SQL in the City Summit

Azure DevOps for SQL Server DBAs

(Greg Low)
Why Azure DevOps?

Turn ideas into software

- Plan smarter
- Collaborate better
- Create quality
- Ship faster

So what does it provide?

Azure DevOps isn't just one service:

- Azure Boards
- Azure Repos
- Azure Pipelines
- Azure Test Plans
- Azure Artifacts
- Azure Monitor
Azure Boards

Track work with Kanban boards, backlogs, team dashboards, and custom reporting

Connected from idea to release
Track all your ideas at every development stage and keep your team aligned with all code changes linked directly to work items

Scrum ready
Use built-in scrum boards and planning tools to help your teams run sprints, stand-ups, and planning meetings

Project insights
Gain new insights into the health and status of your project with powerful analytics tools and dashboard widgets

Demo: Projects and Boards
Azure Repos

Unlimited private Git repo hosting and support for TFVC at scale

- Works with your Git client
  Securely connect with and push code into your Git repos from any IDE, editor, or Git client

- Web hooks and API integration
  Add validations and extensions from the marketplace or build your own using web hooks and REST APIs

- Semantic code search
  Quickly find what you’re looking for with code-aware search that understands classes and variables

Demo: Repos
Azure Pipelines
Cloud-hosted pipelines for Linux, Windows and macOS, with unlimited minutes for open source

- Any language, any platform, any cloud
  Build, test, and deploy Node.js, Python, Java, PHP, Ruby, C/C++, .NET, Android, and iOS apps. Run in parallel on Linux, macOS, and Windows. Deploy to Azure, AWS, GCP or on-premises

- Extensible
  Explore and implement a wide range of community-built build, test, and deployment tasks, along with hundreds of extensions from Slack to SonarCloud. Support for YAML, reporting and more

- Containers and Kubernetes
  Easily build and push images to container registries like Docker Hub and Azure Container Registry. Deploy containers to individual hosts or Kubernetes.

- Best-in-class for open source
  Ensure fast continuous integration/continuous delivery (CI/CD) pipelines for every open source project. Get unlimited build minutes for all open source projects with up to 10 free parallel jobs across Linux, macOS and Windows

Infrastructure as Code
Support for 3rd party and OSS tooling like Terraform, Ansible, Chef, Puppet & SaltStack
Continuous Security

Leverage ML to proactively identify and mitigate risks to reduce exposure to attacks. Quickly detect and respond to threats with advanced analytics.

Demo: Pipelines
Azure Test Plans

Get end-to-end traceability. Run tests and log defects from your browser. Track and assess quality throughout your testing lifecycle.

Capture rich data
Capture rich scenario data as you execute tests to make discovered defects actionable. Explore user stories without test cases or test steps. You can create test cases directly from your exploratory test sessions.

Test across web and desktop
Test your application where it lives. Complete scripted tests across desktop or web scenarios. Test on-premises application from the cloud and vice-versa.

Get end-to-end traceability
Leverage the same test tools across your engineers and user acceptance testing stakeholders. Pay for the tools only when you need them.

Demo: Test Plans
Azure Artifacts

Create and share Maven, npm, and NuGet package feeds from public and private sources – fully integrated into CI/CD pipelines

- Manage all package types
  Get universal artifact management for Maven, npm, and NuGet

- Add packages to any pipeline
  Share packages, and use built-in CI/CD, versioning, and testing

- Share code efficiently
  Easily share code across small teams and large enterprises

Demo: Artifacts
Azure Monitor
Collecting, analyze, and act on telemetry from your cloud and on-premises environments

- Predefined solutions
  Smart thresholds provide you just the information you need. Separate the signal from the noise and accelerate root-cause analysis

- Visualize
  Visualize data in intuitive and customizable dashboards

- Integrate
  Integrate your existing processes & tools like Service Now

Demo: Monitor
So what's been missing?

Databases!

Next session tackles this
MCP Certification

Microsoft Certified: Azure DevOps Engineer Expert

Azure DevOps professionals combine people, process, and technologies to continuously deliver valuable products and services that meet end user needs and business objectives.

Required exam: Exam AZ-400
Prerequisites: 1 certification | See details

Skills measured

- Design a DevOps strategy
- Implement DevOps development processes
- Implement continuous integration
- Implement continuous delivery
- Implement dependency management
- Implement application infrastructure
- Implement continuous feedback

Any questions?

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