving long strings of semicolons in the "Set-Cookie" header, causes the event loop to block for excessive amounts
High 7.5 WS-2016-0030 Jun-19-2016	minimatch-1.0.0.tgz	Minimatch is a minimal matching utility that works by converting glob expressions into JavaScript RegExp objects. The primary fun pattern is vulnerable to ReDoS in the pattern parameter. This is because of the regular expression on line 521 of minimatch.js: problematic portion of the regex is <code>(?:\A(?!2))*</code> which matches against //

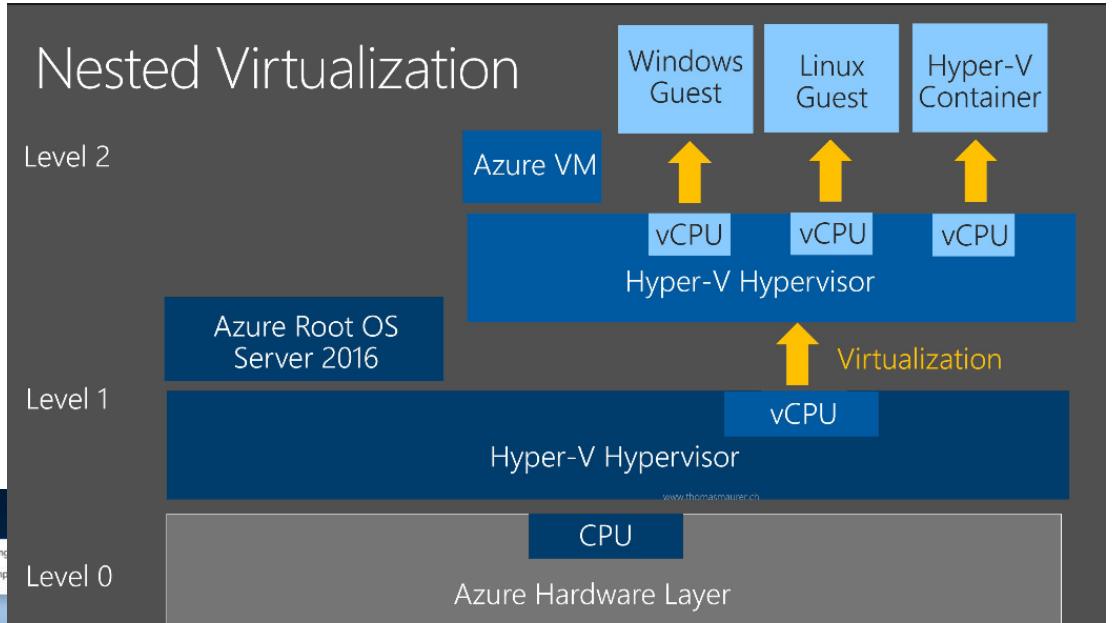
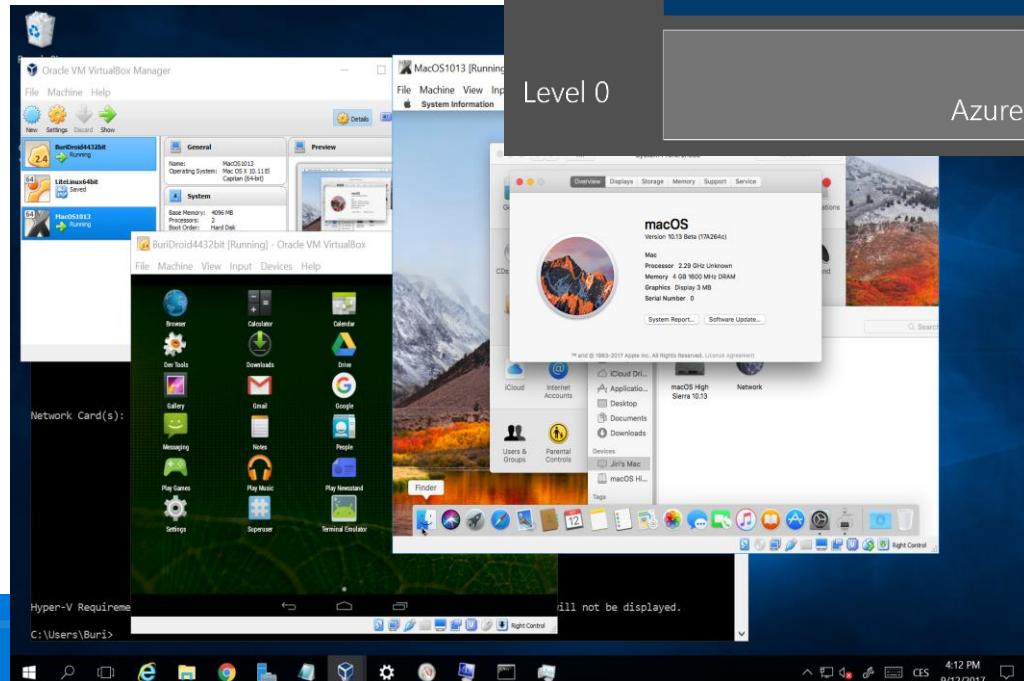
Demo

Celý Microsoft 70 000 vývojářů jede ve VSTS

- <https://mseng.visualstudio.com> (skupina co tvoří VSTS)

Tip : Nested Virtualizace v Azure

- Pro týmy které již mají virtualizované DevOps
- Chtějí vše co nejrychleji převést do Azure IaaS
- VirtualBox
- VMWare
- KVM
- ...



Souhrn

- Využijte Vaše Visual Studio Subscriptions benefity
- VSTS je zdarma pro malé týmy a předplatitele
- Nezapomeňte na <https://marketplace.visualstudio.com/>
- Azure přináší obrovské možnosti
- Azure je i pro ne-Microsoftí vývojáře
- <https://blogs.msdn.microsoft.com/vyvojari/>

Microsoft DevTest a DevOps v cloudu
Benefity pro vývojáře a IT profesionály
Visual Studio pronájemem v CSP
Azure kredity pro DevTest
DevTest benefity



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