

Visual Studio LIVE!

EXPERT SOLUTIONS FOR ENTERPRISE DEVELOPERS

Las Vegas

PLANET HOLLYWOOD RESORT & CASINO

EVENT PROGRAM

#VSLIVE



STAY CONNECTED TO VISUAL STUDIO LIVE! ON OUR SOCIAL NETWORKS:



[twitter.com
@VSLive](https://twitter.com/@VSLive)



[facebook.com
@VSLiveEvents](https://facebook.com/@VSLiveEvents)



[instagram.com
@VisualStudioLive](https://instagram.com/@VisualStudioLive)



[linkedin.com
@Visual Studio Live!](https://linkedin.com/@Visual Studio Live!)

EVENT PARTNER

SUPPORTED BY

PRODUCED BY



Visual Studio
MAGAZINE





CONFERENCE MAP

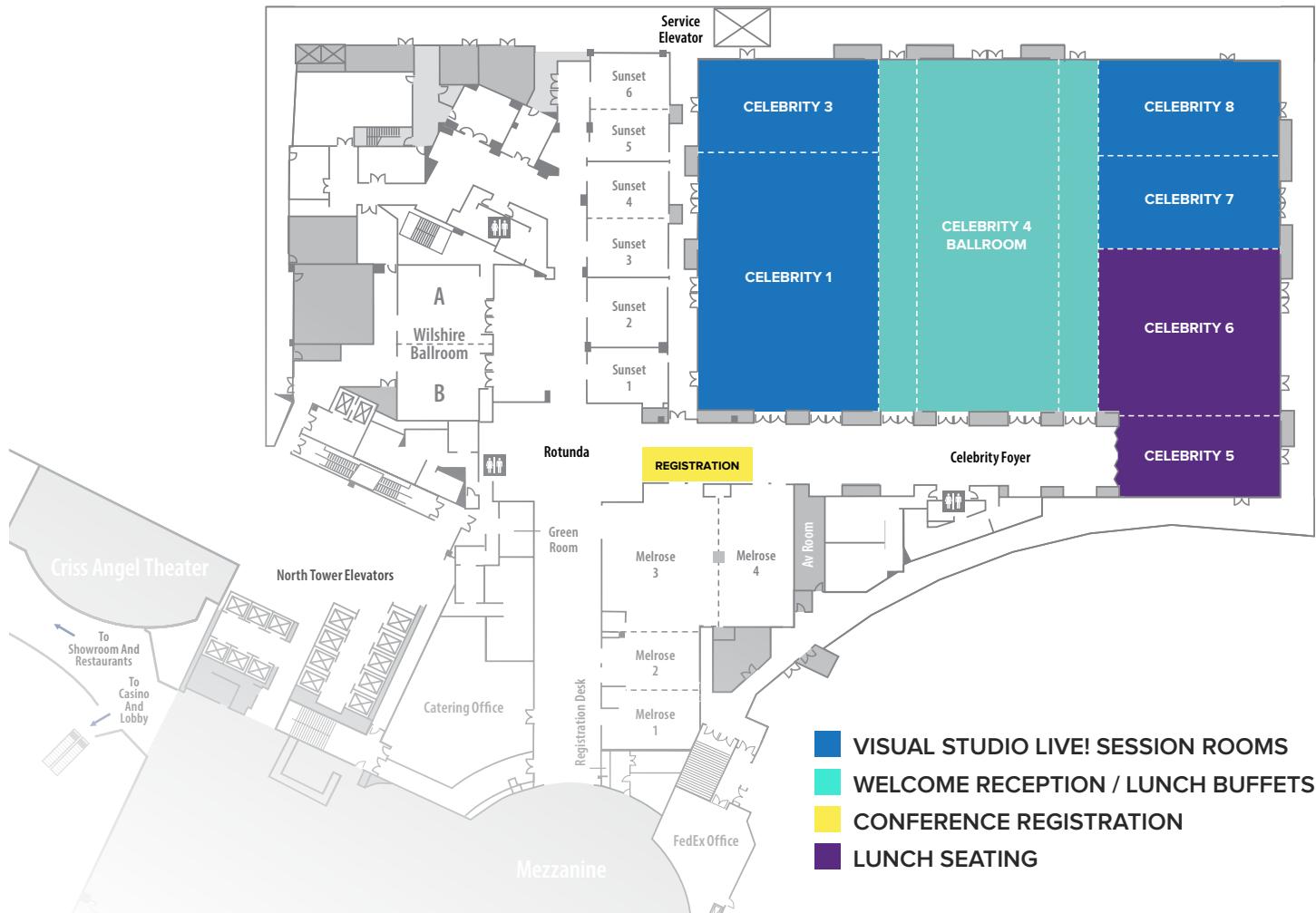


TABLE OF CONTENTS

- 1** Welcome Letter
- 2** Registration Hours / FAQ
- 3** Events & Activities
- 5** Sponsors / Exhibitors
- 6** Keynotes
- 7** Conference Speakers
- 8** Conference Agenda at-a-Glance
- 10** Hands-On Labs
- 10** Workshops
- 12** Sessions

INTERNET CONNECTION

Connect to: **VSLive!**

Password: **vegas2023**

SLIDES AND CODE

To access presentation slides and materials from the conference go to the website:

<https://vslive.com/vegasslides>

Username: **PHVegas**

Password: **CodeinLV**

NOTE: both are case sensitive

WELCOME TO VISUAL STUDIO LIVE! LAS VEGAS 2023 AT PLANET HOLLYWOOD

Welcome to the return of Visual Studio Live! (VSLive!)™ in Las Vegas as we celebrate 30 years of delivering rock-solid education and training for the developer community. On behalf of the conference chairs and VSLive! staff, I thank you for your attendance and participation in this valuable professional development conference.

This week, you can expect a jam-packed agenda with over 65 hard-hitting sessions, workshops, and hands-on labs delivering current and upcoming technology solutions from a leading team of industry gurus and Microsoft innovators. We hope that you will take advantage of this vast knowledge base to ask questions and make contacts. We are confident that you will leave Visual Studio Live! Las Vegas with cutting-edge insights and expertise that will make life easier for you and your colleagues back at the office. We encourage you to maximize your experience by engaging and networking with your peers and conference speakers during the Mix & Mingle, Welcome Reception, interactive lunches, VSLive!'s Out on the Town in Old Las Vegas, and networking activities scheduled throughout the week.

Please take some time to review the program carefully, as it provides all the information you need to easily navigate your way through the week. If you have any questions, the

Visual Studio Live! Team is on-site to assist you and help make your experience enjoyable and rewarding.

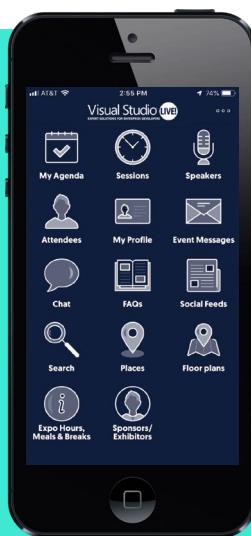
We encourage you to stay engaged and provide us with feedback about the event, such as educational content, special events, and speakers. Your comments will help us shape future conferences and enhance your next experience at a future Visual Studio Live!

On behalf of the Visual Studio Live! Event Team, thank you for joining us and I thank you for being the most important part of Visual Studio Live! Las Vegas 2023!



A handwritten signature in black ink that reads "Brent C. Sutton".

Brent C. Sutton
VP, Events, Converge360
bsutton@converge360.com
#VSLIVE



STAY CONNECTED ON YOUR SMART PHONE

Get all conference information on your iPhone or Android.



- Browse sessions by agenda, speaker, or track.
- Read detailed information about each session and speaker.
- Add your favorite sessions to your agenda for easy access.
- Rate sessions immediately after attending.
- Refresh the program at any time to see schedule changes.

Download our mobile app using the QR Code, or search for "**Converge360 Events**" in your app store. Once you have the downloaded the app, log in with the credential below, and stay up to date with all conference information at your fingertips. For assistance with the mobile app, check with the conference registration desk.

Log-in Email: The same Email you used to register

Password: vegas2023



REGISTRATION HOURS

SUNDAY MARCH 19	MONDAY MARCH 20	TUESDAY MARCH 21	WEDNESDAY MARCH 22	THURSDAY MARCH 23	FRIDAY MARCH 24
8:00AM - 9:00AM 4:00PM - 6:00PM	8:00AM - 6:00PM	7:00AM - 4:15PM	7:30AM - 5:15PM	7:30AM - 4:00PM	7:30AM - 5:00PM

FREQUENTLY ASKED QUESTIONS

WHEN DO I NEED MY BADGE?

Your conference badge is your ticket to everything while at Visual Studio Live! Please wear it at all times for admission to any conference events and areas.

WHAT SHOULD I DO IF I HAVE AN EMERGENCY?

Please alert any conference staff member, speaker, security personnel, or hotel staff immediately for assistance.

DOES THE CONFERENCE AREA HAVE WIRELESS ACCESS?

Yes, wireless access is available throughout the conference area.

Connect to: VSLive!

Password: vegas2023

LIABILITY FOR DAMAGE OR LOSS OF DATA:

Visual Studio Live! will not be responsible for any damages to your computer or device or loss of any data caused by accessing the wireless network or by your inability to access it.

WHAT MEALS ARE PROVIDED AT THE CONFERENCE?

Morning coffee and pastries and lunch will be available each day of the conference.

A variety of food and beverage choices will also be available at the Tuesday Welcome Reception.

HOW DO I ACCESS PRESENTATION SLIDES AND MATERIALS AFTER THE CONFERENCE?

For your convenience, conference materials are available on the track page of the Visual Studio Live! Las Vegas website. Updated or missing session slides and materials will be added to the website as they are received. To access the presentation materials, visit <https://vslive.com/vegasslides> and log in with the following:

Username = PHVegas

Password = CodeinLV

NOTE: both are case sensitive

IS SMOKING PERMITTED AT PLANET HOLLYWOOD?

Smoking is prohibited throughout all non-gaming areas. Please use the designated smoking areas located in the casino area and outside.

IS THERE A BAG CHECK AREA?

We recommend you leave personal belongings at your hotel during the conference. If you need bag check service, please see the bell desk in the Planet Hollywood lobby.

CAN I USE MY MOBILE PHONE DURING THE CONFERENCE?

You're welcome to use your cell phone, tablet, and whatever other devices you might own. But, please, switch them into silent mode. A ringing device distracts the speaker and your fellow attendees.

WHAT SHOULD I WEAR DURING THE CONFERENCE?

Conference alumni know to dress casually for Visual Studio Live! We want you to be comfortable while sitting in the sessions.

NOTE: The temperature in the session rooms may vary, so be sure to bring a sweater or light jacket. We recommend wearing layers.

HOW CAN I GIVE CONFERENCE FEEDBACK OR SUGGESTIONS?

Session evaluations are available for each session through the Visual Studio Live! Las Vegas mobile app.

Use the QR code to access the Overall Conference Evaluation to share your feedback about the entire event. Starting Thursday morning, you can get the Visual Studio Live! Las Vegas 2023 T-shirt if you take a screenshot of the survey

Thank You page and show it to the Conference Registration Desk staff.



TWEET TO WIN!

Live Tweets - #VSLIVE



Live tweet about your Visual Studio Live! Las Vegas experience for a chance to win a FREE pass to a Visual Studio Live! Conference in 2024.

Use #vslive at the end of your tweets – the more you tweet during Visual Studio Live! Las Vegas, the better your chances are of winning! The winner will be announced on twitter and in the Visual Studio Live! email following the event.

**Hands-On Labs, travel and accommodations are not included.*

THE FUN STUFF: VISUAL STUDIO LIVE! LAS VEGAS EVENTS & ACTIVITIES

YOUR ATTENDANCE AT VISUAL STUDIO LIVE! LAS VEGAS is about learning from your peers as well as the experts; make the most of your time with us and add these events to your itinerary!

NETWORKING BREAKFASTS

Sunday, March 19 – Friday March 24

Celebrity 4

Coffee and pastries will be served each morning of the conference allowing you more time to meet and mingle with your peers.

MIX & MINGLE

Monday, March 20, 6:30 – 8:30pm

Buffalo Wild Wings, 3663 S Las Vegas Blvd Ste 600 – Meet at 6:15pm at the Registration Desk to walk over with the group.

This is your opportunity to meet fellow attendees and start friendships that can last for the week or even longer. Join us at Buffalo Wild Wings 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 Vegas nightlife. Everyone is responsible for their own beverages.

Participating speakers include:



Alex Thissen, Allen Conway, Brian Randell, Jason Bock, Jeremy Clark, Marcel de Vries, Mickey Gousset, Philip Japikse, Rockford Lhotka



MIX & MINGLE



WELCOME RECEPTION

WELCOME RECEPTION & TUESDAY TRIVIA

Tuesday, March 21, 4:15 – 5:30pm

Celebrity 4

Enjoy drinks and snacks while you relax, unwind, and network with fellow attendees and speakers after a long day of learning.

Test your knowledge against your fellow attendees with VSLive! Trivia Fun! Everyone can join in by using their mobile device. Each round winner will receive a prize along with bragging rights for the week!

VSLive! Raffle – Everyone who attended the Keynote on Tuesday at 11:00am will be given a raffle ticket as they enter the room (Celebrity 1). The Raffle will be held during the Tuesday reception at 5:15pm in Celebrity 4 - You MUST be present to win.

Prizes include: Bose noise-cancelling headphones, Yeti cooler, Apple TV, \$150 Sunglass Hut Gift Card, \$100 Gift Card, \$25 Starbucks Cards, and a FREE VSLive! 2024 Conference Pass.

STAY CONNECTED TO VISUAL STUDIO LIVE! ON OUR SOCIAL NETWORKS:



[twitter.com: @VSLive](https://twitter.com/@VSLive)



[facebook.com: @VSLiveEvents](https://facebook.com/@VSLiveEvents)



[instagram.com: @VisualStudioLive](https://instagram.com/@VisualStudioLive)



[linkedin.com: @Visual Studio Live!](https://linkedin.com/@Visual Studio Live!)



VISUAL STUDIO LIVE! LAS VEGAS EVENTS & ACTIVITIES *(continued)*

TABLE TOPICS LUNCH

Wednesday, March 22, 12:00 – 1:30pm

Celebrity 5 & 6

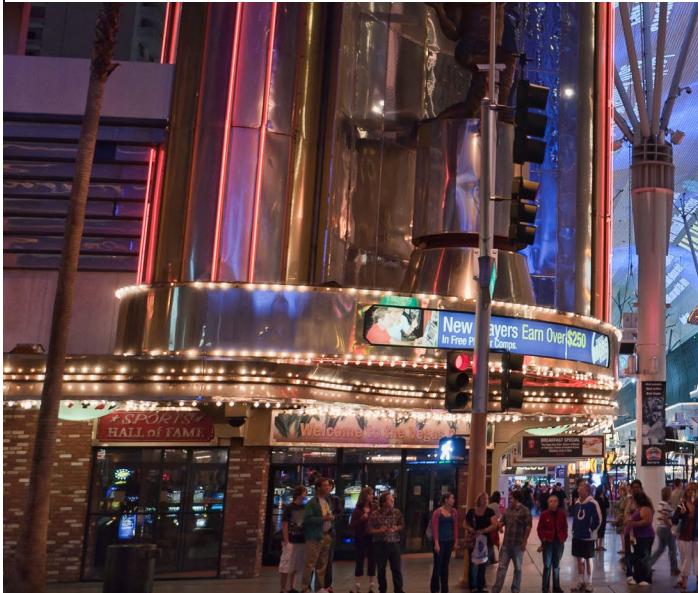
Join other attendees at lunch to share ideas, talk about the issues of the day, and maybe solve a few. While you enjoy lunch, you can find and connect with other like-minded people at tables designated for certain languages, technologies, and interests.

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.

All seating is on a first come basis. Enjoy!



TABLE TOPICS LUNCH



VSLIVE!'S OUT ON THE TOWN IN OLD LAS VEGAS

VSLIVE!'S OUT ON THE TOWN IN OLD LAS VEGAS

Wednesday, March 22, 5:45 – 11:30pm

Pick Up: Planet Hollywood outside of main reception past taxi stand

Return: Golden Nugget Rush Tower

The Las Vegas strip is exciting, but have you experienced all that downtown Las Vegas has to offer? This is your chance to see the real Las Vegas (or "Glitter Gulch" as it was known for years due to all of the neon lights), from the first Vegas hotel (still operating as the Golden Gate Hotel and Casino) to the nightly Viva Vision show, you don't want to miss the "real" Las Vegas.

Join us on Wednesday night as complimentary buses run from our host hotel, the Planet Hollywood Resort, to the heart of old town Fremont Street (drop off and pick up will be at the Golden Nugget - Rush Tower, 129 E Fremont St.). Take this opportunity to explore downtown Las Vegas's vibrant nightlife, including its restaurants, the Fremont Street Experience, SlotZilla Zip Line, a Pedestrian mall, the Neon Museum, the Viva Vision show, casinos, and so much more. Viva Las Vegas!

Buses will depart the Planet Hollywood Resort (bus pick-up outside hotel reception to the left past the taxi stand) starting at 6:00pm and will run back and forth, roughly every 30 minutes, with the last bus departing Fremont Street at the Golden Nugget - Rush Tower at 11:30pm.



Photo: Jean Christophe



Las Vegas

March 19-24, 2023

Planet Hollywood Resort & Casino

SPECIAL THANKS TO OUR PARTNER & SUPPORTERS

EVENT PARTNER



Founded in 1975, Microsoft (Nasdaq "MSFT") is the worldwide leader in software, services and Internet technologies for personal and business computing. Microsoft offers a wide range of innovative products and services designed to help individuals and organizations realize their full potential.

www.microsoft.com

SUPPORTED BY



Visual Studio
MAGAZINE



FREE T-SHIRT!

Remember to complete your Conference Evaluation and get your FREE Visual Studio Live! Las Vegas 2023 t-shirt!

Your input is critical to the success of future Visual Studio Live! events. Please complete the full conference evaluation by following the QR Code or by going to <https://www.surveymonkey.com/r/M5ZWYMP>. To receive your VSLive! Las Vegas 2023 conference t-shirt, please take a screenshot, photo or print the confirmation page and take it to the conference registration desk to receive your Official VSLive! Las Vegas t-shirt.

Note: You can only pick up your t-shirt on Thursday March 23 after 9:15am

RAFFLE DRAWING

Tuesday, March 21 at 5:15pm

Celebrity 4

Attend the Tuesday Keynote: Visual Studio Secrets Uncovered at 11:00am in Celebrity 1 to receive a raffle ticket. Raffle Winners will be announced during the Tuesday Welcome Reception in Celebrity 4 at 5:15pm (you must be present to win).

Great Prizes include: Bose headphones, Yeti Tundra, Sunglass Hut Gift Card, Apple TV, Gift Card, VSLive! 2024 Pass





GENERAL SESSIONS

WANT A FRONT-ROW SEAT TO THE FUTURE OF TECHNOLOGY? Attend the keynotes for Visual Studio Live! Las Vegas to learn what's hot on today's tech landscape and what exciting developments lie ahead for this year and beyond.

TUESDAY KEYNOTE

Visual Studio Secrets Uncovered

Tuesday, March 21, 11:00am – 12:00pm

Celebrity 1

Visual Studio is one of the largest applications in the world, used by millions of developers every day. It's no simple task to plan, code, innovate, and release a new version every few weeks. Join Mads as he takes you behind the scenes of how Visual Studio is made, why being customer obsessed changed everything, and other inspiring lessons that can help you build better software. When Edward Thomson joined Microsoft ten years ago, open source was still "a cancer". But a decade later, the world has changed. Software isn't eating the world anymore, now open source is eating the world and GitHub has become the largest developer community on the planet. Edward will explain how to pivot a company to understand and accept open source, to use and contribute open source successfully, and how to apply the open source ideologies of openness and collaboration "within your firewall" to empower your organization to achieve more.



Mads Kristensen

Principal Product Manager, Microsoft

Mads Kristensen is a principal product manager on the Visual Studio team and has published close to 200 free Visual Studio extensions. He blogs about anything related to Visual Studio and can often be found hosting various shows on the Visual Studio YouTube channel.

ATTEND THE TUESDAY KEYNOTE TO RECEIVE YOUR RAFFLE TICKET. WINNERS WILL BE ANNOUNCED DURING THE WELCOME RECEPTION AT 5:15PM ON TUESDAY, MARCH 21 IN CELEBRITY 4 (YOU MUST BE PRESENT TO WIN).

GREAT PRIZES INCLUDE: BOSE HEADPHONES, YETI TUNDRA, SUNGLASS HUT GIFT CARD, APPLE TV, GIFT CARD, VSLIVE! 2024 PASS

WEDNESDAY KEYNOTE

From Startups to the Enterprise - Scale Your Business and Applications with Azure SQL

Wednesday, March 22, 11:00am – 12:00pm

Celebrity 1

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 scale your business as it grows
- What developer tools to access data seamlessly and integrated with DevOps
- Trust a proven data platform that works with the smallest to largest application and business



Bob Ward

Principal Architect, Microsoft Azure Data, Microsoft

Bob Ward is a Principal Architect for the Microsoft Azure Data team, which owns the development for all SQL Server versions. Bob has worked for Microsoft for 27+ years on every version of SQL Server shipped from OS/2 1.1 to SQL Server 2019 including Azure SQL. Bob is a well-known speaker on SQL Server and Azure SQL, often presenting talks on new releases, internals, and specialized topics at events such as Red Hat Summit, SQLBits, SQLIntersection, Microsoft Inspire, Microsoft Ignite, and many different virtual events. You can also learn Azure SQL from him on the popular series <https://aka.ms/azuresql4beginners>. You can follow him at @bobwardms or linkedin.com/in/bobwardms. Bob is the author of the books Pro SQL Server on Linux, SQL Server 2019 Revealed, and Azure SQL Revealed available from Apress Media.



Drew Skwiers-Koballa

Senior Program Manager, Microsoft

Drew Skwiers-Koballa is a Senior Program Manager for the Azure Data team focusing on tools and experiences for SQL. Prior to joining Microsoft in 2020, he spent nearly a decade as a developer and database administrator. Drew has built several extensions for Azure Data Studio and is an advocate for open source.

CONFERENCE ADVISORY BOARD



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



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



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



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

SPEAKERS



Sam Basu
Developer Advocate,
Progress Software



Benjamin Day
Author, Trainer,
Developer



Steve Jones
Editor,
SQLServerCentral



Drew Skwiers-Koballa
Senior Program
Manager, Microsoft



Jason Bock
Developer Advocate,
Rocket Mortgage



Marcel de Vries
CO-Founder & CTO,
Xpirit



Chris Klug
Developer,
Active Solution



Brian Spendolini
Senior Product
Manager, Microsoft



Eric D. Boyd
Founder and CEO,
responsiveX



Angela Dugan
Solutions Director,
3Cloud Solutions



Mads Kristensen
Principal Product
Manager, Microsoft



Alex Thissen
Architect, Lead
Developer, and Mentor



Andrew Brust
CEO and Founder, Blue
Badge Insights



Mickey Gousset
DevOps Architect,
GitHub



Rockford Lhotka
VP of Strategy, Xpirit



Amber Vanderburg
Founder,
Pathwayz Group



Laurent Bugnion
Cloud Developer Advo-
cate, Microsoft



Chad Green
Director of IT
Architecture,
Glennis Solutions



Leonard Lobel
CTO,
Sleek Technologies, Inc.



Stacia Varga
Consultant, Educator,
and Author



Sara Caldwell
Principle Agile Coach at
3Cloud Solutions



Ian Griffiths
Technical Fellow, endjin



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



Bob Ward
Principal Architect,
Microsoft Azure Data,
Microsoft



Jeremy Clark
Developer Educator,
JeremyBytes.com



Billy Hollis
Developer. Designer.
Speaker. Author.



Becky Nagel
VP of Web, 1105 Media



Michael Washington
Founder,
BlazorHelpWebsite.com
& AIHelpWebsite.com



Allen Conway
Web Client Practice
Lead,
Cognizant Softvision



Philip Japikse
Developer, Coach,
Author, Teacher



Brian Randell
Product Marketing
Director, GitHub



AGENDA AT-A-GLANCE

DevOps and Beyond

Cloud, Containers and Microservices

AI, Data and Machine Learning

START TIME	END TIME	Visual Studio Live! Pre-Conference Hands-On Labs: Sunday, March 19, 2023					
8:00 AM	9:00 AM	Pre-Conference Hands-On Labs Registration • Coffee and Morning Pastries					
Rooms		Celebrity 3	Celebrity 7	Celebrity 8			
9:00 AM	1:00 PM	HOL01 Hands-on Lab: Asynchronous and Parallel Programming in C# - Jeremy Clark	HOL02 Hands-on Lab: Develop an ASP.NET Core App with EF Core in a Day - Philip Japikse	HOL03 Hands-on Lab: Building Cross-Platform Mobile & Desktop Apps with .NET MAUI - James Montemagno			
1:00 PM	2:00 PM	Lunch - Celebrity 4					
2:00 PM	6:00 PM	HOL01 Hands-on Lab Continued	HOL02 Hands-on Lab Continued	HOL03 Hands-on Lab Continued			
START TIME	END TIME	Visual Studio Live! Pre-Conference Workshops: Monday, March 20, 2023					
8:00 AM	9:00 AM	Pre-Conference Workshop Registration • Coffee and Morning Pastries					
Rooms		Celebrity 1	Celebrity 3	Celebrity 7	Celebrity 8		
9:00 AM	1:00 PM	M01 Workshop: Move Your Brownfield Engineering to the Elysian Fields - Brian Randell and Mickey Gousset	M02 Workshop: Dapr for Building Distributed .NET Applications - Marcel de Vries & Alex Thissen	M03 Workshop: Microsoft Blazor Top to Bottom - Jason Bock, Allen Conway & Rockford Lhotka	M04 Workshop: Full Stack Development From Zero to Hero - Drew Skwiers-Koballa & Brian Spendolini		
1:00 PM	2:00 PM	Lunch - Celebrity 4					
2:00 PM	6:00 PM	M01 Workshop Continued	M02 Workshop Continued	M03 Workshop Continued	M04 Workshop Continued		
6:30 PM	8:30 PM	Mix & Mingle @ VS Live! - Buffalo Wild Wings, 3663 S Las Vegas Blvd Ste 600 (Meet at 6:15pm at the Registration Desk to walk over with the group)					
START TIME	END TIME	Visual Studio Live! Day 1: Tuesday, March 21, 2023					
7:00 AM	8:00 AM	Registration • Coffee and Morning Pastries					
Rooms		Celebrity 1	Celebrity 3	Celebrity 7	Celebrity 8		
8:00 AM	9:15 AM	T01 An Introduction to Getting Up and Running with Modern Angular - Allen Conway	T02 Event-driven Applications in Azure - Laurent Bugnion	T03 Getting Your Story Straight with Data Visualizations - Stacia Varga	T04 What's New in C# - Ian Griffiths		
9:30 AM	10:45 AM	T05 ASP.NET Core Beyond the Basics - Chris Klug	T06 Desktop Apps Your Way! - Sam Basu	T07 Making the Leap from Reporting to Data Analysis - Stacia Varga	T08 Further, Faster, with Azure Functions and Azure SQL Integrations - Drew Skwiers-Koballa		
11:00 AM	12:00 PM	KEYNOTE: VISUAL STUDIO SECRETS UNCOVERED Mads Kristensen, Principal Product Manager, Microsoft - Celebrity 1 (Attend the Keynote to receive a raffle ticket)					
12:00 PM	1:30 PM	Lunch - Celebrity 4					
1:30 PM	2:45 PM	T09 Modern Authentication and Authorization with OIDC, OAuth2, and Resource-based Permissions - Eric D. Boyd	T10 Be Ready: Optimizing Cold Start with .NET 6.0 in the Cloud - Ian Griffiths	T11 .NET MAUI: Next Generation Multi-platform App Development - James Montemagno	T12 Pure Consultancy: Mastering Your Fears Like a Jedi - Alex Thissen		
3:00 PM	4:15 PM	T13 TypeScript: Moving Beyond the Basics - Allen Conway	T14 Power Your DevOps Development with SQL Server Containers - Bob Ward	T15 Building Teams Apps & Bots with .NET & Blazor - James Montemagno	T16 Measuring Up! Collect the Right Metrics for the Right Reasons - Sara Caldwell & Angela Dugan		
4:15 PM	5:30 PM	Welcome Reception - Celebrity 4 (Raffle at 5:15pm - you MUST be present to win)					
START TIME	END TIME	Visual Studio Live! Day 2: Wednesday, March 22, 2023					
7:30 AM	8:00 AM	Registration • Coffee and Morning Pastries					
Rooms		Celebrity 1	Celebrity 3	Celebrity 7	Celebrity 8		
8:00 AM	9:15 AM	W01 Deep Dive: Microsoft Blazor Zero to Success - Rockford Lhotka	W02 Dive into Durable Functions - Laurent Bugnion	W03 Catching Up with C# Interfaces: What You Know Might Be Wrong - Jeremy Clark	W04 Monitor Your Applications and Infrastructure - Eric D. Boyd		

For the complete session schedule and full session descriptions, please check the Visual Studio Live! Las Vegas web site at <https://vslive.com/lasvegas>

Sessions and speakers subject to change.



Developing New Experiences

Technical Excellence & Leadership Skills

The Core of .NET

Full Stack Web Development

START TIME	END TIME	Visual Studio Live! Day 2: Wednesday, March 22, 2023 (Continued)						
Rooms		Celebrity 1	Celebrity 3	Celebrity 7	Celebrity 8			
9:30 AM	10:45 AM	W01 Deep Dive: Microsoft Blazor Zero to Success (Continued)		W05 Visual Studio and Azure Debugging Tips and Tricks - Laurent Bugnion		W06 Introduction to Actor-based Development with Project Orleans - Chris Klug		
11:00 AM	12:00 PM	KEYNOTE: FROM STARTUPS TO THE ENTERPRISE - SCALE YOUR BUSINESS AND APPLICATIONS WITH AZURE SQL Bob Ward, Principal Architect, Microsoft Azure Data, & Drew Skwiers-Koballa, Senior Program Manager, Microsoft - Celebrity 1						
12:00 PM - 1:30 PM Table Topic Lunch - Celebrity 4								
Rooms		Celebrity 1	Celebrity 3	Celebrity 7	Celebrity 8			
1:30 PM	1:50 PM	W08 Fast Focus: JavaScript Framework/Library Showdown - Allen Conway		W09 Fast Focus: Power BI Metrics - Managing KPIs and Scorecards for Yourself and Your Team - Andrew Brust		W10 Fast Focus: Getting .NET Interactive Notebooks - Jason Bock		
2:00 PM	2:20 PM	W12 Fast Focus: Using Blazor in MAUI - Rockford Lhotka		W13 Fast Focus: Adding Content-Negotiation to ASP.NET Core MVC - Chris Klug		W14 Fast Focus: Super Charge Your Feedback Skills in 20 Minutes - Angela Dugan		
2:30 PM	3:45 PM	W15 Creating Business Applications using Blazor - Michael Washington		W16 Modernization with Blazor Hybrid - Sam Basu		W17 Power BI: The Basics and the Latest Coolness - Andrew Brust		
4:00 PM	5:15 PM	W19 Architecting Zero Downtime Database Deployments - Steve Jones		W20 How to Fix a Failing Project - Benjamin Day		W21 An Introduction to Service Meshes on Kubernetes - Marcel de Vries		
6:00 PM	11:30 PM	VSLive!s Out on the Town in Old Las Vegas - Buses will run roughly every 30 minutes between Planet Hollywood and Golden Nugget Rush Tower						
START TIME	END TIME	Visual Studio Live! Day 3: Thursday, March 23, 2023						
7:30 AM	8:00 AM	Registration • Coffee and Morning Pastries						
Rooms		Celebrity 1	Celebrity 3	Celebrity 7	Celebrity 8			
8:00 AM	9:15 AM	TH01 Web Services with ASP.NET Core Deep Dive - Philip Japikse	TH02 How to Effectively Communicate Technical Ideas to Non-Technical Audiences - Amber Vanderburg	TH03 Testability in .NET - Jason Bock	TH04 What's New for Developers in SQL Server 2022 - Leonard Lobel			
9:30 AM	10:45 AM		TH05 Learned Helplessness vs. Learned Optimism - Getting Your Team Unstuck - Sara Caldwell	TH06 Build Apps Faster with GitHub Codespaces - Brian Randell	TH07 Introduction to Azure Cosmos DB - Leonard Lobel			
11:00 AM	12:15 PM	TH08 Better CI/CD with GitHub Actions - Mickey Gousset	TH09 Technical Debt Is Not Free - Chad Green	TH10 Getting Started with Design Thinking: A Guide for Developers and Managers - Billy Hollis	TH11 Implementing the Full Data Analytics Lifecycle on the Microsoft Cloud - Andrew Brust			
12:15 PM	1:15 PM	Lunch - Celebrity 4						
1:15 PM	2:30 PM	TH12 I Love YAML: Using Azure DevOps to Build and Release to Azure - Benjamin Day	TH13 Mapping the Story - Your Team's Guide to Creating a Product Backlog - Sara Caldwell & Angela Dugan	TH14 UX Design in a Virtual World - Billy Hollis	TH15 Adding Graph Structures to Your SQL Database - Steve Jones			
2:45 PM	4:00 PM	TH16 How to Effectively Move from Ideation to Implementation - Amber Vanderburg	TH17 Secrets of Conflict Resolution - Chad Green	TH18 Building Fabulous NuGet Packages - Jason Bock	TH19 Creating Business Applications using Azure Maps - Michael Washington			
START TIME	END TIME	Visual Studio Live! Post-Conference Workshops: Friday, March 24, 2023						
7:30 AM	8:00 AM	Post-Conference Workshop Registration • Coffee and Morning Pastries						
Rooms		Celebrity 7		Celebrity 8				
8:00 AM	12:00 PM	F01 Workshop: Developer Dive into SQL Server 2022 - Leonard Lobel		F02 Workshop: Building Azure PaaS Apps with C# - Ian Griffiths				
12:00 PM	1:00 PM	Lunch - Celebrity 4						
1:00 PM	5:00 PM	F01 Workshop Continued			F02 Workshop Continued			



FULL-DAY HANDS-ON LABS

HOL01

Hands-on Lab: Asynchronous and Parallel Programming in C#

Intermediate

JEREMY CLARK

Sunday, March 19, 9:00am-6:00pm

Asynchronous programming is a critical skill to take full advantage of today's multi-core systems. But async programming brings its own set of issues. In this HOL workshop, we'll work through some of those issues and get comfortable using parts of the .NET Task Parallel Library (TPL).

We'll start by calling asynchronous methods using the Task Asynchronous Pattern (TAP), including how to handle exceptions and cancellation. With this in hand, we'll look at creating our own asynchronous methods and methods that use asynchronous libraries. Along the way, we'll see how to avoid deadlocks, how to isolate our code for easier async, and why it's important to stay away from "async void".

In addition, we'll look at some patterns for running code in parallel, including using Parallel.ForEachAsync, channels, and other techniques. We'll see pros and cons so that we can use the right pattern for a particular problem.

Throughout the day, we'll go hands-on with lab exercises to put these skills into practice.

Objectives

- Use asynchronous methods with Task and await
- Create asynchronous methods and libraries
- How to avoid deadlocks and other pitfalls
- Understand different parallel programming techniques

Prerequisites

Basic understanding of C# and object-oriented programming (classes, inheritance, methods, and properties). No prior experience with asynchronous programming is necessary; we'll take care of that as we go.

HOL02

Hands-on Lab: Develop an ASP.NET Core App with EF Core in a Day

Intermediate

PHILIP JAPIKSE

Sunday, March 19, 9:00am-6:00pm

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!

HOL03

Hands-on Lab: Building Cross-Platform Mobile & Desktop Apps with .NET MAUI

Intermediate

JAMES MONTEMAGNO

Sunday, March 19, 9:00am-6:00pm

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!

FULL-DAY WORKSHOPS

M01

Workshop: Move Your Brownfield Engineering to the Elysian Fields

Intermediate

BRIAN RANDELL AND MICKEY GOUSSET

Monday, March 20, 9:00am - 6:00pm

Every developer dreams of "File I New" with the latest and greatest technology. Yet the reality is you often working on line-of-business apps that serve the business well, and that will take time to upgrade. You're not sure you can "move to paradise" and embrace DevOps. But Brian and Mickey are here to show you that you can do just that in this all-day workshops that will take a "legacy" .NET Framework plus SQL Server application that's "self-hosted" on a local domain and move it to the Azure Cloud with GitHub Enterprise Cloud and DevOps best practices.

We'll start by moving code out of a "local" Git repo and move it to the cloud. We'll look at how you move

your manual "right-click publish" deployment model to a modern CI/CD deployment with GitHub Actions locally. Then, we'll show you how to move to the Azure Cloud with Azure App Service. Along the way you'll see you can leverage GitHub Issues & Projects for "lightweight" planning and tracking.

Then we'll start with the database. How do you keep your database structure in sync with your apps? What about SQL Server programmable objects like stored procedures and triggers? How do you manage the necessary changes needed to support your applications and keep them running 24/7? How do you track these changes and follow a change from development to test to production?

We'll show how to take an existing database and build a DevOps process around it by showing how to create a workflow using SQL Server Data Tools (SSDT). We'll look at how you integrate this process with an ASP.NET Web App and how you have it *and* your database tested, deployed, managed, and

monitored using the Azure Cloud. GitHub will provide the foundation for the source code and CI/CD tooling.

We'll then look at how you can make your app development process more secure with GitHub Advanced Security and how you can integrate with other tools via the GitHub Marketplace including using Azure Boards when you need more full-scale project management. We'll also show you can use Azure Test Plans to increase app quality.

Finally, we'll move to operations side and integrate Azure Monitor's Logs, Metrics, Insights, and various alerting tools. We'll finish showing how you could move forward with an upgraded version of the app running on .NET 7.0, the database in a container, and your workstation in the cloud with GitHub Codespaces.

By the end of the day, you'll know how to go back to your organization and start both your cloud computing and DevOps transformations.

You will learn:

- How legacy apps can work with a good DevOps process.

FULL-DAY WORKSHOPS *(continued)*

- How to migrate to the cloud for your app and database with good CI/CD
- How to use GitHub's as your DevX and DevOps Platform

M02

Workshop: Dapr for Building Distributed .NET Applications

Intermediate

MARCEL DE VRIES & ALEX THISSEN

Monday, March 20, 9:00am - 6:00pm

Modern distributed applications require much more than just application logic. Features such as state management for services, communication using publish/subscribe messaging and event-driven binding to cloud resources might be needed. Dapr introduces a runtime to offer such building blocks, and is less invasive in your application, allowing you to pick and choose what you need. In this workshop, we will look at the approach that the Dapr runtime takes with a sidecar architecture, separating application logic from the Dapr runtime components. You learn to develop distributed applications in .NET using Dapr's features and, how to bind to messaging infrastructure and cloud resources.

You will learn:

- Understanding Dapr and side-car architecture
- Dapr components and actor programming model
- Programming container-based applications in .NET using Dapr

M03

Workshop: Microsoft Blazor Top to Bottom

Introductory / Intermediate

JASON BOCK, ALLEN CONWAY AND ROCKFORD LHOTKA

Monday, March 20, 9:00am - 6:00pm

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.

M04

Workshop: Full Stack Development From Zero to Hero

Introductory to Intermediate

DREW SKWIERS-KOBALLA
& BRIAN SPENDOLINI

Monday, March 20, 9:00am - 6:00pm

Let's build a fullstack/jamstack solution together, in one day. Starting from scratch, we'll see how using Azure Static Web Apps, Vue.js, Azure Functions and Azure SQL Database you can build a modern, ultra-scalable, secure solution, in just a day. We'll cover the basic of a Jamstack solution, and we'll go through all these steps to have it built and tested locally and deployed in Azure, using GitHub to setup a CI/CD pipeline that will take care of everything. We'll go through changing requirements, authentication and authorization, scalability and alternative architectures so that, at the end of the day, you will have a solid and practical foundation for building a modern, cloud based, hyper scalable, solution.

We will cover the following topics:

- Jamstack Architecture
- Static Web Apps, Vue.Js and Azure Functions
- The Database: Azure SQL DB (Why? Stored Procs or not? JSON? Dapper or EF Core?)
- Authentication
- Connection Resiliency
- Deployment and CI/CD
- Caching
- Alternative Implementations

F01

Workshop: Developer Dive into SQL Server 2022

Intermediate

LEONARD LOBEL

Friday, March 24, 8:00am-5:00pm

This full-day workshop will get you up to speed on powerful new features in SQL Server 2022. Lenni will pull no punches as he rips through the most important SQL Server features for developers in this intensive demo-packed tour.

We'll kick things off with the broad multi-platform support across Windows, Linux, and Docker. Learn how SQL Server's ability to run inside Linux containers on both Windows and Mac will revolutionize the way you work with the database engine. Then you'll explore the Intelligent Query Processing (IQP) features, which deliver groundbreaking performance improvements to the query engine. We'll then move on to the latest development platform improvements, including T-SQL enhancements added in SQL Server 2022, machine learning services with R and Python, integrated JSON support, and temporal tables.

Next we'll explore security features, starting with ledger tables. New in SQL Server 2022, ledger utilizes blockchain technology that hashes every transaction, and guarantees tamper evidence in your

database. Next, we'll examine dynamic data masking and row-level security. We'll then dig into Always Encrypted and demonstrate support for secure enclaves to enable rich querying over encrypted data. We'll wrap up with the latest PolyBase enhancements to query external data in Azure Blob Storage, MongoDB, Oracle, and other remote data sources.

You'll learn a ton of new SQL Server features in this information-packed day!

You will learn:

- How to boost developer productivity by running SQL Server inside Linux containers with docker
- Intelligent Query Processing features, T-SQL enhancements, and modern development platform for machine learning with R and Python
- Discover the newest security features including ledger tables, Always Encrypted with secure enclaves, and the latest data virtualization capabilities with PolyBase

F02

Workshop: Building Azure PaaS Apps with C#

Intermediate

IAN GRIFFITHS

Friday, March 24, 8:00am – 5:00pm

Making the leap from samples and educational demos to building real systems in Azure is difficult. Simple examples tend to punt on tricky issues such as secret management, authentication, and handling configuration in multiple environments. Demos don't usually show what to do when things don't work right (at least, not on purpose), even though a lot of development work involves diagnosing problems.

This workshop will show how to build web applications and APIs on Azure App Service (Azure Web Apps, and Azure Functions) and also Azure Container Apps. It will present techniques for managing critical secrets in a 'zero-trust' way, so that developers don't need direct access to storage account keys or connection strings. It will show strategies for managing configuration across multiple dev, test, and prod environments. It will illustrate how to use Azure AD both to secure access to your application, but also to provide higher-security service-to-service communication than more commonplace approaches. You will see how to architect systems to take full advantage of Azure's network-level security.

You will also learn techniques for diagnosing problems in the cloud, and for investigating performance issues. You will see how to use an extend Azure's built-in monitoring features to keep track of your system's vital signs. You will also see how to build detailed observability into your systems using Application Insights.

You will learn:

- Techniques for diagnosing problems in complex cloud systems
- How to manage secrets and configuration effectively across multiple environments
- How to provide deep observability and monitoring on Azure



SESSION DESCRIPTIONS BY TRACK

W04 DEVOPS AND BEYOND

As the world continues to move forward, it's become crystal clear that providing remote access and automation that is secure, easy to access, and readily available are critical to modern teams being successful. We've learned much about what it means to be agile and to "do DevOps", and organizations that have thrived in times of uncertainty know that DevOps is the way that modern teams deliver value to their customers with both speed and high quality.

As part of an organizational transformation, DevOps starts with a focus on people and better process and then, yes, great products are adopted to increase productivity and reduce friction. DevOps is all about the enablement and acceleration of continuous value delivery. After participating in sessions in this track, you'll walk away confident in your knowledge about the why, how, and what of modern DevOps. Our DevOps experts will leverage their knowledge and experiences to expose you to the latest tools, strategies, and leading practices.

W04

Monitor Your Applications and Infrastructure

Introductory / Intermediate

ERIC D. BOYD

Wednesday, March 22, 8:00 – 9:15am

You will learn:

- An overview of Azure Monitor
- How to Integrate Azure Monitor and Application Insights into your applications
- How to query, gain insights, and send alerts with Azure Monitor

W07

Shift Security Left in Your Development Process

Intermediate

MICKEY GOUSSET

Wednesday, March 22, 9:30 – 10:45am

You will learn:

- What security issues to look for when developing/deploying software
- What changes you should consider in your development process
- How tools can help you become more secure

W19

Architecting Zero Downtime Database Deployments

Intermediate

STEVE JONES

Wednesday, March 22, 4:00 – 5:15pm

You will learn:

- The challenges of zero downtime database deployments
- About deployment patterns that minimize impact of database changes
- The application development patterns that support zero downtime deployments

TH08

Better CI/CD with GitHub Actions

Intermediate

MICKEY GOUSSET

Thursday, March 23, 11:00am – 12:15pm

This demo-heavy session is packed with real-world examples, and you'll leave the session with ideas that you can start using immediately.

TH12

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

Intermediate / Advanced

BENJAMIN DAY

Thursday, March 23, 1:15 – 2:30pm

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?

TH16

How to Effectively Move from Ideation to Implementation

Introductory

AMBER VANDERBURG

Thursday, March 23, 2:45 – 4:00pm

You will learn:

- Tools to craft powerful, memorable, relatable storytelling to convey complex ideas
- How to present data and statistics in a way that conveys ideas clearly

- Insight into the power of jargon and when communication short cuts can be a benefit and a detriment in collaboration



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 Docker and Kubernetes (aka k8s) 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.

T02

Event-driven Applications in Azure

Intermediate

LAURENT BUGNION

Tuesday, March 21, 8:00 – 9:15am

You will learn:

- How to use SignalR to create event-driven web applications with Web sockets
- How to deploy and configure a Static Web App on Azure
- How these technologies are used at Microsoft in a production setting

T08

Further, Faster, with Azure Functions and Azure SQL Integrations

Intermediate

DREW SKWIERS-KOBALLA

Tuesday, March 21, 9:30 – 10:45am

Azure SQL and Azure Functions are a powerful combination for building flexible and performant applications. Whether you are improving an existing application or building from scratch, there are new developer tools for you with Azure SQL.

SESSION DESCRIPTIONS BY TRACK *(continued)*

T10

Be Ready: Optimizing Cold Start with .NET 6.0 in the Cloud

Intermediate

IAN GRIFFITHS

Tuesday, March 21, 1:30 – 2:45pm

You will learn:

- The factors affecting cold start times in the cloud
- The tools and technique .NET offers for improving cold start
- How to repeatedly, reliably measure and analyze cold start performance

T14

Power Your DevOps Development with SQL Server Containers

Intermediate

BOB WARD

Tuesday, March 21, 3:00 – 4:15pm

You will learn:

- How SQL Server containers work
- Why SQL Server containers can make you a more efficient developer
- See a local cloud database development experience to power DevOps

W02

Dive into Durable Functions

Advanced

LAURENT BUGNION

Wednesday, March 22, 8:00 – 9:15am

You will learn:

- Why Durable Functions can help solve issues that normal Azure Functions cannot
- Learn from experience what can happen when you use Durable Functions, and how to solve issues
- Understand when Durable Functions are used in production scenarios

W05

Visual Studio and Azure Debugging Tips and Tricks

Intermediate

LAURENT BUGNION

Wednesday, March 22, 9:30 – 10:45am

In this talk, Laurent Bugnion, a Cloud Advocate for Microsoft and a “veteran developer (and debugger)” will show you what tools he uses to find that annoying little bug that keeps him awake at night.

W21

An Introduction to Service Meshes on Kubernetes

Introductory

MARCEL DE VRIES

Wednesday, March 22, 4:00 – 5:15pm

You will learn:

- What services a service mesh can provide
- How to setup a service mesh on AKS
- Applying deployment strategies

TH19

Creating Business Applications using Azure Maps

Introductory

MICHAEL WASHINGTON

Thursday, March 23, 2:45 – 4:00pm

You will learn:

- Display interactive maps using Microsoft Blazor technology
- Implement proper production level security
- Create a store locator service



AI, DATA, AND MACHINE LEARNING

Data has once again become one of the hottest topics in our industry and ecosystem. SQL Server 2019 is a juggernaut, with SQL Server 2022's release imminent, 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.

T03

Getting Your Story Straight with Data Visualizations

Introductory

STACIA VARGA

Tuesday, March 21, 8:00-9:15am

You will learn:

- How telling a story is different from creating a report
- Explore the vocabulary and grammar of data visualization
- Evaluate the goal of your data story and choose appropriate visualizations

T07

Making the Leap from Reporting to Data Analysis

Introductory / Intermediate

STACIA VARGA

Tuesday, March 21, 9:30-10:45am

You will learn:

- Review the basic process of data analysis
- how to reveal and explore relationships in your data
- How to apply simple statistics to your data for deeper insights

W09

Fast Focus: Power BI Metrics - Managing KPIs and Scorecards for Yourself and Your Team

Intermediate

ANDREW BRUST

Wednesday, March 22, 1:30-1:50pm

You will learn:

- What KPIs and OKRs are, and when they're useful
- The basics of Power BI scorecarding and different types of scorecards
- How to build and deploy Power BI scorecards, and analyze their output

W11

Fast Focus: 10 Things Developers Need to Know About ChatGPT

Introductory

BECKY NAGEL

Wednesday, March 22, 1:30-1:50pm

Don't miss this practical, fact -focused session where we'll cover:

- The history of LLMs and why ChatGPT caught on over others
- What products Microsoft has (and is planning to) incorporated ChatGPT into
- Why putting your code into ChatGPT may be a bad idea, but how Azure GPT may solve those security issues
- How LLMs are creating new high-paying career paths for developers

W17

Power BI: The Basics and the Latest Coolness

Intermediate

ANDREW BRUST

Wednesday, March 22, 2:30-3:45pm

You will learn:

- The basics of Power BI visuals and reports



SESSION DESCRIPTIONS BY TRACK (continued)

- How to build a full semantic model
- How to leverage cool AI features in Power BI
- Using a self-service BI approach with big data volumes of enterprise data
- Elementary and expert data prep with Power Query

W22

Microsoft Session Under Wraps

DREW SKWIERS-KOBALLA
& BRIAN SPENDOLINI

Tuesday, March 21, 4:00-5:15pm

TH04

What's New for Developers in SQL Server 2022

Intermediate

LEONARD LOBEL

Thursday, March 23, 8:00-9:15am

You will learn:

- How to secure your data using ledger tables
- How to apply granular permissions to dynamic data masking
- How to leverage new T-SQL enhancements

TH07

Introduction to Azure Cosmos DB

Introductory

LEONARD LOBEL

Thursday, March 23, 9:30-10:45am

You will learn:

- Get familiar with NoSQL databases, and Microsoft Azure Cosmos DB
- Understand the differences between NoSQL and relational database platforms, and when to choose one or the other for your next application
- About the unique NoSQL features of Cosmos DB, including global distribution, server-side horizontal partitioning, multi-model support, rich query over schema-free data, client development, server-side programming, tunable consistency, and automatic indexing

TH11

Implementing the Full Data Analytics Lifecycle on the Microsoft Cloud

ANDREW BRUST

Thursday, March 23, 11:00am-12:15pm

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

TH15

Adding Graph Structures to Your SQL Database

Introductory

STEVE JONES

Thursday, March 23, 1:15-2:30pm

You will learn:

- How graph databases work
- About modeling data structures with a graph database
- The basics of querying graph structures to solve problems

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.

T06

Desktop Apps Your Way!

Introductory / Intermediate

SAM BASU

Tuesday, March 21, 9:30-10:45am

You will learn:

- Various ways of building for desktop
- Explore modernization options for desktop apps
- How to share code across platforms

T11

.NET MAUI: Next Generation Multi-Platform App Development

Introductory

JAMES MONTEMAGNO

Tuesday, March 21, 1:30-2:45pm

You will learn:

- What is .NET MAUI and how can you use it to build apps
- How do I get started and what is the project structured
- Accessing platform features and integrations

T15

Building Teams Apps & Bots with .NET & Blazor

Intermediate

JAMES MONTEMAGNO

Tuesday, March 21, 3:00-4:15pm

You will learn:

- What are Teams apps and bots
- How to write apps and bots in C# and Blazor
- Share code across all .NET apps and Teams apps/bots

W12

Fast Focus: Using Blazor in MAUI

Introductory

ROCKFORD LHOTKA

Wednesday, March 22, 2:00-2:20pm

You will learn:

- How to create a MAUI Blazor project
- How Blazor operates within MAUI
- How Blazor can leverage MAUI to access native capabilities

W16

Modernization with Blazor Hybrid

Introductory / Intermediate

SAM BASU

Wednesday, March 22, 2:30-3:45pm

.NET MAUI & Blazor are pillars of innovation in the modern .NET ecosystem. .NET MAUI is the next generation of cross-platform .NET development stack. A truly single code base powers native apps for mobile/desktop, with tighter inner loop & smarter app architecture. Blazor isn’t just for modern server/client web apps, but now powers native apps with .NET MAUI. With .NET 7, .NET MAUI & Blazor share a runtime, promote code reuse across platforms & enable modernization strategies. Blazor Hybrid enables bringing the best of the web to mobile/desktop apps, aided by the island mindset with .NET MAUI – let’s mix & match technology stacks & move apps forward.

TH10

Getting Started with Design Thinking: A Guide for Developers and Managers

Introductory

BILLY HOLLIS

Thursday, March 23, 11:00am-12:15pm

Many developers think “design” is synonymous with “visual design”. But there are many different ways that design and design thinking can help teams produce more valuable applications, and visual design is only one of them. In this session, we’ll cover the various levels of design effort.

SESSION DESCRIPTIONS BY TRACK *(continued)*

TH14

UX Design in a Virtual World

Introductory

BILLY HOLLIS

Thursday, March 23, 1:15-2:30pm

You will learn:

- See an overview of a typical, lightweight design process
- Find out how UX design techniques change when teams operate virtually
- Learn a hybrid design process that combines the best of in-person and virtual/remote work



TECHNICAL EXCELLENCE AND LEADERSHIP SKILLS

Every software team member knows that there's more to delivering truly great products than writing solid code and having the best of breed tooling. Modern software teams that experience the greatest successes understand that strong leadership of highly motivated and skilled people are the difference, and that building better teams means building better solutions. The practices and techniques that team members use to understand and analyze the problem space, to manage interpersonal communication and conflict, and to deliver solutions that delight the end users are key to their success.

People are not born leaders; leaders are cultivated from anyone who is motivated to make a difference! Whether you're a leader by title or by necessity, the skills and practices shared in this track will enable you to have more effective interactions with stakeholders, team members, direct reports, even your manager. Whether you're an experienced leader or an aspiring leader, we have something for you in the Technical Excellence and Leadership Skills track.

T12

Pure Consultancy: Mastering Your Fears Like a Jedi

Intermediate

ALEX THISSEN

Tuesday, March 21, 1:30-2:45pm

You will learn:

- Understanding common fears during customer and colleague interaction
- Interact with other consultants, architects and developers
- Overcoming fears and changing your mindset

T16

Measuring Up! Collect the Right Metrics for the Right Reasons

Introductory / Intermediate

SARA CALDWELL AND ANGELA DUGAN

Tuesday, March 21, 3:00-4:15pm

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

W14

Fast Focus: Super Charge Your Feedback Skills in 20 Minutes

Introductory / Intermediate

ANGELA DUGAN

Wednesday, March 22, 2:00-2:20pm

In this fast-paced 20-minute session focused on supercharging your feedback skills, Angela will help you get a good foothold on where to start. We'll warm up with an overview of what feedback is, attributes of high-quality feedback, and some “tips and tricks” to getting comfortable with giving and receiving candid feedback that has worked really well for me both as a manager and a team member.

W20

How to Fix a Failing Project

Intermediate / Advanced

BENJAMIN DAY

Wednesday, March 22, 4:00-5:15pm

You will learn:

- How unclear priorities and too much Work in Progress (WIP) can get in your way
- How to use simple metrics to measure what's going on: Flow Metrics, Cycle Time, and Lead Time
- Communication techniques for working with grumpy stakeholders and bosses

TH02

How to Effectively Communicate Technical Ideas to Non-Technical Audiences

Introductory

AMBER VANDERBURG

Thursday, March 23, 8:00-9:15am

You will learn:

- Tools to craft powerful, memorable, relatable storytelling to convey complex ideas
- How to present data and statistics in a way that conveys ideas clearly
- Insight into the power of jargon and when communication short cuts can be a benefit and a detriment in collaboration

TH05

Learned Helplessness vs. Learned Optimism - Getting Your Team Unstuck

Introductory

SARA CALDWELL

Thursday, March 23, 9:30-10:45am

You will learn:

- How to recognize when your team is struggling with “learned helplessness”
- How to list three ways to manage learned helplessness on your team
- Feel more comfortable how to talk about learned helplessness

TH09

Technical Debt Is Not Free

Introductory

CHAD GREEN

Thursday, March 23, 11:00am-12:15pm

You will learn:

- What technical debt is and how to measure it
- How to track technical debt in a way meaningful for developers and the business
- Ways to combat technical debt

TH13

Mapping the Story – Your Team’s Guide to Creating a Product Backlog

Introductory

SARA CALDWELL AND ANGELA DUGAN

Thursday, March 23, 1:15-2:30pm

You will learn:

- Shared understanding of the business outcome the team is driving towards,
- Shared understanding of how the team is going to work to accomplish the outcome(s),
- How to create an actionable release plan

TH17

Secrets of Conflict Resolution

Introductory

CHAD GREEN

Thursday, March 23, 2:45-4:00pm



SESSION DESCRIPTIONS BY TRACK (continued)

You will learn:

- The five conflict resolution methods and why you would use one over another
- About the Karpman Dram Triangle and how we can use it to understand the motivations of those involved within a conflict
- The 10 useful tips for handling conflict that you can employ right away

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 6. 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:

- Hands-on Lab: Asynchronous and Parallel Programming in C#
- What's new in C#
- Catching Up with C# Interfaces: What You Know Might Be Wrong
- Introduction to Actor-based Development with Project Orleans
- Getting .NET Interactive Notebooks
- Building intuitive command-line interfaces in .NET
- Testability in .NET
- Build Apps Faster with GitHub Codespaces
- Building Visual Studio extensions have never been easier
- Building Fabulous NuGet Packages

T04

What's New in C#

Intermediate

IAN GRIFFITHS

Tuesday, March 21, 8:00-9:15am

You will learn:

- About the features added to the latest versions of C#
- About the features added to the latest versions of .NET
- What is planned for C# 12 and .NET 8.0

W03

Catching Up with C# Interfaces: What You Know Might Be Wrong

Intermediate

JEREMY CLARK

Wednesday, March 22, 8:00-9:15am

You will learn:

- Pros and cons of default implementation in interfaces
- Why you may want a “private” interface member
- Why you need to be more explicit when using interfaces

W06

Introduction to Actor-based Development with Project Orleans

Introductory / Intermediate

CHRIS KLUG

Wednesday, March 22, 9:30-10:45am

You will learn:

- To understand what the Actor model is
- To understand how Project Orleans gives us access to an Actor model
- To see how we can use the Actor model to build advanced solutions

W10

Fast Focus: Getting .NET Interactive Notebooks

Introductory

JASON BOCK

Wednesday, March 22, 1:30-1:50pm

You will learn:

- See what .NET Interactive Notebooks are
- Understand how .NET works in notebooks
- Gain insight into .NET integration in Jupyter

W18

Building Intuitive Command-line Interfaces in .NET

Intermediate

ALEX THISSEN

Wednesday, March 22, 2:30-3:45pm

You will learn:

- How to use System.CommandLine to create CLI interfaces for .NET applications
- About making discoverable and intuitive CLI using designs and patterns
- How to leverage CLIs in DevOps scenarios using pipelines for CI/CD

TH03

Testability in .NET

Introductory / Intermediate

JASON BOCK

Thursday, March 23, 8:00-9:15am

You will learn:

- What is available for developers to help them write clear unit tests
- A deep understanding of testing and mocking frameworks
- Obtain guidance on unit testing strategies

TH06

Build Apps Faster with GitHub Codespaces

Intermediate

BRIAN RANDELL

Thursday, March 23, 9:30-10:45am

You will learn:

- What are GitHub Codespaces
- How do you get started with Codespaces
- How to work with Codespaces at the team level

TH18

Building Fabulous NuGet Packages

Intermediate

JASON BOCK

Thursday, March 23, 2:45-4:00pm

You will learn:

- What NuGet is
- Insight into different NuGet features
- How NuGet packages are created and consumed



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!

SESSION DESCRIPTIONS BY TRACK *(continued)*

T01

Getting Up and Running with Modern Angular

Introductory

ALLEN CONWAY

Tuesday, March 21, 8:00-9:15am

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

T05

ASP.NET Core Beyond the Basics

Intermediate / Advanced

CHRIS KLUG

Tuesday, March 21, 9:30-10:45am

You will learn:

- To understand that there is more to ASP.NET Core than meets the eye
- To see some ways that we can extend our ASP.NET Core applications to solve some interesting problems
- To have some fun, seeing some stuff you have never seen before

T09

Modern Authentication and Authorization with OIDC, OAuth2, and Resource-based Permissions

Introductory / Intermediate

ERIC D. BOYD

Tuesday, March 21, 1:30-2:45pm

You will learn:

- Overview of modern identity with OIDC and OAuth2
- Getting started with Azure Active Directory and other identity providers
- How to secure your applications and services with OIDC and OAuth

T13

TypeScript: Moving Beyond the Basics

Intermediate / Advanced

ALLEN CONWAY

Tuesday, March 21, 3:00-4:15pm

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

W01

Deep Dive: Microsoft Blazor Zero to Success

Intermediate

ROCKFORD LHOTKA

Wednesday, March 22, 8:00-10:45am

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

W08

Fast Focus: JavaScript Framework/ Library Showdown

Introductory

ALLEN CONWAY

Wednesday, March 22, 1:30-1:50pm

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

W13

Fast Focus: Adding Content-Negotiation to ASP.NET Core MVC

Intermediate

CHRIS KLUG

Wednesday, March 22, 2:00-2:20pm

You will learn:

- That content-negotiation is a great way to extend our APIs
- What is needed to support content-negotiation in ASP.NET Core
- That ASP.NET Core is more than just the built-in features

W15

Creating Business Applications using Blazor

Introductory

MICHAEL WASHINGTON

Wednesday, March 22, 2:30-3:45pm

You will learn:

- Core Blazor concepts including Binding, Routing and JavaScript Interop
- How to create end-to-end Blazor business applications using Server Side Blazor and Blazor WebAssembly

TH01

Web Services with ASP.NET Core Deep Dive

Intermediate

PHILIP JAPIKSE

Thursday, March 23, 8:00-10:45am

You will learn:

- Foundations of ASP.NET Core
- Building RESTful services with ASP.NET Core
- Documenting services with swagger

THANK YOU FOR ATTENDING VISUAL STUDIO LIVE! LAS VEGAS 2023

JOIN US NEXT YEAR!
MARK YOUR CALENDARS FOR MARCH 3-8, 2024
HERE AT PLANET HOLLYWOOD RESORT & CASINO.

UPCOMING 2023 EVENTS...



Visual Studio Live! Nashville
May 15-19, 2023
Renaissance Nashville, Nashville, TN

vslive.com/nashville



Visual Studio Live! Microsoft HQ
July 17-21, 2023
Microsoft Conference Center, Redmond, WA /
Hyatt Regency Bellevue

vslive.com/microsofthq



Visual Studio Live! San Diego
August 7-11, 2023
Sheraton San Diego Hotel & Marina, San Diego, CA

vslive.com/sandiego



Visual Studio Live! Orlando
November 12-17, 2023
Loews Royal Pacific Resort at
Universal Orlando, Orlando, FL

Part of
 **LIVE! 360**

live360events.com

STAY CONNECTED TO VISUAL STUDIO LIVE! ON OUR SOCIAL NETWORKS:



[@VSLive](https://twitter.com/@VSLive)



[@VSLiveEvents](https://facebook.com/@VSLiveEvents)



[@VisualStudioLive](https://instagram.com/@VisualStudioLive)



[linkedin.com
@Visual Studio Live!](https://linkedin.com/@Visual Studio Live!)