



Azure DevOps – Azure Boards

Azure DevOps is a set of development tools and services provided by Microsoft to support the entire software development lifecycle (SDLC). It enables teams to plan, develop, test, deliver, and monitor applications efficiently while integrating DevOps practices.

Key Components of Azure DevOps

1. **Azure Repos** – Provides Git repositories for source control, enabling version management and collaboration.
2. **Azure Pipelines** – Supports continuous integration (CI) and continuous deployment (CD), automating build, test, and deployment processes across multiple platforms.
3. **Azure Boards** – Offers Agile project management tools, including Kanban boards, backlogs, and sprint planning for tracking work and managing projects.
4. **Azure Test Plans** – Provides tools for manual and automated testing, test case management, and reporting.
5. **Azure Artifacts** – A package management system that allows teams to store, manage, and share dependencies such as NuGet, npm, and Maven packages.

Benefits of Azure DevOps

- **End-to-End DevOps Solution** – Covers the entire software development lifecycle from planning to deployment.
- **Cross-Platform and Language Support** – Works with various programming languages such as .NET, Java, Python, and Node.js.
- **Integration with Third-Party Tools** – Can be integrated with GitHub, Jenkins, Docker, Kubernetes, and other DevOps tools.
- **Scalability and Flexibility** – Supports cloud-based (Azure DevOps Services) and on-premises (Azure DevOps Server) deployments.
- **Security and Compliance** – Provides role-based access control, audit logging, and compliance with industry standards.

Azure Boards is a service within Azure DevOps that provides Agile project management tools for tracking work, planning sprints, and managing software development projects. It is designed to help teams collaborate, prioritize tasks, and monitor project progress using various work tracking features.

Key Features of Azure Boards

1. **Work Items** – Fundamental units of work such as user stories, tasks, bugs, and features that help track project progress.
2. **Kanban Boards** – Customizable boards that allow teams to visualize workflows and track work in different stages.

3. **Scrum Support** – Built-in tools for sprint planning, backlog management, and velocity tracking to support Agile and Scrum methodologies.
4. **Backlogs** – Organized lists of work items, enabling teams to prioritize and plan upcoming work efficiently.
5. **Dashboards & Reporting** – Provides customizable dashboards and built-in analytics to track project status, progress, and performance.
6. **Team Collaboration** – Enables teams to assign tasks, set priorities, and track dependencies within a shared environment.
7. **Workflows & Custom Rules** – Allows teams to define workflows, automate processes, and set up custom rules for managing work items.
8. **Integration with Other Azure DevOps Services** – Seamlessly integrates with Azure Repos, Azure Pipelines, and other DevOps tools for a connected development workflow.

Benefits of Using Azure Boards

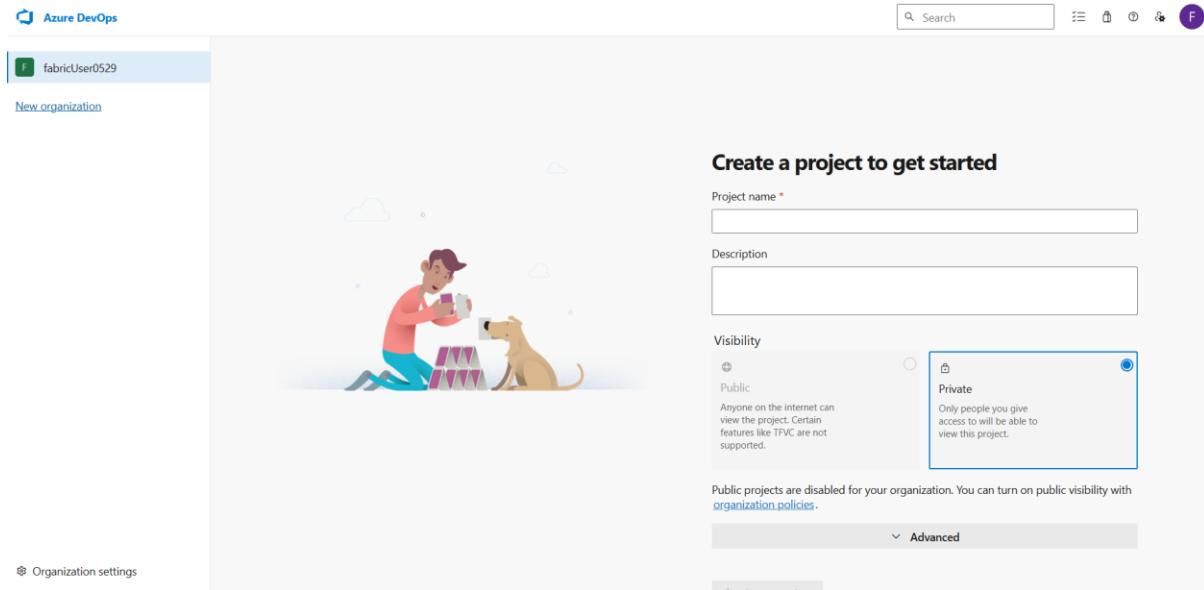
- **Supports Agile, Scrum, and Kanban methodologies** for flexible work management.
- **Improves team collaboration and visibility** with real-time tracking and reporting.
- **Customizable workflows and processes** to fit project-specific needs.
- **Scales efficiently** for small teams or large enterprise projects.

The process begins by logging into the Azure DevOps portal and creating a project. Initially, only basic work items are available, but by creating a new project and selecting the Agile work item process, more options become accessible. An Epic is created, followed by multiple User Stories, which are linked as child items to the Epic. Tasks are then added to the User Stories. The backlog is managed, and User Stories are assigned to Sprints for iterative development. The end goal is to organize and track work efficiently using Azure Boards, ensuring structured Agile project management with clear task progress.

To begin with the Lab

1. First you need to log in to your Azure Portal and then to the Azure DevOps using the link below.

<https://aex.dev.azure.com/>
2. Once logged in you will see this type of screen. You need to give a project name and the description then click on Create project.



3. Once your project is created then you will be on this screen. Click on boards.

4. Here you can see that we have multiple options in Azure Boards but when we click on new work item, we can see that only three options are available, if we require more then we have to create another project with more advanced features.
5. So, basically this is the basic work process that it has assigned us at the creation of our project but we are going to change it. Click on the username as you can see in the snapshot.

Azure DevOps interface showing the 'Work items' section. The left sidebar includes 'Overview', 'Boards', 'Work items' (selected), 'Backlogs', 'Sprints', 'Queries', 'Delivery Plans', 'Analytics views', 'Repos', 'Pipelines', 'Test Plans', and 'Artifacts'. The main area shows a 'Recently updated' list with three items: 'Epic', 'Issue', and 'Task'. A red box highlights the 'New Work Item' button and the 'Recently updated' dropdown. Below this is a large orange circle with a white 'L' and a circular arrow, followed by the text 'Find recently updated items'.

6. You will be on the organization page from here you need to click on New Project.

Azure DevOps interface showing the 'fabricUser0529' organization page. The top navigation bar includes 'Search' and 'New project' buttons. The main area shows 'Projects' (selected), 'My work items', and 'My pull requests'. A 'devProject' card is visible. A red box highlights the '+ New project' button.

7. This time we will give a new name to our project and in the Advanced setting for work item process we will choose Agile.

Create new project

X

Project name *

AgileProject

Description

Visibility



Public

Anyone on the internet can view the project. Certain features like TFVC are not supported.



Private

Only people you give access to will be able to view this project.



Public projects are disabled for your organization. You can turn on public visibility with [organization policies](#).

Advanced

Version control [?](#)

Git

Work item process [?](#)

Agile

Cancel

Create

8. This time if you go to boards and click on New work item, you will see more than 3 options here. Now we are going to create an Epic. Click Epic.

The screenshot shows the Azure DevOps Boards Work items page for the 'AgileProject'. The left sidebar is visible with options like Overview, Boards, Work items, and Artifacts. The main area displays a card for an 'Epic' titled 'Job application - Job postings'. A modal window is open, showing a list of work item types: Bug, Epic (selected), Feature, Issue, Task, Test Case, and User Story. Below the modal, there's a large orange circular icon with a white letter 'L' and the text 'Find recently updated items'.

9. So, give it a name and description, click on save as you can see below.

The screenshot shows the 'Work Items' page for the 'AgileProject'. A new epic is being created with the title 'Job application - Job postings'. The 'Description' field contains the text 'Job application - Job postings'. The 'Planning' section shows a priority of 2 and risk level. The 'Deployment' section provides instructions on tracking releases. The 'Save' button is highlighted at the top right.

10. Now if you come back to work items you can see your epic here. Now click on new work item again, this time choose to create a user story.

The screenshot shows the 'Work items' page for the 'AgileProject'. A user story titled 'Job' is listed under 'Recently updated'. The details for the user story are shown in a table:

	Assigned To	State	Area Path	Tags
...	Unassigned	New	AgileProject	

A dropdown menu on the left shows the selected item is 'Job'.

11. For a user story we are adding a sentence as you can see in the snapshot. So we will be adding three user stories based on three sentences.

Work Items [Back to Work Items](#)

NEW USER STORY *

Each department admin must be able to add a job posting

No one selected [Comments](#) [Add Tag](#) [Save](#) [Details](#)

State	New	Area	AgileProject
Reason	New	Iteration	AgileProject

Description	Planning	Deployment
Each department admin must be able to add a job posting	Story Points Priority 2 Risk	To track releases associated with this work item, go to Releases and turn on deployment status reporting for Boards in your pipeline's Options menu. Learn more about deployment status reporting
Acceptance Criteria	Click to add Acceptance Criteria.	

12. You can see that we have an Epic and three user stories. Now open your Epic.

Work items

Recently updated [New Work Item](#) [Open in Queries](#) [Column Options](#) [Import Work Items](#) [Recycle Bin](#)

ID	Title	Assigned To	State	Area Path	Tags
10	Once the job posting is published, no edits should be possible on the	Unassigned	New	AgileProject	
9	There should be an inbuilt workflow for the job posting	Unassigned	New	AgileProject	
8	Each department admin must be able to add a job posting	Unassigned	New	AgileProject	
7	Job application - Job postings	Unassigned	New	AgileProject	

13. Inside your epic if you look at the bottom of it you can see the Related work tab click on Add link and choose to add an existing item.

Recently updated [Back to Work Items](#) 4 of 4

EPIC 7

7 Job application - Job postings

No one selected [Comments](#) [Add Tag](#) [Save](#) [Follow](#) [Details](#)

State	New	Area	AgileProject
Reason	New	Iteration	AgileProject

Discussion	Effort	Development
Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request. switch to Markdown editor	Business Value Time Criticality Start Date Target Date	Add link Link an Azure Repos commit , pull request or branch to see the status of your development. You can also create a branch to get started.
	Classification	Related Work
	Value area Business	Add link Add an existing work item as a parent

14. Then you have to choose link type as child and choose all three user stories. Click on Add link.

Add link

You are adding a link from:

Job application - Job postings
Updated 9m ago • New

Link type:

Child

Work items to link 3

[Clear all](#)

Search work items by ID or title

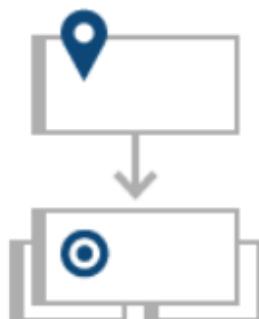
User Story 8: Each department admin must be able to...
Updated 5m ago, • New



User Story 9: There should be an inbuilt workflow for...
Updated 5m ago, • New



User Story 10: Once the job posting is published, no...
Updated 4m ago, • New



Comment:

Enter a comment

[Add link](#)

[Cancel](#)

15. Here you can see that your epic has 3 children now.

Classification

- Value area
- Business

Related Work

Add link ▾

[Add an existing work item as a parent](#)

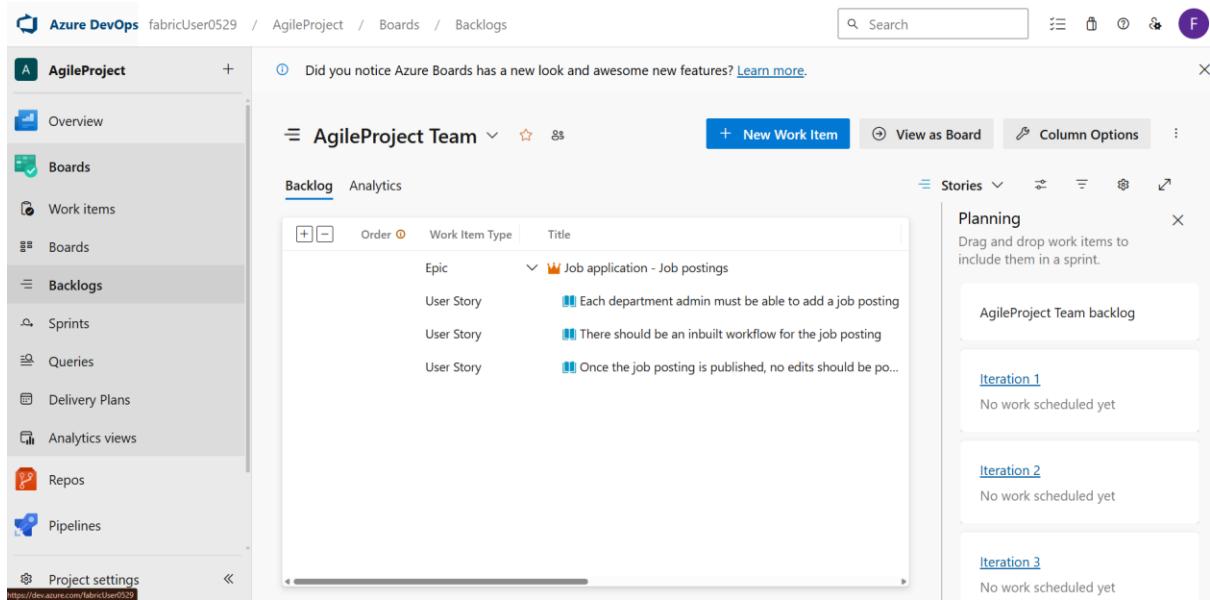
Child

- | 8 Each department admin must be able ... Updated 5m ago • New
- | 10 Once the job posting is published, n... Updated 4m ago • New
- | 9 There should be an inbuilt workflow f... Updated 5m ago • New

16. Click on boards and you will see some more options where you can move your user stories to active, resolved or closed state.

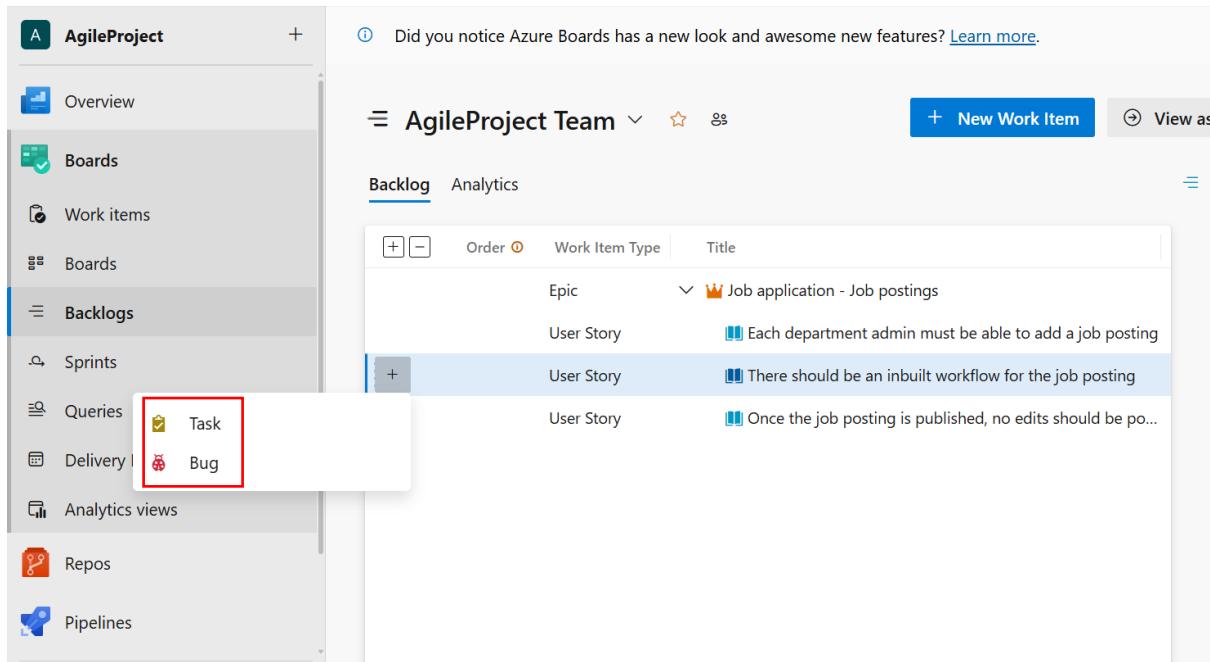
17. Below you can see that as we are moving our user stories the state of them are being changed.

18. You can manage all your user stories in the backlogs as well.



The screenshot shows the Azure DevOps interface for the 'AgileProject' team. The left sidebar is open, showing 'Backlogs' is selected. The main area displays the 'Backlog' view for the 'AgileProject Team'. A table lists work items: an Epic ('Job application - Job postings') and three User Stories ('Each department admin must be able to add a job posting', 'There should be an inbuilt workflow for the job posting', 'Once the job posting is published, no edits should be po...'). To the right, there's a 'Planning' section with a note about dragging and dropping work items into sprints, and a list of iterations: 'Iteration 1', 'Iteration 2', and 'Iteration 3', each noting 'No work scheduled yet'.

19. We can also add a task or a bug to our user stories. Let's add a task to our user story.



The screenshot shows the same Azure DevOps interface as above, but with a modal window open over the backlog table. The modal has a header 'New Work Item' and a body containing a dropdown menu with 'Task' selected. Other options like 'User Story' and 'Bug' are also visible. The rest of the interface remains the same, showing the backlog table and the planning section.

20. Here we have defined a task, given a name and description to it then click on save and close.

NEW TASK *

Login as a department admin

No one selected 0 Comments Add Tag

Save and Close

State: New Area: AgileProject
Reason: New Iteration: AgileProject

Details 1 0

Description	Planning	Deployment
Login as a department admin	Priority: 2 Activity	To track releases associated with this work item, go to Releases and turn on deployment status reporting for Boards in your pipeline's Options menu. Learn more about deployment status reporting
Discussion	<p>Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.</p> switch to Markdown editor	
	Effort (Hours)	Development
	Original Estimate	Add link
	Remaining	Link an Azure Repos commit
	Completed	

21. Once the task has been added we can see it as a child to our user story. We are going to add some more task to it.

AgileProject Team

+ New Work Item View as Board Column Options

Backlog Analytics Stories

Order	Work Item Type	Title	State	Story...	Value Area	Iteration Path
Epic	Job application - Job postings	New	Business	AgileProject		
User Story	Each department admin must be able to add a job posting	New	Business	AgileProject		
User Story	There should be an inbuilt workflow for the job posting	New	Business	AgileProject		
Task	Login as a department admin	New		AgileProject		
User Story	Once the job posting is published, no edits should be po...	New	Business	AgileProject		

AgileProject Team

+ New Work Item View as Board Column Options

Backlog Analytics Stories

Order	Work Item Type	Title	State	Story...	Value Area	Iteration Path
Epic	Job application - Job postings	New	Business	AgileProject		
User Story	Each department admin must be able to add a job posting	New	Business	AgileProject		
User Story	There should be an inbuilt workflow for the job posting	New	Business	AgileProject		
Task	Login as a department admin	New		AgileProject		
Task	View the job posting area for the department	New		AgileProject		
Task	Adding job posting for the department	New		AgileProject		
User Story	Once the job posting is published, no edits should be po...	New	Business	AgileProject		

22. If you go to boards you can see that three task has been added to the user story.

The screenshot shows the Azure Boards interface for the 'AgileProject Team'. On the left, the navigation bar includes 'Overview', 'Boards' (selected), 'Work items', 'Backlogs', 'Sprints', 'Queries', 'Delivery Plans', 'Analytics views', 'Repos', 'Pipelines', and 'Project settings'. The main area displays a backlog item titled '9 There should be an inbuilt workflow for the job posting'. This item has a 'New' status, is assigned to 'fabricUser', and has 'Story Points' set to '0/3'. Below the item is a 'Task' section with three tasks: 'Login as a department...', 'View the job posting...', and 'Adding job posting fo...'. A second backlog item, '10 Once the job posting is published, no edits should be possible on the job posting', is also visible with a 'New' status. The top right corner shows '0/5' and 'Resolved' counts.

23. So now, as part of the agile process, we've collected a few user requirements, in the form of user stories. We have added the task for one of the user stories. Let's say, we want to start implementing a user story that has these tasks. We need to add it to something known as a sprint.

24. If you go to sprints, in the backlog you already have three sprints in place, iterations 1, 2, and 3. We will click on set dates.

The screenshot shows the 'AgileProject Team' backlog page. The navigation bar on the left is identical to the previous screenshot. The main area features a 'Taskboard' with tabs for 'Backlog' (selected), 'Capacity', and 'Analytics'. A 'Planning' sidebar on the right says 'Drag and drop work items to include them in a sprint.' It lists 'Iteration 1', 'Iteration 2', and 'Iteration 3', all of which are currently empty. A red box highlights the 'Set dates' button in the planning sidebar. The top right corner of the main area has a red box highlighting the 'No iteration dates' message.

25. We can give a name to the iteration and give a start and ending date for the sprint. Now we want to add our backlog items to the sprint.

Edit iteration

Job Application - Sprint 1.0.0 - Postings

Iteration name

Job Application - Sprint 1.0.0 - Postings

Start date

08-03-2025



End date

22-03-2025



Location

AgileProject

Save and close

Cancel

26. To add your user story in the sprint we need to click on three dots then choose move to iteration then choose our current iteration or sprint.

The screenshot shows the Azure Boards backlog for the 'AgileProject' team. A context menu is open over a user story titled 'There should be an inbuilt workflow for the job posting'. The menu options include 'Assign to', 'Copy as HTML', 'Copy link', 'Delete', 'Add link', 'Move to iteration' (which is currently selected), 'Change parent', and 'Change type...'. The 'Move to iteration' option has a submenu with items for 'Backlog', 'Current (Job Application - Sprint...', and 'Future iterations'. Under 'Future iterations', there are entries for 'Iteration 2' and 'Iteration 3', both under 'AgileProject\Iteration 2' and 'AgileProject\Iteration 3' respectively. Other backlog items visible include 'Login as a department admin', 'View the job posting area for the department', 'Adding job posting for the department', and 'Once the job posting is published, no edits should be po...'. The backlog is filtered by 'User Story' and 'Work Item Type'.

27. Here you can see that our backlog item has been added to the sprint.

The screenshot shows a backlog board for the 'AgileProject Team'. The board is titled 'Job Application - Sprint 1.0.0 - Postings'. The sprint duration is listed as '8 March - 22 March' with '10 work days remaining'. The backlog items are listed in a table with columns: Order, Title, State, Assigned To, and Remaining. There are four items in the backlog:

Order	Title	State	Assigned To	Remaining
1	There should be an inbuilt workflow for the job posting	New	fabricUser	
	Login as a department admin	New		
	View the job posting area for the department	New		
	Adding job posting for the department	New		