

**Agenda: About Azure DevOps**

- What is Azure DevOps
- Version History
- Azure DevOps Features
- Azure DevOps Tools and Project Life Cycle
- Create DevOps Account
- Create Organization
- Create Project and Get Started
- Create Users and invite teams members

**What is Azure DevOps?**

- Azure DevOps (formerly Visual Studio Team Services) is a hosted **suite of service** providing development and collaboration tools for anyone who wants an enterprise-grade DevOps tool chain.
- Azure DevOps can help your team release code in a more efficient, cooperative, and stable manner.
- Azure DevOps has a lot of **inbuilt functionality** that allows teams to get up and running with managing their project and automating their workflows to increase productivity with a very short initial learning curve.

**You can quickly get up and running with the many tools available.**

- Agile tools covering Kanban/scrum project methodologies
- Git repositories for source control.
- Build and Release pipelines for CI/CD automation.
- Many pre-built deployment tasks/steps to cover the most common use cases and the ability to extend this with your own tasks.
- Hosted build/release agents with ability to additionally run your own
- Custom dashboards to report on build/release and agile metrics.
- Built in wiki.

**Azure DevOps is available in two different forms:**

1. **Azure DevOps Server**, collaboration software for software development formerly known as Team Foundation Server (TFS) and Visual Studio Team System (VSTS)
2. **Azure DevOps Services**, cloud service for software development formerly known as Visual Studio Team Services and Visual Studio Online.

**History:** This first version of Team Foundation Server was released March 17, 2006.

Product name	Form	Release year
Visual Studio 2005 Team System	On-premises	2006
Visual Studio Team System 2008	On-premises	2008
Team Foundation Server 2010	On-premises	2010
Team Foundation Service Preview	Cloud	2012
Team Foundation Server 2012	On-premises	2012
Visual Studio Online	Cloud	2013
Team Foundation Server 2013	On-premises	2013
Team Foundation Server 2015	On-premises	2015
Visual Studio Team Services	Cloud	2015
Team Foundation Server 2017	On-premises	2017
Team Foundation Server 2018	On-premises	2017
<b>Azure DevOps Services</b>	<b>Cloud</b>	<b>2018</b>
<b>Azure DevOps Server 2019</b>	<b>On-premises</b>	<b>2019</b>

### Azure DevOps Features

You can use one or more of the following features based on your business needs:

1. **Azure Boards** delivers a suite of Agile tools to support planning and tracking work, code defects, and issues using Kanban and Scrum methods.
2. **Azure Repos** provides Git repositories or Team Foundation Version Control (TFVC) for source control of your code.
3. **Azure Pipelines** provides build and release services to support continuous integration and delivery of your apps.
4. **Azure Test Plans** provides several tools to test your apps, including manual/exploratory testing and continuous testing.
5. **Azure Artifacts** allows teams to share Maven, npm, and NuGet packages from public and private sources and integrate package sharing into your CI/CD pipelines.



Azure  
Boards

Plan, track, and discuss work across teams, deliver value to your users faster.



Azure  
Repos

Unlimited cloud-hosted private Git repos. Collaborative pull requests, advanced file management, and more.



Azure  
Pipelines

CI/CD that works with any language, platform, and cloud. Connect to GitHub or any Git provider and deploy continuously to any cloud.



Azure  
Test Plans

The test management and exploratory testing toolkit that lets you ship with confidence.

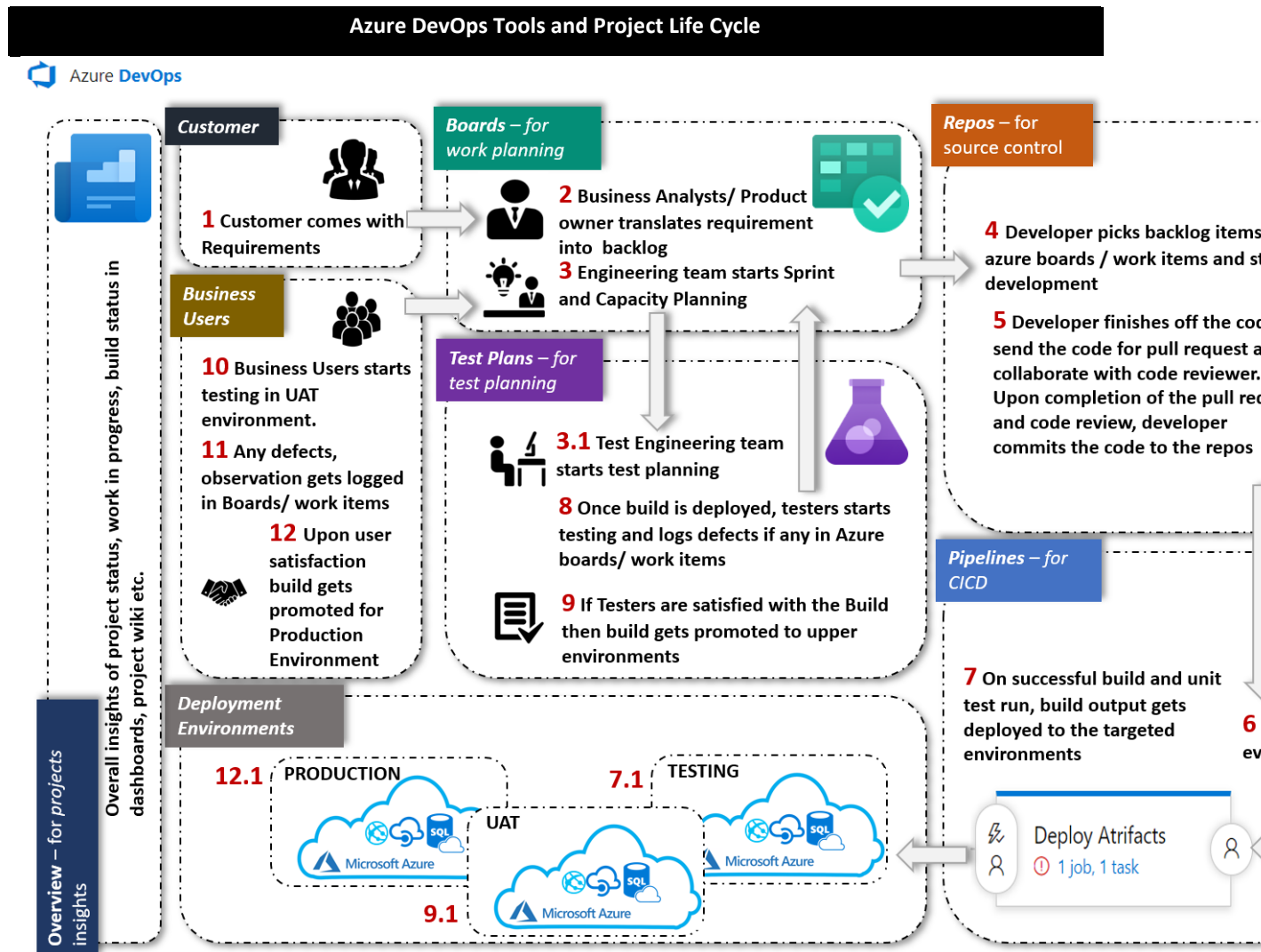


Azure  
Artifacts

Create, host, and share packages. Easily add artifacts to CI/CD pipelines.

Azure DevOps supports **adding extensions** and integrating with other popular services, such as: Campfire, Slack, Trello, UserVoice, and more, and developing your own custom extensions.

Azure DevOps provides extensive integration with industry and community tools. It is far from the closed-off single vendor solution that was the early version of TFS. As noted above, there is a marketplace which makes hundreds of extensions available, so if Azure DevOps doesn't do something out of the box, odds are a tool exists in the market which does.



### Designing a License Management Strategy:

Open source projects	Small Teams	Teams of any size
<h2>Free</h2> <p>Unlimited users and build time</p> <ul style="list-style-type: none"> <li>• <b>Azure Pipelines:</b> 10 parallel jobs with unlimited minutes for CI/CD</li> <li>• <b>Azure Boards:</b> Work item tracking and Kanban boards</li> <li>• <b>Azure Repos:</b> Unlimited public Git repos</li> </ul> <p><a href="#">Start for free</a></p>	<h2>Free</h2> <p>Start free with up to 5 users</p> <ul style="list-style-type: none"> <li>• <b>Azure Pipelines:</b> 1 hosted job with 1,800 minutes per month for CI/CD and 1 self-hosted job</li> <li>• <b>Azure Boards:</b> Work item tracking and Kanban boards</li> <li>• <b>Azure Repos:</b> Unlimited private Git repos</li> <li>• <b>Azure Artifacts:</b> Package management (5 users free)</li> <li>• Load testing (20,000 VUMs/month)</li> <li>• Unlimited stakeholders</li> </ul> <p><a href="#">Start for free</a></p>	<h2>\$30/mo</h2> <p>10 Users</p> <ul style="list-style-type: none"> <li>• <b>Azure Pipelines:</b> 1 hosted job with 1,800 minutes per month for CI/CD and 1 self-hosted job</li> <li>• <b>Azure Boards:</b> Work item tracking and Kanban boards</li> <li>• <b>Azure Repos:</b> Unlimited private Git repos</li> <li>• <b>Azure Artifacts:</b> Package management (5 users free)</li> <li>• Load testing (20,000 VUMs/month)</li> <li>• Unlimited stakeholders</li> <li>• Visual Studio subscribers included free</li> </ul> <p><a href="#">Start</a></p>

<https://azure.microsoft.com/en-in/pricing/details/devops/azure-devops-services/>

### To Create an DevOps Account / Organization

#### Sign up with a personal Microsoft account

1. Visit <https://azure.microsoft.com/services/devops/>
2. Click Start free
3. Either Login with Existing Microsoft Account or Create a New one.

An organization is created based on the account you used to sign in. Sign in to your organization at any time, (<https://dev.azure.com/{yourorganization}>).

#### Create a Project to get started


- If you signed up for Azure DevOps with a newly created Microsoft account (MSA), your project is automatically created and named based on your sign-in.
- If you signed up for Azure DevOps with an existing MSA or GitHub identity, you're automatically prompted to create a project. You can create either a public or private project.
- A **public GitHub repository** is accessible to everyone, whereas a **private repository** is accessible to you and the people you share it with. In both cases, only collaborators can commit changes to a GitHub repository.

#### Create Users

1. Create an outlook ID
2. Activate your Subscription (FREE account or Azure Pass Sponsorship or get owner rights other users subscription)
3. Visit <https://portal.office.com>

4. Go to Azure Active Directory and create users [user1@orgname.onmicrosoft.com](mailto:user1@orgname.onmicrosoft.com) and [user2@orgname.onmicrosoft.com](mailto:user2@orgname.onmicrosoft.com)

### Invite team members

1. Create couple of outlook ids
2. Use primary email id and visit <https://dev.azure.com/>.
3. Start Free
4. Create a project to get started
  - a. Project Name = "Demo Project"
  - b. Description = "For Demo"
  - c. Visibility = "Private"
  - d. Expand Advanced, Version Control = Git, Work Item process = "Agile"
  - e. **Create Project**
5. **Invite Users**
  - a. Use bread crump and navigate to Organization
  - b. Select  **Organization settings**.
  - c. Select **Users** → **Add new users**.
  - d. Users = <Email Id of another User>, Access level = Basic, Add to project = <project created before>, Azure DevOps Group=Project Contributors

Note: You will have to now login as another use and accept the invitation. Do the same in different users...

Issue about Parallel Jobs:

<https://devblogs.microsoft.com/devops/change-in-azure-pipelines-grant-for-private-projects/>

### Types of Users

Basic Users = 5 are FREE + \$6/- for additional user. (Azure Boards + Azure Repos + Azure Pipelines + Azure Test Plans + Azure Artifacts)

Stakeholders = Any number are FREE. (Azure Boards )

Visual Studio Subscribers = Any number are FREE. (Azure Boards + Azure Repos + Azure Pipelines + Azure Test Plans + Azure Artifacts)