@ Microsoft HQ

JULY 17-21, 2023
THE MICROSOFT COMMONS
REDMOND, WA
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A MESSAGE FROM THE CONFERENCE CO-CHAIRS

MICROSOFT’S CAMPUS IN REDMOND, WA IS A SPECIAL PLACE FOR THE VSLIVE! FAMILY. From the beautiful weather the area enjoys in the summer, to the thrill of hearing directly from Microsoft’s own experts on their home turf, attendees and presenters alike love being on the Microsoft campus, and we’re back, July 17-21, 2023, for another great show!

We’re Andrew Brust, Angela Dugan, Rockford Lhotka, James Montemagno and Brian Randell, and as Conference Co-Chairs for Visual Studio Live! Microsoft HQ, we’d like to personally invite you to join us in-person on Microsoft’s Redmond Campus. We firmly believe that an in-person experience, where you get to have two-way conversations with some of the finest Microsoft and external expert speakers—and with the chance to network with your peers—continues to deliver the highest level of value. The rapid pace of change means there’s more you need to know. Our cohort of technical speakers will be ready to help you know what’s ready, what’s not, and provide their expert advice and knowledge on how to build the best solutions for your customers.

Visual Studio Live! Microsoft HQ gives you a rich, multi-track event (including one track staffed entirely by Microsoft speakers) with great 75-minute breakout sessions, a full day of hands-on-lab training, and an all-day set of workshops that cover a wide array of development technologies for everyone on your team. We have picked every hands-on-lab, workshop, and session with the goal of transferring knowledge to you, so you can be a better developer and help your organization succeed in this ever-changing world.

Kicking off the week, we’ve got three great, all-day, hands-on-labs covering Mobile and Desktop Apps with .NET MAUI, Web Development with ASP.NET Core and EF Core, and DevOps. Bookending things at the end of the week, we have three all-day seminars providing deep coverage of Azure SQL and SQL Server, a Developer Deep Dive into Azure Cosmos DB, and a full day diving into Microsoft Blazor Top to Bottom. The goal of these hands-on labs and workshops is to go further into the subjects you need to master to give you the edge in your job and to help your companies build better apps.

However, sometimes you need focused coverage of specific products, technologies, and processes. We’ve got you covered there in droves, with fresh coverage on Microsoft Visual Studio 2022, .NET 6 and .NET 7, Azure technologies, Power Apps, DevOps, and the Microsoft Intelligent Data Platform. If the Web is more your style, you’ll find coverage of JavaScript, TypeScript, Angular, and Blazor, as well as ASP.NET Core on the server.

But what if you want to improve the quality of your software? Mystified as to how you can bring DevOps to your organization? Are you looking to enhance the culture of your team? We’re confident that our speakers will answer your questions with practical guidance on all these, plus mobile development, database development, and more.

Our industry continues the march toward the future. To keep up, you need to absorb rapidly and adapt. Go beyond lockdown-era Internet-based content to return to a live experience, where you get to ask questions in real-time and engage directly with Microsoft staff, independent experts, and your peers. Find a way to get to Visual Studio Live! Microsoft HQ and get the tools to help yourself grow.

We hope to see you there!

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We hope to see you there!
Ten Reasons to Attend Visual Studio Live! 2023

10. Back by Popular Demand: Hands-On Learning. Again, at VSLive! this year there’s another full day of learning with the Monday HANDS-ON LABS. Bring your laptop and learn by doing!

9. We’ve Never Skimped on Content. VSLive! is known for being a technically-focused conference, with up to 5 full days of educational sessions on hot topics like .NET 6 & 7 and .NET MAUI, Blazor, ASP.NET Core, ML.NET, Microservices, SQL Server 2022, C#, Azure, and so much more....

8. Respect the Past; Code the Future. Get relevant, immediately usable training on what’s happening on the developer landscape now, and learn what’s coming next to get out ahead of the competition.

7. Networking is Key. From the networking breakfasts, to evening activities, to just sitting next to someone new at lunch, you’ll have the unique chance to learn from and share with your peers, all week long!

6. Unparalleled Speaker Access. What has always separated Visual Studio Live! from other conferences (and internet-based training) is the unparalleled access to the speakers. Get your questions answered in-between sessions, during meals, and at fun evening events.

5. Featured Track: Microsoft-Led Sessions. Hear from Microsoft insiders who are “in the trenches” working with developers just like you on a daily basis. Learn the newest techniques from those truly in the know, and hear the most-up-to-date analysis and detail on any development announcements made at the Microsoft Build conference.

4. Be Ready for Now & Next. Get up to speed on what’s happening on the .NET developer landscape now, and learn what’s coming next to get out ahead of the competition. Keep yourself and your business competitive and future-ready with training on Microsoft Visual Studio 2022, .NET 7, DevOps, MAUI, JavaScript, TypeScript, Angular, Blazor, modern data warehouse technology, and so much more....

3. We Saved Your Spot at Microsoft Headquarters! Live like a Blue Badge for the week—have lunch at the employee food court, visit the company store, rub elbows with experts at the networking events, and so much more!

2. The Choice is Yours. With so many sessions, workshops, and hands-on labs in a variety of tracks, you’re free to choose what sessions you attend and when. You aren’t bound to any one session or track! Sometimes it’s hard to choose, though, so we provide all conference proceedings and any shared code for all the sessions free to attendees!

1. 30 Years of Coding Innovation! For over 30 years, Visual Studio Live! (VSLive!) has been THE trusted resource for .NET developer-focused education and training! We are proud to have served tens of thousands, giving them the training and education they’ve needed since 1993.
THE FUN STUFF: VISUAL STUDIO LIVE! MICROSOFT HQ EVENTS & ACTIVITIES

YOUR ATTENDANCE AT VISUAL STUDIO LIVE! is about learning from your peers as well as our expert speakers. Make the most of your time and add these events to your itinerary.

ACCESS TO THE MICROSOFT COMPANY STORE

You bring the money, we get you special access!*

All Visual Studio Live! event attendees will have the opportunity to visit the Microsoft Company Store during their time at the conference and have access to employee-only discount pricing. Popular home-use software titles such as Windows, Office, Office for Mac, and Streets and Trips are available. XBOX accessories and a selection of XBOX games are offered at significant savings. At the Redmond campus location, you will find one of the largest selections of Microsoft-branded PC hardware in any retail store. PC Hardware offered includes Keyboards and desktop sets, Mice, Webcams and more.

VSLive! event attendees will qualify for a pass that allows them access to the special discounts normally reserved only for Microsoft employees. Due to the amazing deals, each attendee is allowed to spend up to a maximum of $200. **Restrictions apply.

*Attendees will be given a voucher/form that allows them access to the employee only discount area to spend up to $200 of their own money on select Microsoft products.

**All attendees must have a valid driver’s license that matches the name on the voucher.

**If using a credit card for payment, the name on the card must match the name on your voucher and identification.

**If you are employed by a government agency or a school or university, you are not eligible for the discount pass due to Microsoft policy.

VISIT THE MICROSOFT VISITOR CENTER

The Microsoft Visitor Center is open to all employees and visitors to the Microsoft campus. Come share in the excitement of their discoveries, explore some of the latest products, and meet some of the people whose ideas and creativity make Microsoft a world leader in computer and software industry.

MIX & MINGLE @ VSLIVE!

Monday, July 17

This is your opportunity to meet fellow attendees and start friendships that can last for the week or even longer. Join us to mix and mingle with other conference attendees and speakers for a casual no-host mixer. Enjoy light appetizers provided by VSLive! while you get to know your fellow attendees and take in the local Bellevue nightlife. Everyone is responsible for their own beverages.

WELCOME RECEPTION & MICROSOFT ASK THE EXPERTS

Tuesday, July 18

Visual Studio Live! Microsoft HQ’s Welcome Reception will be combined with a Microsoft Ask the Experts session, where you’ll get a chance to talk with Microsoft product team members and speakers. Enjoy drinks and snacks while you mingle with conference speakers, attendees, and exhibitors.
THE FUN STUFF (continued)

TABLE TOPIC LUNCH
Wednesday, July 19
Join other attendees at lunch to share ideas, talk about the issues of the day, and maybe solve a few. While you enjoy lunch, you can find and connect with other like-minded people at tables designated for certain languages, technologies, and interests.

We will also have designated speaker tables - noted with the speakers’ name. Join your favorite speaker for a lunchtime discussion or to follow up on any questions from a session.

VSLIVE!’S GET YOUR GAME ON
@ DAVE & BUSTER’S
Wednesday, July 19
Pre-registration & $10 Confirmation Fee Required

Grab the complimentary shuttle on Wednesday evening to Dave & Buster’s for an exciting night of networking, gaming, and fun with your fellow attendees. In addition to the appetizer buffet (including unlimited sodas, tea, and coffee), each attendee will receive a Power Card loaded with $15 of game play + unlimited video game play* (unlimited video game play excludes games which give tickets, specialty, & crane games). And Wednesday is ½ price game night at Dave & Buster’s, so your game card goes twice as far.

*Unlimited video game play includes the car racing games like Mario Kart, Shoot ‘em Up Games like The Walking Dead and Tomb Raider, Air Hockey, our virtual Roller Coaster Typhoon, Guitar Hero, PacMan Battle Royale, and many others.

“THE BEST PART WAS THE NUGGETS OF INFORMATION THAT I CAN DIRECTLY APPLY TO MY WORK STARTING MONDAY.”
— 2022 Visual Studio Live! Microsoft HQ attendee
# AGENDA-AT-A-GLANCE

## Visual Studio Live! Pre-Conference Hands-On Labs: Monday, July 17, 2023
*Separate entry fee required*

<table>
<thead>
<tr>
<th>START TIME</th>
<th>END TIME</th>
<th>LAB TITLE</th>
<th>SPEAKERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 AM</td>
<td>8:30 AM</td>
<td>Pre-Conference Hands-On Labs Registration • Coffee and Breakfast</td>
<td></td>
</tr>
<tr>
<td>8:30 AM</td>
<td>12:30 PM</td>
<td>VM01 Hands-On Lab: Building Mobile &amp; Desktop Apps with .NET MAUI</td>
<td>James Montemagno &amp; Becky Buckler</td>
</tr>
<tr>
<td>12:30 PM</td>
<td>13:00 PM</td>
<td>Lunch at The Mixer</td>
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</tr>
<tr>
<td>1:30 PM</td>
<td>5:30 PM</td>
<td>VM01 Hands-On Lab: Continued</td>
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<tr>
<td>6:30 PM</td>
<td>8:00 PM</td>
<td>Mix &amp; Mingle @ VSLive!</td>
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## Visual Studio Live! Day 1: Tuesday, July 18, 2023

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>7:00 AM</td>
<td>8:00 AM</td>
<td>Registration • Coffee and Breakfast</td>
<td></td>
</tr>
<tr>
<td>8:00 AM</td>
<td>9:15 AM</td>
<td>VT01 What’s New and Next for .NET MAUI Developers?</td>
<td>James Montemagno &amp; Becky Buckler</td>
</tr>
<tr>
<td>9:30 AM</td>
<td>10:45 AM</td>
<td>VT05 What’s New in Blazor for .NET 8</td>
<td>Don Roth</td>
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<tr>
<td>10:45 AM</td>
<td>11:15 AM</td>
<td>Sponsored Break • Visit Exhibitors</td>
<td></td>
</tr>
<tr>
<td>11:15 AM</td>
<td>12:15 PM</td>
<td>Lunch at The Mixer • Visit the Microsoft Company Store &amp; Visitor Center</td>
<td></td>
</tr>
<tr>
<td>12:15 PM</td>
<td>1:30 PM</td>
<td>VT09 Power your DevOps Development with SQL Server Containers</td>
<td>Bob Ward</td>
</tr>
<tr>
<td>1:30 PM</td>
<td>2:45 PM</td>
<td>VT10 Injecting Innovation Into Applications Through Design</td>
<td>Billy Hollis</td>
</tr>
<tr>
<td>2:45 PM</td>
<td>4:15 PM</td>
<td>VT13 Make the Most of GitHub to Setup your Projects for Success</td>
<td>Jessie Houghton</td>
</tr>
<tr>
<td>4:15 PM</td>
<td>5:45 PM</td>
<td>Microsoft Ask the Experts &amp; Welcome Reception</td>
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</tbody>
</table>

Sessions and speakers subject to change.
## AGENDA-AT-A-GLANCE (continued)

<table>
<thead>
<tr>
<th>Modern Software Engineering</th>
<th>Cloud, Containers and Microservices</th>
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<th>Data &amp; Analytics</th>
<th>Developing New Experiences</th>
<th>Human Factors in Engineering</th>
<th>The Core of .NET</th>
<th>Full Stack Web Development</th>
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### Visual Studio Live! Day 2: Wednesday, July 19, 2023

<table>
<thead>
<tr>
<th>START TIME</th>
<th>END TIME</th>
<th>Session</th>
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</thead>
<tbody>
<tr>
<td>7:30 AM</td>
<td>8:00 AM</td>
<td>Registration • Coffee and Breakfast</td>
</tr>
<tr>
<td>8:00 AM</td>
<td>9:15 AM</td>
<td><strong>VW01</strong> Building Power Apps with .NET &amp; Azure API Management - End-to-End - Julia Kasper, Stephanie Lemus &amp; Linda Nichols</td>
</tr>
<tr>
<td>9:30 AM</td>
<td>10:45 AM</td>
<td><strong>VW02</strong> TypeScript: Moving Beyond the Basics - Allen Conway</td>
</tr>
<tr>
<td>9:30 AM</td>
<td>10:45 AM</td>
<td><strong>VW03</strong> What's New for Developers in SQL Server 2022 - Leonard Lobel</td>
</tr>
<tr>
<td>10:45 AM</td>
<td>11:15 AM</td>
<td>Sponsored Break • Visit Exhibitors</td>
</tr>
</tbody>
</table>
| 11:15 AM   | 12:15 PM | **KEYNOTE: FROM STARTUPS TO THE ENTERPRISE: SCALE YOUR BUSINESS AND APPLICATIONS WITH AZURE SQL**
  *Bob Ward, Principal Architect, Microsoft Azure Data & Asad Khan, Vice President of SQL Products and Services, Microsoft* |
| 12:15 PM   | 1:15 PM  | Table Topics Lunch • Visit Exhibitors                                    |
| 1:15 PM    | 2:30 PM  | **VW09** New Features in Visual Studio You Will Love
  - Visual Studio & .NET Team |
| 1:15 PM    | 2:30 PM  | **VW10** An Introduction to Getting Up and Running with Modern Angular
  - Allen Conway |
| 2:30 PM    | 3:00 PM  | Sponsored Break • Exhibitor Raffle @ 2:45 pm (Must be present to win)    |
| 3:00 PM    | 4:15 PM  | **VW13** Azure Functions for .NET Developers – Everything You Need To Know
  - Fabio Cavalcante & Matthew Henderson |
| 3:00 PM    | 4:15 PM  | **VW14** Get Func-y: Understanding Delegates in C# - Jeremy Clark     |
| 4:15 PM    | 5:15 PM  | **VW15** Introduction to Azure Cosmos DB - Leonard Lobel                |
| 5:15 PM    | 9:30 PM  | VSLive!’s Get Your Game On @ Dave & Buster’s                            |

Sessions and speakers subject to change.
AGENDA-AT-A-GLANCE (continued)

Visual Studio Live! Day 3: Thursday, July 20, 2023

<table>
<thead>
<tr>
<th>START TIME</th>
<th>END TIME</th>
<th>Session</th>
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<tbody>
<tr>
<td>7:30 AM</td>
<td>8:00 AM</td>
<td>Registration • Coffee and Breakfast</td>
<td></td>
</tr>
<tr>
<td>8:00 AM</td>
<td>9:15 AM</td>
<td>VH01 What’s Next in C#</td>
<td>Dustin Campbell &amp; Mads Torgersen</td>
</tr>
<tr>
<td>9:30 AM</td>
<td>10:45 AM</td>
<td>VH05 The Whirlwind Tour of Building .NET Apps in Azure</td>
<td>Matt Soucoup</td>
</tr>
<tr>
<td>9:30 AM</td>
<td>11:20 AM</td>
<td>VH06 I’ll Get Back to You: Task, Await, and Asynchronous Methods in C#</td>
<td>Jeremy Clark</td>
</tr>
<tr>
<td>11:00 AM</td>
<td>11:20 AM</td>
<td>VH09 Fast Focus: Delivering Developer Velocity through Microsoft Dev Box</td>
<td>Sagar Chandra Reddy Lankala</td>
</tr>
<tr>
<td>11:35 AM</td>
<td>11:55 AM</td>
<td>VH13 Fast Focus: Code to Cloud with the Azure Developer CLI (azd)</td>
<td>Savannah Ostrowski</td>
</tr>
<tr>
<td>11:55 AM</td>
<td>1:15 PM</td>
<td>Lunch @ The Mixer</td>
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<tr>
<td>1:15 PM</td>
<td>2:30 PM</td>
<td>VH17 Modern Architectures with Azure SQL DB</td>
<td>Davide Mauri &amp; Brian Spindolini</td>
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<tr>
<td>2:45 PM</td>
<td>4:00 PM</td>
<td>VH21 T-SQL for Cloud-native Developers</td>
<td>Umachandar (UC) Jayachandran &amp; Abhiman Tiwari</td>
</tr>
<tr>
<td>8:00 AM</td>
<td>12:00 PM</td>
<td>VF01 Workshop: Azure SQL and SQL Server</td>
<td>Davide Mauri &amp; Umachandar (UC) Jayachandran</td>
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<td>1:00 PM</td>
<td>5:00 PM</td>
<td>VF01 Workshop: Continued</td>
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Visual Studio Live! Post-Conference Workshops: Friday, July 21, 2023 (Separate entry fee required)

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<tr>
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<td>5:00 PM</td>
<td>VF01 Workshop: Continued</td>
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KEYNOTE SESSIONS

WE HAVE LINED UP SOME OF THE BEST IN THE BUSINESS to give the 2 Keynotes we have planned for Visual Studio Live! @ Microsoft HQ. While they are busy finalizing their session details you can check out their impressive bios below.

**KEYNOTE:**
**The Future of Development - AI and the Cloud**  
Tuesday, July 18, 11:15am – 12:15pm

Join Amanda Silver and friends to see the exciting new advancements in developer tooling that will enable your team to onboard new developers faster and equip them with everything they need to get coding and be more productive while writing code. See how you can use Microsoft Dev Box and Azure Deployment Environments, along with Visual Studio, Visual Studio Code, and GitHub Copilot to supercharge your productivity.

Amanda Silver  
CVP, Head of Product Developer Division, Microsoft

**KEYNOTE:**
**From Startups to the Enterprise: Scale your Business and Applications with Azure SQL**  
Wednesday, July 19, 11:15am – 12:15pm

Any startup is looking to scale its business to the next enterprise. They need their developers to access cloud services that are easy to deploy, integrate with DevOps, and scale quickly with unlimited resources as the business grows. Azure SQL has the tools for developers and industry-proven cloud services for data with built-in capabilities for graph, JSON, REST API, analytics, Ledger, and traditional OLTP. Build applications and let Azure SQL adapt to your workload with built-in intelligence for maximum performance. In this session, we will show you all the innovations for Azure SQL that provide developers with the tools, price/performance, security, and fault tolerance needed for any data application from small to virtually unlimited size.

You will learn:

- How to build quickly and inexpensive data applications using Azure SQL Database
- How Azure SQL Database is a cloud platform for startups all the way to large enterprises
- Learn by demonstration the latest announcements and innovations for Azure SQL

Asad Khan  
Vice President of SQL Products and Services, Microsoft

Bob Ward  
Principal Architect, Microsoft Azure Data, Microsoft
FULL-DAY HANDS-ON LABS (Separate entry fee required)

Visual Studio Live! @ Microsoft HQ offers three instructor-led, pre-conference Hands-On Labs to help you take your dev skills to a new level. Get intensive, in-depth training to complete your conference experience.

Topics covered include:
- Building Mobile & Desktop Apps with .NET MAUI
- ASP.NET Core App with EF Core
- Essential DevOps

These labs are presented on a Bring Your Own Laptop (BYOL) basis.

VM01
Building Mobile & Desktop Apps with .NET MAUI
Intermediate
JAMES MONTEMAGNO & BECKY BUCKLER
Monday, July 17, 8:30am - 5:30pm
Let's learn how to build our very first cross-platform mobile and desktop app for iOS, Android, macOS, and Windows with .NET MAUI! We will build out a new project, add data, navigation, and call web services.

You will learn:
- What is .NET MAUI and how can you use it to build apps
- Build your first .NET MAUI app and call backend services
- Add navigation, platform features, and more!

Attendee Requirements:
You must provide your own laptop computer (Windows or Mac) for this hands-on lab.

This is a hands-on workshop and I encourage you to bring your own development machine to follow throughout the day. We will be building a full app from scratch with short presentation in between each exercise and Q&A along the way.

A few important notes before you arrive so we have a successful day. .NET MAUI is fully GA and tooling is available in both Visual Studio 2022 and Visual Studio 2022 for Mac.

For the workshop, we will be using the latest version of .NET, .NET 7, which was released on November 8th alongside Visual Studio 2022 v17.4 and Visual Studio for Mac 2022 v17.4. I recommend upgrading to this latest version.

Before you arrive, please follow the .NET MAUI tutorial to ensure that you have the correct workloads and versions of Visual Studio configured. Finally, be sure to make sure you to browse through the Get started guides on the documentation site to ensure your emulator and simulators are configured.

After that, your machine should be ready to go for the full workshop.

VM02
Develop an ASP.NET Core App with EF Core in a Day
Intermediate
PHILIP JAPIKSE
Monday, July 17, 8:30am - 5:30pm
Interested in ASP.NET Core and Entity Framework Core, but not sure where to start? Start here with an all-day Hands-on Lab where you will build a complete solution using the latest development technology from Microsoft. You will build a data access library using Entity Framework Core, complete with repos and migrations. Next, you will build an ASP.NET Core web application, leveraging all of the latest that ASP.NET Core has to offer, including Tag Helpers, View Components, Dependency Injection, and more!

You will learn:
- ASP.NET Core Web Applications (MVC)
- EF Core
- Build an application in a day!

Attendee Requirements:
You must provide your own laptop computer (Windows or Mac) for this hands-on lab.

All other laptop requirements will be provided to attendees 2 weeks prior to the conference.

VM03
Hands-On Lab: Essential DevOps 2023
Intermediate
BRIAN RANDELL
Monday, July 17, 8:30am - 5:30pm
Details to come

Attendee Requirements:
You must provide your own laptop computer (Windows or Mac) for this hands-on lab.

All other laptop requirements will be provided to attendees 2 weeks prior to the conference.
FULL-DAY WORKSHOPS

Choose from a range of content and topics by expert presenters with Visual Studio Live! @ Microsoft HQ’s Post-Conference workshops.

Topics covered include:

• Azure SQL and SQL Server
• Azure Cosmos DB
• Microsoft Blazor

VF01 Workshop: Azure SQL and SQL Server: All Things Developers

DAVIDE MAURI & UMACHANDAR JAYACHANDRAN
Friday, July 21, 8:00am - 5:00pm

A great number of new features have been announced for Azure SQL and SQL Server to support developers in being more efficient and productive when creating either shiny new solutions or when modernizing existing ones.

In this workshop, we’ll dedicate a full day to deep diving into each one of these new features, so that you’ll learn how to take advantage of them right away.

You will learn:
• How to use the new feature of Azure SQL
• Understand the use cases
• Gain practical knowledge that can be used right away

VF02 Workshop: Developer Dive into Azure Cosmos DB

LEONARD LOBEL
Friday, July 21, 8:00am - 5:00pm

This full day workshop will ramp you up quickly on Azure Cosmos DB, Microsoft’s globally distributed, massively scalable, low (single-digit millisecond) latency, fully managed NoSQL database service designed specifically for modern web and mobile applications. Like other NoSQL platforms, Cosmos DB supports a schema-free data model, built-in partitioning for sustained heavy-write ingestion, and replication for high availability. But only Cosmos DB offers turnkey global distribution, automatic indexing, and SLAs for guarantees on 99.999% availability, throughput, latency, and consistency.

For many newcomers to Cosmos DB, the learning process starts with data modeling and partitioning. How should you structure your model? When should you combine multiple entity types in a single container? Should you de-normalize your entities? What’s the best partition key for your data? So we start off with the key strategies for modeling and partitioning data effectively in Cosmos DB. Using a real-world NoSQL example based on the AdventureWorks relational database, we explore key Cosmos DB concepts—request units (RUs), partitioning, and data modeling—and how their understanding guides the path to an optimal data model that yields the best performance and scalability.

Throughout the day, we tour the many features of Cosmos DB, including its multi-model capabilities which allow you to store and query schema-free JSON documents (using either SQL or MongoDB APIs), graphs (Gremlin API), and key/value entities (table API), and columnar (Cassandra API). You’ll learn about global distribution, multi-region conflict resolution, scale-out partitioning, tunable consistency, custom indexing, and more.

You’ll also learn client development, starting with the .NET SDK as we build a Cosmos DB application from scratch in C#. Then you’ll see how to work with your data using interactive Jupyter notebooks and Python. You’ll also learn how to migrate data from SQL Server to Cosmos DB with Azure Data Factory, how to query Cosmos DB using SQL, and how to write data access code that creates and queries databases, containers, and documents. We’ll also create, deploy, and execute server-side stored procedures, triggers, and user-defined functions, using the Cosmos DB JavaScript server-side programming model. Attend this workshop, and get yourself ready for Cosmos DB!

VF03 Workshop: Microsoft Blazor Top to Bottom

JASON BOCK, ALLEN CONWAY & ROCKFORD LHOTKA
Friday, July 21, 8:00am - 5:00pm

Blazor (Browser + Razor) has redefined the current landscape for web developers, allowing C# and .NET back into the modern web development picture. Leveraging WebAssembly to allow running .NET code in the browser, we can use the same C# language on the client and the server to build our modern web applications. At the core of Blazor is the ability to compose our web application using reusable components just like the modern browser frameworks.

Join experts in Blazor, WebAssembly, and enterprise development as they discuss why and when to use Blazor. They will give you everything you need to know to build Blazor apps, use the Razor component model, data and event binding, styling the UI, and building maintainable code. You will learn about Blazor server, WebAssembly, and MAUI hybrid apps, and how to implement authentication and authorization. WebAssembly and Blazor are incredibly powerful technologies and may be the future of web development. Come to this workshop to form your own view on this exciting platform.

You will learn:
• The basics of Blazor app dev and Blazor features
• The various ways to host and run Blazor apps
• How to implement authentication and authorization

“THE BEST PART WAS THE GREAT SPEAKERS THAT SPARKED GREAT CONVERSATIONS.”

– 2022 Visual Studio Live! Microsoft HQ attendee
SESSION DESCRIPTIONS BY TRACK

MODERN SOFTWARE ENGINEERING

The heart of Modern Software Engineering is building and delivering software faster, reducing complexity and risk, all without sacrificing quality – quality of the software AND quality of the experience of everyone involved in building and delivering that software. The list of technical strategies, tools, and leading practices that enable modern software engineering is long and are evolving rapidly. This track will help you stay on top of leading DevOps, DevSecOps, and platform engineering practices, tools, and strategies. Expect us to dig in on providing remote access, robust environments, and automation that is secure, easy to access, and readily available.

You’ll find coverage of:
- Workshop: Essential DevOps in 2023
- Database DevOps in 2023
- GitHub Actions
- Real World Scrum with Azure DevOps
- YAML and Azure DevOps Pipelines
- Shift left on security with GitHub

VT09

Power your DevOps Development with SQL Server Containers

Intermediate

BOB WARD
Tuesday, July 18, 1:30 – 2:45pm

You will learn:
- How SQL containers powers DevOps for data applications
- See demonstrations for free local development for Azure SQL integrated with GitHub and the cloud
- See how SQL containers can reduce costs and energy by promoting a local, consistent development experience for data

VT13

Make the Most of GitHub to Setup your Projects for Success

Introductory / Intermediate

JESSIE HOUGHTON
Tuesday, July 18, 3:00 – 4:15pm

You will learn:
- How to get started with GitHub Issue tracking with Visual Studio
- How to leverage GitHub in the inner loop work developer workflow
- How to incorporate GitHub Actions in Visual Studio

VT16

I Love YAML: Using Azure DevOps to Build and Release to Azure

Intermediate / Advanced

BENJAMIN DAY
Wednesday, July 19, 3:00 – 4:15pm

You will learn:
- What is YAML and YAML-based pipelines? How is it the same/different from JSON-based pipelines?
- How do you handle multiple environments?
- How do you use approvals to control deployments to environments?

VH24

Shift Left on Security with GitHub

Introductory

ESTEBAN GARCIA
Thursday, July 20, 2:45 – 4:00pm

You will learn:
- GHAS features
- Understand what is meant by shifting left on security
- AS a developer, what can I do to improve the security posture of my application

THE INSTRUCTORS WERE ALL AWESOME! REALLY ENJOY LISTEN TO THEM SPEAK ON TOPICS THEY ARE PASSIONATE ABOUT.”

— Jose Medina, 2022 Visual Studio Live! Microsoft HQ attendee
SESSION DESCRIPTIONS BY TRACK (continued)

**CLOUD, CONTAINERS, AND MICROSERVICES**

Cloud computing is no longer new. For most organizations, it’s not a matter of “if”, it’s more about how much with a focus on the big three: AWS, Azure, and GCP. Container technologies such as Kubernetes (aka k8s) and Docker are having a large impact on cloud computing, as well as on software architecture. This is perhaps most clear when thinking about service-oriented, or microservice, software architectures and how they can be used to leverage cloud- and container-based environments. It is hard to imagine any enterprise development scenario where one or more of these trends would not be high on the list of critical skills.

This track includes coverage of the following:
- Workshop: Deep Dive into Azure CosmosDB
- Azure Service Bus
- Azure Messaging Services
- Azure Functions
- Microsoft Dev Box
- Azure CLI
- Building .NET Apps in Azure
- Workshop: Building Azure PaaS Apps with C#

**VT07**

**The Latest and Greatest from Azure Service Bus**

**Introductory / Intermediate**

**ELDERT GROOTENBOER**

Tuesday, July 18, 9:30 – 10:45am

You will learn:
- About the new features in Azure Service Bus.
- Give feedback and help impact the future of Azure Service Bus.
- Get to know more about how and why we built certain features.

**VT11**

**A Guide through the Azure Messaging Services**

**Introductory**

**ELDERT GROOTENBOER**

Tuesday, July 18, 1:30 – 2:45pm

You will learn:
- All about the different Azure messaging services.
- Identify what messaging services you should use for your workloads.
- Understand the architecture used for the different types of Azure messaging services.

**VH03**

**Living the Container Life in Azure**

**Intermediate**

**ESTEBAN GARCIA**

Thursday, July 20, 8:00 – 9:15am

You will learn:
- About container deployment and operations
- Understand Azure Container Apps
- Deploy and run containers with AKS

**VT05**

**The Whirlwind Tour of Building .NET Apps in Azure**

**Introductory / Intermediate**

**MATT SOUCOUP**

Thursday, July 20, 9:30 – 10:45am

In this session learn to make the most of Azure to build scalable, robust, and resilient .NET web (and mobile!) apps with Azure.

**VH05**

**The Whirlwind Tour of Building .NET Apps in Azure**

**Intermediate**

**ELDERT GROOTENBOER**

Tuesday, July 18, 1:30 – 2:45pm

You will learn:
- All about the different Azure messaging services.
- Identify what messaging services you should use for your workloads.
- Understand the architecture used for the different types of Azure messaging services.

**VW13**

**Azure Functions for .NET Developers – Everything You Need to Know**

**FABIO CAVALCANTE & MATTHEW HENDERSON**

Wednesday, July 19, 3:00 – 4:15pm

In this session, the Azure Functions team will show you how to leverage your existing .NET skills to author function projects that take full advantage of the platform and all the newest features and capabilities.

**VH09**

**Fast Focus: Delivering Developer Velocity through Microsoft Dev Box**

**Introductory**

**SAGAR CHANDRA REDDY LANKALA**

Thursday, July 20, 11:00 – 11:20am

You will learn:
- Self-serve ready-to-code workstations
- Customize dev box for a specific project
- Centrally manage and govern developer desktops

**VH09**

**Fast Focus: Code to Cloud with the Azure Developer CLI (azd)**

**Introductory**

**SAVANNAH OSTROWSKI**

Thursday, July 20, 11:35 – 11:55am

You will learn:
- About the Azure Developer CLI + its ecosystem
- About how to use the CLI to scaffold your application for the cloud
- How to provision infrastructure + deploy your code in a single step
CUTTING-EDGE AI

With the advent of ChatGPT and the huge growth in generative AI, it suddenly seems like artificial intelligence is everywhere, and everyone’s talking about it. The technology is exciting and powerful, and the mainstream awareness of it can help adoption and create opportunities. But learning how the technology works, and how it can help you, requires getting beyond the hype and examining the core of the subject matter itself.

Visual Studio Live!’s Cutting-Edge AI track does exactly that, by teaching you how GPT, ChatGPT and other large language models work, how best to prompt them, and how you can use them as tools in your own work, including for generating and debugging code. Beyond Generative AI, this track will also teach you the foundational machine learning technology that remains important and becomes even more so as AI awareness picks up. Want to get up to speed on real-world AI without side-lining your other important work? Visual Studio Live! gives you the expertise, education and pragmatic approach you need to get there.

You will learn:

- Gain a foundational understanding of ChatGPT and its underlying GPT-4 architecture, which empowers the AI to generate human-like text responses and comprehend complex language patterns.
- Acquire practical knowledge on how to effectively use ChatGPT for various tasks, such as drafting emails, generating creative content, and providing assistance in programming and customer support.
- Develop an appreciation for the broader context of large language models, including their evolution, ethical considerations, and the ongoing efforts to ensure the safe and responsible use of AI technologies.

VT04


Introductory

BRIAN RANDELL
Tuesday, July 18, 8:00 – 9:15am

VT20

Large AI models and Generative AI Beyond ChatGPT

Introductory / Intermediate

ANDREAS ERBEN
Thursday, July 20, 1:15 - 2:30pm

You will learn:

- About generative AI complementing ChatGPT
- How to get started with running large models locally
- Hear about latest trends in generative AI

VH12

Fast Focus: Developing AI solution with Azure OpenAI APIs without the Fuzz

Introductory / Intermediate

ANDREAS ERBEN
Thursday, July 20, 11:00 - 11:20am

You will learn:

- About the Azure OpenAI Service
- About the APIs of Azure OpenAI Service
- How to build AI solutions leveraging Azure OpenAI Service

VH16

Fast Focus: No, ChatGPT and Bard Won’t Take Your Job

Introductory

BRIAN RANDELL
Thursday, July 20, 11:35 – 11:55am

You will learn:

- Understanding the capabilities and limitations of AI language models such as ChatGPT and Bard
- Exploring the unique value of human expertise and creativity in the face of AI advancements
- Identifying opportunities for collaboration between AI and humans, leading to increased productivity and innovation
SESSION DESCRIPTIONS BY TRACK (continued)

DATA & ANALYTICS

Data has once again become one of the hottest topics in our industry and ecosystem. SQL Server 2022 is the current target for enterprise data, Azure SQL Database continually improves, Cosmos DB is coming on strong and Entity Framework is ever more relevant in the modern .NET world. There’s no room for anyone to be complacent when it comes to data, and we’re here to keep you up to date.

This track includes coverage of the following:

• Choosing the Right Data Store
• Database Admin for the non-DBA
• Scale your business and apps with Azure SQL
• What’s New for Developers in SQL Server 2022
• Analytics with the Microsoft Intelligent Data Platform
• .NET Developers Guide to Python
• Azure Cosmos DB
• Modern Architectures with Azure SQL DB
• T-SQL for Cloud-Native Developers
• Workshop: Azure SQL and SQL Server for Developers

VT03
Choosing the Right Data Store - An Overview of Azure Data Platform Choices
Intermediate
DENNY CHERRY
Tuesday, July 18, 8:00 – 9:15am
You will learn:
• The differences between the data solutions
• When to use different data platforms in Azure
• When to keep databases on-premises

VT15
Database Administration for the non-DBA
Introductory
DENNY CHERRY
Tuesday, July 18, 3:00 – 4:15pm
You will learn:
• How to take SQL Server backups
• What the database compatibility level really means
• How to fix database corruption

VW03
What’s New for Developers in SQL Server 2022
Intermediate
LEONARD LOBEL
Wednesday, July 19, 8:00 – 9:15am
You will learn:
• How to secure your data using ledger tables
• Apply granular permissions to dynamic data masking
• Leverage new T-SQL enhancements

VW07
Analytics with the Microsoft Intelligent Data Platform
Advanced
ANDREW BRUST
Wednesday, July 19, 9:30 – 10:45am
You will learn:
• How to use Microsoft cloud services together, and how not to
• The differences between data warehouses, data lakes and data lakehouses
• Ways to combine T-SQL, Spark SQL and Python, without getting confused
• Understanding and working with open data file formats like Parquet, Delta Lake and, yes, CSV
• The collaborative use of multiple tools, including Web-based UIs, VS Code, Azure Data Studio and SQL Server Management Studio

VH07
SQL Server Machine Learning Services & Language Extensions
Intermediate
UMACHANDAR (UC) JAYACHANDRAN
Thursday, July 20, 9:30 - 10:45am
In this session, we will look at SQL Server Machine Learning Services & Language Extensions.
SESSION DESCRIPTIONS BY TRACK (continued)

**VH17**
Modern Architectures with Azure SQL DB
Intermediate
DAVIDE MAURI & BRIAN SPENDOLINI
Thursday, July 20, 1:15 – 2:30pm
You will learn:
- How Azure SQL DB can be used in modern architectures
- Use Data API Builder to generate REST and GraphQL endpoints from database objects
- Use database Change Stream

**VH21**
T-SQL for Cloud-native Developers
Introductory / Intermediate
UMACHANDAR (UC) JAYACHANDRAN & ABHIMAN TIWARI
Thursday, July 20, 2:45 – 4:00pm
You will learn:
- How to use JSON effectively in T-SQL
- How to integrate T-SQL with external services
- About the improved T-SQL string operations

**VT01**
What’s New and Next for .NET MAUI Developers?
Introductory
JAMES MONTEMAGNO & BECKY BUCKLER
Tuesday, July 18, 8:00 – 9:15am
You will learn:
- What is .NET MAUI and how can you use it to build apps
- How to deploy .NET MAUI apps to different platforms
- How to integrate native integrations into .NET MAUI apps

**VT02**
Busy Developers Guide to Flutter
Intermediate
TED NEWARD
Thursday, July 20, 8:00 – 9:15am
You will learn:
- The basics of Dart and Flutter
- Different approaches to coding
- Take away a different way of thinking about building mobile apps

**DEVELOPING NEW EXPERIENCES**
The expectations around “user experience” are being upended right before our eyes. In today’s world you need to understand not only graphical interactions with keyboard, mouse, touch, and stylus, but also gesture, 3D, mixed-reality, and more. Fortunately, we’ve got you covered with content for rich multi-platform apps covering Windows, macOS, and mobile and even bots for good measure.

This track includes coverage of the following:
- Hands-on Lab: Building Mobile and Desktop Apps with .NET MAUI
- What’s New and Next for .NET MAUI
- Power Apps with .NET and Azure API Management
- Developers Guide to Flutter
- Changing the World with IoT

**VT10**
Injecting Innovation Into Applications Through Design
Introductory
BILLY HOLLIS
Tuesday, July 18, 1:30 – 2:45pm
You will learn:
- How innovation is underappreciated due to modern development complexities
- See how processes and methodologies, including widely used agile variants, hamper innovation
- Discover techniques to make your team innovation focused, allowing them to build more valuable applications

**VT14**
Leveraging WinUI3 for Business Desktop Applications
Intermediate
BILLY HOLLIS
Tuesday, July 18, 3:00 – 4:15pm
You will learn:
- Understand why WinUI is bringing together Microsoft’s most important native UI platforms
- See how moving from WPF to WinUI can offer important new functionality in your apps
- Learn some of the challenges in moving to WinUI 3 based on a real project

**VW01**
Building Power Apps with .NET & Azure API Management - End-to-End
JULIA KASPER, STEPHANIE LEMUS & LINDA NICHOLS
Wednesday, July 19, 8:00 – 9:15am
You will learn:
- Azure API Management
- ASP.NET web API Development
- Visual Studio

“I REALLY LIKED TO HEAR FROM THE PEOPLE WORKING ON THE TOOLS, LIKE THE TALK OF WHAT IS NEW IN VS TO IMPROVE PRODUCTIVITY. IT WAS AWESOME TO SEE HIS EXCITEMENT WHEN SHOWING US NEW STUFF.”
– 2022 Visual Studio Live! Microsoft HQ attendee
SESSION DESCRIPTIONS BY TRACK (continued)

**HUMAN FACTORS IN ENGINEERING**

When engineering software, systems, and processes, one factor that is key to success, that is particularly complex and challenging to account for, and is often not focused on proactively – is the human factor. Drucker famously said that “culture eats strategy for breakfast”, meaning that the best laid system architecture, cloud strategies, and DevOps pipelines are only as effective as the people and teams who are implementing those brilliant plans. And to be effective, those individuals and teams need leaders who are connected and present and who provide clear vision and priorities for their teams to align to. They also need to work within a culture that embraces and encourages experimentation, learning, and continuous improvement, with access to tools and processes that reduce friction and boost collaboration. The sessions in the Human Factors in Engineering track focus on topics that will be relevant and useful for a lifetime regardless of the platform, languages, and “best practices” that you use along the way.

Topics in this track include:
- Using Empathetic Conversations to Get Good Requirements
- The Software Developer As an Agent of Corporate Change
- Roll with the changes - Boosting Your Adaptability Quotient
- Measuring up! How to Choose Agile Metrics Your Team Won’t Hate
- Choosing metrics with your team to foster experimentation and growth
- Workshop: The Human Side of Agile and DevOps

**VW04**

**Using Empathetic Conversations to Get Good Requirements**

*Intermediate*

**ROBERT BOGUE**

Wednesday, July 19, 8:00 – 9:15am

**You will learn:**
- Apply proven questions to get accurate and complete answers
- Identify barriers to communication
- Develop trust, safety, and rapport to create the conditions for honest answers

**VW08**

**The Software Developer as an Agent of Corporate Change**

*Intermediate*

**ROBERT BOGUE**

Wednesday, July 19, 9:30 – 10:45am

**You will learn:**
- Identify individual personal motivators
- Assess the impact of trust on your change project
- Synthesize strategies to motivate your colleagues

**VH04**

**Roll with the Changes - Boosting Your Adaptability Quotient**

*Introductory*

**ANGELA DUGAN**

Thursday, July 20, 8:00 – 9:15am

**You will learn:**
- What is AQ?
- Ways to measure AQ
- Techniques for effectively rolling with the random chaos life throws your way

**VH08**

**Measuring Up! How to Choose Agile Metrics Your Team Won’t Hate**

*Introductory / Intermediate*

**ANGELA DUGAN**

Thursday, July 20, 9:30 – 10:45am

**You will learn:**
- Why it is so difficult to identify meaningful metrics in the software world
- The importance of developing a healthy “metrics mindset”
- The best types of quality-focused team metrics to focus on in an agile organization

**VH15**

**Fast Focus: Super Charge Your Feedback Skills in 20 Minutes**

*Introductory / Intermediate*

**ANGELA DUGAN**

Thursday, July 20, 11:35 – 11:55am

In this fast-paced 20-minute session focused on supercharging your feedback skills, I will help you get a good foothold on where to start. You’ll be a feedback champion before you know it!

“**THE BEST PART OF THE CONFERENCE WAS THE ENGAGEMENT WITH MICROSOFT STAFF AND TECHNICAL LEADERSHIP SESSIONS.**

— 2022 Visual Studio Live! Microsoft HQ attendee
THE CORE OF .NET

The heart of the Microsoft development experience has been the .NET Framework. But it’s changed a lot in the era of .NET Core. And now we have a single, unified version,. .NET 7 and .NET 8 coming in the near future. You need to understand these major changes in the platform, not to mention the cool features being added to C#. These are the foundation-level topics you need to know for success in the Microsoft development world.

Topics in this track include:
- Task and Await: Async Programming in C#
- 10 Software Design Patterns for Everyday Life
- Developing Accessible Apps with Visual Studio
- New Features in Visual Studio You’ll Love
- Understanding Delegates in C#
- Esoteric Programming Languages
- .NET Interactive Notebooks
- What’s New in .NET 7 APIs
- Dependencies Demystified
- C# and Roslyn
- Entity Framework Performance Monitoring and Tuning

VW05

Developing Accessible Applications with Visual Studio
 Introductory
 DANTE GAGNE
 Wednesday, July 19, 9:30 – 10:45am
 You will learn:
- The integrated accessibility checker for XAML based applications
- How to understand the impact of an accessibility issue and how to prioritize it
- How to use AI for Code to fix common accessibility issues quickly

VW09

New Features in Visual Studio You Will Love
 Intermediate
 VISUAL STUDIO & .NET TEAM
 Wednesday, July 19, 1:15pm – 2:30pm
 You will learn:
- How to be more productive using Visual Studio
- About new features you didn’t know existed
- Why upgrading to VS 2022 is in every engineer’s best interest

VW14

Get Func-y: Understanding Delegates in C#
 Introductory / Intermediate
 JEREMY CLARK
 Wednesday, July 19, 3:00 – 4:15pm
 You will learn:
- See how delegates can add extension points to your code
- Use methods as parameters for other methods
- Understand the built-in Func and Action delegate types

VH01

What’s Next in C#
 Intermediate
 DUSTIN CAMPBELL & MADS TORGersen
 Thursday, July 20, 6:00 – 7:15am
 Join Dustin and Mads on a tour of recent and upcoming language features in C#.

VH06

I’ll Get Back to You: Task, Await, and Asynchronous Methods in C#
 Introductory
 JEREMY CLARK
 Thursday, July 20, 9:30 – 10:45am
 You will learn:
- Get data back from an asynchronous method
- Handle exceptions that occur in an asynchronous method
- When to use “ConfigureAwait”

VH11

Fast Focus: Busy Developer’s Guide to Esoteric Programming Languages
 Introductory
 TED NEWARD
 Thursday, July 20, 10:00 – 11:15am
 You will learn:
- Explore what an esoteric programming language is
- Pick up a few new languages
- Drive yourself (and maybe a few co-workers) crazy

VH14

Fast Focus: Getting Polygot Notebooks
 Introductory
 JASON BOCK
 Thursday, July 20, 11:00 – 11:55am
 You will learn:
- See what Polygot Notebooks are
- Understand how .NET works in notebooks
- Gain insight into .NET integration in Jupyter
SESSION DESCRIPTIONS BY TRACK (continued)

VH18
What’s New in .NET 7 APIs
Intermediate
JASON BOCK
Thursday, July 20, 1:15 – 2:30pm
You will learn:
• See what functionality .NET provides
• Understand new features in the latest version of .NET
• Gain insight in staying on top of new runtime versions

VH22
Dependencies Demystified
Intermediate
JASON BOCK
Thursday, July 20, 2:45 – 4:00pm
You will learn:
• Gain insight into what dependencies are
• See how containers simplify and empower your applications
• How to use containers effectively in modern .NET applications

VH19
C# Roslyn and You
Intermediate / Advanced
JIM WOOLEY
Thursday, July 20, 1:15 – 2:30pm
You will learn:
• How to take advantage of C# Scripting to add some dynamic functionality in your applications.
• Understand how to use and create code analyzers and code fixes.
• Discover how to automate repetitive coding tasks with Syntax Generators

VH23
Entity Framework Performance Monitoring and Tuning
Intermediate
JIM WOOLEY
Thursday, July 20, 2:45 – 4:00pm
You will learn:
• Discover typical performance issues based on real-life examples and how to fix them
• Discover how to profile your database interactions through Entity Framework
• How different versions of EF generate different queries and how you need to modify your data access strategy as a result

FULL STACK WEB DEVELOPMENT
Web development has become the dominant approach for building enterprise software. To provide your best on every project, you need to understand the server and browser client worlds. On the server, there’s ASP.NET using .NET 6 with MVC, Razor Pages, and support for building services. The browser client is evolving rapidly, with constant changes and updates to JavaScript, TypeScript, Angular, and other related frameworks. But more than this, there’s now Blazor Server and Blazor Client (aka WebAssembly) and the ability to run other languages natively in the browser. Your need to keep up to date with all these technologies has never been greater, and we’re here to give you the knowledge you need!

Topics in this track include:
• Hands-on Lab: Develop an ASP.NET Core App with EF Core in a Day
• Workshop: Microsoft Blazor Top to Bottom
• Introduction to Blazor
• What’s New and Next for Blazor
• ASP.NET Core Razor Pages
• Typescript
• Modern Angular Development
• Building Enterprise Apps with Blazor and CSLA .NET
• JavaScript Framework Showdown

VT02
Introduction to Blazor
Introductory / Intermediate
ROCKFORD LHOTKA
Tuesday, July 18, 8:00 – 9:15am

“THE FUNNY AND FRIENDLY SPEAKERS WERE FANTASTIC, I LOVED IT WHEN THEY SHARED THEIR CANDID EXPERIENCES WITH PROGRAMMING LANGUAGES AND TOOLS.”
– 2022 Visual Studio Live! Microsoft HQ attendee
SESSION DESCRIPTIONS BY TRACK (continued)

You will learn:
• How Blazor, WebAssembly, and .NET combine to enable this app platform
• How to build server-side Blazor and Blazor WebAssembly apps
• How to use Blazor UI framework features such as UI components, data binding, routing, and authorization

VT05
What's New in Blazor for .NET 8
Intermediate
DAN ROTH
Tuesday, July 18, 9:30 – 10:45am
You will learn:
• How Blazor is becoming the best option for full stack web development
• How Blazor United in .NET 8 will provide full flexibility to build web apps however works best for you
• How to try out the latest Blazor features in .NET 8

VT06
Websites with ASP.NET Core Razor Pages
Introductory / Intermediate
PHIL JAPIKSE
Tuesday, July 18, 9:30 – 10:45am
You will learn:
• Foundations of ASP.NET Core
• DI, Routing, Configuration
• Views, Layouts, Templates, and more

VT07
TypeScript: Moving Beyond the Basics
Intermediate / Advanced
ALLEN CONWAY
Wednesday, July 19, 9:00 – 10:15am
You will learn:
• About advanced TypeScript language features available beyond the basics
• How to leverage the building blocks of TypeScript and build upon them with advanced features to make web client development more powerful
• About additional TypeScript language features like advanced types, decorators, mixins, symbols, generics, iterators, and declaration merging

VT08
Building Enterprise Blazor Apps Using CSLA .NET
Intermediate
ROCKFORD LHOTKA
Wednesday, July 19, 9:30 – 10:45am
You will learn:
• How Blazor can be used to build end-user experiences for the enterprise
• How CSLA .NET helps you develop maintainable, reusable, cross-platform business logic
• How to leverage your business logic on the server with Linux containers

VW02
An Introduction to Getting Up and Running with Modern Angular
Introductory
ALLEN CONWAY
Wednesday, July 19, 1:15 – 2:30pm
You will learn:
• The fundamentals of the Angular framework and why you would use it for modern web development, as well as how it fits in front of your existing back-end implementation
• How to create and run an Angular application using the CLI (Command Line Interface)
• The fundamentals of Angular applications by building components, views, and services

VW06
Fast Focus: JavaScript Framework/Library Showdown
Introductory
ALLEN CONWAY
Thursday, July 20, 11:00 – 11:20am
You will learn:
• About the main frameworks and libraries for modern web client development
• About the main differences between Angular, React, and Vue
• About what backing factors will help guide the way to making a good decision about the framework and library chosen

“I REALLY ENJOYED EXPLORING NEW TOOLS & TECHNIQUES FOR OUR TEAM.”
– 2022 Visual Studio Live! Microsoft HQ attendee
CONFERENCE CHAIRS & SPEAKERS

CONFERENCE CHAIRS

Andrew Brust  
Founder & CEO, Blue Badge Insights  
Visual Studio Live! Conference Co-Chair

Angela Dugan  
Solutions Director, 3Cloud Solutions  
Visual Studio Live! Conference Co-Chair

Rockford Lhotka  
VP of Strategy, Xpirit USA  
Visual Studio Live! Conference Co-Chair

James Montemagno  
Principal Lead Program Manager for .NET Community, Microsoft  
Visual Studio Live! Conference Co-Chair

Brian Randell  
Product Marketing Director, GitHub  
Visual Studio Live! Conference Co-Chair

SPEAKERS

Jeremy Clark  
Developer Educator, JeremyBytes.com

Billy Hollis  
Developer, Designer, Speaker, Author

Rockford Lhotka  
VP of Strategy, Xpirit

Jason Bock  
Developer Advocate, Rocket Mortgage

Allen Conway  
App Modernization Consultant, Xpirit USA

Jessie Houghton  
VS Program Manager, Microsoft

Leonard Lobel  
CTO, Sleek Technologies, Inc.

Robert Bogue  
President, Thor Projects LLC

Benjamin Day  
Author, Trainer, Developer

Philip Japikse  
Developer, Coach, Author, Teacher

Davide Mauri  
Principal Product Manager, Microsoft

Andrew Brust  
CEO and Founder, Blue Badge Insights

Angela Dugan  
Solutions Director, 3Cloud Solutions

Umachandar (UC) Jayachandran  
Principal Product Manager, Microsoft

James Montemagno  
Principal Lead Program Manager for .NET Community, Microsoft

Becky Buckler  
Program Manager, Microsoft

Andreas Erben  
CEO Americas, daenet

Julia Kasper  
Program Manager, Microsoft

Ted Neward  
Principal, Neward & Associates

Dustin Campbell  
Principal Software Engineer, .NET Developer Experience Team, Microsoft

Dante Gagne  
Senior Accessibility Product Manager for Visual Studio, Microsoft

Asad Khan  
Vice President of SQL Products and Services, Microsoft

Linda Nichols  
App Innovation Global Blackbelt, Microsoft

Fabio Cavalcante  
Principal Software Engineering Manager, Microsoft

Esteban Garcia  
CEO, Xpirit USA

Sagar Chandra Reddy Lankala  
Senior Product Manager - Developer Division, Microsoft

Savannah Ostrowski  
Senior Program Manager, Microsoft

Denny Cherry  
Owner and Principal Consultant, Denny Cherry & Associates Consulting

Eldert Grootenboer  
Senior Program Manager, Microsoft

Stephanie Lemus  
Global Blackbelt App Innovation/Fusion, Microsoft

Brian Randell  
Product Marketing Director, GitHub

Daniel Roth  
Principal Product Manager, Microsoft

Amanda Silver  
CVP, Head of Product Developer Division, Microsoft

Matthew Soucoup  
Principal Cloud Developer Advocate for .NET, Microsoft

Brain Spendolini  
Senior Product Manager, Microsoft

Abhiman Tiwari  
Program Manager, Microsoft

Mads Torgersen  
C# Lead Designer, .NET Team, Microsoft

Jim Wooley  
Solution Architect, Slalom Consulting

Bob Ward  
Principal Architect for Azure Data team, Microsoft

Linda Nichols  
App Innovation Global Blackbelt, Microsoft

Asad Khan  
Vice President of SQL Products and Services, Microsoft

Savannah Ostrowski  
Senior Program Manager, Microsoft

Brian Randell  
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Developer, Designer, Speaker, Author

Rockford Lhotka  
VP of Strategy, Xpirit
VENUE & TRAVEL

LOCATION
Take advantage of the $229.00* room rate by June 30, 2022

HYATT REGENCY BELLEVUE
900 Bellevue Way N.E.
Bellevue, WA 98004

Special attendee rate: $229.00*
Book by: June 30, 2022

Book your room online, or call Reservations at 800-233-1234 and ask for the Visual Studio Live! Room Block. The offer is subject to room availability, so make sure to book early.

Hyatt Regency Bellevue rooms booked within the Visual Studio Live! room block include complimentary standard in-room internet and access to the Hyatt Stay Fit gym.

*The special attendee room rate is based on single or double occupancy. The room rate does not include applicable state, local, and occupancy taxes. Rooms are subject to availability.

DISCOVER REDMOND AND SEATTLE WA.
From the iconic Space Needle to the awesome Experience Music Project, you’ll find plenty to do in your off-hours in the Pacific Northwest. Can’t wait to take in all the wonderful things Redmond, Bellevue, and the “Emerald City” have to offer? Find out more at visitseattle.org.
## CONFERENCE AND HOTEL PRICING PACKAGES

**VISUAL STUDIO LIVE! OFFERS SEVERAL CONFERENCE AND HOTEL PACKAGES** to best suit your needs and budget. Register now to save your seat and remember to book your hotel early too before it sells out!

<table>
<thead>
<tr>
<th>CONFERENCE PACKAGES</th>
<th>SUPER EARLY BIRD UNTIL MAY 19</th>
<th>EARLY BIRD UNTIL JUNE 23</th>
<th>STANDARD UNTIL JULY 17</th>
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<tbody>
<tr>
<td><strong>5-DAY CONFERENCE PACKAGE</strong> + Monday HOL + Friday Workshop (Monday - Friday)</td>
<td>$2,700</td>
<td>$2,800</td>
<td>$3,100</td>
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<tr>
<td><strong>4-DAY CONFERENCE PACKAGE</strong> + Friday Workshop (Tuesday - Friday)</td>
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<td><strong>3 DAY CONFERENCE PACKAGE</strong> (Tuesday - Thursday)</td>
<td>$1,700</td>
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<tr>
<td><strong>FULL DAY HANDS-ON LAB</strong> (Monday Only)</td>
<td>$650</td>
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</tr>
<tr>
<td><strong>FULL DAY WORKSHOP PASS</strong> (Friday Only)</td>
<td>$650</td>
<td>$650</td>
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**ADD THE HOTEL PACKAGE**

At the Hyatt Regency Bellevue

VSLive! will provide daily complimentary shuttle transportation between the Hyatt Regency Bellevue and the Microsoft Conference Center (Building 33).

<table>
<thead>
<tr>
<th>5 DAY HOTEL PACKAGE*</th>
<th>$1,325</th>
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<th>4 DAY HOTEL PACKAGE*</th>
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<th>3 DAY HOTEL PACKAGE*</th>
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<td>Check In: Monday, July 17</td>
<td>Check Out: Thur, July 20</td>
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* The Hotel Package includes applicable state, local and occupancy taxes.
DISCOUNTS & SPECIAL SAVINGS

TEAM DISCOUNTS: BRING THE TEAM AND SAVE BIG!

Visual Studio Live! @ Microsoft HQ offers savings to teams of 3 or more from the same company and registering for the same package. Looking to bring 10 or more? Contact our Conference Registrar at sross@converge360.com or at 949.296.9840.

TEAM PACKAGES * Team Prices quoted are “per-person”

<table>
<thead>
<tr>
<th>Every Conference Package grants you access to every Keynote, Session, Breakfast, Lunch, and Welcome Reception</th>
<th>SUPER EARLY BIRD UNTIL MAY 19</th>
<th>EARLY BIRD UNTIL JUNE 23</th>
<th>STANDARD UNTIL JULY 17</th>
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<tr>
<td>5-DAY CONFERENCE PACKAGE + Monday HOL + Friday Workshop (Monday - Friday)</td>
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<tr>
<td>4-DAY CONFERENCE PACKAGE + Friday Workshop (Tuesday - Friday)</td>
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“**I APPRECIATED THE VARIETY OF TOPICS/SPEAKERS AS WELL AS THE EXPOSURE TO NEW FEATURES, TOOLS, SOLUTIONS.**”

– 2022 Visual Studio Live! Microsoft HQ attendee

MORE DISCOUNTS

ALUMNI

Welcome back! If you have attended any Visual Studio Live!, TechMentor or Live! 360 event, you qualify for our special alumni discount. You should receive alumni special promotions, but if not, please contact our Conference Registrar at sross@converge360.com or 949.296.9840.

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We offer full-time college students and faculty from accredited universities a discount. To receive this discount, please contact our Conference Registrar at sross@converge360.com or 949.296.9840. Subject to Visual Studio Live! verification.

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If you are a new Developer (or new to the Microsoft Platform) with less than three years of experience, you are eligible for $600 off of our full price conference registration to help accelerate your career. Use Promo Code NDD. Subject to Visual Studio Live! verification.

GOVERNMENT/ NON-PROFIT

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UPCOMING 2023 CONFERENCES & SEMINARS

2-Day Virtual Hands-On Training Seminar: Automated Software Testing for Developers
June 5-6, 2023
vslive.com

Visual Studio Live! San Diego
August 7-11, 2023
Sheraton San Diego Hotel & Marina
vslive.com/sandiego

Visual Studio Live! / Live! 360 Orlando
November 12-17, 2023
Loews Royal Pacific Resort at Universal Orlando, Orlando, FL
live360events.com

4-Day Virtual Hands-On Training Seminar: Full Stack Hands-On Development with .NET (Core)
December 4-7, 2023
vslive.com