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# Start using Azure Boards (Basic process)

1/31/2019 • 2 minutes to read • [Edit Online](#)

## Azure Boards

Use this guide to sign up and start using Azure Boards.

### IMPORTANT

**Select the version that meets your location and process:** We are experimenting with a new acquisition model which is currently available for users located in the United States and that sign up through [azure.com/boards](https://azure.com/boards). This model supports a new Basic process.

For International users and others who sign up through another method, the Agile process is used. Select your version of this article based on your location and process used.

- [Basic process](#)
- [Agile process](#)

Start with [Sign up and invite some teammates](#).

Then, read [Track issues and tasks](#) to start adding and tracking issues on the Kanban board. To add columns, swimlanes, or fields to your board, see [Customize your boards](#).

### NOTE

This quickstart guide illustrates how to sign up, create a project based on the Basic process, and start tracking issues and tasks. If you want more information on working with other processes which offer other work item types, such as user stories and bugs, then see [Choose a process](#).

If you use GitHub and want to track your issues in Azure Boards, see [GitHub & Azure Boards](#).

If you are tasked with managing Azure Boards settings, review [Manage your Azure Boards project](#) for additional configurations and resources that you may want to make.

## Reference

- [Basic fields reference](#)
- [Key concepts](#)
- [Best tool for the job](#)
- [Default permissions & access \(Security\)](#)
- [Why use Azure Boards?](#)
- [Connect a project to GitHub](#)

## Additional resources

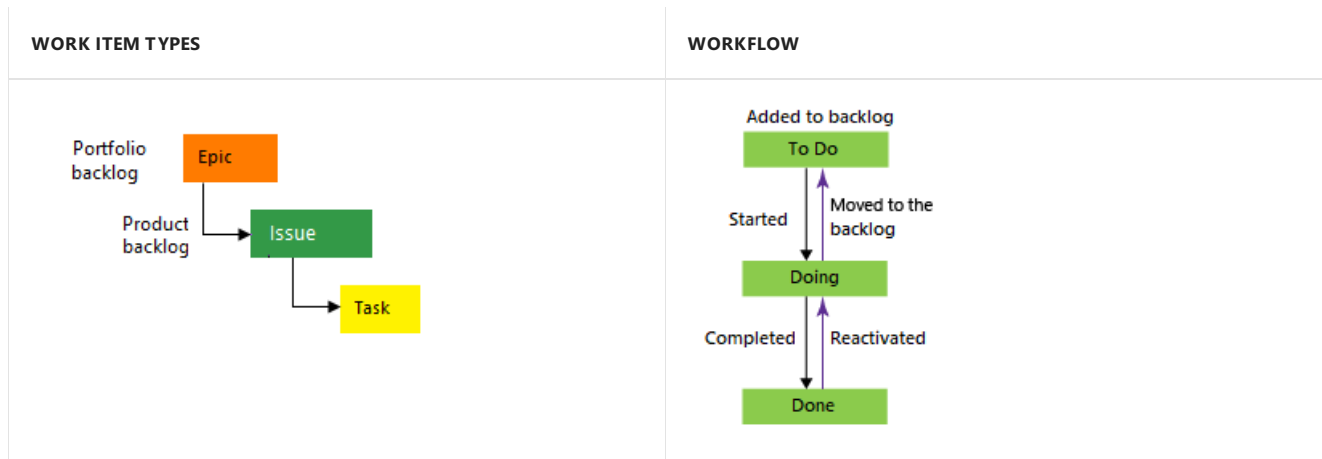
- [Web portal navigation](#)
- [Work items](#)
- [Sprints \(Scrum\)](#)
- [Process customization](#)

# What is Azure Boards and the Basic process?

1/26/2019 • 5 minutes to read • [Edit Online](#)

## Azure Boards

With Azure Boards, you can quickly and easily start tracking tasks, features, and bugs associated with your project. You do this by adding one of three work item types—epics, issues, and tasks—that the Basic process provides. As work progresses from not started to completed, you update the State workflow field from **To Do**, **Doing**, and **Done**.



When you add an issue, task, or epic, you create a work item. Each work item represents an object stored in the work item data store. Each work item is assigned an identifier. The IDs are unique within your projects.

Add epics to track significant features or requirements. Use issues to track user stories, bugs, or other smaller items of work. And, use tasks to track even smaller amounts of work for which you want to track time either in hours or days.

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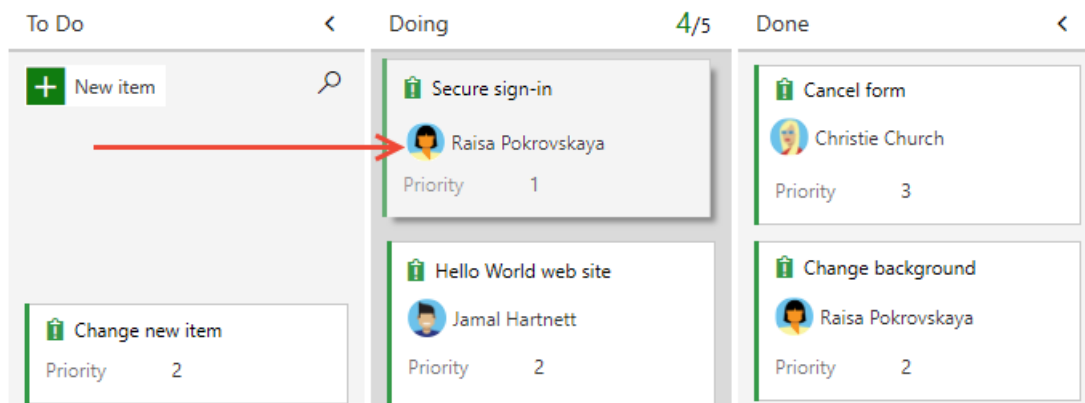
For International users and others who sign up through another method, the Agile process is used. Select your version of this article based on your location and process used.

- [Basic process](#)
- [Agile process](#)

## Track work, implement Kanban

- Quickly add and update the status of work you track from **To Do**, **Doing**, and **Done** using the Kanban board. Add tasks as child items to issues. Learn more: [Track issues and tasks](#).
- Assign work to team members, tag with labels to support queries and filtering, or share information through descriptions, attachments, or links to network shared content.
- Prioritize work through drag-and-drop on your team backlog. Learn more: [Create your backlog](#).

### Update the status of issues



## Prioritize your backlog of issues

Fabrikam Team ▾ ☆ ⚙

+ New Work Item → View as board 🔑 Column options ... Issues ▾ ⚙ 🔍

Order	ID	State	Assigned To	Title
1	3763	Doing	Jamal Hartnett	Secure sign-in
2	3767	Doing	Raisa Pokrovskaya	Hello World web site
3	3766	Doing	Christie Church	Resolve service status issues
4	3764	Doing	Johnnie McLeod	Check performance
5	3773	To Do	Christie Church	Update welcome page
6	3759	To Do	... Jamal Hartnett	Change initial view
7	3762	To Do	Christie Church	Welcome back page

A red arrow points from the 'Change initial view' item in the table to a context menu that appears over it, showing options like 'Change initial view' and 'Hello World web site'.

## Collaborate

- Collaborate with others through the **Discussion** section of the work item form, using **@mentions** and **#ID** controls to quickly include others in the conversation or link to other work items. Learn more: [Discussion section](#).
- Create dashboards that track status and trends of work being accomplished. Learn more: [Add and manage dashboards](#).
- Set notifications to get alerted when an issue is created or changed. Learn more: [Set personal notifications](#).
- Elect to follow specific issues to get alerted when they are updated. Learn more: [Follow a work item](#).

## Get updated when a work item is updated

ISSUE 1

1 Change initial view

Raisa Pokrovskaya 1 comment Add tag Save & Close Follow

State To Do Area Fabrikam Updated just now

Reason To Do Iteration Fabrikam\Iteration 1

Details ⌚ 🔗 🗑

## Work in sprints, implement Scrum

- Plan sprints by assigning work to current or future sprints. Learn more: [Assign work to sprints](#).

- Forecast work that can get completed based on effort estimates: Learn more: [Forecast work](#).
- Determine how much work can be done within a sprint. Learn more: [Set team capacity](#).
- Bulk assign issues and tasks to team members and sprints. Learn more: [Bulk modify work items](#).

### Assign backlog items to a sprint

The screenshot displays the 'Planning' view in Azure DevOps. On the left, the 'Fabrikam Team' backlog is visible with items ordered 1 through 7. Item 3, 'Change initial view', is highlighted. On the right, the 'Sprint 1' (Current) and 'Sprint 2' panels are shown. A red arrow indicates the process of dragging the 'Change initial view' item from the backlog into the 'Sprint 2' panel, which currently shows a placeholder box labeled 'Change initial view'.

## Work effectively

- Organize work into a hierarchy by grouping issues under epics, and tasks under issues. Learn more: [Organize your backlog](#).
- Create queries and quickly triage issues and tasks. Learn more: [View and run queries](#) and [Triage work](#).
- Create work item templates to help contributors quickly add and define open meaningful issues and tasks. Learn more: [Use work item templates](#).
- Quickly find work items assigned to you or pivot or filter work items based on other criteria, such as work items that you follow, that you're mentioned in, or that you viewed or updated. Learn more: [View and add work items](#).

### Group items to create a hierarchy

Fabrikam Team

New Work Item

View as board

Column options

<div>+</div> <div></div>	Order	ID	State	Title
+		60	To Do	Web site updates
		63	Doing	Secure sign-in
		67	Doing	Hello World web site
		69	To Do	Design welcome screen
		71	To Do	Standarize form factors
		70	To Do	Change background color
		72	To Do	About screen
		62	To Do	Welcome back page
		59	To Do	Change initial view
		73	To Do	Service status
		66	Doing	Resolve service status issues
		64	Doing	Check performance
		73	To Do	Change new item

## Connect with GitHub

If you use Azure Boards connected with GitHub, you can also do the following:

- From GitHub, use #AB to link GitHub commits and pull requests to your issues and tasks
- From Azure Boards issues and tasks, link to GitHub commits and pull requests.

Learn more: [GitHub & Azure Boards](#).

## Best tool for the job

Azure Boards provides the following main interactive lists and signboards. Each tool provides a filtered set of work items. All tools support viewing and defining work items. To learn more about effective use of these tools, see [Best tool to add, update, and link work items](#).

- Boards:** Boards present work items as cards and support quick status updates through drag-and-drop. The feature is similar to sticky notes on a physical whiteboard. Use to implement Kanban practices and visualize the flow of work for a team.
- Backlogs:** Backlogs present work items as lists. A product backlog represents your project plan and a repository of all the information you need to track and share with your team. Portfolio backlogs allow you to group and organize your backlog into a hierarchy. Use to plan, prioritize, and organize work.
- Sprints:** Sprint backlogs and taskboards provide a filtered view of work items a team assigned to a specific iteration path, or sprint. From your backlog, you can assign work to an iteration path by using drag-and-drop. You can then view that work in a separate *sprint backlog*. Use to implement Scrum practices.
- Queries:** Queries are filtered lists of work items based on criteria that you define by using a query editor. You use queries to support the following tasks:
  - Find groups of work items with something in common
  - List work items for the purposes of sharing with others or performing bulk updatesTriage a set of items to prioritize or assign them
  - Create status and trend charts that you then can add to dashboards.

- **Work items:** Use to quickly find work items assigned to you or pivot or filter work items based on other criteria, such as work items that you follow, that you're mentioned in, or that you viewed or updated.

## Teams and Backlogs, Boards, and Sprints

A team refers to a group of project members who work in a particular product area. Those areas are represented as *area paths*. Area paths are hierarchical paths that denote the possible areas of ownership in an organization. A team is defined by a name, its members, and its area paths.

Boards, Backlogs, Sprints rely on team configurations. For example, if you want to add a Kanban board or product backlog, you define a team. For more information on teams, see [About teams and Agile tools](#).

## Install and manage extensions

An extension is an installable unit that adds new capabilities to your projects. You can find extensions in the [Visual Studio Marketplace](#), Azure DevOps tab to support planning and tracking of work items, sprints, scrums, and more and collaboration among team members.

# Sign up for free and invite others to collaborate on your project

1/31/2019 • 3 minutes to read • [Edit Online](#)

## Azure Boards

Sign up for an Azure DevOps organization and Azure Boards to begin planning and tracking work. This sequence walks you through the sign-up process for users located in the United States and that sign up through [azure.com/boards](https://azure.com/boards). In the end, you'll have a project that uses the [Basic process for work tracking](#).

### IMPORTANT

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For International users and others who sign up through another method, the Agile process is used. Select your version of this article based on your location and process used.

- [Basic process](#)
- [Agile process](#)

## Sign up for Azure DevOps

1. Select the sign-up link for [Azure DevOps](#).
2. Enter your email address, phone number, or Skype ID for your Microsoft account. If you're a Visual Studio subscriber and you get Azure DevOps as a benefit, use the Microsoft account associated with your subscription. Select **Next**.

3. Enter your password and select **Sign in**.

If you don't have a Microsoft account, you can [create a Microsoft account](#) at this time.

4. To get started with Azure DevOps, select **Continue**.

5. Enter a name for your organization. The name can't contain spaces or special characters (such as / \ [ ] : | < > + = ; ? or \*), can't end in a period or comma, must be less than 256 characters, and must be unique within the DevOps namespace. You can also choose between several locations for where you want your data hosted. Select **Continue**.

You see the following dialog box as your organization is created.

Congratulations, you're now an organization owner!



To sign in to your organization at any time, go to `https://dev.azure.com/{yourorganization}`.

- Next, enter a name for the project, select the visibility, and optionally provide a description. Then choose **Create project**.

## Create a project to get started

Project name \*

Fabrikam



Description

Azure Boards to track issues

Visibility



Public

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



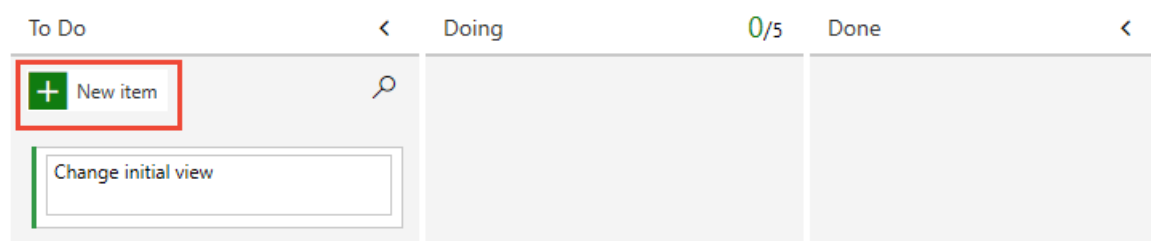
Private

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

+ Create project

The name can't contain spaces or special characters (such as `/ : \ ~ & % ; @ ' " ? < > | # $ * } { , + = [ ]`), can't begin with an underscore, can't begin or end with a period, and must be 64 characters or less. Visibility can be either public or private. With public visibility, anyone on the internet can view your project. With private visibility, only people who you give access to can view your project.



When your project has been created, the Kanban board appears.

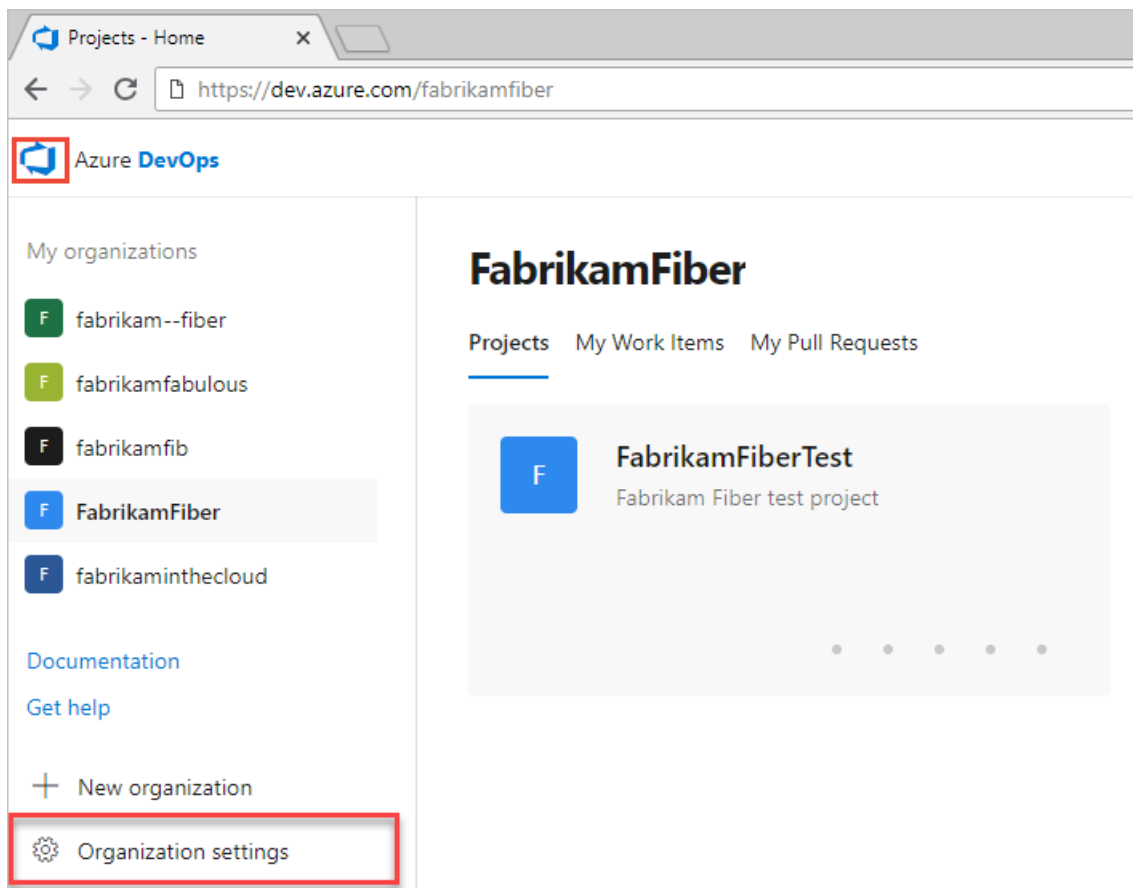


You're now set to start [tracking issues, tasks, and features](#).

## Invite team members

You can add and invite others to work on your project by adding their email address to your organization and project.

- From your project web portal, choose the  Azure DevOps icon, and then select  **Organization settings**.



2. Select **Users** > **Add new users**.

3. Complete the form by entering or selecting the following information:

- **Users:** Enter the email addresses (Microsoft account) for the users. You can add several email addresses by separating them with a semicolon (;). An email address appears in red when it's accepted.
- **Access level:** Assign one of the following access levels:
  - **Basic:** Assign to users who must have access to all Azure Boards features. You can grant up to five users **Basic** access for free.
  - **Stakeholder:** Assign to users who will have limited access to features to view, add, and modify work items. You can assign an unlimited number of users **Stakeholder** access for free.
- **Add to project:** Select the project you named in the preceding procedure.
- **Azure DevOps Groups:** Select one of the following security groups which will determine the permissions the users have to perform select tasks (To learn more, see [Default permissions and access for Azure Boards](#)):
  - **Project Readers:** Assign to users who only require read-only access.
  - **Project Contributors:** Assign to users who will contribute fully to the project.
  - **Project Administrators:** Assign to users who will configure project resources.

#### NOTE

You must add email addresses for [personal Microsoft accounts](#) unless you plan to use [Azure Active Directory \(Azure AD\)](#) to authenticate users and control organization access. If a user doesn't have a Microsoft account, ask the user to [sign up](#) for a Microsoft account.

4. When you're done, select **Add** to complete your invitation.

For more information, see [Add organization users for Azure DevOps Services](#).

## Try this next

[Track issues and tasks](#)

## Related articles

- [About access levels](#)
- [Define organizations and projects](#)

### NOTE

Your first project was created using the Basic process which uses Epics, Issues, and Tasks to track work. If you want a project that uses the Agile, Scrum, or CMMI process, then you can [add another project](#) and specify the process through advanced setting options. See [Choose a process for a comparison of processes](#).

# Track issues, tasks, and epics

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## Azure Boards

This article walks you through creating issues and tasks using a Kanban board for the Basic process.

### IMPORTANT

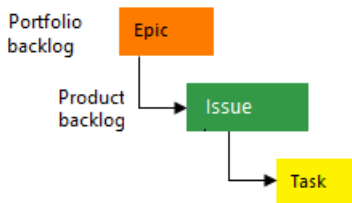
**Select the version that meets your location and process:** We are experimenting with a new acquisition model which is currently available for users located in the United States and that sign up through [azure.com/boards](https://azure.com/boards). This model supports a new Basic process.

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- [Basic process](#)
- [Agile process](#)

Your first project uses the Basic process which provides three work item types—epics, issues, and tasks—to plan and track work. We recommend you start by adding issues to track your user stories, bugs, or feature items. If you need to group them into a hierarchy, you can define epics. If you want to track additional details of work, you can add tasks to an issue.

WORK ITEM TYPES
































```

graph LR
    PB[Portfolio backlog] --> E[Epic]
    E --> I[Issue]
    I --> T[Task]

```

BACKLOG HIERARCHY

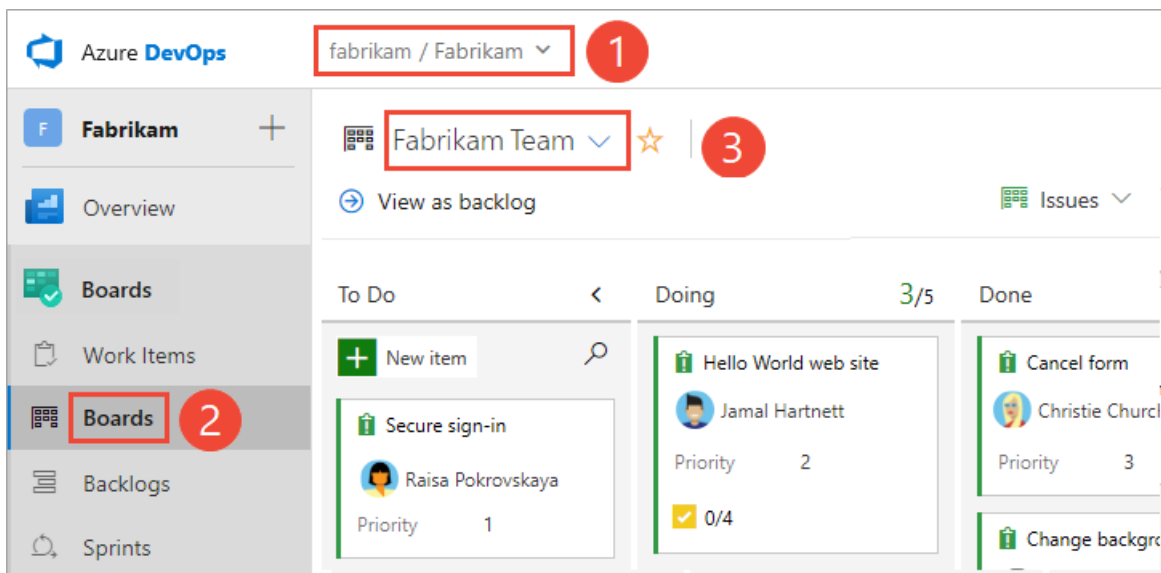
 	Order	ID	State	Title
		60	 To Do	▼  Web site updates
		63	 Doing	 Secure sign-in
		67	 Doing	▼  Hello World web site
		69	 To Do	 Design welcome screen
		71	 To Do	 Standarize form factors
		70	 To Do	 Change background color
		72	 To Do	 About screen
		62	 To Do	 Welcome back page
		59	 To Do	 Change initial view
		73	 To Do	▼  Service status
		66	 Doing	 Resolve service status issues
		64	 Doing	 Check performance
		73	 To Do	 Change new item

Within each work item form, you can describe the work to be done, assign work to project contributors, track status, and collaborate with others through the Discussion section.

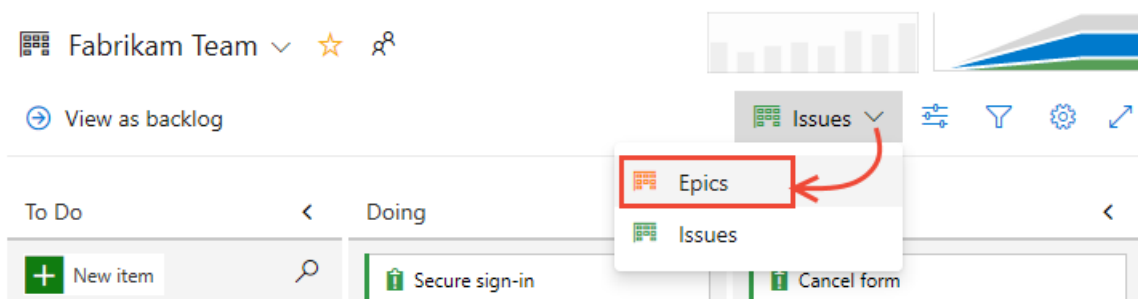
Here we show how to add issues and child tasks from the web portal and add details to those work items .

## Open the Issues board

The Issues Kanban board is the best tool for quickly adding issues and child tasks. To open, choose **Boards>Boards**.

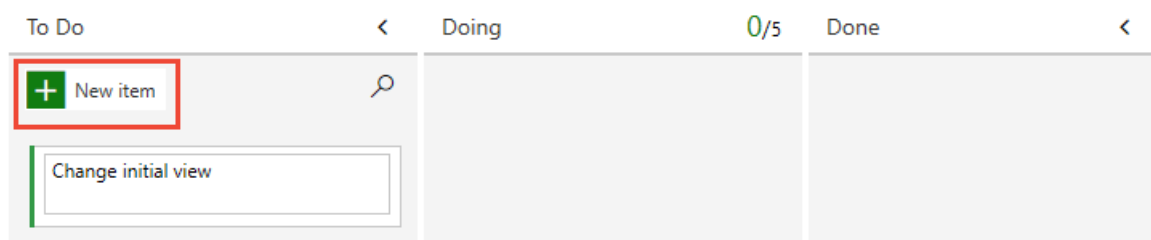


The Epics Kanban board is the best tool for quickly adding epics and issues that are children of those epics. To open the Epics board from the Issues board, choose **Epics** from the board selector.

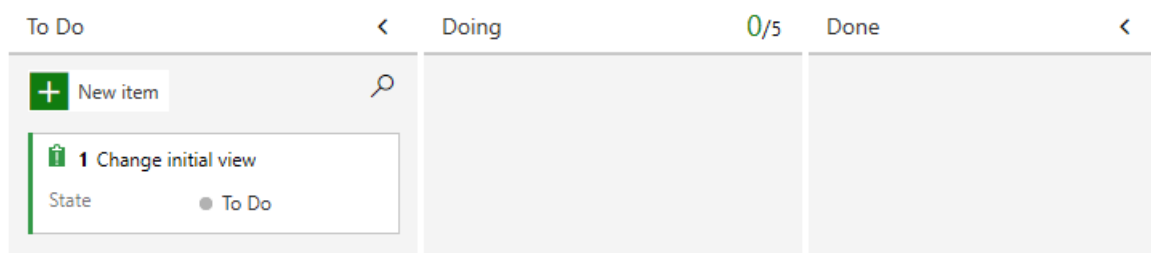


## Add issues

1. From the Issues board, choose **New item** and start adding those issues you want to track.



2. Enter return and the system assigns a work item ID to the issue.



3. To track the work you want to manage, add as many issues that you need.

## Add details to an issue

1. Choose the issue title to open it. Change one or more field values, add a description, or make a note in the

**Discussion** section. You can also choose the **Attachments** tab and drag-and-drop a file to share the file with others.

For example, here we assign the issue to Raisa Pokrovskaya and we add a discussion note, at-mentioning Raisa.

ISSUE 1

1 Change initial view

Raisa Pokrovskaya

0 comments

Add tag

Save & Close

Follow

State

To Do

Area

Fabrikam

Updated just now

Reason

To Do

Iteration

Fabrikam\Iteration 1

Details

Description

Switch initial view to the updated design.

Discussion

@Raisa Pokrovskaya

- Can you make this happen in the next week?

B / U

Planning

Priority

2

Effort

Development

+ Add link

Development hasn't started on this item.

Related Work

+ Add link

There are no links in this group.

NOTE

You can only assign work to a user who has been added to the project.

2. Choose **Save & Close** when done.

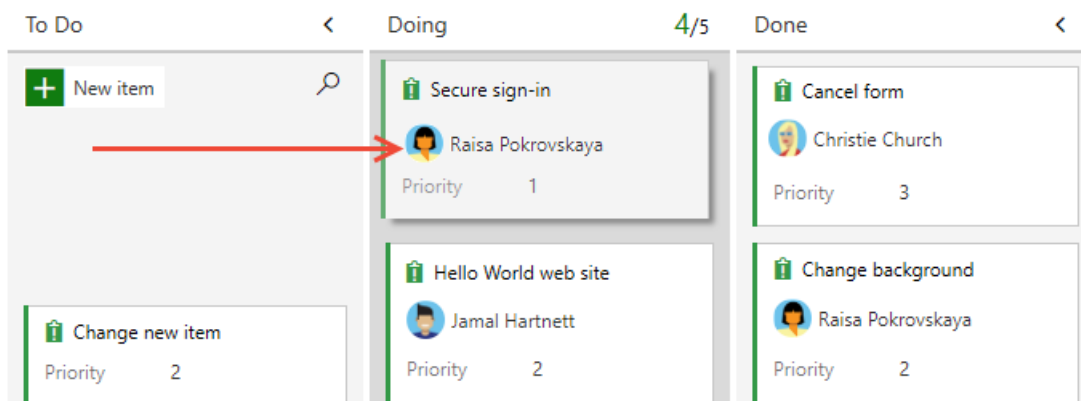
Field descriptions

FIELD	DEFINITION
Title	Enter a description of 255 characters or less. You can always modify the title later.
Assigned To	Assign the work item to the team member responsible for performing the work. Depending on the context you are working in, the drop-down menu will list only team members or contributors to the project.
State	When the work item is created, the State defaults to the first state in the workflow. As work progresses, update it to reflect the current state.
Reason	Use the default first. Update it when you change state as need. Each State is associated with a default reason.
Area	Choose the area path associated with the product or team, or leave blank until assigned during a planning meeting. To change the dropdown list of areas, see <a href="#">Define area paths and assign to a team</a> .

Iteration	Choose the sprint or iteration in which the work is to be completed, or leave it blank and assign it later during a planning meeting. To change the drop-down list of iterations, see <a href="#">Define iteration paths (aka sprints) and configure team iterations</a> .
Description	Provide enough detail to create shared understanding of scope and support estimation efforts. Focus on the user, what they want to accomplish, and why. Don't describe how to develop the product. Do provide sufficient details so that your team can write tasks and test cases to implement the item.
Priority	<p>A subjective rating of the issue or task it relates to the business. You can specify the following values:</p> <p><b>1:</b> Product cannot ship without the successful resolution of the work item, and it should be addressed as soon as possible.</p> <p><b>2:</b> Product cannot ship without the successful resolution of the work item, but it does not need to be addressed immediately.</p> <p><b>3:</b> Resolution of the work item is optional based on resources, time, and risk.</p> <p><b>4:</b> Resolution of the work item is not required.</p>
Effort	<p>Provide a relative estimate of the amount of work required to complete an issue.</p> <p>Most Agile methods recommend that you set estimates for backlog items based on relative size of work. Such methods include powers of 2 (1, 2, 4, 8) and the Fibonacci sequence (1, 2, 3, 5, 8, etc.). Use any numeric unit of measurement your team prefers.</p> <p>The estimates you set for <b>Effort</b> are used to calculate <a href="#">velocity</a> and <a href="#">forecast sprints</a>.</p>

## Update issue status

As work starts, drag the issue from the **To Do** column to the **Doing** column. Once completed, move to the **Done** column.

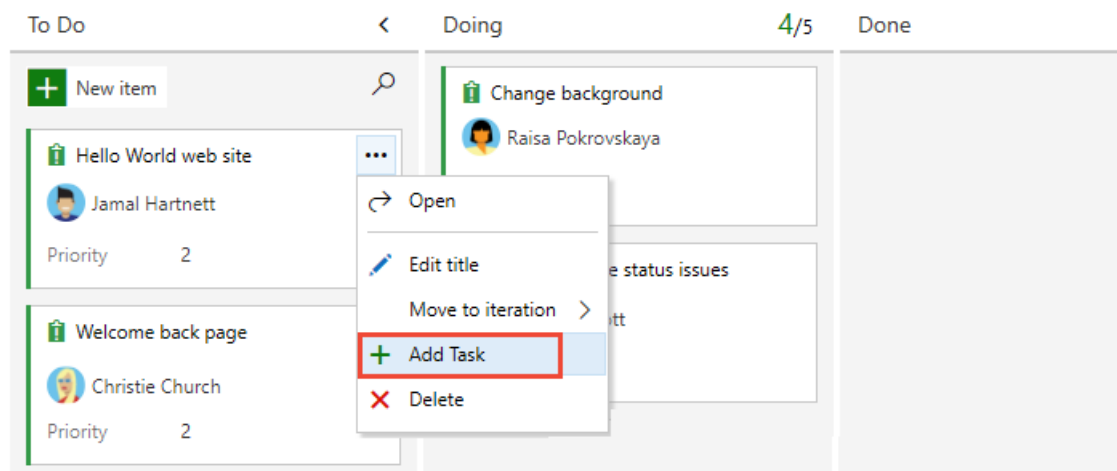


You can add or rename columns as needed, see [Customize your board](#).

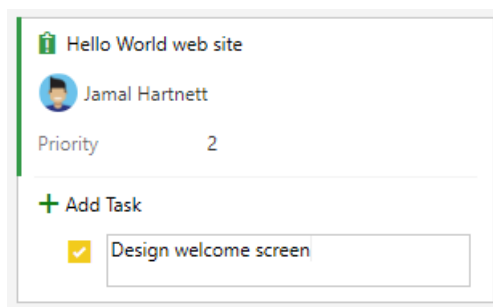
## Add tasks to an issue

Task checklists provide a quick and easy way to track elements of work which are important to support completing an issue.

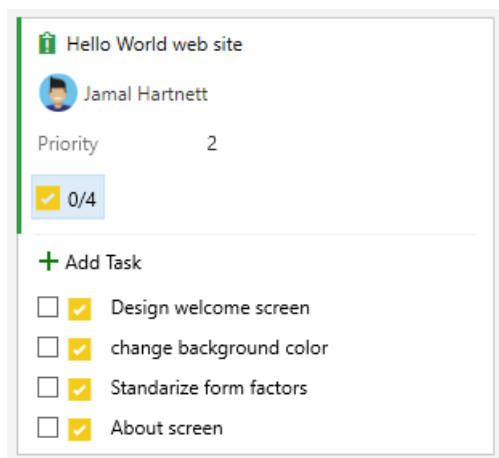
1. To start adding tasks, choose the **...** actions icon for the issue and select the **+ Add Task** option.



Enter a title for the task and type Enter when done.

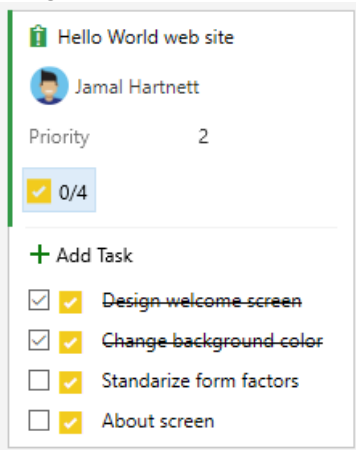
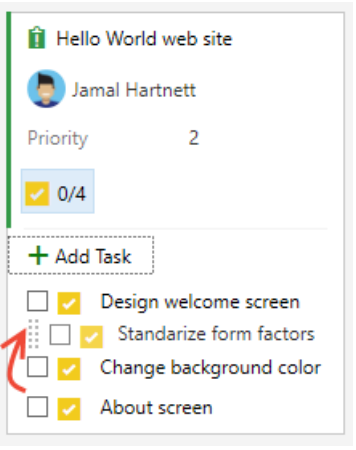



2. If you have a number of tasks to add, simply keep typing your task titles and type Enter.



3. You can mark a task as done, expand or collapse the task checklist, or reorder and reparent tasks.



MARK A TASK AS DONE	REORDER AND REPARENT TASKS	EXPAND OR COLLAPSE THE CHECKLIST
<p>To mark a task as complete, check the task checkbox. The task State changes to <b>Done</b>.</p> 	<p>To reorder a task, drag it within the checklist. To reparent a the task, drag it to another issue on the board.</p> 	<p>To expand or collapse a task checklist, simply choose the task annotation.</p> 

## Add details to a task

1. If you have details you want to add about a task, choose the title, to open it. Change one or more field values, add a description, or make a note in the **Discussion** section.

Here we assign the task to Jamal.

TASK 9\*

9 Design welcome screen

Jamal Hartnett

0 comments

Add tag

Save & Close

Follow

Refresh

More

State

To Do

Area

Fabrikam

Updated 9 minutes ago

Reason

Added to bac...

Iteration

Fabrikam\Sprint 1

Details

Time

History

Links (1)

Attachments

Description

Click to add Description

Discussion

Add a comment. Use # to link a work item, ! to link a pull request, or @ to mention a person.

Planning

Priority

2

Activity

Remaining Work

Development

+ Add link

Development hasn't started on this item.

Related Work

+ Add link

Parent

7 Hello World web site

Updated 29 minutes ago, To Do

### Field descriptions

In addition to the fields you can define for an issue, you can specify the following fields for a task to support capacity and time tracking.

FIELD	DEFINITION
Activity	<p>The type of activity that is required to perform a task.To learn more about how this field is used, see <a href="#">Capacity planning</a>. Allowed values are:</p> <ul style="list-style-type: none"><li>• Deployment</li><li>• Design</li><li>• Development</li><li>• Documentation</li><li>• Requirements</li><li>• Testing</li></ul>
Remaining Work	<p>The amount of work that remains to finish a task. You can specify work in hours or in days. There are no inherent time units associated with this field even though the taskboard always shows "h" for hours in relationship to Remaining Work.</p> <p>Remaining Work is also used to calculate burn down.</p>

2. Choose **Save & Close** when done.

## Capture comments in the Discussion section

Use the **Discussion** section within a form to add and review comments about the work under development.

### Discussion



Add a comment. Use # to link a work item, ! to link a pull request, or @ to mention a person.



**Jamal Hartnett** commented just now

@Christie Church - Assigning this to you



**Christie Church** commented less than a minute ago

I've updated the storyboard per our discussions yesterday.



**Helena Petersen** commented 9 minutes ago

@Christie Church, @Jamal Hartnett - Let's do an A/B test on the colors used in the form.



**Jamal Hartnett** commented 21 hours ago

Make sure the standards guidelines are written in a similar manner to those done for account setup.

Use the **@mention** control to notify another team member about the discussion. Simply type @ and their name. Or, bring a group into the discussion by typing @ and the group name, such as a team or security group. To reference another issue, task, or work item, use the **#ID** control. Type # and a list of work items that you've recently referenced will appear from which you can select.

The rich text editor tool bar displays below the text entry area when you click your cursor within the each text box that can be formatted.



[@Jamal Hartnett](#) note that this work item is dependent on [Product Backlog Item 358: Research architecture changes](#)



Use the icons—[@](#) at-mention, <#> #-work-item-ID, and [PR](#) pull-request ID—to facilitate bringing others into the discussion or linking to work items or pull requests. Choose one of these icons and a menu displays with the most recent options that you've previously selected.

## Try this next

[Customize your board](#)

## Related articles

- [Index to field descriptions](#)
- [Add tags to issues or tasks](#)
- [Use @mentions in work items](#)
- [Use #ID to link to work items](#)

# Customize your boards

1/31/2019 • 4 minutes to read • [Edit Online](#)

## Azure Boards

This article shows how to customize a Kanban board for the Basic process. You have one Kanban board for each active product or portfolio backlog.

### IMPORTANT

**Select the version that meets your location and process:** We are experimenting with a new acquisition model which is currently available for users located in the United States and that sign up through [azure.com/boards](https://azure.com/boards). This model supports a new Basic process.

For International users and others who sign up through another method, the Agile process is used. Select your version of this article based on your location and process used.


- [Basic process](#)
- [Agile process](#)

You can configure your Kanban board in several ways to support specific tracking needs. For example:

- Update fields directly from the card
- Highlight cards based on field assignments
- Add columns to track other workflow states
- Add swimlanes to expedite work or differentiate work assigned to different service classes.

Each team can customize their Issues and Epics boards and sprint Taskboards.

## Open Settings for the board

1. [Open your Kanban board](#).
2. Choose the  gear icon to configure the board setting settings.



The Settings dialog opens.

# Settings



Cards

Fields

Styles

Tag colors

Annotations

Tests

Board

Columns

Swimlanes

Card reordering

Charts

Cumulative flow

General

Backlogs

Working days

Fields

Show the important information to your team. Fields are editable directly on the card.

Issue

Core fields

☒ Show ID

☒ Show Assigned To as:

Avatar and full name (default) ▾

☒ Show Effort

☒ Show Tags

Additional fields

Add up to 10 fields in the order that you want them to appear on the card.

+ Field

State ▾

✕

Show empty fields

☐ Check if you want to display fields, even when they are empty.

Save and close

Cancel

3. Choose one of the following tabs based on what you want to customize:

## Common customizations:

- **Fields:** Set what fields appear on cards.
- **Columns:** Add, rename, and configure columns for the board.
- **Swimlanes:** Add swimlanes to a board to easily track high priority levels, distinguish different service classes, or track blocked items.
- **Backlogs:** Enable or disable issues or epics from being tracked on backlogs and boards.

## Less common customizations:

- **Styles:** Specify the card color to display based on field criteria you specify.
- **Tag colors:** Specify the tag color to display based on tag criteria you specify.
- **Annotations:** Enable or disable task or test annotations.
- **Tests:** Configure how you want tests to appear and behave on the cards.
- **Card reordering:** Choose to enable/disable changing of the backlog priority when dragging and dropping cards on the board.
- **Cumulative flow:** Set how you want the cumulative flow diagram to display.
- **Working days:** Set the active weekdays to use when tracking capacity and burndown.

## Customize fields

To quickly assign fields from the card without having to open the work item, add them to display on the card.

1. To configure the fields displayed on cards, choose the **Fields** tab.
2. Check or uncheck those fields you want to display or not display on the board.
3. To add a field, choose **+ Field** to add a field.

For example, here we uncheck **Show ID** and add the **Priority** field.

Settings ×

Cards

**Fields \***

Styles

Tag colors

Annotations

Tests

Board

Columns

Swimlanes

Card reordering

Charts

Cumulative flow


General

Backlogs

Working days

Fields

Show the important information to your team. Fields are editable directly on the card.

 Issue

Core fields

☒ Show ID

☒ Show Assigned To as:  
Avatar and full name (default) ▼

☒ Show Effort

☒ Show Tags

Additional fields

Add up to 10 fields in the order that you want them to appear on the card.

+ Field

Priority

▼

×

Show empty fields

☐ Check if you want to display fields, even when they are empty.

Save and close

Cancel

4. To remove a field, choose the **×** delete icon next to the field.
5. Choose **Save and close** when done. To learn more, see [Customize cards](#).

## Customize columns

1. To add a column or change column settings, choose **Columns** tab.

Here we choose **+ Column**, and then specify the name as **Research**.

# Settings



Cards

Fields

Styles

Tag colors

Annotations

Tests

Board

**Columns \***

Swimlanes

Card reordering

Charts

Cumulative flow

General

Backlogs

Working days

Columns

Columns visualize the flow of work across the board.

+ Column

To Do

Research

Doing

Done

Column name

Name

Research

Work in progress limit

Setting it to 0 specifies no limit.

WIP limit

5

☐ Split column into doing and done

State mapping

Specify the state this column maps to.

Issue

To Do

Definition of done

Enter plain text or format using markdown.

Save and close

Cancel

2. Choose **Save and close** when done. To learn more about column settings, see [Add columns to your Kanban board](#).

## Customize swimlanes

1. To add a swimlane, choose **Swimlanes** tab and choose **+ Swimlane**, and then specify the name.

Here we label the swimlane **Expedite**.

Settings

Cards

Fields

Styles

Tag colors

Annotations

Tests

Board

Columns

Swimlanes \*

Card reordering

Charts

Cumulative flow

General

Backlogs

Working days

Swimlanes

Swimlanes visualize different classes of work as horizontal lanes on the board.

+ Swimlane

Expedite

...

(Default lane)

...

Swimlane name

Name

Expedite

Save and close

Cancel

2. Choose **Save and close** when done. To learn more about working with swimlanes , see [Expedite work with swimlanes](#).

## Add or remove backlog levels

If you decide you don't want to use Epics to track work, you can turn it off and it won't show up as a board or backlog. By default, it is enabled for new projects.

1. Choose **Backlogs** tab and uncheck the work item type you no longer want to track on backlogs and boards.



Settings

Cards

Fields

Styles

Tag colors

Annotations

Tests

Board

Columns

Swimlanes

Card reordering

Charts

Cumulative flow

General

Backlogs \*

Working days

Backlogs

See only the backlogs your team manages.

Backlog navigation levels

☐ Epics

☒ Issues

Save and close

Cancel

- Choose **Save and close** when done.

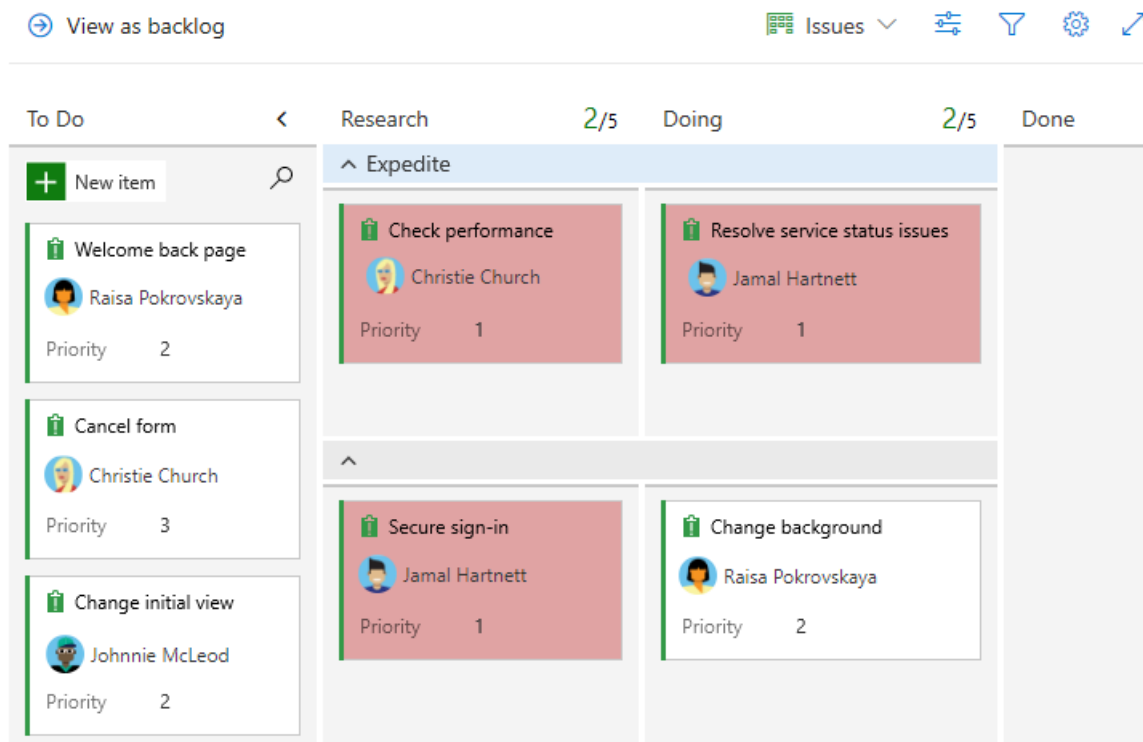
#### NOTE

Contributors will still be able to create Epics from other views, they just won't be able to view Epics within a backlog or board. To completely disable the Epic work item type, see [Add and manage work item types](#), [Enable or disable a WIT](#)

## Review your changes

After you close the settings dialog, refresh (F5) your board to view your changes. Verify that all changes appear as expected, or revisit the Settings dialog to make a change.

Here we show the customizations made in this article. The following image also shows a style applied to the color when the Priority=1.



## Try this next

[Manage your project](#)

## Related articles

- [Customize cards](#) (addresses **Styles**, **Tag colors**, **Annotations** and **Tests**)
- [Card reordering](#)
- [Work in Progress limits](#)
- [Split columns](#)
- [Definition of Done](#)
- [Set working days](#)
- [Cumulative flow](#)

# Configure settings and manage your Azure Boards project

1/31/2019 • 3 minutes to read • [Edit Online](#)

## Azure Boards

You can start using Azure Boards and configure resources as you go. No up-front work is required. Most settings define defaults.

As an organization owner or a project admin, there are a few items you might want to attend to at the start, to ensure a smooth operational experience. If you own a large organization, you'll want to consider additional tasks to structure your projects to support multiple teams or software development apps.

Specifically, consider performing one or more of the following tasks:

- [Add users to your project](#). To assign users to issues or tasks, you need to add them to your project.
- [Share your project vision](#). To support people who'll contribute to your project, provide them some directions via the project summary page, or through your [project wiki](#).
- [Define area and iteration paths](#). If you work with Scrum methods or want to time-box your issues and tasks, you'll want to define Iteration Paths.
- [Customize your issues or tasks](#). If you need additional fields to track data, or other type of work item, you can customize your process.

## Add users to your project

The first task is to ensure that all members of your organization or group are added to your organization and projects. For small groups, using [Microsoft Accounts](#) to add users to your organization and projects works fine. For details, see [Add users](#).

## Share your project vision and support collaboration

Each project has a summary page where you can share information through **README** files or by pointing to a project Wiki. To orient users who are new to your project and share established processes and procedures, we recommend that you [set up your project summary page](#) or [provision a Wiki](#).

## Define area and iteration paths for work tracking

If you support several products or feature areas, you can assign issues and tasks (Basic process) or user stories and tasks (Agile process) to a feature area by defining [Area Paths](#). To assign work items to specific time intervals, also known as sprints, you'll want to configure [Iteration Paths](#). To use the Scrum tools—sprint backlogs, taskboards, and team capacity—you need to configure several sprints. For an overview, see [About areas and iteration paths](#).

Iterations

Areas

Create and manage the iterations for this project. These it for iteration planning (sprint planning). [Learn more!](#)

To access the default team's iteration settings, [click here](#).

New

New child

+

-

Iterations	Start Date	End Date
▾ Fabrikam Fiber		
▾ Release 1		
Sprint 1	6/11/2018	6/29/2018
Sprint 2	7/2/2018	7/20/2018
Sprint 3	7/16/2018	8/3/2018
Sprint 4	7/23/2018	8/10/2018
Sprint 5	9/17/2018	10/5/2018
Sprint 6	10/29/2018	11/16/2018
Release 2		
Release 3		

Iterations

Areas

Create and manage the areas for this project. These a the team's backlog and what work items the team is r

To access the default team's area settings, [click here](#).

New

New child

+

-

Areas	Teams
▾ Fabrikam Fiber	Fabrikam Fiber Team
Customer Service	Customer Service Team
Phone	Fabrikam Fiber Team, Phone
Voice	Voice
Web	Fabrikam Fiber Team, Web

## Customize your issues or tasks

You and your team can start using all work-tracking tools immediately after you create a project. But often, one or more users want to customize the experience to meet one or more business needs. Although you can customize the process easily through the user interface, you'll want to establish a methodology for who will manage the updates and evaluate requests.

### NOTE

By default, organization owners and users added to the **Project Collection Administrators** security group are granted permission to create, edit, and manage processes used to customize the work-tracking experience. If you want to lock down who is able to perform these tasks, you can set permissions at the organization-level to **Deny**.

To learn more, see these articles:

- [About process customization and inherited processes](#)
- [Customize a project](#)
- [Add and manage processes](#)
















## Review and update notifications

A number of notifications are predefined for each project. Notifications are based on subscription rules. Subscriptions arise from the following areas:

- [Out-of-the-box or default subscriptions](#).
- [Team notifications](#), managed by a team administrator.
- Project notifications, managed by a member of the Project Administrators group.

If users believe they're getting too many notifications, they can [opt out of a subscription](#).

 Notifications > Mine | [+ New subscription](#) [? Help](#)

Description		Type	Notifies	State
Build				
	<b>Build completes</b> Notifies you when a build you queued or that was queued for you compl...	 Build completed (any project)	 You	<input checked="" type="checkbox"/> On
Code (Git)				
	<b>Pull request reviewers added or removed</b> Notifies you when you are added to a pull request or when a user is add...	 Pull request (any project)	 You	<input checked="" type="checkbox"/> On
	<b>Pull request completion failures</b> Notifies you when a pull request you created fails to complete	 Pull request (any project)	 You	<input checked="" type="checkbox"/> On
	<b>Pull request changes</b> Notifies you when changes are made to a pull request you created or are...	 Pull request (any project)	 You	<input checked="" type="checkbox"/> On
	<b>A comment is left on a pull request</b> Notifies you about comments made to a pull request you created or a di...	 Pull request comment (any project)	 You	<input checked="" type="checkbox"/> On

## Install and manage extensions

To add new features and capabilities to Azure Boards, install extensions from the [Visual Studio Marketplace](#). You can install [free](#), [preview](#), or [paid](#)

To learn more, see [Install free extensions for Azure DevOps](#). To learn about building your own Azure DevOps extensions, see [developing](#) and [publishing](#) extensions.

## Related articles

- [Web portal navigation](#)
- [Set user preferences](#)
- [Enable a preview feature](#)
- [Get started as an administrator for Azure DevOps](#)

# Index to basic field descriptions

2/7/2019 • 2 minutes to read • [Edit Online](#)

## Azure Boards

Use this index to look up a description of a field used to track an issue, task, or epic. This reference includes all fields defined for the Basic process. If you use another process—such as Agile, CMMI, or Scrum—see [Work item field index](#) for additional field definitions.

To support additional tracking needs, you can [define your own custom work item fields](#).

## Alphabetical index

<b>A</b> <ul style="list-style-type: none"><li>• <a href="#">Activated By</a></li><li>• <a href="#">Activated Date</a></li><li>• <a href="#">Activity</a></li><li>• <a href="#">Area ID</a></li><li>• <a href="#">Area Path</a></li><li>• <a href="#">Assigned To</a></li><li>• <a href="#">Attached File Count</a></li></ul> <b>B</b> <ul style="list-style-type: none"><li>• <a href="#">Board Column</a></li><li>• <a href="#">Board Column Done</a></li><li>• <a href="#">Board Lane</a></li></ul> <b>C</b> <ul style="list-style-type: none"><li>• <a href="#">Changed By</a></li><li>• <a href="#">Changed Date</a></li><li>• <a href="#">Closed By</a></li><li>• <a href="#">Closed Date</a></li><li>• <a href="#">Completed Work</a></li><li>• <a href="#">Created By</a></li><li>• <a href="#">Created Date</a></li></ul> <b>D-E</b> <ul style="list-style-type: none"><li>• <a href="#">Description</a></li><li>• <a href="#">Effort</a></li><li>• <a href="#">External Link Count</a></li></ul>	<b>H-I</b> <ul style="list-style-type: none"><li>• <a href="#">History</a></li><li>• <a href="#">Hyperlink Count</a></li><li>• <a href="#">ID</a></li><li>• <a href="#">Iteration Id (System)</a></li><li>• <a href="#">Iteration Path (System)</a></li></ul> <b>L-N-P</b> <ul style="list-style-type: none"><li>• <a href="#">Link Comment</a></li><li>• <a href="#">Link Description</a></li><li>• <a href="#">Node Name</a></li><li>• <a href="#">Priority</a></li></ul> <b>R</b> <ul style="list-style-type: none"><li>• <a href="#">Reason</a></li><li>• <a href="#">Related Link Count</a></li><li>• <a href="#">Remaining Work</a></li><li>• <a href="#">Remote Link Count</a></li><li>• <a href="#">Resolved By</a></li><li>• <a href="#">Resolved Date</a></li><li>• <a href="#">Resolved Reason</a></li></ul>	<b>S</b> <ul style="list-style-type: none"><li>• <a href="#">Stack Rank</a></li><li>• <a href="#">Start Date</a></li><li>• <a href="#">State</a></li><li>• <a href="#">State Change Date</a></li></ul> <b>T</b> <ul style="list-style-type: none"><li>• <a href="#">Tags</a></li><li>• <a href="#">Team Project</a></li><li>• <a href="#">Title</a></li></ul> <b>W</b> <ul style="list-style-type: none"><li>• <a href="#">Watermark</a></li><li>• <a href="#">Work Item Type</a></li></ul>
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## Add and modify fields

To add fields to a process, modify select field attributes, and review fields added to a process, see [Customize a process](#).

Also, you can [view the list of fields defined for an organization](#) and the WITs which reference them.

## Related articles

- [Create managed queries](#)

# Key concepts and terms used for Azure Boards

2/7/2019 • 7 minutes to read • [Edit Online](#)

## Azure Boards

Here are definitions of key concepts and artifacts used in Azure Boards.

### IMPORTANT

**Select the version that meets your location and process:** We are experimenting with a new acquisition model which is currently available for users located in the United States and that sign up through [azure.com/boards](https://azure.com/boards). This model supports a new Basic process.

For International users and others who sign up through another method, the Agile process is used. Select your version of this article based on your location and process used.

- [Basic process](#)
- [Agile process](#)

## Area path

Area paths are used to group work items by team, product, or feature area. Iteration paths are used to group work into sprints, milestones, or other event-specific or time-related periods. You can use area paths to define a hierarchy of paths. To learn more, see [About area and iteration paths](#).

## Dashboards

Dashboards are user-configurable interactive signboards that provide real-time information. Dashboards are associated with a team and display configurable widgets to show information. To learn more, see [Add and manage dashboards](#).

## Favorites

Tagging an object as a favorite is a method used to support quick navigation by yourself or other team members. You can tag work item queries and build definitions as personal and team favorites. Other objects you can tag as a favorite for yourself only include code branches, delivery plans, test plans, and teams or projects. To learn more, see [Set personal or team favorites](#).

## Field

Fields are used to track a piece of information about the work to perform. Values you assign to a field are stored in the work-tracking data store. You can use the data store to query and generate charts to view status and trends. To look up the definition of each predefined field, see [Index to basic field descriptions](#).

## Follow

Tagging specific work items or pull requests to follow them is a method used to receive email updates about changes that are made to them. To learn more, see [Follow a work item or pull request](#).

## Inheritance process model



Inheritance process models are used to customize Azure Boards work and issue tracking. Projects inherit the customizations made to a process. To learn more, see [Inheritance process model](#).

## Issue (Basic process)

An issue is a type of work item that defines some work or code defect that needs to be tracked. It is defined for the Basic process and appears on the product backlog and [Issues Kanban board](#). (Issues and impediments for other processes track other types of work as described in [Manage issues and impediments](#)).

## Iteration paths (aka sprints)

A time period, usually two to three weeks, used to group work items to be completed during that time period. Sprints are used in Scrum methods to support sprint planning, sprint burndown, and other Scrum processes. Iteration paths allow you to group work into sprints, milestones, or other event-specific or time-related period. Learn more: [About area and iteration paths](#).

## Kanban board

A Kanban board is an interactive, electronic signboard that supports visualization of the flow of work from concept to completion and lean methods. To learn more, see [Kanban basics](#).

## Portfolio backlog

An interactive list of work items, similar to the product backlog, that supports organizing or grouping work under features, epics, or scenarios. Portfolio backlogs work similarly to product backlogs in that you can prioritize work and view the tree hierarchy of work. Learn more: [Define features and epics](#).

## Process

A process defines the building blocks of a work-tracking system. To customize a process, you first create an inherited process from one of the default system processes, [Agile](#), [Scrum](#), or [CMMI](#). All projects that use the process see the changes you make. To learn more, see [About process customization and inherited processes](#).

## Product backlog

An interactive list of work items that corresponds to a team's project plan or roadmap for what the team plans to deliver. The product backlog supports prioritizing work, forecasting work by sprints, and quickly linking work to portfolio backlog items. You can define your backlog items and then manage their status using the Kanban board.

Each product backlog can be customized by a team. Learn more: [Create your backlog](#).

## Projects

A project, which was previously known as a *team project*, provides a repository for source code. A project provides a place where a group of people can plan, track progress, and collaborate on building software solutions. A project is defined for an Azure DevOps Services organization or within a TFS project collection. You can use it to focus on those objects defined within the project. To learn more, see [About projects and scaling your organization](#).

## Queries

Queries are used to find and list work items. Queries support managed searches, which are used to triage work, versus ad-hoc searches, which are used to find a specific work item. To learn more, see [About managed queries](#).

## Sprints (also known as iterations)

A sprint is a time period of usually two to three weeks that's used to group work items to be completed during that time period. Sprints are used in Scrum methods to support sprint planning, sprint burndown, and other Scrum processes. Sprints are defined via iteration paths. To learn more, see [About area and iteration paths \(aka sprints\)](#).

## Sprint backlog

An interactive list of work items that have been assigned to the same sprint or iteration path for a team. The sprint backlog supports teams that use Scrum methodologies. Learn more: [Sprint planning](#).

## Taskboard

A taskboard is an interactive board of work items that you can use to review and update tasks defined for the sprint backlog. The taskboard supports teams that use Scrum methodologies. To learn more, see [Update and monitor your taskboard](#).

## Teams

A team corresponds to a selected set of project members. With teams, organizations can subcategorize work to better focus on all the work they track within a project. Each team gets access to a suite of Agile tools. Teams can use these tools to work autonomously and collaborate with other teams across the enterprise. Each team can configure and customize each tool to meet their work requirements. To learn more, see [About teams and Agile tools](#).

## Work items

A work item represents an object stored in the work item data store. Each work item is based on a work item type—such as a user story, feature, bug, task, or issue—and is assigned an identifier which is unique across all projects in an organization or project collection. The work item types available to you are based on the process used when your project was created. Each work item supports capturing information, adding attachments, linking to other work items, and more. Learn more: [About work items](#).

## Work item types (WITs)

A WIT specifies the fields, workflow, and form used to track an item of work. Each WIT is associated with more than 30 system fields and several more type-specific fields. You use work items to plan and track the work required to develop your project. For an overview of predefined WITs provided with the default processes, see [Choose a process](#).

## Workflow

A workflow is an integral aspect of a work item. It's defined by its corresponding work item type. The workflow determines the logical progression and regression of work items. It tracks the status of work as the work progresses from a new or active state to a closed or completed state. For the Basic process, all work item types use the **To Do**, **Doing**, and **Done** states to track workflow status.

The workflow also specifies the values that appear in the State and Reason drop-down menus. To learn more, see [Workflow states and state categories](#).

## Related articles

- [Kanban key concepts](#)
- [Sprints and scrum key concepts](#)

- [Work item field index](#)
- [Project management and navigation glossary](#)

# Best tool to add, update, and link work items

2/7/2019 • 6 minutes to read • [Edit Online](#)

**Azure Boards | Azure DevOps Server 2019 | TFS 2018 | TFS 2017 | TFS 2015 | TFS 2013**

Azure Boards provides you several tools—many designed to perform a single task and others that support several tasks. This article provides a guide to the best tool for specific tasks that will help you work most efficiently.

## Work item form

If you want to make a single update to one work item, you can do that from within the work item form. When you want to add or update several work items at a time, then you'll want to use a backlog or query.

[Work item form controls](#) | [Work item field index](#)

### Best tool for:

- [Updating a work item field for a single work item](#)
- [Adding to the discussion, mentioning others in the discussion](#)
- [Choosing to follow or unfollow a work item](#)
- [Driving Git development, creating a branch](#)
- [Adding a link to another work item or external object](#)
- [Copying or cloning a work item](#)
- [Deleting the work item](#)

### Additional supported tasks:

- [Share information](#)
- [Copy the work item URL](#)
- [Capturing the work item to use as a template](#)
- [Updating fields of the work item by applying an existing template](#)

## Work Items

Use the [Work Items](#) page to quickly focus on work items of interest to you.

### Best tool for:

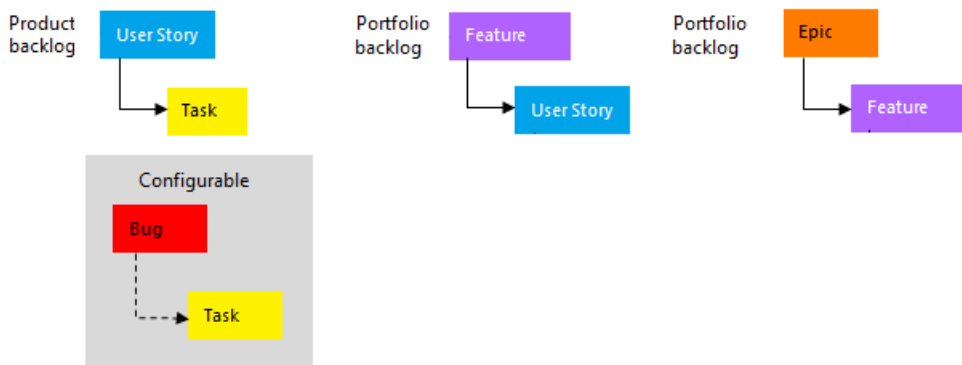
- Listing and filtering work items of interest to you, specifically work items that meet the following criteria:
  - That are assigned to you
  - That you chose to follow
  - Where you were mentioned
  - That you've recently viewed or updated
  - That has been recently updated, completed, or created for the project.

### Additional supported tasks:

- [Add a work item](#)
- [Restore work items from the recycle bin](#)
- [View work items through a mobile browser](#)

# Boards

The two types of Kanban boards, product backlog and portfolio backlogs, provide the quickest means for adding user stories and portfolio work item types. You can also quickly add and update the status of child items within a hierarchy. As shown in the following image for the Agile process, when you add tasks to user stories, user stories to features, or features to epics, you automatically create parent-child links between the work items.



[Product backlog board](#) | [Features or Epics board](#) | [Customize cards](#)

## Best tool for:

- [Implementing Kanban methods](#)
- Viewing the flow of work from inception to completion
- Quickly adding [product backlog](#) and [portfolio backlog](#) items
- Updating the status of backlog items
- Adding linked child items ([task checklists](#), [user stories](#) or [features](#))
- [Filtering work items to focus on different views](#)
- Adding, running, and updating [inline test cases](#)

## Additional supported tasks:

- [Assigning a work item, updating a field displayed on a card](#)
- [Monitoring cumulative flow](#)
- [Monitoring lead time and cycle time control charts](#)
- [Assigning a work item, updating a field displayed on a card](#)
- [Monitoring cumulative flow](#)

# Backlogs

You can quickly add and prioritize your product and portfolio backlogs, which list work items either as a flat or hierarchical list. You can also quickly add and reparent child items within a hierarchy.

[Product backlog](#) | [Portfolio backlogs](#)

## Best tool for:

- [Managing your product backlog, developing your project plan](#)
- Quickly adding [product](#) and [portfolio backlog](#) items
- [Moving backlog items in priority order](#)
- [Creating, viewing, and modifying a hierarchy of backlog items](#)
- [Organizing your backlog, linking or mapping backlog items to portfolio backlog items](#)
- [Planning a sprint](#)

- [Forecasting work](#)
- [Emailing a list of backlog items](#)

**Additional supported tasks:**

- [Bulk modifying work items](#)
  - [Change work item type](#)
  - [Move work item to a different project](#)
  - [Assign work items, change the iteration](#)
  - [Add or remove tags](#)
  - [Delete work items](#)
- [Creating a Git branch from one or more work items](#)
- [Monitoring team velocity](#)
- [Bulk modifying work items](#)
  - [Assign work items, change the iteration](#)
  - [Delete work items](#)
  - [Add or remove tags](#)
- [Creating a Git branch from one or more work items](#)
- [Restoring work items from the recycle bin](#)
- [Monitoring team velocity](#)
- [Bulk modifying work items](#)
- [Assigning work items, change the iteration](#)
- [Adding or removing tags](#)
- [Restoring work items from the recycle bin](#)
- [Monitoring team velocity](#)
- [Bulk modifying work items](#)
- [Assigning work items, change the iteration](#)
- [Adding or removing tags](#)
- [Monitoring team velocity](#)

## Sprints

Sprint tools provide teams a focused view of work items they've assigned to a specific sprint. You can add tasks to work items and prioritize your sprint backlog.

[Sprint backlog](#) | [Taskboard](#) | [Capacity](#)

**Best set of tools for:**

- [Implementing Scrum methods](#)
- [Adding tasks to backlog items](#)
- [Configuring team capacity](#)
- [Monitoring and adjusting team capacity](#)
- [Updating remaining work, and task status](#)
- [Emailing or sharing a sprint plan](#)

**Additional supported tasks:**

- [Monitoring sprint burndown](#)
- [Bulk modifying work items](#)

# Queries

Queries enable you to filter work items within or across projects for the purposes of listing, updating, or sharing work items.

- [Queries](#) | [Query operators](#)

## Best tool for:

- [Listing items to perform bulk updates, assign or reassign](#)
- Listing a [tree of parent-child related work item](#) or [dependent work items](#)
- [Triaging work items \(review, set priority, update\)](#)
- [Creating simple progress and trend charts](#)
- [Emailing a list work items](#)

## Additional supported tasks:

- Create a chart and add it to a dashboard
- Create a chart to get a count of items or sum a field
- Create a chart that shows a burndown or burnup over time

# Plans

When you want to review the schedule of stories or features your teams plan to deliver, use [Delivery Plans](#). Plans show scheduled work items that are assigned to sprints of selected teams against a calendar view.

## Best tool for:

- [Viewing product or portfolio work items assigned to several teams against a calendar schedule](#)

## Additional supported tasks:

- [Moving a work item to a different iteration](#)

# Office integration tools

### NOTE

Starting with Azure DevOps Server 2019 and Visual Studio 2019, the Team Foundation plug-in for Office is deprecating support for Office Project and Storyboarding with PowerPoint.

OFFICE APPLICATION	BEST TOOL FOR:
<a href="#">Excel</a>	<ul style="list-style-type: none"><li>• Adding or updating many work items and their fields</li><li>• Adding or changing hierarchical links between work items</li></ul>
<a href="#">Project</a>	<ul style="list-style-type: none"><li>• Importing a project plan to a project</li><li>• Adding tasks to Project and publishing them as work items</li><li>• Creating or updating parent-child links or predecessor-successor links</li></ul>

<b>Storyboarding with PowerPoint</b>	<ul style="list-style-type: none"> <li>• Storyboarding features and user interface changes</li> <li>• <a href="#">Linking your storyboard to a work item</a></li> <li>• <a href="#">Adding and sharing storyboard shapes</a></li> </ul>
--------------------------------------	---

## Test tools, test artifacts, and bugs

Testing tools used several work item types—such as test plans, test suites, test cases, and more. You create and manage them from **Test Plans/Test** or using one or more test tools. Several of these tools also support creating bugs.

TEST TOOL	BEST TOOL FOR:
<a href="#">Test Plans</a>	<ul style="list-style-type: none"> <li>• <a href="#">Test Plans and Test Suites</a></li> <li>• <a href="#">Test Cases</a></li> <li>• <a href="#">Test Cases, grid view</a></li> <li>• <a href="#">Shared Steps, Shared Parameters</a></li> <li>• <a href="#">Delete test artifacts</a></li> </ul> <p><b>Additional supported tasks:</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Track test status</a></li> <li>• <a href="#">Order manual tests within suites</a></li> <li>• <a href="#">Export test plans and test suites</a></li> <li>• <a href="#">Assign testers to test cases</a></li> </ul>
<a href="#">Test Runner</a>	<ul style="list-style-type: none"> <li>• <a href="#">Running tests, adding bugs</a></li> </ul>
<a href="#">Test &amp; Feedback extension</a>	<ul style="list-style-type: none"> <li>• <a href="#">Exploratory testing, capture feedback in connected mode</a></li> <li>• <a href="#">Adding bugs, tasks, and test cases linked to a work item</a></li> <li>• <a href="#">Requesting feedback</a></li> <li>• <a href="#">Providing feedback</a></li> </ul> <p><b>Additional supported tasks:</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Updating existing bugs</a></li> <li>• <a href="#">Capture feedback in standalone mode</a></li> <li>• <a href="#">Capture screen recordings of your app during testing</a></li> </ul>

<

## Other tools

TOOL	BEST TOOL FOR:
<a href="#">Adhoc search</a>	<ul style="list-style-type: none"> <li>• Find a specific work item using its ID or a keyword</li> <li>• Find one or more work items across all projects in a fast, flexible manner</li> <li>• Perform full text search across all work item fields</li> <li>• Review work items assigned to a specific team member</li> <li>• Search against specific work item fields to quickly narrow down a list of work items</li> <li>• Determine what key words will support a managed search.</li> </ul>



<a href="#">Work item templates</a>	<ul style="list-style-type: none"> <li>• <a href="#">Capture templates</a></li> <li>• <a href="#">Apply templates to update work items</a></li> <li>• <a href="#">Use templates to create work items</a></li> <li>• <a href="#">Manage work item templates.</a></li> </ul>
<b>Request and capture feedback</b>	<ul style="list-style-type: none"> <li>• <a href="#">Request feedback</a></li> <li>• <a href="#">Give feedback using Microsoft Feedback Client</a></li> </ul>
<b>Notifications</b>	<ul style="list-style-type: none"> <li>• <a href="#">Manage personal notifications</a></li> <li>• <a href="#">Manage team and project notifications</a></li> <li>• <a href="#">Manage organization notifications</a></li> </ul>
<b>Favorites</b>	<ul style="list-style-type: none"> <li>• <a href="#">Set personal and team favorites</a></li> </ul>

## Marketplace extensions

A number of additional tools become available when you install one of the [Extensions for Azure DevOps, Boards category](#).

### TFS Power Tools

Provides you access to these additional tools through the Team Explorer plug-in for Visual Studio. Additional requirements may apply.

- [Process Template Editor](#)
- [Additional check-in policies for Team Foundation Version Control](#)
- [Team Explorer enhancements including Team Members](#)
- [Team Foundation Power Tool Command Line](#)
- [Test Attachment Cleaner](#)
- [Work Item Templates](#)

## Related articles

- [Navigate in the web portal](#)
- [Navigate in Team Explorer](#)
- [Configure a Burndown or Burnup widget](#)

# Default permissions and access for Azure Boards

2/5/2019 • 6 minutes to read • [Edit Online](#)

## Azure Boards

As a member of an Azure Boards project, you can use the majority of features to track work. Limitations to select features are based on the *access level* and *security group* to which a user is assigned. The **Basic** access level supports full access to all Azure Boards features. **Stakeholder** access level provides partial support to select features, allowing users to view and modify work items, but not use all features. The built-in security groups—**Readers**, **Contributors**, and **Project Administrators**—and team administrator role grant permissions to specific features.

In the tables provided in this article, a ☐ checkmark indicates that the corresponding access level or security group has access to a feature by default.

### NOTE

Team administrators can configure settings for their team's tools. Organization owners and members of the Project Administrators group can configure settings for all teams.

For a comparison chart of Stakeholder versus Basic access, see the [Feature matrix](#). To assign or change an access level, see [Add users and assign licenses](#). If you need to [grant specific users select permissions](#), you can do so.

## General work item feature access

You can use work items to track anything you need to track. To learn more, see [Understand how work items are used to track issues, tasks, and epics](#).

TASK	STAKEHOLDERS	READERS	CONTRIBUTORS	TEAM ADMINS
View/open work items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Add work items, add tags to work items (Stakeholders can assign existing tags to work items, but can't add new tags)	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Change work item type	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Move work item to another project			<input type="checkbox"/>	<input type="checkbox"/>
Email work items	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Apply a work item template	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Delete work items (able to restore from the Recycle bin)			<input type="checkbox"/>	<input type="checkbox"/>
Permanently delete work items				<input type="checkbox"/>

Provide feedback (through the Microsoft Feedback client)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Request feedback			<input type="checkbox"/>	<input type="checkbox"/>

## Boards feature access

**Boards** present work items as cards and support quick status updates through drag-and-drop.

TASK	STAKEHOLDERS	READERS	CONTRIBUTORS	TEAM ADMINS
View boards and open work items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Add work items to a board; update status, reorder, or reparent child tasks through drag-and-drop; update a field on a card			<input type="checkbox"/>	<input type="checkbox"/>
Add child tasks to a checklist	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Assign to a sprint (from card menu)	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Customize a board, configure team settings (Stakeholders assigned as a team administrator or Project Administrator can configure team settings)	<input type="checkbox"/>			<input type="checkbox"/>

## Backlogs features access

**Backlogs** display work items as lists. A product backlog represents your project plan and a repository of all the information you need to track and share with your team. Portfolio backlogs allow you to group and organize your backlog into a hierarchy.

TASK	STAKEHOLDERS	READERS	CONTRIBUTORS	TEAM ADMINS
View backlogs and open work items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Add work items to a backlog, Stakeholders can only add items to the bottom of the backlog	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Use bulk edit features	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Add child items to a backlog item; prioritize or reorder a backlog; parent items using the Mapping pane; Assign items to a sprint using the Planning pane			<input type="checkbox"/>	<input type="checkbox"/>
Customize a backlog, configure team settings (Stakeholders assigned as a team administrator or Project Administrator can configure team settings)	<input type="checkbox"/>			<input type="checkbox"/>

## Sprints feature access

**Sprints** provide a filtered view of work items that a team has assigned to specific iteration paths or sprints.

TASK	STAKEHOLDERS	READERS	CONTRIBUTORS	TEAM ADMINS
View sprint backlogs, taskboards, and open work items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Add work items to a sprint backlog (Stakeholders can add backlog items to the bottom of a sprint backlog)	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Add work items to a taskboard (Stakeholders can add backlog items but not tasks)			<input type="checkbox"/>	<input type="checkbox"/>
Prioritize/reorder a sprint backlog or taskboard; add child items to a backlog item; reassign items to a sprint using the Planning pane			<input type="checkbox"/>	<input type="checkbox"/>
View team capacity (work details)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Set team capacity			<input type="checkbox"/>	<input type="checkbox"/>
Use bulk edit features	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Define sprints, set sprint dates				<input type="checkbox"/>
Customize a sprint backlog or taskboard, configure team settings (Stakeholders assigned as a team administrator or Project Administrator can configure team settings)	<input type="checkbox"/>			<input type="checkbox"/>

## Queries and semantic search

**Queries** are filtered lists of work items based on criteria that you define by using a query editor.

TASK	STAKEHOLDERS	READERS	CONTRIBUTORS	TEAM ADMINS
View and run managed queries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Create and save managed queries (Stakeholders can't save shared queries)	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
View query charts		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Create query charts			<input type="checkbox"/>	<input type="checkbox"/>
Powerful semantic work-tracking search.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## More on Stakeholder access

Stakeholder access supports business owners, analysts, and other team members who don't manage the work of a project, but need to be able to view and add ideas to the backlog, add context and information to work items, and

review status and progress. All members of an organization who don't use Visual Studio but want to contribute to work item tracking and monitor progress can be assigned as a stakeholder. Note, even if you change the permission level for a user assigned **Stakeholder** access, the user won't be able to access the feature.

#### NOTE

For public projects, Stakeholder access gives users full access to all work-tracking features. To learn more, see [About access levels](#), [Stakeholder access](#).

## Related articles

- [Get started as a stakeholder](#)
- [Add another team](#)
- [Add a team administrator](#)
- [Manage teams and configure team tools](#) \* [Grant or restrict access to select features and functions](#)
- [Set permissions and access for work tracking](#)

# 11 Reasons for using Azure Boards to plan and track your work

2/7/2019 • 4 minutes to read • [Edit Online](#)

## Azure Boards

We know you have a choice of tracking systems. So why use Azure Boards to plan and track your work, bugs, and customer issues?

In [What is Azure Boards?](#), we describe the main features you get with Azure Boards. Here, we provide 11 compelling reasons to take Azure Boards for a free test spin.

## 1. Start simply, scale as you grow

Azure Boards provides you with a set of predefined work item types to support tracking features, user stories, bugs, and tasks. You can quickly get up and running by using your product backlog or Kanban board. Whatever Agile method you use, Azure Boards supports you with the tools you need to implement that method.

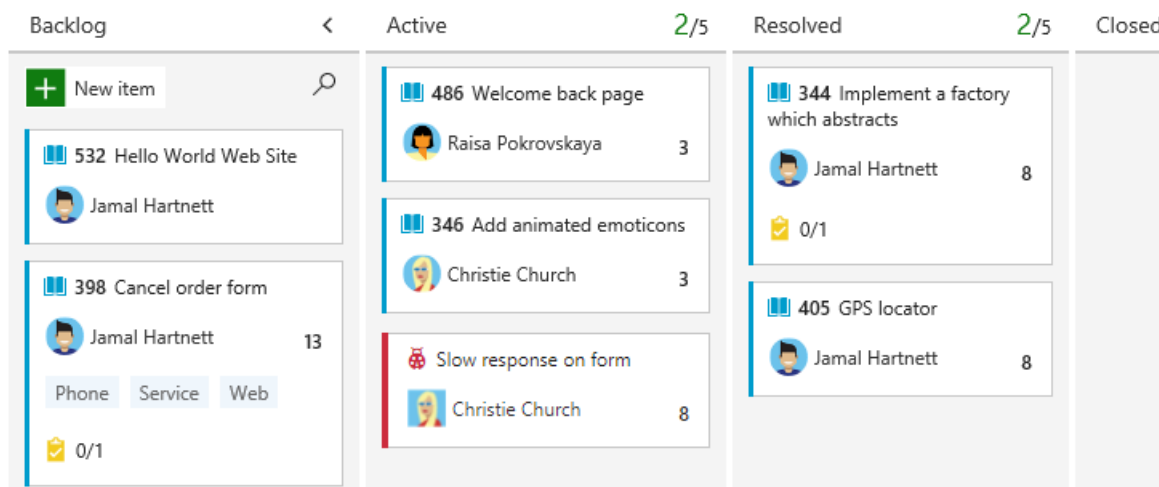
As your organization grows, you can [add teams](#) to provide them the autonomy to track their work according to their needs.

### TIP

Quickly add work items by using your backlog or Kanban board. Or, use [work item templates](#) to simplify defining work items by setting values for select fields.

## 2. Visual, interactive tools

Visual tools help teams quickly see and share progress. For example, with [Kanban boards](#) you can add work, update the status of work, and monitor work in progress.



With [product backlogs](#), you can quickly add work items and prioritize work to keep the most important work at the top of the stack. And, with [delivery plans](#), teams can share their plans against a calendar view.

Use [built-in scrum boards and planning tools](#) to help your teams run effective stand-ups, planning meetings, and retrospectives.

### 3. Easy to customize

Kanban boards, taskboards, and delivery plans are easy to configure and customize through the user interface.

For example, with Kanban boards, you can configure columns, swim lanes, card styles, fields shown on cards, and more. You can configure them all through a common configuration dialog.

Settings

**Cards**

- Fields**
- Styles
- Tag colors

**Board**

- Columns
- Swimlanes
- Card reordering

**Charts**

- Cumulative flow

**General**

- Backlogs
- Working days
- Working with bugs

**Fields**

Show the important information to your team. Fields are editable directly on the card.

**User Story** **Bug**

**Core fields**

- ☒ Show ID
- ☒ Show Assigned To as:  
Avatar and full name (default)
- ☒ Show Story Points
- ☒ Show Tags

**Additional fields**

Add up to 10 fields in the order that you want them to appear on the card.

+ Field

**Show empty fields**

- ☒ Check if you want to display fields, even when they are empty.

Save Cancel

#### TIP

Define [area paths](#) and [iteration paths](#) to group work items by product or feature. You also can group work items into sprints, milestones, or other time-related periods.

And, you can easily add [custom fields](#), [work item types](#), and [portfolio backlogs](#).

### 4. Built-in social tools and communication

Work item forms provide built-in discussion that you can use to capture questions, notes, and communication as they occur. With this feature, you can maintain a history of what a team decides on any particular work item. You can quickly bring a team member or an entire team into the conversation [by using @mentions](#).





By using [configurable dashboards](#), you can add one or more widgets. You configure widgets to display the information and data you want, such as the following bug burndown widget.



In addition to dashboards, you have access to the [Analytics service](#), which is optimized for fast read-access and server-based aggregations. By using [Analytics views](#) and [Power BI](#), you can create highly sophisticated reports on the project data of interest.

## 8. Office integration









Project managers who want to use familiar tools can import and export work item queries to and from Microsoft Office Excel and Project. To learn more, see:

- [Bulk add or modify work items with Excel](#)
- [Create your backlog and tasks by using Project](#)

## 9. Extensions and extensibility

You can gain even greater functionality by adding Marketplace extensions, many of which are free. An extension is an installable unit that adds capabilities to Visual Studio, Azure DevOps Services, Team Foundation Server, or Visual Studio Code. You can find extensions within these products or in the [Visual Studio Marketplace](#), Azure DevOps tab.

Here are a few extensions available from the Marketplace.

 <b>Attachments Group</b> Otto Streifel 397 Preview image attachments from the work item form ★★★★★ FREE	 <b>Feature timeline and progress</b> Microsoft DevLabs 2.2K Feature timeline of your in-progress features. ★★★★★ FREE	 <b>VSTS RollUp</b> Canarys Automation 1.2K Rollup of efforts of Task Work Items to parent level items like PBI, Stories, Feature, Epic, ★★★★★ FREE	 <b>Time &amp; Effort</b> Cape Code GmbH 429 Plan & track time and costs on work items easily. ★★★☆☆ FREE
 <b>Work item form one click</b> Mohit Bagra 578 Work item form group extension with custom defined action buttons ★★★★★ FREE	 <b>Query based boards</b> RealDolmen 699 Visualize flat and one-hop query results on a board ★★★★★ FREE	 <b>Board Group</b> Otto Streifel 1.5K Places a group on the work item form showing the current board. ★★★★★ FREE	 <b>Related Work items</b> Mohit Bagra 770 Gets a list of related work items for your current work item. ★★★★★ FREE

In addition, by using the [REST API](#), you can create your own extensions or tools to integrate with Azure DevOps Services.

## 10. Mobile app

Azure Boards makes it easy to stay on top of changes as they occur. By using the [mobile browser](#), you can be notified and respond to changes made to work items.

Work items

Mobile form is in PREVIEW.

USER STORY 1

This is the new mobile experience!

Updated Wednesday by Jamal Hartnett

3 UI service mobile

Jamal Hartnett2 days ago

@Chuck Reinhart - Note the differences between the previous and the latest version.

View 1 comment >

DetailsHistoryLinksAttachments

Assigned To

Christie Church

State

New

Reason

New

Area

Fabrikam Fiber

Iteration

Fabrikam Fiber

Description

## 11. Start for free

Last but not least, you can start for free and add up to five free users and unlimited [stakeholders](#).

Get started today. To learn how, see [Sign up for free and invite others to collaborate on your project](#).

## Related articles

- [Best tool to add, update, and link work items](#)

# Connect Azure Boards to GitHub

1/31/2019 • 2 minutes to read • [Edit Online](#)

## Azure Boards

By connecting your Azure Boards project with GitHub repositories, you support linking between GitHub commits and pull requests to work items. You can use GitHub for software development while using Azure Boards to plan and track your work.

### NOTE

Azure Boards and GitHub integration is in Public Preview and supported only for Azure DevOps Services at this time.

## Prerequisites

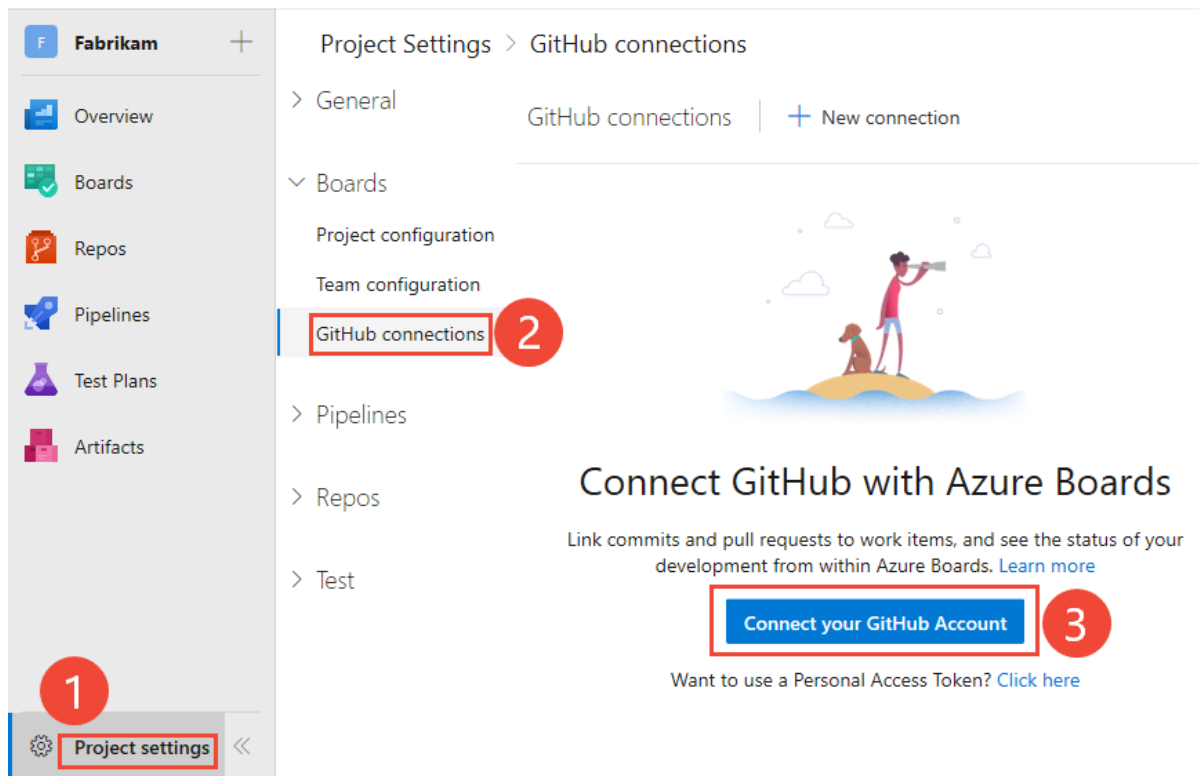
- You must connect to an Azure Boards or Azure DevOps project. If you don't have a project yet, [create one](#).
- You must be a member of the [Project Administrators group](#) and the project's [Contributors group](#). If you created the project, then you have permissions.
- You must be an administrator or owner of the GitHub repository you'll be connecting to.

### IMPORTANT

You can connect to multiple repositories so long as you are an administrator for those repositories.

## Add a GitHub connection and repository

1. Sign into Azure Boards. Make sure that you have [enabled New Navigation](#). You can only configure the GitHub repositories from the New Navigation user interface.
2. Choose (1) **Project Settings**, choose (2) **GitHub connections** and then (3) **Connect your GitHub Account**.



3. Enter your GitHub account credentials. Choose an account for which you are an administrator for the repositories you want to connect to.

The screenshot shows the GitHub sign-in page. At the top is the GitHub logo. Below it is a green checkmark icon. The text reads: 'Sign in to GitHub to continue to Azure Boards'. There are two input fields: 'Username or email address' with the value 'JamalHart' and a 'Password' field with masked characters. A 'Forgot password?' link is next to the password field. A green 'Sign in' button is at the bottom. Below the sign-in button is a link: 'New to GitHub? [Create an account.](#)'.

4. If you have enabled two-factor authentication, enter the authentication code that GitHub sent you and choose **Verify**.



## Two-factor authentication

Authentication code

[What's this?](#)



Verify



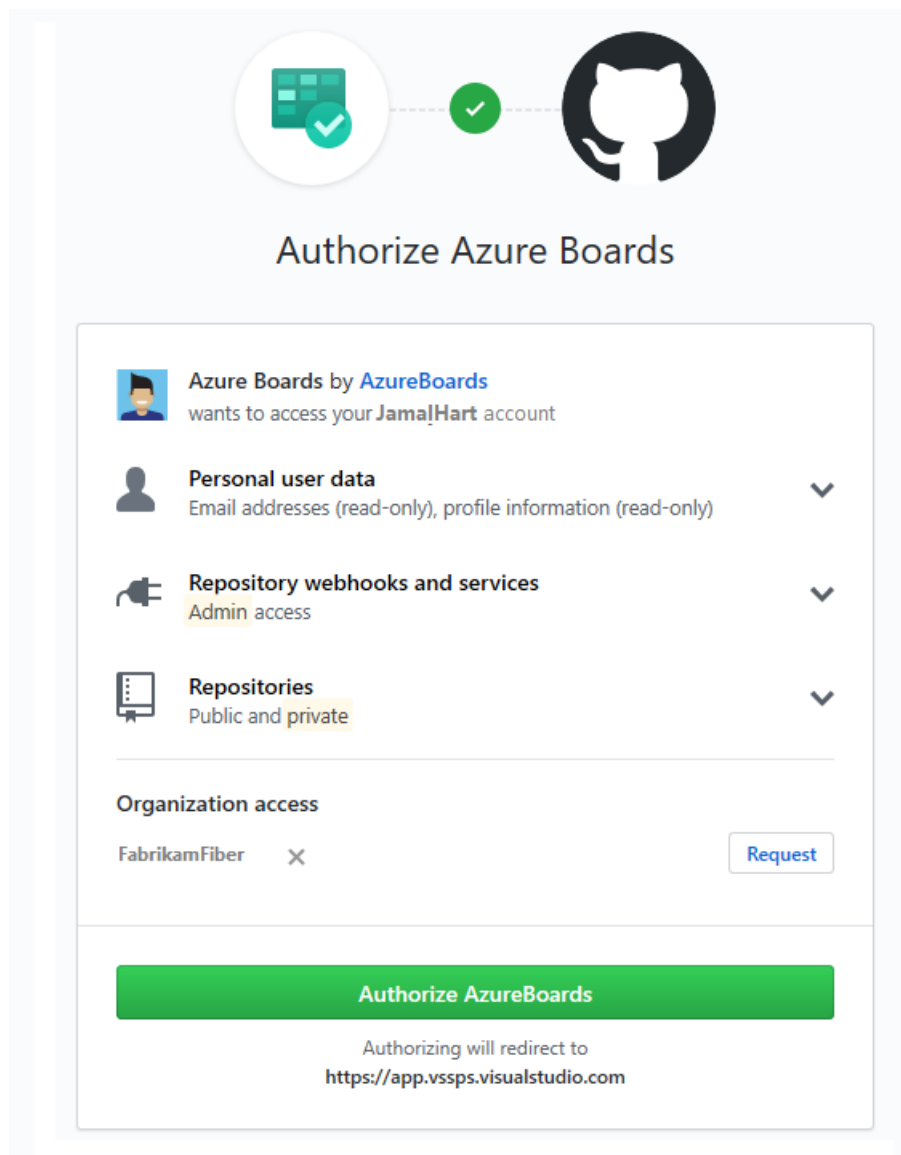
We just sent you a message via SMS with your authentication code. Enter the code in the form above to verify your identity.

[Re-send the code](#)

**Don't have your phone?**

[Enter a two-factor recovery code](#)

5. Review the GitHub authorization dialog that appears which indicates the information you'll allow Azure Boards to access from GitHub. Choose **Authorize AzureBoards** when ready.



6. In the Add GitHub repositories dialog, you'll see the list of repositories for which you are an administrator.

## Add GitHub repositories



Add the GitHub repositories you want to use with your Azure Boards.

[Learn more](#)

Filter by keywords All

JamalHart /fabrikam-apps

JamalHart /fabrikam-demo

JamalHart /fabrikam-open-source

JamalHart /fabrikam-suite




Can't find a repository? [Add manually](#)

Cancel

Save

Check the ones that you want to add and then choose **Save**. When done, you should see the new connection with the selected repository listed.

GitHub connections | + New connection

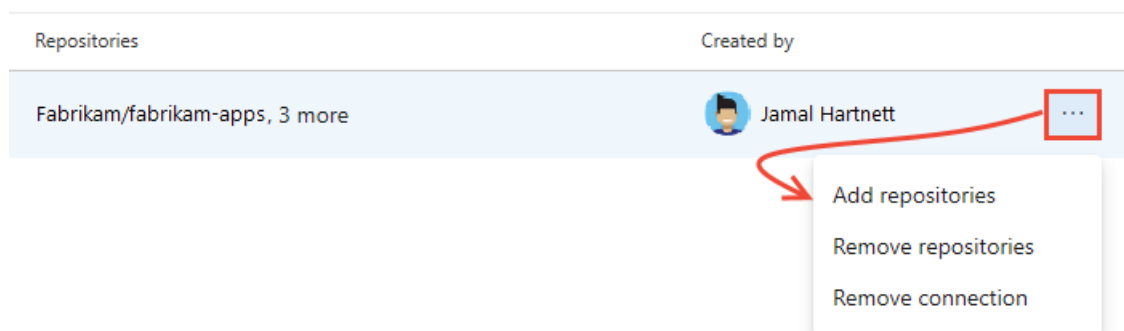
Connection	Auth type	Repos	Created by
 Fabrikam  GitHub	OAuth	JamalHart/fabrikam-apps	 Jamal Hartnett

#### TIP

We recommend that you only connect a GitHub repo to projects defined in a single Azure DevOps organization. Connecting the same GitHub repo to projects defined in two or more Azure DevOps organizations can lead to unexpected AB# mention linking. For details, see [Troubleshoot GitHub & Azure Boards integration](#).

## Add or remove repositories, or remove a connection

1. To add or remove repositories, open the **...** for the connection and choose **Add** repositories or **Remove** repositories from the menu.



2. To remove all repositories and the connection, choose the **Remove connection** option. Then, choose **Remove** to confirm.

### Confirmation



Are you sure you want to remove the 'Fabrikam' connection and all its repositories?

Cancel

Remove

## Use a Personal Access Token (PAT)

We recommend that you use OAuth to connect to your GitHub repository. However, if you need to use a PAT, you can by following these procedures.

#### TIP

When creating your GitHub PAT, make sure that you include these scopes:

```
repo, read:user, user:email, admin:repo_hook .
```

1. To choose a PAT when connecting a GitHub repository, choose [+ New Connection](#) and then choose the **Click here** link.

### Add GitHub Connection



Link another GitHub account to Azure Boards. [Learn more](#)

Connect your GitHub Account

Want to use a Personal Access Token? [Click here](#)

To create a GitHub PAT, go to [GitHub Developer Settings > Personal access tokens](#).

2. Enter the PAT and choose **Connect**.

### Add GitHub Connection



First you need to link your GitHub account to Azure Boards. [Learn more](#)

Personal Access Token

Ensure your token has the following scopes:  
repo, read:user, user:email, admin:repo\_hook

[View your personal access tokens in GitHub.](#)

Cancel

Connect

## Resolve connection issues

See [Troubleshoot GitHub repository connection](#).

## Try this next

[Link GitHub commits and pull requests to work items](#)

## Related articles

- [What is Azure Boards?](#)
- [Troubleshoot GitHub & Azure Boards integration](#)



# Web portal navigation in Azure DevOps

1/31/2019 • 7 minutes to read • [Edit Online](#)

## Azure DevOps Services | Azure DevOps Server 2019 | TFS 2018 | TFS 2017

The web portal for Azure DevOps is organized around a set of services, as well as administrative pages and several task-specific features such as the search box. The service labels differ depending on the navigation selected:

- **New navigation:** **Overview, Boards, Repos, Pipelines, Test Plans, and Artifacts**
- **Previous navigation:** **Dashboards, Code, Work, Build and Release, Test, Wiki, and Analytics views**

Each service provides you with one or more pages which support a number of features and functional tasks. Within a page, you may then have a choice of options to select a specific artifact or add an artifact.

The web portal for Azure DevOps Server is organized around a set of services—such as, **Overview, Boards, Repos, Pipelines, Test Plans, and Artifacts**—as well as administrative pages and several task-specific features such as the search box. Each service provides you with one or more pages which support a number of features and functional tasks. Within a page, you may then have a choice of options to select a specific artifact or add an artifact.

Each service provides you with one or more pages which support a number of features and functional tasks. Within a page, you may then have a choice of options to select a specific artifact or add an artifact.

The web portal for Team Foundation Server (TFS) is organized around a set of applications—such as, **Dashboards, Code, Work, Build and Release**—as well as administrative pages and several task-specific features such as the search box. Each service provides you with one or more pages which support a number of features and functional tasks. Within a page, you may then have a choice of options to select a specific artifact or add an artifact.

### NOTE

Your web portal uses either the **New navigation** or **Previous navigation** user interface. Choose the **New navigation** tab if the **New Navigation** feature is enabled. You'll see a vertical sidebar along with other navigational features when **New Navigation** has been enabled for the signed-in user or the organization. Choose **Previous navigation** when you see a top-level, blue-bar—indicating that **New navigation** isn't enabled.

### NOTE

Choose the **New navigation** tab for guidance. Azure DevOps Server 2019 supports the **New Navigation** user interface.

### NOTE

Choose the **Previous navigation** tab for guidance. TFS 2018 and earlier versions only support the previous navigation user interface.

Here's what you need to know to get up and running using the web portal.

- [New navigation](#)
- [Previous navigation](#)
- **Open a service, page, or settings:** use to switch to a different [service or functional area](#)
- **Add an artifact or team:** use to quickly add a work item, Git repo, build or release pipelines, or a new team

- **Open another project or repo:** use to switch to a different project or access work items and pull requests defined in different projects, or items you've favorited
- **Open team artifacts, use breadcrumbs, selectors and directories:** use to navigate within a service, to open other artifacts or return to a root function
- **Work with favorites:** favorite artifacts to support quick navigation
- **Search box:** use to find code, work items, or wiki content
- **Your profile menu:** use to set personal preferences, notifications, and enable preview features
- **Settings:** use to add teams, manage security, and configure other project and organization-level resources.

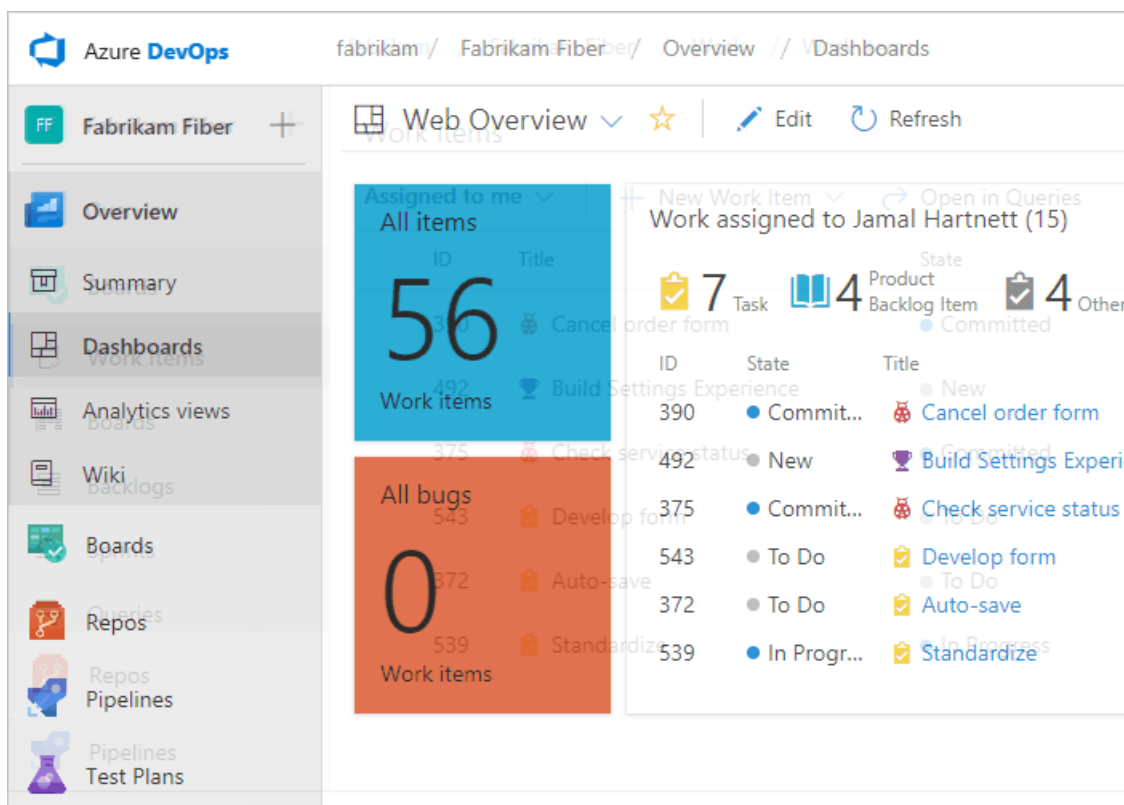
Choose the **Previous navigation** tab for guidance. **New navigation** isn't supported for TFS 2018 and earlier versions.

#### NOTE

Only those services that are enabled will appear in the user interface. For example, if **Boards** is disabled, then **Boards** or **Work** and all pages associated with that service won't appear. To enable or disable a service, see [Turn an Azure DevOps service on or off](#).

- [New navigation](#)
- [Previous navigation](#)

In **New navigation**, you select services—such as **Boards**, **Repos**, and **Pipelines**—from the sidebar and pages within those services.



Choose the **Previous navigation** tab for guidance. **New navigation** isn't supported for TFS 2018 and earlier versions.

Now that you have an understanding of how the user interface is structured, it's time to get started using it. As you can see, there are a lot of features and functionality.

If all you need is a code repository and bug tracking solution, then start with the [Get started with Git](#) and [Manage bugs](#).

To start planning and tracking work, see [About Agile tools](#).

## Connect to the web portal, user accounts and licensing

You connect to the web portal through a supported web browser—such as the latest versions of Edge, Chrome, Safari, or Firefox. Only users who have been [added to a project](#) can connect. This is typically done by the organization owner.


Five account users are free as are Visual Studio subscribers and stakeholders. After that, you need to [pay for more users](#). Find out more about licensing from [Azure DevOps pricing](#).

Limited access is available to an unlimited number of stakeholders for free. For details, see [Work as a Stakeholder](#).

You connect to the web portal through a supported web browser—such as the latest versions of Edge, Chrome, Safari, or Firefox. Only users who have been [added to a project](#) can connect. This is typically done by a member of the Project Administrators group.

Limited access is available to an unlimited number of stakeholders for free. For details, see [Work as a Stakeholder](#). Most regular contributors must have a TFS client access license (CAL). All Visual Studio subscriptions include a TFS CAL. Find out more about licensing from [TFS pricing](#).

## Refresh the web portal

If data doesn't appear as expected, the first thing to try is to refresh your web browser. Refreshing your client updates the local cache with changes that were made in another client or the server. To refresh the page or object you're currently viewing, refresh the page or choose the  **Refresh** icon if available.

To avoid potential errors, you should refresh your client application under the following circumstances:

- Process changes are made
- Work item type definitions are added, removed, renamed or updated
- Area or iteration paths are added, removed, renamed or updated
- Users are added to or removed from security groups or permissions are updated
- A team member adds a new shared query or changes the name of a shared query
- A build definition is added or deleted
- A team or project is added or deleted

## Differences between the web portal and Visual Studio

Although you can access source code, work items, and builds from both clients, some task-specific tools are only supported in the web browser or an IDE, but not in both.

WEB PORTAL	VISUAL STUDIO
<ul style="list-style-type: none"> <li>• <a href="#">Product backlog</a>, <a href="#">Portfolio backlogs</a>, <a href="#">Sprint backlogs</a>, <a href="#">Task boards</a>, <a href="#">Capacity planning</a></li> <li>• <a href="#">Kanban board</a></li> <li>• <a href="#">Dashboards</a>, <a href="#">Widgets</a>, and <a href="#">Charts</a></li> <li>• <a href="#">Team rooms</a></li> <li>• <a href="#">Request feedback</a></li> <li>• Web-based Test Management</li> <li>• Administration pages to administer accounts, team projects, and teams</li> </ul>	<ul style="list-style-type: none"> <li>• Task specific interfaces that integrate with Git and TFVC, such as: <ul style="list-style-type: none"> <li>◦ <b>Git:</b> <a href="#">Changes</a>   <a href="#">Branches</a>   <a href="#">Pull Requests</a>   <a href="#">Sync</a>   <a href="#">Work Items</a>   <a href="#">Builds</a></li> <li>◦ <b>TFVC:</b> <a href="#">My Work</a>   <a href="#">Pending Changes</a>   <a href="#">Source Control Explorer</a>   <a href="#">Work Items</a>   <a href="#">Builds</a></li> </ul> </li> <li>• Greater integration with work items and Office-integration clients. You can open a work item or query result in an office supported client.</li> </ul>

## Resources

- [Manage projects](#)
- [Project & Organizational Settings](#)

# GitHub & Azure Boards

1/31/2019 • 2 minutes to read • [Edit Online](#)

## Azure Boards

Use this guide to connect Azure Boards with one or more GitHub repositories. If you need to sign up for Azure Boards, see our [Get started guide for Azure Boards](#).

By connecting Azure Boards with GitHub repositories, you enable linking between GitHub commits and pull requests to work items. You can use GitHub for software development while using Azure Boards to plan and track your work. Azure Boards provides the scalability to grow as your organization and business needs grow.

### NOTE

Azure Boards and GitHub integration is in Public Preview and supported only for Azure DevOps Services at this time.

Integration steps include:

- [Connect Azure Boards to GitHub](#)
- [Link GitHub commits and pull requests to work items](#)

### Additional resources

- [Web portal navigation](#)
- [Link work items](#)
- [Work items](#)
- [Process customization](#)

# Work items

1/31/2019 • 2 minutes to read • [Edit Online](#)

**Azure Boards | Azure DevOps Server 2019 | TFS 2018 | TFS 2017 | TFS 2015 | TFS 2013**

Track the features and requirements you're developing, code defects or bugs, and other particulars using work items.

## 5-Minute Quickstarts

- [View and add work items](#)
- [Add work items](#)
- [Drive Git development](#)
- [Add work items](#)
- [Drive Git development](#)
- [Add work items](#)

## Step-by-Step Tutorials

- [Follow work](#)
- [Manage bugs](#)
- [Manage issues](#)
- [Move, change, or delete items](#)
- [Link work items](#)
- [Bulk modify \(web\)](#)
- [Manage bugs](#)
- [Manage issues](#)
- [Remove or delete items](#)
- [Link work items](#)
- [Bulk modify \(web\)](#)

## Concepts

- [Choose a process](#)
- [Agile process guidance](#)
- [CMMI process guidance](#)
- [Scrum process guidance](#)
- [Agile glossary](#)

## How-to Guides

- [Use @mentions to further discussion](#)
- [Use #ID to link to work items](#)
- [Add tags to work items](#)
- [Use work item templates](#)

- [Add tags to work items](#)
- [Use work item templates](#)

## Reference

- [Permissions and access for work tracking](#)
  - [Work item form controls](#)
  - [Keyboard shortcuts for work item forms & the Work Items page](#)
  - [Work item field index](#)
- 
- [Permissions and access for work tracking](#)
  - [Work item field index](#)

## Resources

- [Backlogs](#)
- [Kanban](#)
- [Scrum](#)
- [Queries](#)
- [Customization](#)

# Sprints (Scrum)

1/25/2019 • 2 minutes to read • [Edit Online](#)

**Azure Boards | Azure DevOps Server 2019 | TFS 2018 | TFS 2017 | TFS 2015 | TFS 2013**

With Scrum, you can schedule and plan sprints, update your taskboard, and monitor your sprint burndown. For an overview of the Scrum lifecycle, see [What is Scrum?](#).

## 5-Minute Quickstarts

Start tracking work by adding work items, creating your backlog, or scheduling sprints.

- [Schedule sprints](#)
- [Define iteration paths](#)

## Step-by-Step Tutorials

Whether you use scrum, Kanban, or a combination of Agile methods, you can get started tracking bugs, driving your Git development, and more using the Agile tools available to you.

1. [Assign backlog items to a sprint](#)
2. [Add tasks to backlog items](#)
3. [Set sprint capacity](#)
4. [Adjust work to fit sprint capacity](#)
5. [Share your sprint plan](#)
6. [Update the Taskboard](#)

## Concepts

- [Scrum best practices](#)
- [Sprints and Scrum key concepts](#)
- [Scrum and sprint planning tools](#)
- [About areas and iterations](#)
- [About permissions and access](#)
- [Share information in work items and social tools](#)

## How-to Guides

- [Filter backlogs & queries](#)
- [Copy list of work items](#)
- [Bulk add or modify \(Web\)](#)

## Reference

- [Permissions and access for work tracking](#)
- [Work item field index](#)
- [Backlog keyboard shortcuts](#)



# Resources

- [Backlogs](#)
- [Kanban](#)
- [Work item queries](#)
- [Work item customization](#)
- [What is Scrum?](#)
- [What is Agile development?](#)

# About process customization and inherited processes

1/31/2019 • 12 minutes to read • [Edit Online](#)

## Azure Boards | Azure DevOps Server 2019

To customize the work tracking system, you *customize* an inherited process through the administrative user interface for the organization. All projects that use an inherited process get the customizations made to that process. On the other hand, you *configure* your Agile tools—[Backlogs](#), [Sprints](#), [Kanban boards](#), and [Taskboard](#)—for each team.

### IMPORTANT



To customize an on-premises project or update XML definition files to support customization, see [On-premises XML process model](#). This article applies to Azure DevOps Services and Azure DevOps Server 2019 only.

There are a number of customizations you can make. The primary ones are adding custom work item types (WITs) or modifying an existing WIT to add custom fields, modify the layout, or change the workflow.

Below you'll find an index to those tasks you can perform to customize an inherited process. Some options of inherited elements are locked and can't be customized.

## System versus inherited processes

You'll see two types of processes:

-  System processes —[Scrum](#), [Agile](#), and [CMMI](#)—which are locked from being changed.
-  Inherited processes, which you can customize and that inherit definitions from the system process from which they were created. System processes are owned and updated periodically by Microsoft. Any updates made to a system process will automatically update your inherited process.

In addition, all processes are shared. That is, one or more projects can use a single process. Instead of customizing a single project, you customize a process. Changes made to the process automatically update all projects that use that process.

Once you've created an inherited process, you can customize it, create projects based on it, make a copy of it, and change existing projects to use it.





For example, as shown in the following image, you see a list of projects defined for the *fabrikam* organization. The second column shows the process used by each project. To change the customizations of the *Fabrikam Fiber* project, you need to modify the *MyAgile* process (which inherits from the *Agile* system process). Any changes you make to the *MyAgile* process will also update the *Test Agile* project. You can't customize the *Scrum Project*, on the other hand, until you change it to a process which inherits from Scrum.

OverviewSettingsSecurityProcessBuildAgent PoolsNotificationsExtensionsUsage

Account / fabrikamProjects

Description

New team project... | ↺

Project name	Process	Status
 Custom Scrum Project	Custom scrum	Online
 Fabrikam Fiber	MyAgile	Online
 Scrum Project	Scrum	Online
 Test Agile	MyAgile	Online

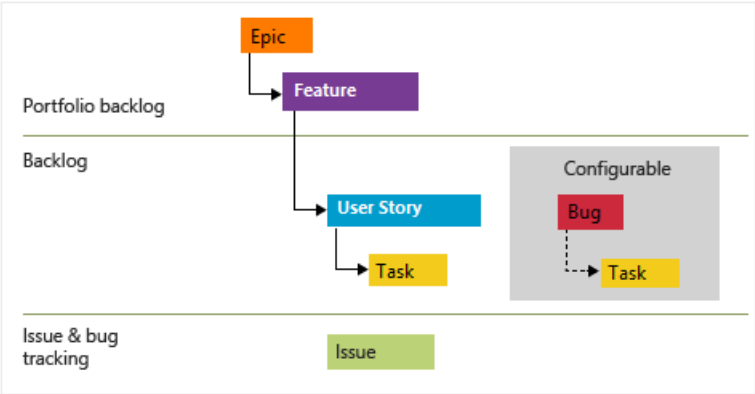
**Process name restrictions**

Process names must be unique and 128 Unicode characters or less. Also, names can't contain the following characters: `.,;':~\/*|?'"&%$!+=()[\]<>.`

To rename a process, open the ... context menu for the process and choose **Edit**.


## Inherited objects versus custom objects

Each inherited process you create inherits the WITs defined in the system process—Agile, Scrum, or CMMI. For example, the Agile process provides bug, task, user story, feature, epic, issue and test-related WITs.




You can add fields and modify the workflow and work item form for all inherited WITs that display on the **Work Item Types** page. If you don't want users to create a WIT, you can disable it. In addition, you can add custom WITs.

## Field customizations

Fields defined in the system process appear with an  inherited icon, indicating that you can make limited modifications to it in your inherited process.

Fields are defined for all projects and processes in the organization. That means that any custom field you defined for a WIT in one process can be added to any other WIT defined for another process.

FIELD TYPE	CUSTOMIZATION SUPPORT
 Inherited fields	<ul style="list-style-type: none"><li>Change the field label</li><li>Show/Hide field on form</li></ul>

#### Custom fields

- [Add a custom field](#)
- [Add picklist \(drop-down menu\)](#)
- [Add person-name/Identity](#)
- [Add a rich-text \(HTML\) field](#)
- [Add a checkbox \(Boolean\) field](#)
- [Add a custom control](#)
- [Add custom rules to a field](#)
- [Change the field label](#)
- [Set Required/Default options](#)
- [Move the field within the layout](#)
- [Remove field from form](#)
- [Delete field](#)

When adding custom fields, note the following limits:

- A maximum of 64 fields can be defined for each WIT
- A maximum of 512 fields can be defined per process

In addition, you can [add an existing field](#) to another WIT within the process. For example, you can add Due Date to the user story or bug WITs.

#### What you can't customize

- You can't change the field name or data type once you've defined it
- With regards to picklists, you currently can't perform these operations:
  - Change the picklist of an inherited field, such as the Activity or Discipline field
  - Change the picklist order, picklists display in alphabetic order
- Import or define a global list as supported by the Hosted XML and On-premises XML process models. To learn more, see [Define global lists](#).

#### NOTE

With the inherited process, you can't modify the picklists of pre-defined fields—such as [Activity](#), [Automation Status](#), [Discipline](#), [Priority](#), plus others.

#### Configurable picklists

The following picklists are configured for each project and not customizable through an inherited process.

- [Area paths](#)
- [Iteration paths](#)

Picklists associated with person-name fields, such as Assigned To and Changed By, are managed based on the users you add to a [project or team](#).

#### Can a field be renamed or its field type changed?

Renaming a field or changing the field type aren't supported actions.

However, you can change the label that appears for a field on the work item form from the Layout tab. When selecting the field in a query you need to select the field name and not the field label.

#### What is a field? How are field names used?

Each [work item type](#) is associated with 31 system fields and several more type-specific fields. You use work items to plan and track your project.

Each field supports tracking a piece of information about the work to perform. Values you assign to a field are

stored in the work tracking data store which you can create queries to determine status and trends.

For descriptions and usage of each field defined for the core system processes—[Scrum, Agile, and CMMI system processes](#)—see [Work item field index](#).

#### Field names

A work item field name uniquely identifies each work item field. Make sure your field names fall within these guidelines:

- Field names must be unique within the organization or project collection
- Field names must be 128 or fewer Unicode characters
- Field names can't contain any leading or trailing spaces, nor two or more consecutive spaces
- Field names must contain at least one alphabetic character
- Field names can't contain the following characters: `. , ; ' ` : ~ \ / \ * | ? " & % $ ! + = ( ) [ ] { } < > .`

Because all fields are defined for the organization, you can't add a custom field with the same field name that already exists in the organization or was added to a WIT in another inherited process.

#### NOTE

When you change a project to use an inherited process, you may find one or more Agile tools or work items appear in an invalid state. For example:

- If you make a field required, work items with that field undefined will show an error message. You'll need to resolve the errors to make additional changes and save the work item.
- If you add or remove/hide workflow states of a WIT that appears on the Kanban board, you'll need to update the Kanban board column configurations for all teams defined in the project.

## Custom rules and system rules

Each WIT—bug, task, user story, etc.—has several system rules already defined. Some are simple, like making the Title field required or setting a default for the Value Area field. In addition, a number of system rules define actions to take when a workflow state changes.

For example, several rules exist to copy the current user identity under the following conditions:

- When a work item is modified, copy the user identity to the Changed By field
- When the workflow state changes to Closed or Done, copy the user identity to the Closed By field.

#### IMPORTANT

Predefined system rules will take precedent over any custom rule that you define which would overwrite it.

Custom rules provide support for a number of business use cases, allowing you to go beyond setting a default value for a field or make it required. Rules allow you to clear the value of a field, copy a value into a field, and apply values based on dependencies between different fields' values.

With a custom rule, you can define a number of actions based on specific conditions. For example, you can apply a rule to support these types of scenarios:

- When a value is defined for Priority, then make Risk a required field
- When a change is made to the value of Release, then clear the value of "Milestone"
- When a change was made to the value of Remaining Work, then make Completed Work a required field
- When the value of Approved is True, then make Approved By a required field
- When a user story is created, make the following fields required: Priority, Risk, and Effort


**TIP**

You can't define a formula using a rule. However, you may find a solution that fits your needs via the [TFS Aggregator \(Web Service\) Marketplace extension](#). See also [Rollup of work and other fields](#).

For details on defining custom rules, see [Add a rule to a work item type](#).



## WIT customizations

Here are your customization options for inherited and custom WITs.

WIT TYPE	CUSTOMIZATION SUPPORT
 Inherited WITs	<ul style="list-style-type: none"><li>• <a href="#">Add custom rules to a WIT</a></li><li>• <a href="#">Add/remove custom fields</a></li><li>• <a href="#">Add/remove custom groups</a></li><li>• <a href="#">Add/remove custom pages</a></li><li>• <a href="#">Add/remove a custom control</a></li><li>• <a href="#">Enable/disable</a></li></ul>
Custom WITs	<ul style="list-style-type: none"><li>• <a href="#">Add custom WIT</a></li><li>• <a href="#">Change color or description</a></li><li>• <a href="#">Add/remove custom fields</a></li><li>• <a href="#">Add/remove custom groups</a></li><li>• <a href="#">Add/remove custom pages</a></li><li>• <a href="#">Add/remove a custom control</a></li><li>• <a href="#">Add custom rules to a wit</a></li><li>• <a href="#">Add, edit, or remove a workflow state</a></li><li>• <a href="#">Enable/disable</a></li><li>• <a href="#">Delete</a></li></ul>

### What you can't customize

- You can't add or remove an inherited WIT to or from a backlog
  - You can't change the position of an inherited field within the form layout (however, you can hide the field in one area of the form and add it elsewhere in the form)
  - You can't remove the inherited portfolio level from the product (but you can rename them)
  - You can't change the name of a custom WIT.
- ### Work item form customizations
- You can make the following customizations to a WIT form.

GROUP OR PAGE TYPE	CUSTOMIZATION SUPPORT
 Inherited groups	<ul style="list-style-type: none"><li>• <a href="#">Relabel</a></li><li>• <a href="#">Add/remove custom fields</a></li><li>• <a href="#">Show/hide fields</a></li></ul>
Custom groups	<ul style="list-style-type: none"><li>• <a href="#">Add, modify, re-sequence, delete</a></li><li>• <a href="#">Add/remove custom fields</a></li><li>• <a href="#">Add/Hide a group extension</a></li></ul>
 Inherited pages	<ul style="list-style-type: none"><li>• <a href="#">Relabel</a></li><li>• <a href="#">Add/remove custom fields</a></li><li>• <a href="#">Add/remove a custom group</a></li></ul>

Custom pages	<ul style="list-style-type: none"> <li>• <a href="#">Add, modify, re-sequence, delete</a></li> <li>• <a href="#">Add/delete custom fields</a></li> <li>• <a href="#">Add/hide a page extension</a></li> </ul>
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### Layout and resizing

The web form layout is organized into three columns as shown in the image below.



If you only add groups and fields to the first two columns, then the layout reflects a two column layout. Likewise, if you only add groups and fields to the first column, then the layout reflects a one column layout.

The web form resizes depending on the width available and the number of columns in the layout. At maximum width, in most web browsers, each column within a page will display within its own column. As the display width decreases, each column resizes proportionally as follows:

- For three columns: 50%, 25%, and 25%
- For two columns: 66% and 33%
- For one column: 100%.


When the display width won't accommodate all columns, columns appear stacked within the column to the left.

## Workflow customizations

You can customize the workflow of any WIT by hiding inherited states or adding custom states. By default, each WIT is defined with three or four workflow states. Inherited states differ based on the system process —[Agile](#), [Scrum](#), or [CMMI](#)—you chose from which to create your custom process.

#### NOTE

Before adding a workflow state, review [Workflow states and state categories](#) to learn how workflow states are used to support several Agile tools.

STATE TYPES	CUSTOMIZATION SUPPORT
 Inherited states	<ul style="list-style-type: none"> <li>• <a href="#">View workflow states</a></li> <li>• <a href="#">Hide a state</a></li> </ul>
Custom states	<ul style="list-style-type: none"> <li>• <a href="#">Add a state</a></li> <li>• <a href="#">Edit a state (change color or category)</a></li> <li>• <a href="#">Remove a state</a></li> </ul>

### The workflow states must conform to the following rules:

- At least one state must be defined for either the *Proposed* or *In Progress* state categories
- At a minimum, there must be at least two workflow states defined

### What you can't customize

- You can't modify an inherited state (you can't change its name, color, or category), but you can hide it
- You can't modify the state assigned to the *Completed* state category for any WIT, custom or inherited
- You can't change the name of a custom state
- You can't change the order of states (states are listed in the order you add them within the States page, and they're listed alphabetically within the drop down list of a work item form)
- You can't specify a Reason for a state, instead, default reasons are defined such as *Moved to state Triaged*, *Moved out of state Triaged*
- You can't restrict transitions, all transitions are defined from any state to another state.

## Backlog and board customizations

Backlogs and boards are essential Agile tools for creating and managing work for a team. The standard backlogs—product, iteration, and portfolio—inherited from the system process are fully customizable. In addition, you can add two custom portfolio backlogs.

BACKLOG TYPES	CUSTOMIZATION SUPPORT
Standard backlogs	<ul style="list-style-type: none"> <li>• <a href="#">Add a custom WIT</a></li> <li>• <a href="#">Change the default WIT</a></li> <li>• <a href="#">Rename the requirement backlog</a></li> <li>• <a href="#">Rename a portfolio backlog</a></li> </ul>
Custom portfolio backlogs	<ul style="list-style-type: none"> <li>• <a href="#">Add a portfolio backlog which displays custom WITs</a></li> <li>• <a href="#">Edit or rename a portfolio backlog</a></li> <li>• <a href="#">Delete the top-level custom portfolio backlog</a></li> </ul>

When you change the default WIT for a backlog level, it causes that WIT to appear by default in the quick add panel. For example, *Customer Ticket* appears by default in the following quick add panel for the product backlog.

### What you can't customize

- You can't add or remove an inherited WIT to or from a backlog, for example, you can't add the Issue WIT to the product backlog
- You can't remove an inherited portfolio level from the product (but you can rename them)
- You can't insert a backlog level within the existing set of defined backlogs
- You can't reorder the backlog levels
- You can't create a custom task level, although you can add custom WITs to the iteration backlog
- You can't add the *Bug* WIT to any backlog level. Instead, the system allows each team to decide how they want to manage bugs. To learn more, see [Show bugs on backlogs and boards](#).

### Fields added to WITs associated with a backlog level

When you add a WIT to a backlog level, the following fields are added to the WIT definition as hidden fields (that is, they don't appear on the work item form) to support select Agile tool features.



BACKLOG LEVEL	FIELDS ADDED
Portfolio backlog	<ul style="list-style-type: none"> <li>- Stack rank (Agile, CMMI)</li> <li>- Backlog Priority (Scrum)</li> </ul>
Requirement backlog	<ul style="list-style-type: none"> <li>- Stack Rank, Story Points (Agile)</li> <li>- Stack Rank, Size (CMMI)</li> <li>- Backlog Priority, Effort (Scrum)</li> </ul>
Iteration backlog	<ul style="list-style-type: none"> <li>- Activity, Remaining Work, Stack Rank (Agile)</li> <li>- Discipline, Remaining Work, Stack Rank (CMMI)</li> <li>- Activity, Remaining Work, Backlog Priority (Scrum)</li> </ul>

The Stack Rank and Backlog Priority fields capture the relative priority of work items as they are reordered on a backlog or board. For details on it's usage, see [Behind the scenes: the Backlog Priority or Stack Rank field](#).

The Story Points, Size, and Effort fields capture the relative work required to complete a WIT assigned to the Requirement backlog. This value is used to compute [velocity](#).

And, lastly, Remaining Work is used [Sprint burndown and capacity charts](#).

## Object limits

For a list of limits placed on the number of fields, WITs, backlog levels, and other objects you can customize, see [Work tracking object limits](#).