Microsoft

February 28, 2019 — 8:30 AM - 5:00 PM | Detroit, Michigan

Azure Pipelines, Building and Deploying your Code

Learn.

Connect.

Explore.

Azure Repos

Azure Repos

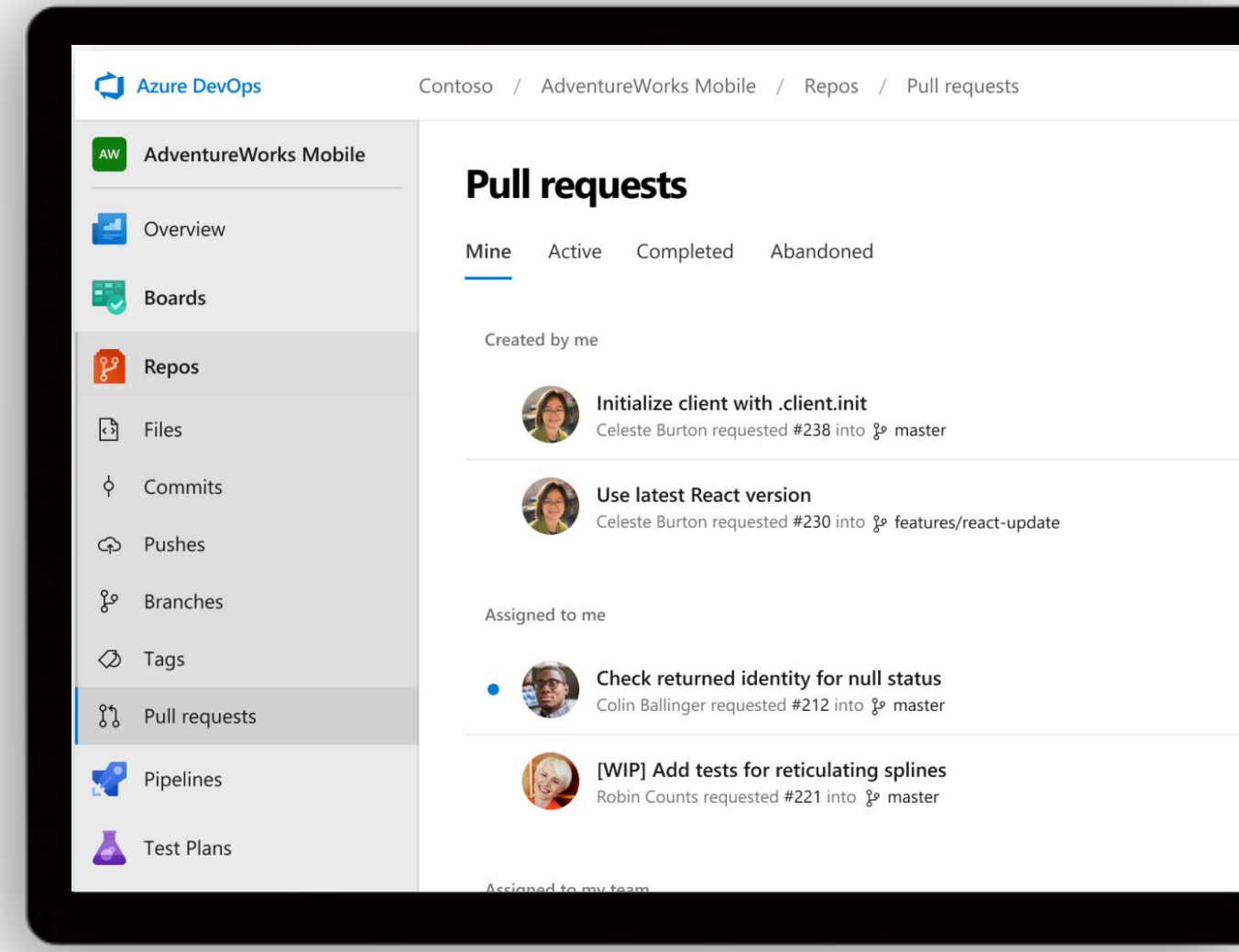
Collaborate on code development using free Git public and private repositories, pull requests, and code review.

Pull Requests

Azure Repos has a rich pull request experience that's easy to use and scales to your needs. Use pull requests to review works in progress and get early feedback on changes. There's no commitment to merge the changes as the owner can abandon the pull request at any time.

Branch Policies

Branch policies help teams protect their important branches of development. Policies enforce your team's code quality and change management standards.



Azure Pipelines

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

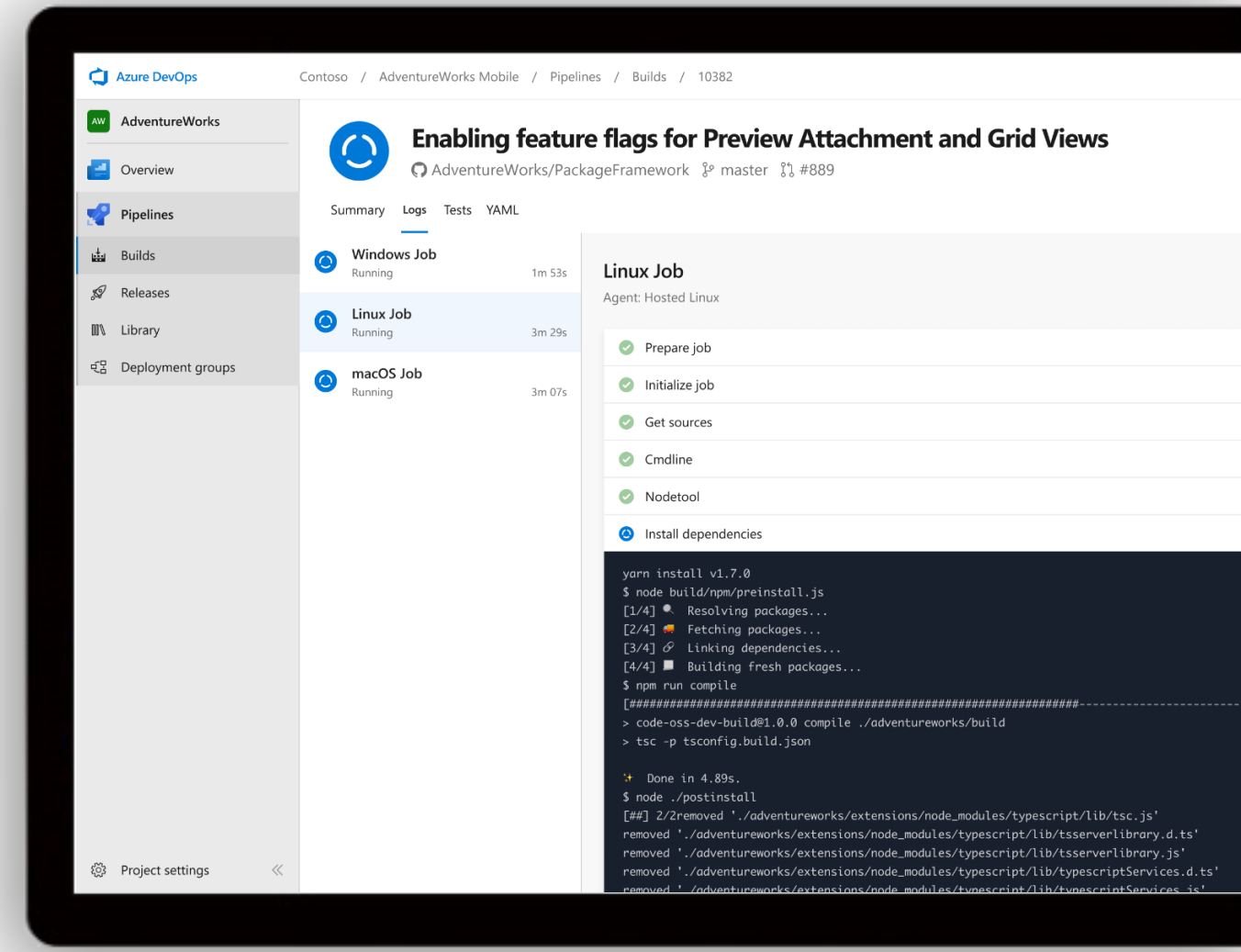
Explore and implement a wide range of community-built build, test, and deployment tasks, along with hundreds of extensions from Slack to SonarCloud. Support for YAML, reporting and more

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



https://azure.com/pipelines

Infrastructure as code

Deploy Repeatedly & Reliably

Azure Resource Manager, Automation & 3rd Party Integrations

- Infrastructure as Code, built-in with Azure Resource Manager
- Azure Config & Automation to automate repetitive tasks
- Support for 3rd party and OSS tooling such as Terraform, Ansible, Chef, Puppet & SaltStack

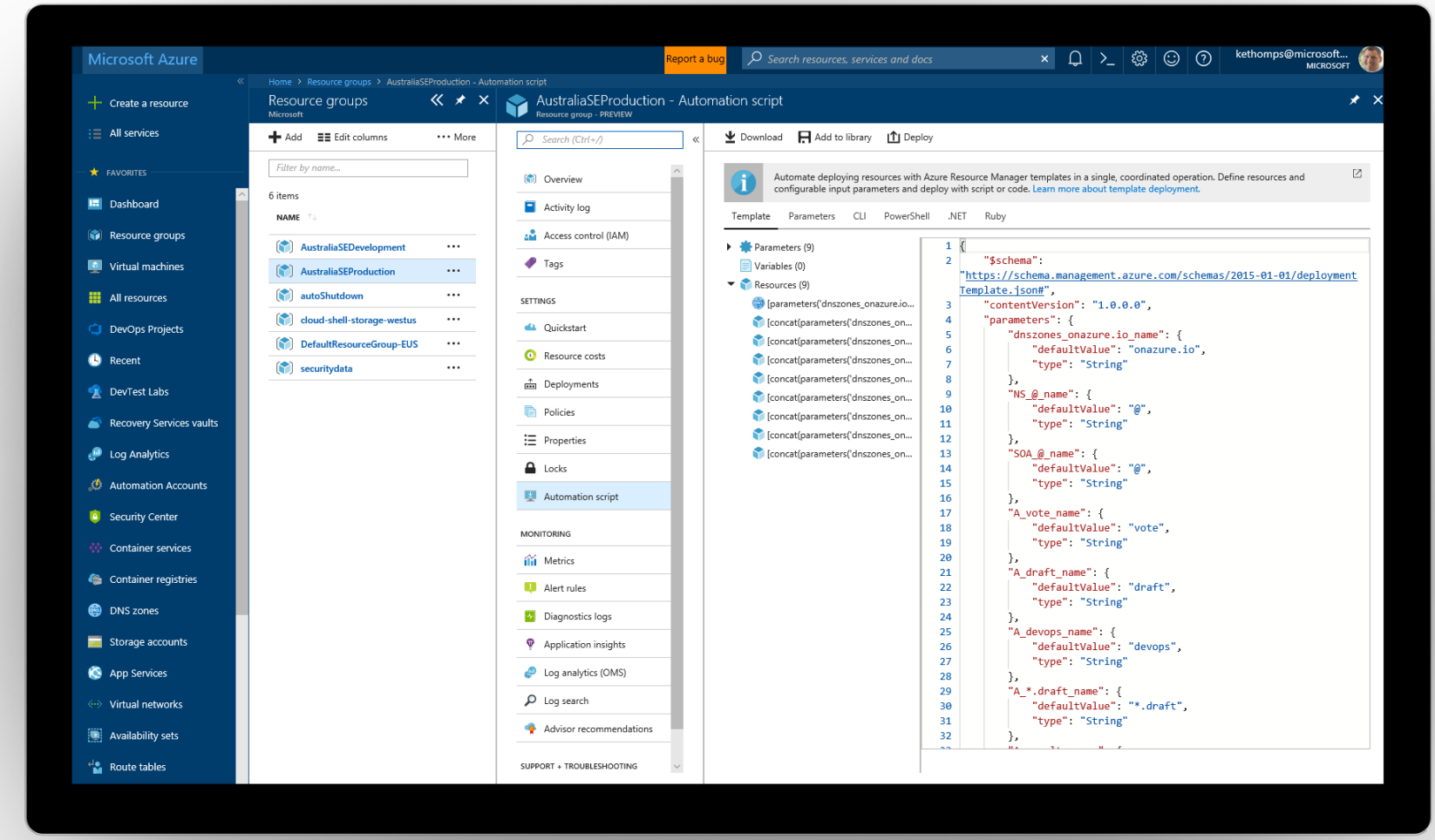
TERRAFORM

ANSIBLE

CHEF

puppet

SALTSTACK



Difference with Traditional Mindset

- Infrastructure as Code
  - Declarative vs Imperative
  - Abstractions over Implementations

Infrastructure as Code

- Treat Infrastructure as Code
  - Continuous Integration
  - Automated Tests
  - Refactoring

Version control enables peer review and change tracking

Infrastructure As Code

- Ecosystem of Tools
  - Linting
  - Unit Testing
  - Integration Testings

Infrastructure as Code Tools for Azure

Environment Management

- Azure Resource Manager (ARM) Templates
- Terraform
- Ansible

Operating System Management

- PowerShell Desired State Configuration (DSC)
- Chef
- Puppet
- Ansible
- SaltStack

Demo

Break – 15 min

Thank you!