

PROJECT BASED LEARNING: AZURE DEVOPS MANUAL PROCESS

Project Overview:

This document will go over the manual process of creating an Azure DevOps environment that is meant to track user stories and tasks given to a team of testers/developers.

Standards:

- User shall be able to create Azure DevOps Projects
- User shall be able to configure the settings necessary to run the Azure DevOps environment.
- User shall be able to manage teammate permissions and activities.
- User shall be able to develop an Azure DevOps Dashboard

Requirements/Task(s):

In Azure DevOps, to create a project, a user **MUST** have the "Basic" access level or higher. Additionally, the user needs to have specific permissions granted to their role or user account:

1. Project Collection Administrators: Members of this group have the necessary permissions by default to create new projects.
2. Organization Owners: These users have full administrative rights within the Azure DevOps organization, including the ability to create new projects.

To summarize, the essential requirements for creating a project in Azure DevOps are:

- Access Level: Basic + Test Plans or higher.
- Permissions: Membership in the Project Collection Administrators group or being an Organization Owner.

Download Azure DevOps Office Integration 2019 – A free solution for non-developers to interact with Azure DevOps using Microsoft Excel.

Note: The current known users allowed to create an Azure DevOps Project is David Goedecke (jdgoedecke@bbins.com)

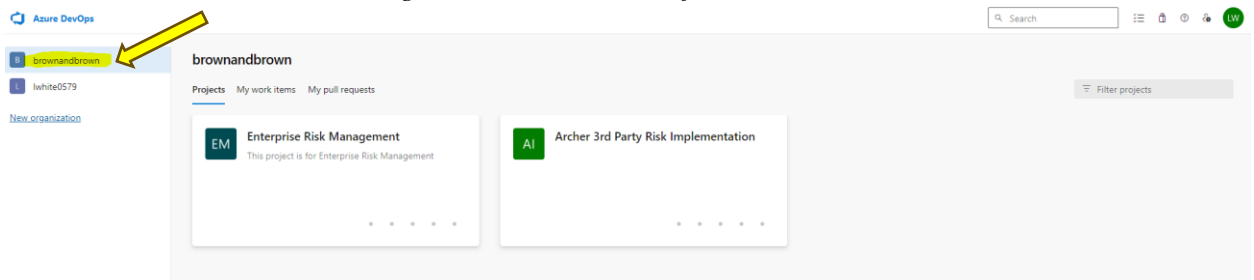
CREATE A PROJECT

These steps outline the process to create a brand-new project in Azure DevOps using the IT PMO Workflow template.

Creating a project in Azure DevOps involves a series of straightforward steps. Here's a simplified guide to help you get started:

- **Step 1:** Sign in to Azure DevOps
 - a) Open Azure DevOps: Go to Azure DevOps (<https://dev.azure.com/>).
 - b) Sign In: Use your Microsoft account to sign in. If you don't have an account, you'll need to create one.
- **Step 2:** Navigate to Your Organization
 - a) Select Your Organization: If you have access to multiple organizations, select the one where you want to create the project from the list on the left sidebar. If you don't have an organization yet, you'll need to create one by following the prompts.

Figure 3: Create New Project



- **Step 3:** Visit Organization Settings
 - a) Visit the Organization Settings and visit Process located under Boards(*Only available for users that have access*)

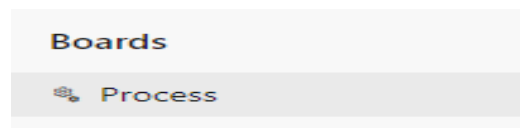


Figure 2: Boards→Process

- **Step 4:** Create new project (***Important***):
 - a) Under the Agile(default) option, select the 3 dots next to IT PMO Testing Workflow.
 - b) Select “+ New team project.”

The work Item Process that will be selected is the [IT PMO Testing Workflow](#). This template was created as an inherited process from the Agile (default) process. Processes define the building blocks of the work item tracking system and supports the Inheritance process model for Azure Boards (*figure 1*). This means across all projects under this process, the work items such as user stories will all be formatted the same.

- Step 5: Enter Project Details
 - a) Enter the Project name and Description.
 - b) Enter the Work Item Process (Note: We will not be changing the Version Control)
 - i) WORK ITEM PROCESS: IT PMO TESTING WORKFLOW

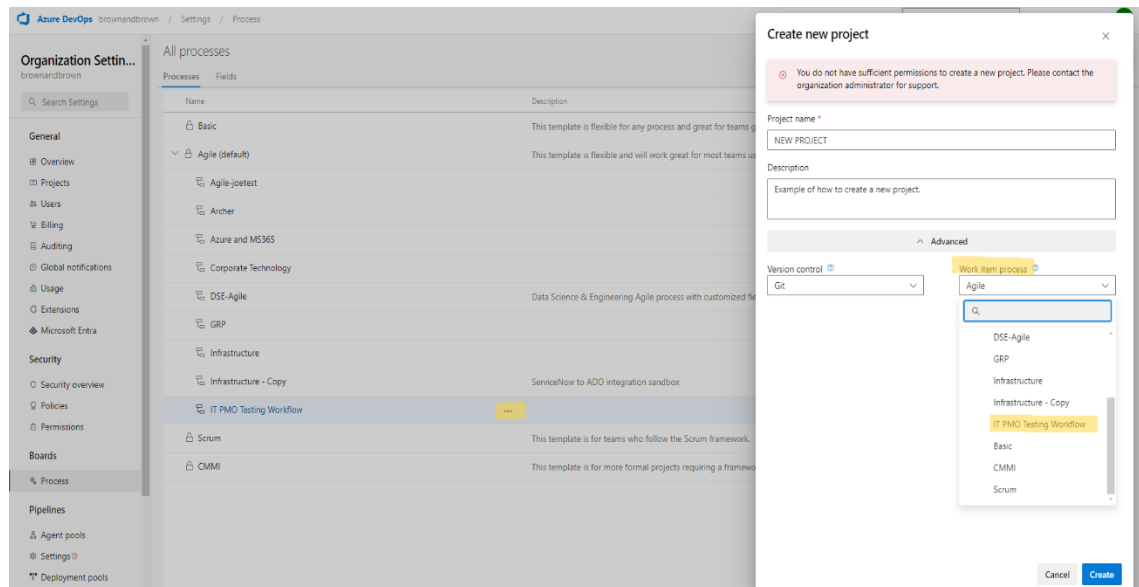


Figure 3: Create New Project

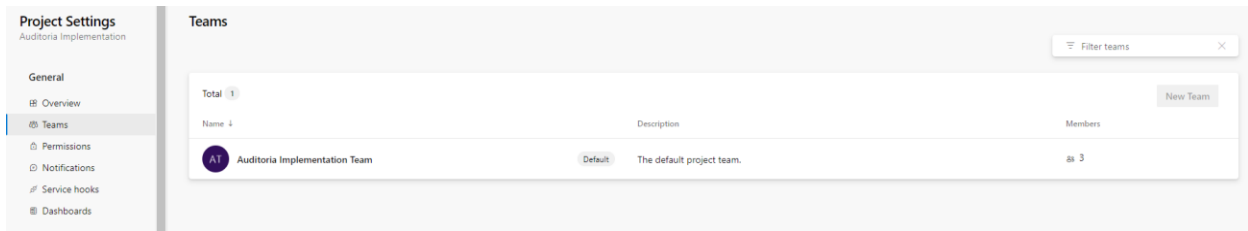
CONFIGURE THE PROJECT

These steps briefly outline how to manage teams, create iterations, modify dashboards, and update work items.

- **MAIN SETTINGS:** Go into your project and go into the “Project Settings”

The Project settings is the first thing you will want to configure. Here you can manage who is allowed into the Azure DevOps project, manage workflow, notifications and more. For now, we will be focusing on the “Teams Area”.

Figure 4: Project Settings Teams



Once you click on the default project team, you will see all the members. The “Admin” can alter any aspect of the Azure DevOps project. When teammates are added, they are given basic “collaborator” privileges which allows them to alter work items and the dashboard but CANNOT alter project settings or share queries unless promoted to Admin by any other Admin. If a manager or director created the project for you, make sure that they add you as an Admin to the actual project. Read more about team configuration in the Microsoft documentation.

- **Project Configuration**

Create and manage the iterations for this project. These iterations will be used by teams for iteration planning (sprint planning). Iterations help to group work items. For example, Work items for Phase 1 of a project that is from January to February will not show up in work items for Phase 2 that lasts from February to March.

- **Dashboard**

The dashboard feature in Azure DevOps provides a customizable view of project data and metrics in a single pane of glass. Here’s a quick rundown:

1. Customization: Users can create multiple dashboards tailored to different teams or purposes within a project.
2. Widgets: Dashboards are populated with widgets that display various types of data such as build and release status, work item queries, code statistics, and more.
3. Flexibility: Widgets can be rearranged, resized, and configured to show specific information relevant to team members or stakeholders.
4. Visibility: Dashboards offer visibility into project health, progress, and key metrics, fostering transparency and enabling informed decision-making.
5. Integration: They integrate seamlessly with other Azure DevOps services like Boards, Repos, Pipelines, and Test Plans, consolidating information from different parts of the development lifecycle.

By: Lenell E. White

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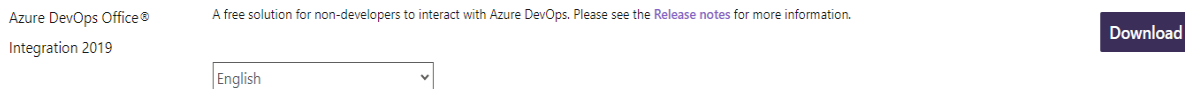
Overall, Azure DevOps dashboards enhance collaboration, productivity, and project management by providing real-time insights and metrics at a glance.

WORK ITEMS

These steps briefly outline how to ADD, UPDATE, and DELETE work items using the Microsoft Excel extension.

- **Step 1:** Download Azure DevOps Office Integration 2019 – A free solution for non-developers to interact with Azure DevOps using Microsoft Excel.

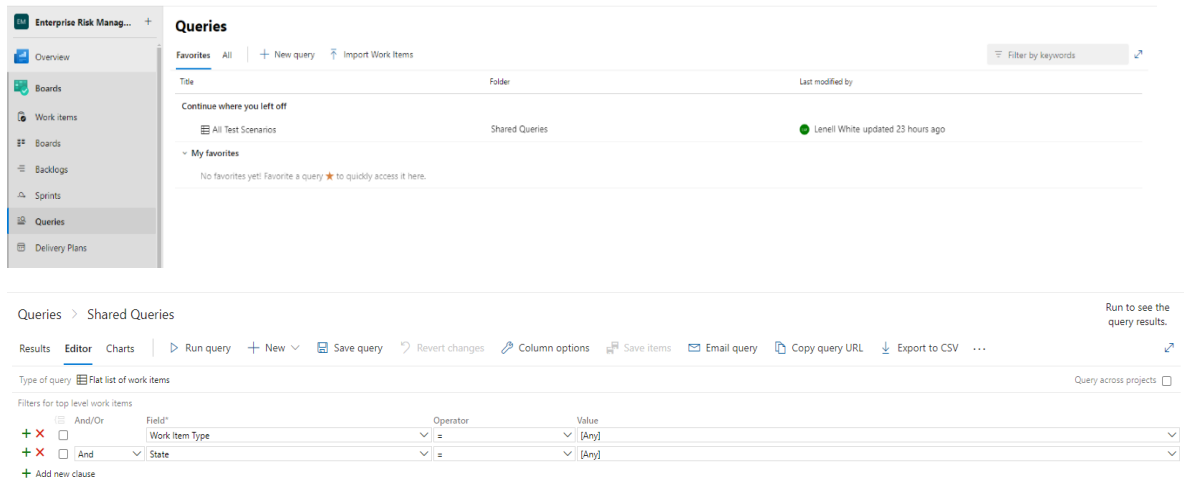
Figure 5: Azure Devops Office Download



<https://visualstudio.microsoft.com/downloads/#other-family>

- **Step 2:** Create a query that pulls every work item (if it is a new project, create a demo user story in Azure DevOps)

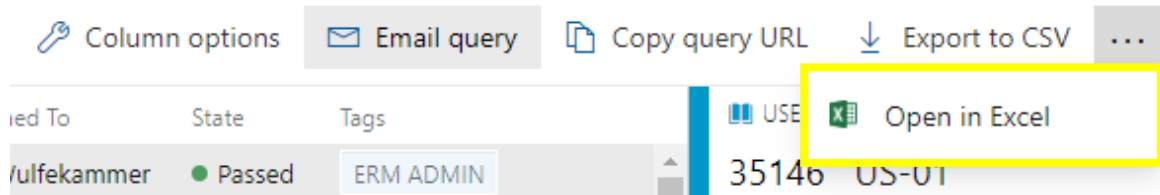
Figure 6: Azure Devops Queries



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- **Step 3:** Click on Open in Excel from the 3 dots drop-down menu inside of the query



- **Step 4:** Navigate to the “Team” tab at the top of the Excel sheet
- **Step 5:** Click “Choose Columns” in the ribbon and add the necessary columns needed (EX: Description and Acceptance Criteria)



- **Step 6:** Insert the necessary data.

Project: Demo Server: dev.azure.com/lwhite0579 Query: Work Items List type: Flat												
ID	Area Path	Iteration Path	Work Item Type	Title	Assigned To	State	Description	Acceptance Criteria	Story Points	Priority	Risk	Due Date
3			User Story	User Story 4	Lenell White	Executed	This is my description	the criteria		3.3 - Medium		
4			User Story	New User Story	Lenell White	Unexecuted	Don't Use an ID	the criteria		2.2 - Medium		

Note: to add a new work item type, add it in a new row and then leave the “ID” cell blank

- **Step 7:** Click Publish to upload any changes to Azure DevOps.

When finished I recommend closing without saving the sheet, any changes already published will be saved and can be re-opened through Azure DevOps Queries

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References

Process Templates Overview: <https://learn.microsoft.com/en-us/azure/devops/reference/process-templates/?view=azure-devops>

Azure DevOps Dashboards, charts, and quick reference: <https://learn.microsoft.com/en-us/azure/devops/report/dashboards/quick-ref?view=azure-devops>

Azure DevOps Office Integration: <https://visualstudio.microsoft.com/downloads/#other-family>