



Microsoft



Katerina Chernevskaya 

ALM for Power Platform Bootcamp:  
DevOps, Environments, Solutions,  
Security & Pipelines!



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# ALM for POWER PLATFORM



LOW CODE  
**POWER**  
LONDON 2024



Microsoft



automate your documents  
integrate your data



mazikglobal

 **NORTH52**  
*Turbocharge Dynamics 365*



Dynamics 365  
Implementation Partner  
for **ERP**, **CRM** & **HR**  
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# Sponsors

# THANK YOU!

**POWER**  
COMMUNITY



# Mastering Deployment

Automate, Streamline, and Excel  
in Every Release



## Kickstarting ALM

Master Environments and Solutions



## Azure DevOps Essentials

Power Up Your Project Management



## Streamlining Operations

CI/CD for Efficient Development

# Katerina Chernevskaya

POWER  
COMMUNITY



- Over 20 years in Microsoft Tech & Solutions
- Community speaker | Content creator
- Contributor and collaborator in Microsoft Sample Solution Gallery  
[aka.ms/powerplatform-samples](http://aka.ms/powerplatform-samples)



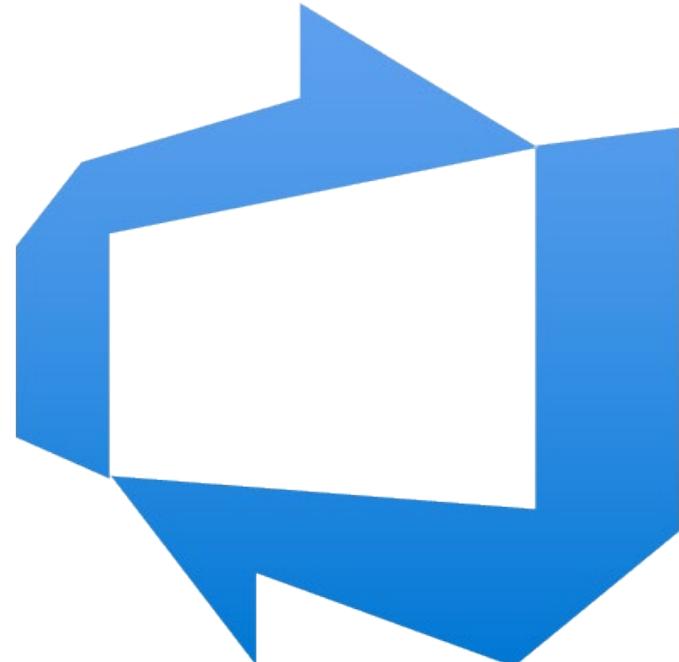
#SharingIsCaring



# Azure DevOps

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A suite of development tools offered by Microsoft that facilitates an agile, collaborative, and integrated environment for development and deployment.



# Azure DevOps

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COMMUNITY



Wiki



Boards



Repository



Pipeline



Artifacts



Test



# Azure DevOps

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### INDIVIDUAL SERVICES

**Azure Pipelines**

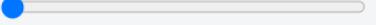


1 Free Microsoft-hosted CI/CD  
1 Free Self-Hosted CI/CD

**Start free**

- 1 Microsoft-hosted job with 1,800 minutes per month for CI/CD and 1 self-hosted job with unlimited minutes per month
- \$40 per extra Microsoft-hosted CI/CD parallel job and \$15 per extra self-hosted CI/CD parallel job with unlimited minutes

Microsoft-hosted  
Free



1,800 minutes free with 1 free parallel job

\$0/mo

**Azure Artifacts**

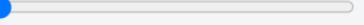


2 GiB free,  
then starting at \$2 per GiB

**Start free**

- Industry-leading NuGet Server
- Support for Maven, npm, and Python packages
- Upstream sources to help protect open-source dependencies
- Integrated with Azure Pipelines
- Sophisticated access controls

First 2 GiB free  
0



\$0/extral gigabyte

\$0/mo



### USER LICENSES

**Basic Plan**



First 5 users free,  
then \$6 per user per month

**Start free**

- **Azure Pipelines:** Includes the free offer from INDIVIDUAL SERVICES
- **Azure Boards:** Work item tracking and Kanban boards
- **Azure Repos:** Unlimited private Git repos
- **Azure Artifacts:** 2 GiB free per organization

First 5 users free  
1

\$6/user/month

\$0/mo

**Basic + Test Plans**



\$52 per user per month

**30 day free trial**

- Includes all Basic plan features
- Test planning, tracking & execution
- Browser-based tests with annotation
- Rich-client test execution
- User acceptance testing
- Centralized reporting

\$52 per user per month  
1

\$52/user/month

\$52/mo

## Configure Organization and Project

### Create Organization

A mechanism for organizing and connecting groups of related projects



### Request Parallelism

Complete [the form](#) to request Parallelism



### Create Project

Select appropriate [work item process](#) for your project



### Set Permissions

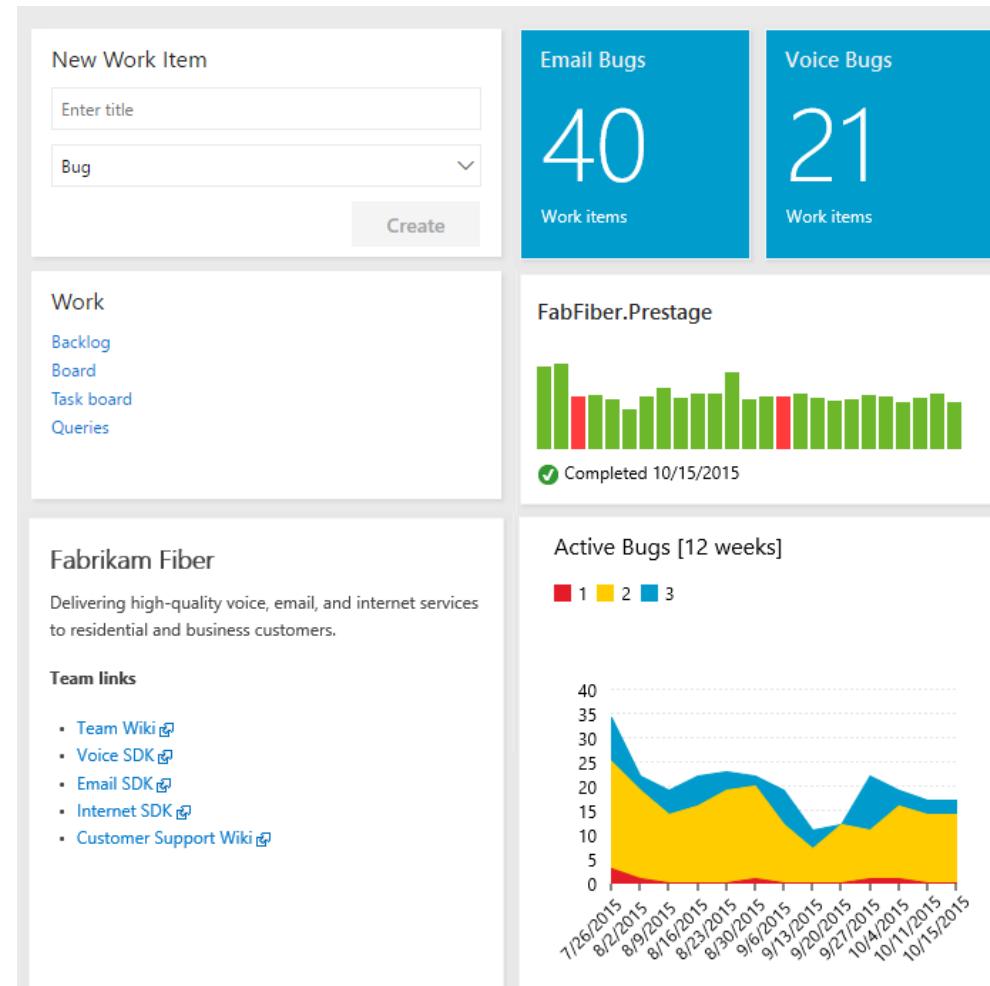
Allow **Contribute** and **Manage Notes** permissions



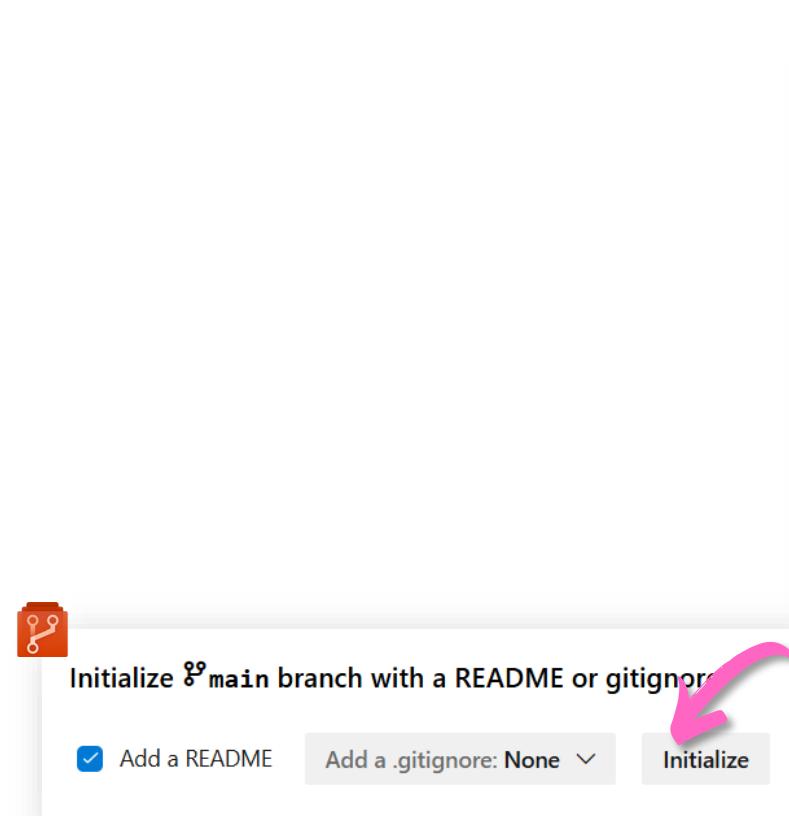
# Azure DevOps

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## Dashboard



## Wiki as code



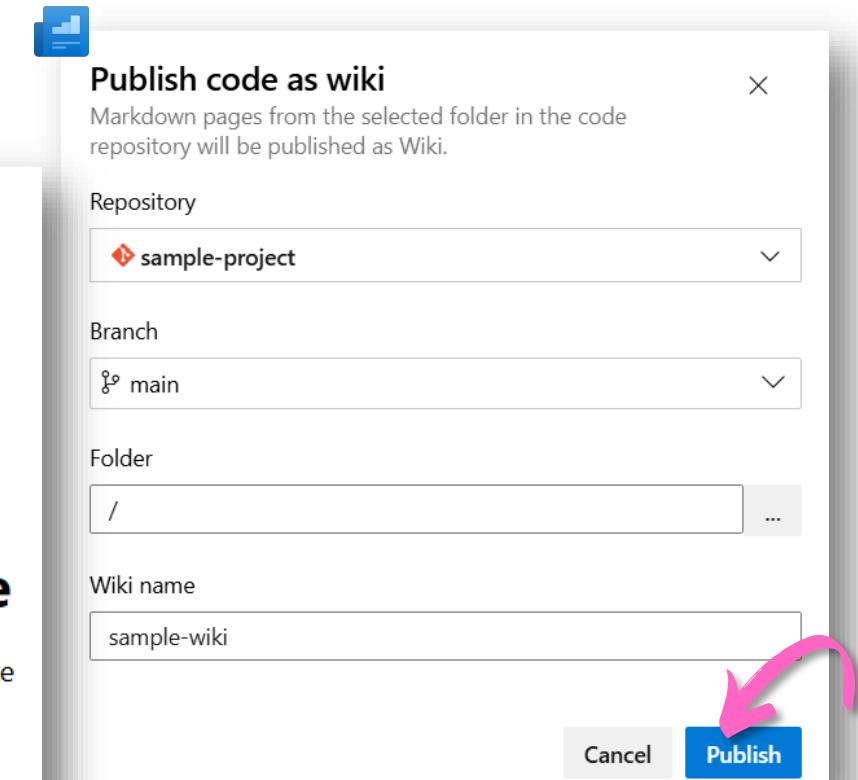
Initialize <sup>89</sup> main branch with a README or gitignore

Add a README     

Get everyone on the same page

Create wiki pages to enable your team members to collaborate

     [Learn more](#)



Publish code as wiki

Markdown pages from the selected folder in the code repository will be published as Wiki.

Repository: sample-project

Branch: main

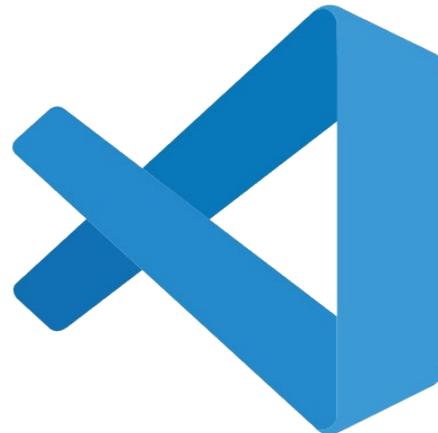
Folder: /

Wiki name: sample-wiki

## Wiki as code

```
git clone https://<organization>@dev.azure.com/<organization>/<project>/_git/<project>
```

```
git pull
```



## Work item process

### ⚡ New work item rule

A rule allows you to specify actions on work item fields to automate their behavior. By defining conditions, you can control when the system applies these changes to the fields. [Learn more about work item rules](#)

Name  \*

#### Conditions ⓘ

When

[+ New condition](#)

#### Actions ⓘ

Then   to

[+ New action](#)



## Service Connections

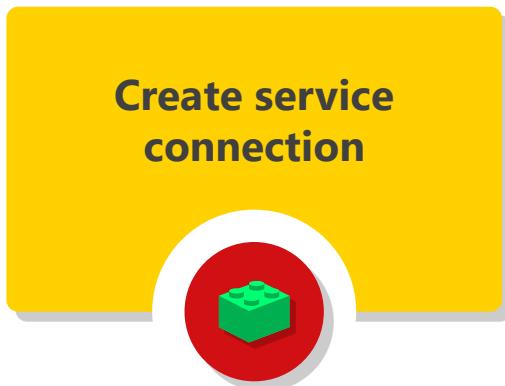
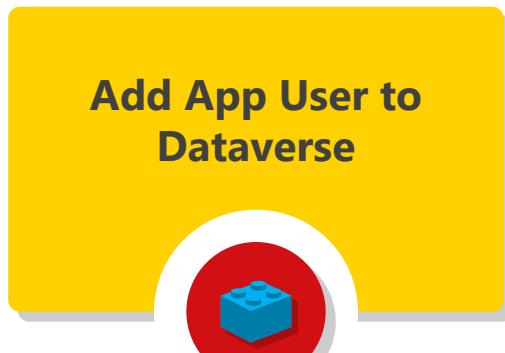
Identity created for use with applications,  
hosted services, and automated tools.

Provides specific permissions  
without using an individual user's credentials.

Ideal for tasks that need to run in the background,  
without human intervention.



## Service Connections



New Power Platform service connection X

Authentication method

Application Id and client secret

Azure Managed Identity

Workload Identity federation (preview)

Server URL

Authentication

Tenant Id

Tenant Id (also called directory Id in Azure portal) to authenticate to. Refer to <https://aka.ms/buildtools-spn> for a script that shows Tenant ID and configures an Application ID and associated Client Secret. The application user must also be [created in CDS](#)

Application Id

Azure Application Id to authenticate with.

Client secret of Application Id

Client secret of the Service Principal associated to above Application Id: used to prove identity.

Details

Service connection name

Description (optional)

Security

Grant access permission to all pipelines

[Learn more](#) [Troubleshoot](#)

[Back](#) [Save](#)

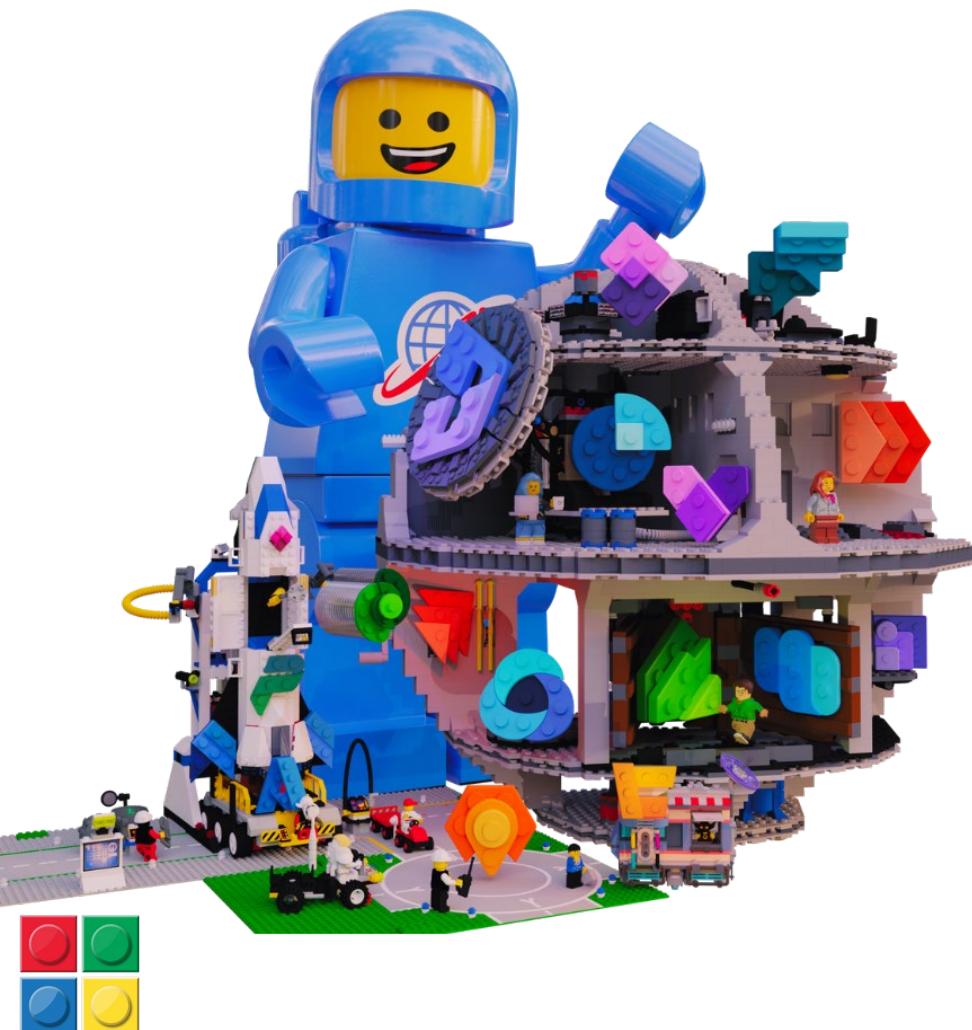
## Repository

Acts as a central hub  
where all your solution codes reside.

Tracks of changes, understand iterations,  
and maintain a history of your solution's evolution.

Allows multiple developers to work seamlessly,  
ensuring smooth collaboration.





## Pipeline

A series of automated procedures and steps, designed to streamline the process of building, testing, and deploying solutions and apps.

In the Power Platform, pipelines streamline the transition of solutions from development to production, enhancing efficiency and minimizing errors.

## Continuous integration

A development approach where code is frequently integrated into a shared repository, promoting a robust and efficient codebase



## Continuous deployment

Automated process of releasing new version of a solution into the target environment once changes pass predefined tests and criteria



# Mastering Deployment

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in Every Release



## Kickstarting ALM

Master Environments and Solutions



## Azure DevOps Essentials

Power Up Your Project Management

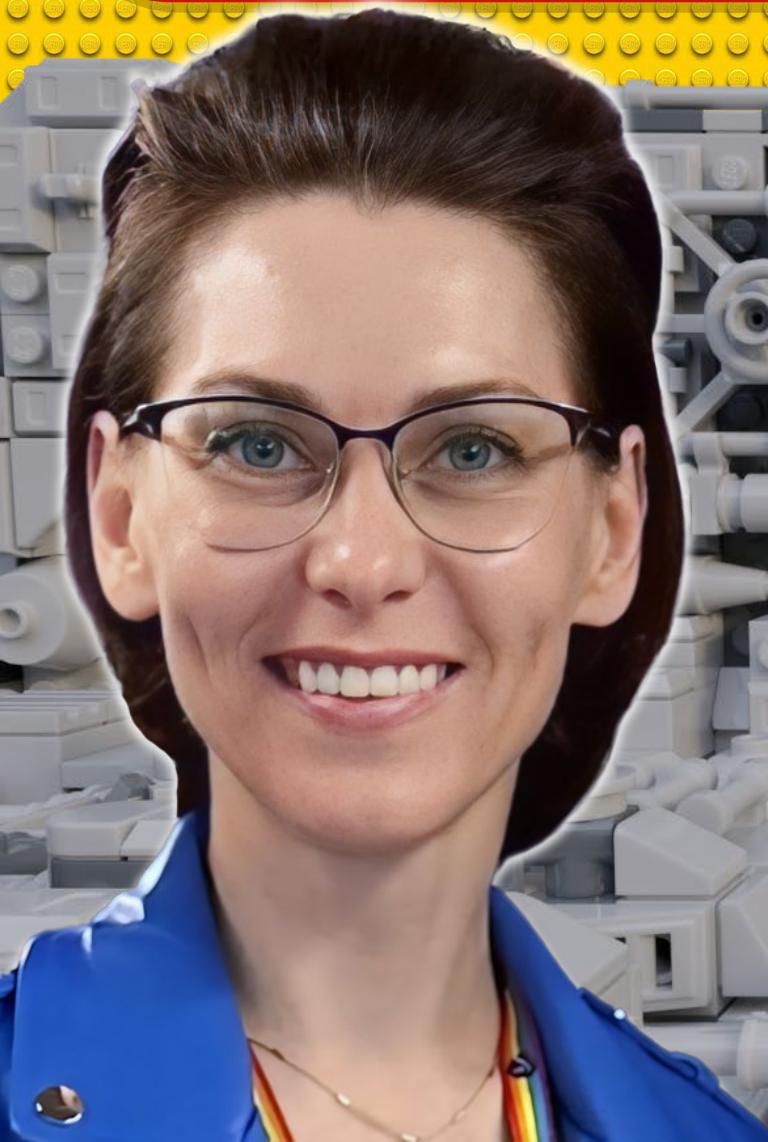


## Streamlining Operations

CI/CD for Efficient Development

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