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Azure DevOps

Bug Reporting and Tracking with Azure DevOps

Hans-Petter Halvorsen



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- Introduction to Azure DevOps
- Bug Reporting
 - Work Items and Bugs
- Bug Tracking
 - Creating and using Queries

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Introduction to Azure DevOps



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Azure DevOps

- Azure DevOps is tool for Software Engineering
 - Planning, Collaboration, Source Code Control, Bug Tracking, Agile and Scrum, etc.
- Developed by Microsoft.
- <https://dev.azure.com>
- Free for 5 Developers + Stakeholders.
- You use it in your web browser, and it also has integration with Visual Studio for Source Code Control and Git.

Bug Reporting and Tracking

- Finding and Reporting and finding Bugs are important in all Software Development Projects.
- Azure DevOps has great features for Bug Reporting and Tracking.
- It is important to your Team creates a guidelines for Bug Reporting and how to follow up these Bugs
 - When someone report bugs it is important that the bugs are fixed and that some actually check that these Bugs has been fixed.

Create New Project

Create new project



Project name *

SoftwareHPH

Description

Visibility



Public

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



Private

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

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

^ Advanced

Version control ?

Git

Work item process ?

Scrum

Select a meaningful Project name

Make sure to select “Advanced”:

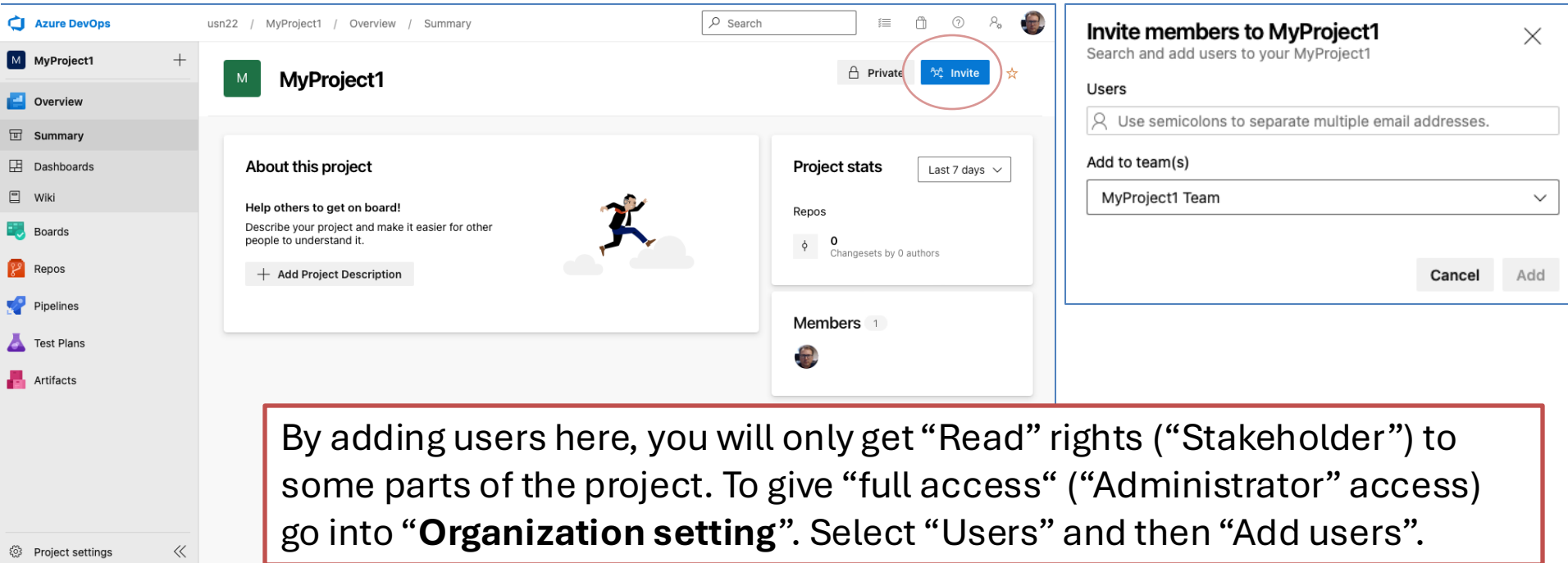
Version control = **Git**

Work item process: **Scrum**

Cancel

Create

Invite/Add Members



The screenshot displays the Azure DevOps interface for a project named 'MyProject1'. The left sidebar shows navigation options like Overview, Summary, Dashboards, Wiki, Boards, Repos, Pipelines, Test Plans, and Artifacts. The main content area includes 'About this project', 'Project stats' (showing 0 changesets by 0 authors), and 'Members' (showing 1 member). A red circle highlights the 'Invite' button in the top right corner. A modal window titled 'Invite members to MyProject1' is open on the right, featuring a search bar for users, a dropdown for adding to a team (currently set to 'MyProject1 Team'), and 'Cancel' and 'Add' buttons.

By adding users here, you will only get “Read” rights (“Stakeholder”) to some parts of the project. To give “full access“ (“Administrator” access) go into “**Organization setting**”. Select “Users” and then “Add users”.

Give Users “Full Access” in Organization Settings

To get full access (“Administrator” access) go into “**Organization setting**”. Select “Users” and then “Add users”. Then Access level = Basic and the proper Project.

The screenshot shows the Azure DevOps interface. On the left, the 'Organization Settings' menu is open, with 'Users' selected. The main area shows the 'Add new users' dialog. The 'Access level' dropdown is set to 'Basic', and the 'Add to projects' field contains 'ProjectHPH'. The 'Send email invites' checkbox is checked. The 'Add users' button is circled in blue. Annotations include a red box around the 'Organization Settings' menu, a red box around the 'Add new users' dialog, and a blue arrow pointing from the 'Add users' button to the 'Access level' dropdown.

Organization Settings

Users

All users Group rules

Filter users

Total 4

<input type="checkbox"/>	Name ↑	Last Accessed
<input type="checkbox"/>	Hans-Petter Halvorsen hans.p.halvorsen@usn.no	5.9.2024
<input type="checkbox"/>	Hakon Andre Iveltan hakon.aveltan@usn.no	5.9.2024
<input type="checkbox"/>	Johannes Skarabekk johannes.skarabekk@usn.no	4.9.2024
<input type="checkbox"/>	Kim Mangard Norborg kim.mangard@usn.no	5.9.2024

Add new users

Required fields are marked with an asterisk

Users or Service Principals *

Users or Service Principals

Summary **Add users**

Access level **Make sure to select “Basic”**

Basic

Add to projects

ProjectHPH **Select Project(s)**

Azure DevOps Groups

Project Contributors

Send email invites (to Users only) **Make sure to select “Send email ..” as well**

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Bug Reporting



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Bug Reporting

- Finding and Reporting and finding Bugs are important in all Software Projects.
- Azure DevOps has great features for Bug Reporting and Tracking.

Bug Work Item Type

Azure DevOps usn24 / MySoftware / Boards / Work items

MySoftware +

- Overview
- Boards
- Work items**
- Boards
- Backlogs
- Sprints
- Queries
- Delivery Plans
- Analytics views
- Repos
- Pipelines
- Test Plans

Work items

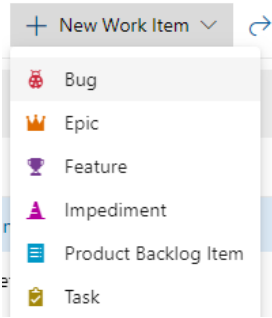
Recently updated | + New Work Item | Open in Queries | Column Options | Import Work Items | Recycle Bin

Filter by keyword

- Bug**
- Epic
- Feature
- Impediment
- Product Backlog Item
- Task
- Test Case

ID	Title	Assigned To	State
4	Medical System for all Patients	Unassigned	Approved
1	The Search Box	Unassigned	New
2	It s the system	Unassigned	New
3	You should get detailed information about a Patient when clicking on	Unassigned	New
41	Test1	Hans-Petter Halvorsen	Design
11	Patient System	Unassigned	New
10	Medical System	Unassigned	New
9	Login Form	Unassigned	In Progress
5	Create Database Class	Unassigned	In Progress

New Bug



Work Items | [← Back to Work Items](#)

NEW BUG *

Search Button not working in Patient window

No one selected | 0 Comments | [Add Tag](#) | [Save](#) | [Refresh](#) | [Close](#) | [More](#)

State	<input checked="" type="radio"/> New	Area	ProjectHPH
Reason	New defect reported	Iteration	ProjectHPH\Sprint 1 (Alpha)

[Details](#) | [Refresh](#) | [Copy](#) | [Share](#)

Repro Steps

Click to add Repro Steps.


System Info

Click to add System Info.

Acceptance Criteria

Click to add Acceptance Criteria.

Discussion

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

[switch to Markdown editor](#)

Details

Priority: 2
Severity: 3 - Medium
Effort:
Remaining Work:
Activity:
Build:
Found in Build:
Integrated in Build:

Deployment

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development

Add link

Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

Related Work

Add link [▼](#)

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

Enter as much information as possible for the Bug. Then it will be easier for the Developer to find and fix the Bug

Areas

Boards i This project is currently using the Scrum process. To customize your work item types, go to [Project Settings](#).

Iterations **Areas**

Create and manage the areas for this project. These areas will be used by teams to determine which work items are assigned to them. For more information, see [customizing areas and iterations](#).

To select areas for the team, go to [the default team's settings](#).

You can create and use Areas to group your Bugs into different parts of the system, different Applications, etc.

You configure Areas under “Project Configuration” in “Project Settings”

New New child | + -

Areas

- ProjectHPH
 - Database
 - Doctor System
 - Doctor Desktop Application
 - Documentation
 - User Manual
 - Patient System
 - Patient Web Interface

BUG 45

45 Search Button not working in Patient window

No one selected 0 Comments Add Tag

State ● New

Reason 📄 New defect reported

Area ProjectHPH

Iteration

Suggestions

- ProjectHPH
- ProjectHPH
 - Database
 - Doctor System
 - Documentation
 - Patient System
 - Patient Web Interface

Repro Steps

Click to add Repro Steps.

System Info

Click to add System Info.

Remaining Work Development

Then you can select a proper Area when creating a new Bug

Bug information

Work Items | ← Back to Work Items

NEW BUG

Search Button not working in Patient window

No one selected | 0 Comments | Add Tag | Save

State: New | Area: ProjectHPH | Reason: New defect reported | Iteration: ProjectHPH\Sprint 1 (Alpha)

Details | Details | Refresh | Share | Print

Repro Steps
Click to add Repro Steps.

System Info
Click to add System Info.

Acceptance Criteria
Click to add Acceptance Criteria.

Discussion
Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request. [switch to Markdown editor](#)

Details
Priority: 2
Severity: 3 - Medium
Effort:
Remaining Work:
Activity:

Deployment
To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development
Add link
Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

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

Enter as much information as possible for the Bug. Then it will be easier for the Developer to find and fix the Bug.

Make sure to register the following information for each Bug:

- **Bug Title**
- **Area** – which part of the system or in which application the bug is found
- Iteration, i.e., in which Iteration is the Bug found
- Assign to **Responsible Person**
- **Priority** and **Severity**
- A more **detailed description and information** regarding the Bug to make it easier for the Developer to find and fix the Bug
 - Reproduction Steps
 - System Information
 - Add Images and Screen shots

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Bug Tracking



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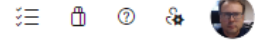
Bug Tracking

- When you have reported Bugs in the system it is important that these bugs are followed up to make sure that they will be fixed.
- Azure DevOps has great features for Bug Reporting and Tracking.
- In Azure DevOps we use **Queries** for Tracking and Monitoring Bugs

Queries

Azure DevOps usn24 / ProjectHPH / Boards / Queries

Search



- ProjectHPH +
- Overview
- Boards
- Work items
- Boards
- Backlogs
- Sprints
- Queries
- Delivery Plans
- Analytics views
- Repos

Queries

Favorites All

+ New query

Import work items

Filter by keywords

Title	Folder	Last modified by
My favorites		

New Query

Azure DevOps usn24 / ProjectHPH / Boards / Queries

Search

ProjectHPH

Queries > My Queries

Run query

New Save Column options

Results Editor Charts 1 of 2

Query type: Flat list of work items

Query across projects

Filters for top level work items

And/Or	Field *	Operator	Value
+ X	Work Item Type	=	Bug
+ Add new clause			

ID	Work Item T...	Title	Assigned To	State	Tags
45	Bug	Search Button not working in Patient window	:	New	
46	Bug	Save button not working when try to save patient Information		New	

Project settings

Search Queries

Search Results


Assign To = @Me


Queries > My Queries ▶ Run query + New Save


Results Editor Charts

Query type: Flat list of work items

Filters for top level work items

And/Or	Field *	Operator	Value
<input type="checkbox"/>	Work Item Type	=	Bug
<input type="checkbox"/> And	Assigned To	=	 Assign people
+ Add new clause			

 @Me

 **Hans-Petter Halvorsen**
hansha@usn.no

Save Query

New query

Name *

New folder *

- My Queries
- Shared Queries

You can choose between
“My Query”
or **“Shared Query”**

@Today

- ProjectHPH +
- Overview
- Boards
- Work items
- Boards
- Backlogs
- Sprints
- Queries
- Delivery Plans
- Analytics views
- Repos
- Pipelines
- Test Plans
- Artifacts

Queries > My Queries > New Bugs

Run query

+ New

Save

Column options

Results Editor Charts

1 of 2

Query type: Flat list of work items

Query across projects

Filters for top level work items

And/Or	Field	Operator	Value
<input type="checkbox"/>	Work Item Type	=	Bug
<input type="checkbox"/> And	Created Date	=	@Today
+ Add new clause			

ID	Work Item T...	Title	Assigned To	State
45	Bug	Search Button not working in Patient window	Hans-Petter Halvorsen	New
46	Bug	Save button not working when try to save patient information		New

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