



Azure DevOps Server (ADO Server) setup

Tags: [Flow](#)

This is a step-by-step guide to connect your Azure DevOps Server (ADO Server) account to Flow.

Data about ADO Server work items appear in Work log, but not in other ticket-based reports.

Note: Azure DevOps Server was previously known as Team Foundation Server (TFS).

For a successful connection:

- [Allowlist Flow's static IP addresses](#) on port 443 over HTTPS.
- Have an SSL certificate that uses a public certificate authority.
- Have a public DNS record pointing to the IP address exposed for Flow analysis.

If PRs have not been updated, deleted, abandoned, or created within the six months prior to the initial integration processing date, the PR will not be ingested into Flow and will not appear in reports.

Important: Use a service account to create this integration. Learn more about [creating a service account](#).

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Permission requirements

To use all integration services such as repos, pull requests, tickets, and webhooks, ensure the following:

- Review the personal access token scopes outlined below.
- The service account is a Project Collection Administrator at the organizational level.

To enable [webhooks](#), the service account needs to be a Project Collection Administrator and have at least one repository imported from a project.

If you don't need webhooks, allow the View instance-level information permission to establish a connection and import repos. Add your service account to each project you want to import into Flow.

Permissions	Member of
Administer build resource permissions	Deny
Administer shelved changes	Deny
Administer workspaces	Deny
Alter trace settings	Deny
Create a workspace	Deny
Create new projects	Deny
Delete field from account	Deny
Delete team project	Deny
Delete team project collection	Deny
Edit instance-level information	Deny
Make requests on behalf of others	Deny
Manage build resources	Deny
Manage process template	Deny
Manage test controllers	Deny
Trigger events	Deny
Use build resources	Deny
View build resources	Deny
View instance-level information	Allow
View system synchronization information	Deny

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Azure DevOps Server Version requirements

To integrate with Flow, your Azure DevOps Server or TFS version must be 2018 or higher.

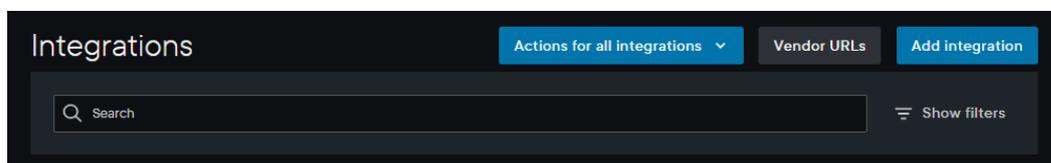
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Azure DevOps Server configuration

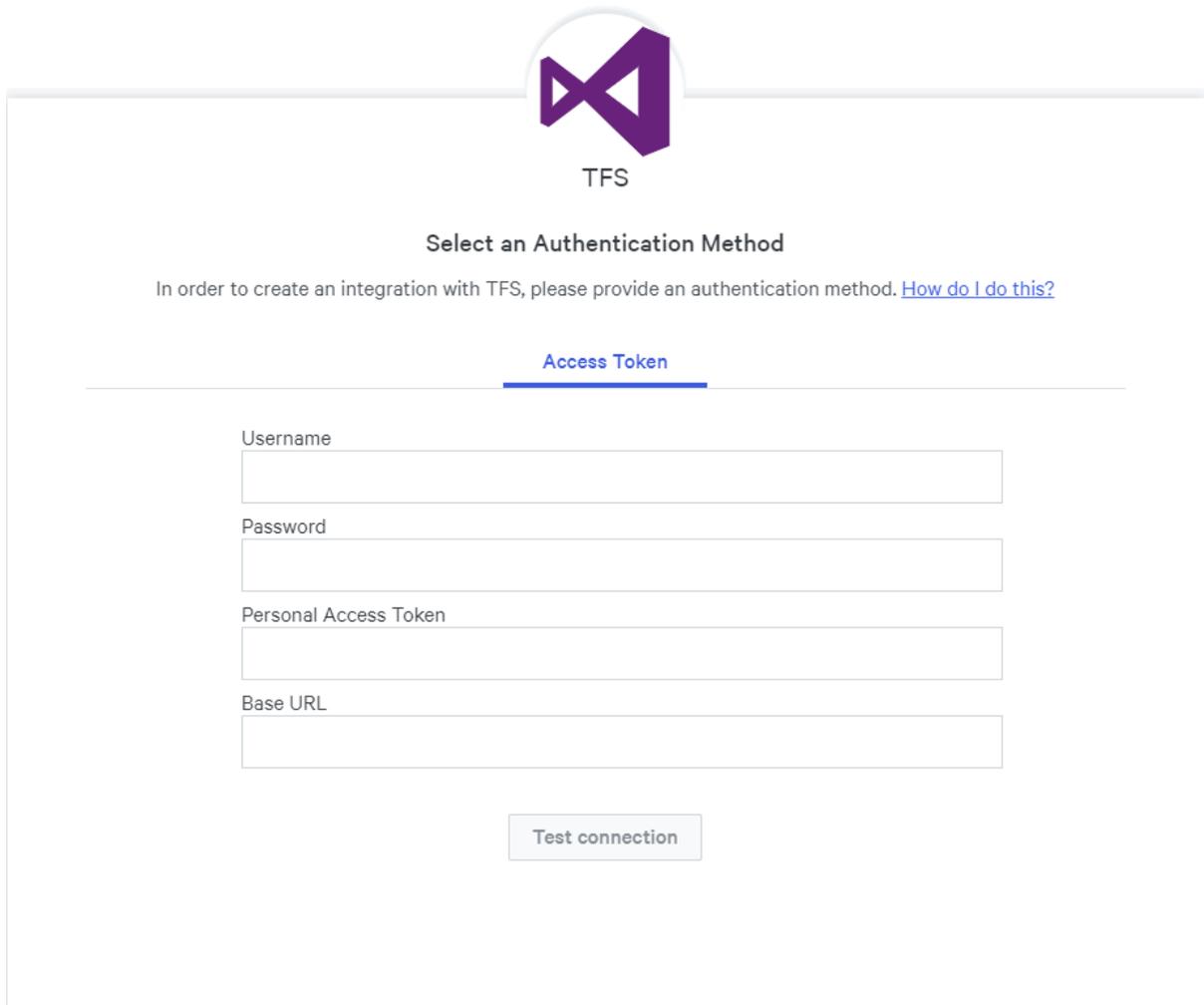
To connect your Azure DevOps Server account, create a new integration.

To create an integration:

1. Click **Settings** in the top navigation.
2. In the left navigation under **Integrations**, click **Integrations**.
3. Click the **Add Integration** button in the top right corner of the Integrations page.



4. Select **TFS** from the Integration Provider list. Do not select Azure DevOps.
5. Input your email, password, personal access token, and base URL of the service account. The base URL looks like: `https://{your_ADO Server_domain}/{yourorganization}`




TFS

Select an Authentication Method

In order to create an integration with TFS, please provide an authentication method. [How do I do this?](#)

Access Token

Username

Password

Personal Access Token

Base URL

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Creating a personal access token

Create a [personal access token in Azure DevOps Server \(external site, opens in new tab\)](#) .

1. Fill in the following information for your new personal access token:
 - Description
 - Expiration date
 - Select the following minimum scopes to connect your account:
 - Code (read)
 - Code (search)
 - Identity (read)
 - Project and team (read)

- Service Endpoints (read and query)
- User profile (read)
- Work items search (read)
- Work items (read)

2. Click **Create**.

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Finishing up

Now that you've created a personal access token, you can complete your integration setup in Flow.

1. Copy your access token and paste it into Flow's **Personal Access Token** field.
2. Click **Test connection**.

TFS

Select an Authentication Method

In order to create an integration with TFS, please provide an authentication method. [How do I do this?](#)

Access Token

Username
roger.johnson@mycompany.com

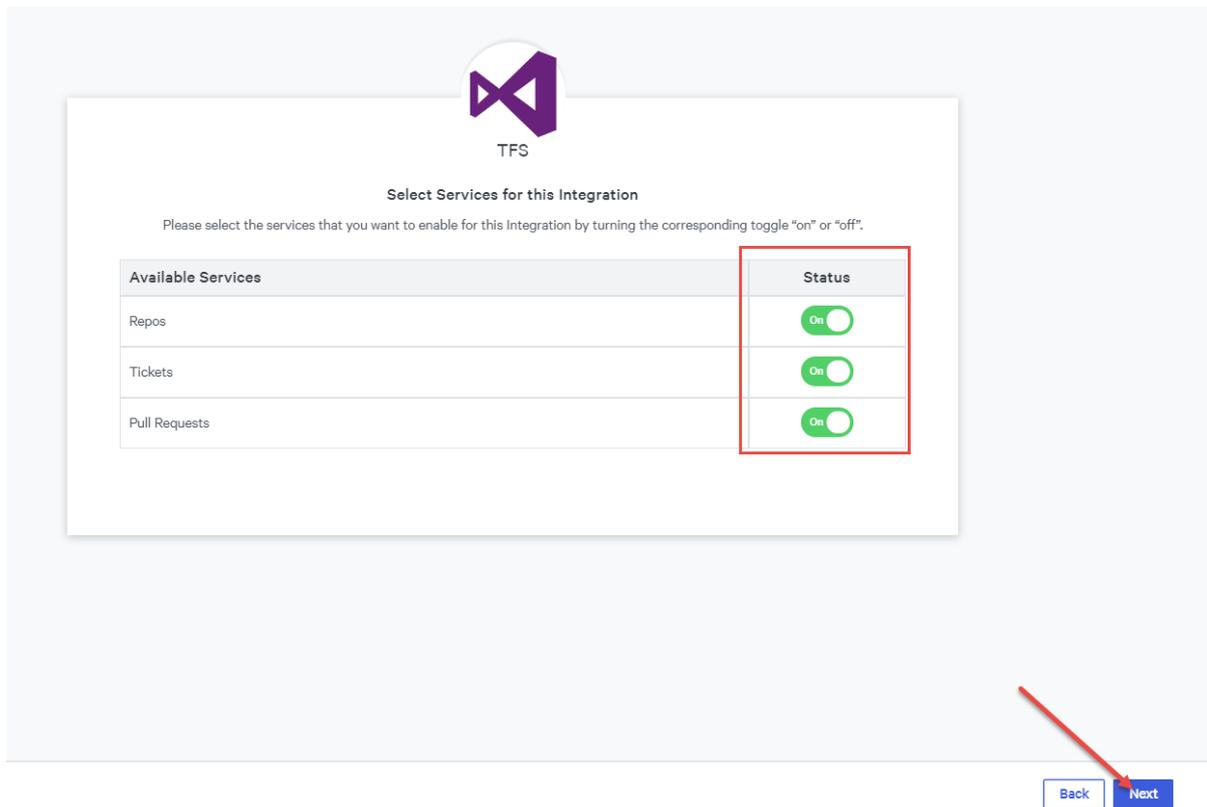
Password
.....

Personal Access Token
ofcyp43fukhjpezzhs5cv5l2j5eiux2atmdxlhs4p3cizp5fzwxq

Base URL
https://test-tfs-01.gitprime-ops.com/DefaultCollection

Test connection

3. If the connection was successful, you'll see a success message. If the connection was not successful, verify that your credentials and access token are correct, then try again.
4. Once you've successfully connected to your Azure DevOps Server account, click **Next**.
5. Select the services you want turned on for this Integration by toggling them **on** or **off**. If you want to import pull request and ticket data in addition to repo data, leave all services on. You can turn services **on** and **off** at any time. Click **Next**.



6. Enter the name you want to give your Azure DevOps Server integration. Click **Create**.

You have successfully created a new Azure DevOps Server integration.

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Troubleshooting

If you can't get your integration set up, try these troubleshooting options:

Could not connect to URL

Error!

Could not connect. Please double check your url and/or authentication credentials

If you receive a **Could not connect** error message when you test your integration:

- Check that your base URL is correct. It should be in the following format:
`https://{your_ADO_Server_domain}/{yourorganization}`
- If you're behind a firewall, review the initial setup of the connection—allowlist IPs, have a public DNS, have a certificate signed by a public CA.

Authorization denied

If you receive an **Authorization denied** error, check your credentials and personal access scopes, then try again.

 Error!

Authorization denied. Please double check your url and/or authentication credentials

Connection tests successfully, but I can't see all my projects and repositories

If you don't see all the projects or repos you expect, double check your permissions at the organization and project level. If you aren't a Project Collection Administrator you need to be added to each project you want to add to your Flow account.

If you need help, please contact [Pluralsight Support](#).