

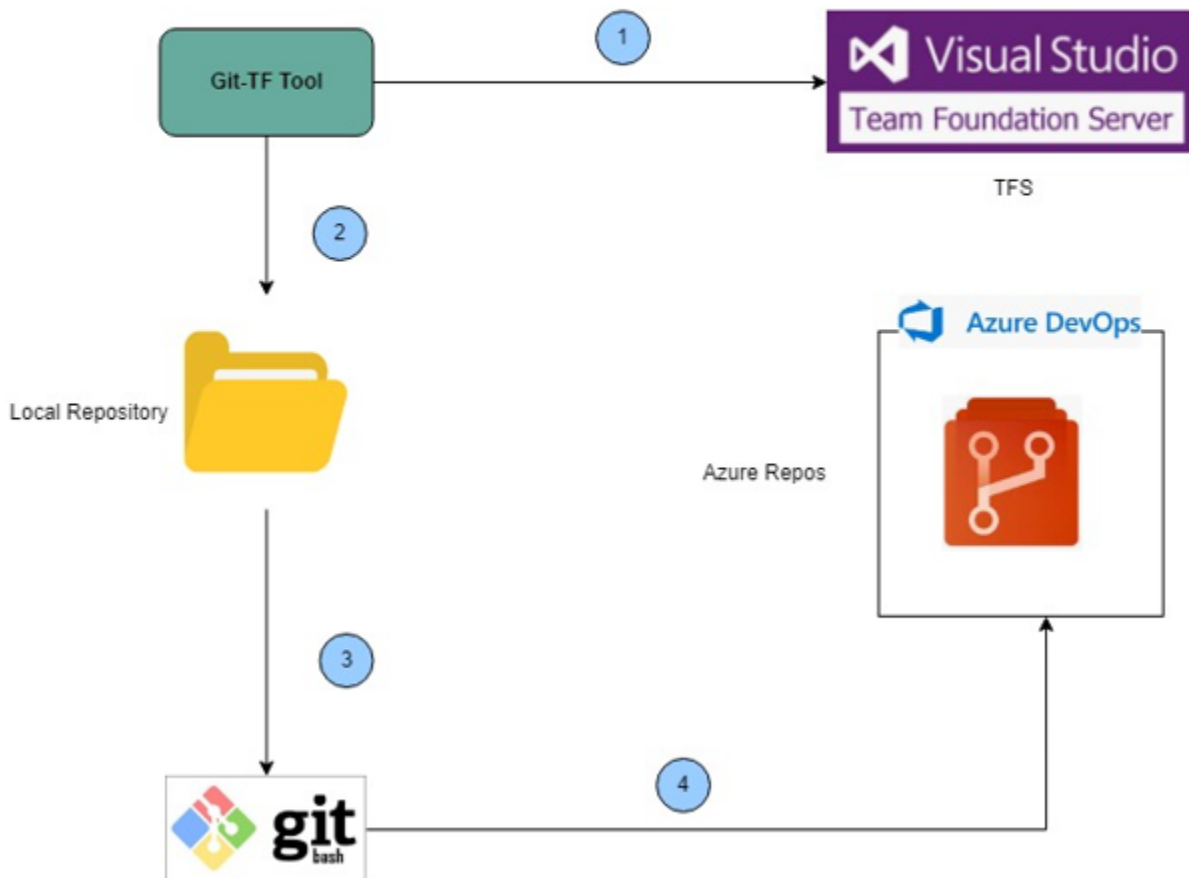
Steps to migrate source code from TFS to Azure Repo for Retail platform

Prerequisite:

1. Install Chocolatey to download and install Git-TFS
2. Install Visual Studio Community Version before installing GIT-TFS
3. Install Git-TFS tool to migrate code from TFS to local
4. Install Git Bash tool to push the code from local to Azure

TFS to Azure DevOps Design:

TFS to Azure DevOps migration



Chocolatey Installation Steps:

1. Open Windows Power Shell as a Administrator
2. Run below command to install Chocolatey

```
Set-ExecutionPolicy Bypass -Scope Process -Force; [System.Net.ServicePointManager]::SecurityProtocol = [System.Net.ServicePointManager]::SecurityProtocol -bor 3072; iex ((New-Object System.Net.WebClient).DownloadString("https://community.chocolatey.org/install.ps1"))
```

Visual Studio 2019 Installation Steps:

1. Go to below link and download the visual studio community version, before installing Git-TFS

[https://my.visualstudio.com/Downloads?q=Visual Studio 2019](https://my.visualstudio.com/Downloads?q=Visual+Studio+2019)

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☐ Visual Studio 2019 (version 16.9)
☐ Visual Studio 2019 for Mac

No key required [Info](#) Release date: 12/Jul/2022 x64 English exe [Download](#)

Visual Studio Professional 2019 (version 16.11)
Get Key [Info](#) Release date: 12/Jul/2022 x64 Multiple Lang... exe [Download](#)

Visual Studio Community 2019 (version 16.11)
No key required [Info](#) Release date: 12/Jul/2022 x64 Multiple Lang... exe [Download](#)

Visual Studio Enterprise 2019 (version 16.11)
Get Key [Info](#) Release date: 12/Jul/2022 x64 Multiple Lang... exe [Download](#)

2. Click on the .exe file to install Visual Studio
3. Please wait for couple of minutes to complete the installation .
4. Go to My Computer Advanced System Settings Environment Variables and below values in System Variables.
GIT_TFS_CLIENT=2019

User variables for sgantinapalli

Variable	Value
ChocolateyLastPathUpdate	133033187232768137
OneDrive	C:\Users\sgantinapalli\OneDrive - TAL Limited
OneDriveCommercial	C:\Users\sgantinapalli\OneDrive - TAL Limited
Path	C:\Users\sgantinapalli\AppData\Local\Microsoft\WindowsApps;C:\...
TEMP	C:\Users\sgantinapalli\AppData\Local\Temp
TMP	C:\Users\sgantinapalli\AppData\Local\Temp

New... Edit... Delete

System variables

Variable	Value
ChocolateyInstall	C:\ProgramData\chocolatey
ComSpec	C:\WINDOWS\system32\cmd.exe
DriverData	C:\Windows\System32\Drivers\DriverData
GIT_TFS_CLIENT	2019
NUMBER_OF_PROCESSORS	4
OS	Windows_NT
Path	C:\Program Files (x86)\Common Files\Oracle\Java\javapath;C:\WIN...

New... Edit... Delete

OK Cancel

Git-TFS Installation Steps :

1. Open Windows Power Shell as a Administrator
2. Run below commands to install Git and Git-TFS

```
choco install git
choco install git-tfs
```

3. After installation completed, run below commands to verify the Git-TFS installation successfully completed.

```
git-tfs --version
```

Administrator: Windows PowerShell

```
Find more help in our online help : https://github.com/git-tfs/git-tfs
PS C:\WINDOWS\system32> git-tfs --version
Found matching Visual Studio version at C:\Program Files (x86)\Microsoft Visual Studio\2019\Community
git-tfs version 0.32.0.0 (TFS client library 16.0.0.0 (MS)) (64-bit)

Note: If you want to force git-tfs to use another version of the tfs client library,
set the environment variable `GIT_TFS_CLIENT` with the wished version (ie: '2015' for Visual Studio 2015,...)
Supported version: 2019, 2017, 2015
PS C:\WINDOWS\system32>
```

Steps to Clone source code from TFS to local Git Repository :

1. Open command prompt and create a folder(example: TFS) and run below command to clone the code from TFS.

Usage: git-tfs clone [options] tfs-url-or-instance-name repository-path <git-repository-path> -c=<changeset from>-t=<changeset up-to>

Note: -c specifies The changeset to clone from and -t specifies up-to changeset

git-tfs clone <http://twsyds530:8080/tfs/DefaultCollection> \$/OnlineRegistrations/Releases/R1 -c=72870 -t=83495

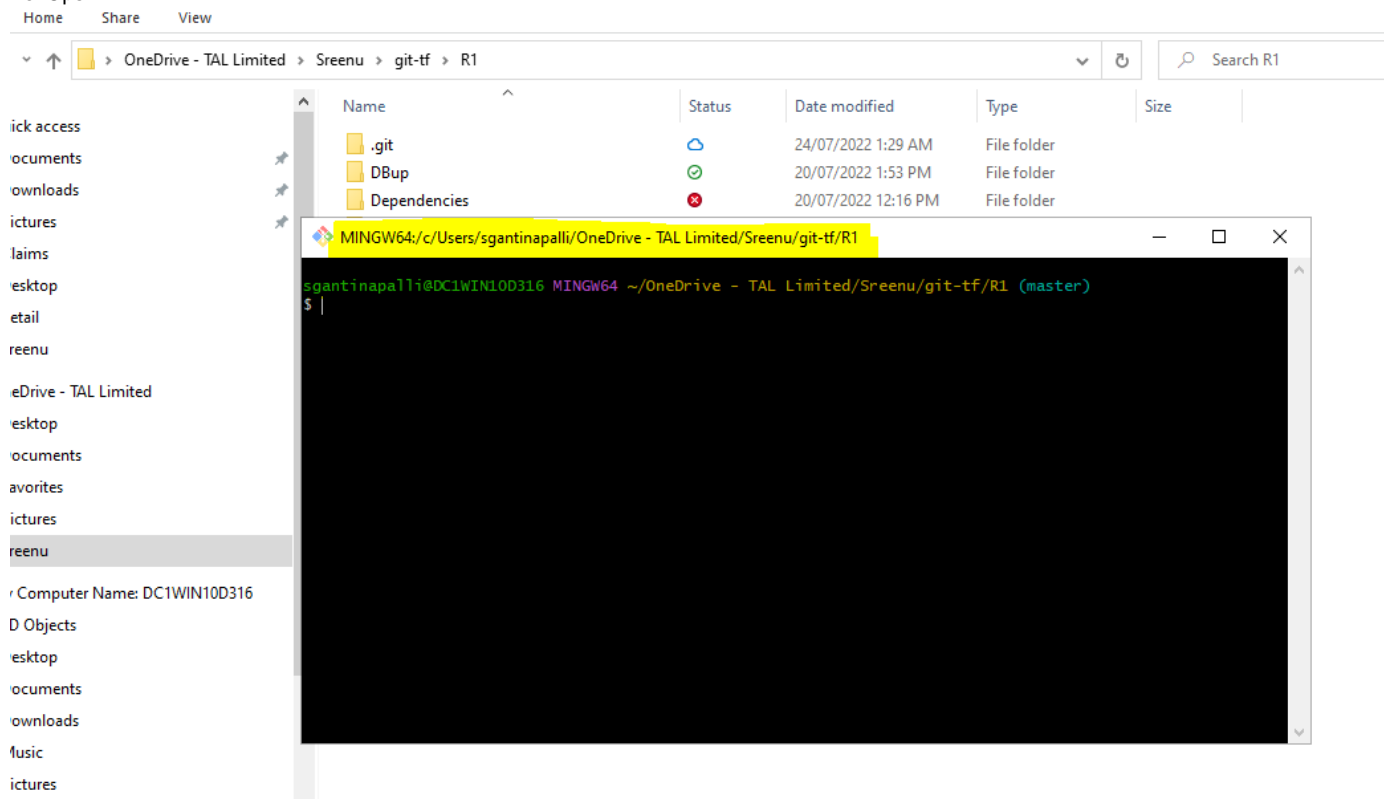
```
C:\WINDOWS\system32\cmd.exe - git-tfs clone http://twsyds530:8080/tfs/DefaultCollection $/OnlineRegistrations/Releases/R1 -c=72870 -t=83495
C:\Users\sgantinapalli\TFS3>git-tfs clone http://twsyds530:8080/tfs/DefaultCollection $/OnlineRegistrations/Releases/R1 -c=72870 -t=83495
Found matching Visual Studio version at C:\Program Files (x86)\Microsoft Visual Studio\2019\Community
Initialized empty Git repository in C:/Users/sgantinapalli/TFS3/R1/.git/

info: you are going to clone a branch instead of the trunk ( $/OnlineRegistrations/Main )
=> If you want to manage branches with git-tfs, clone $/OnlineRegistrations/Main with '--branches=all' option instead...
Fetching from TFS remote 'default'...
Removing workspace "git-tfs-9722b0a3-5793-4042-a359-d5af6e175db6;Sreenu Gantinapalli".
1 objects created...
C72870 = 8e97980e62b8a2f674e6a8cd7c5f4be515db9df4
The name of the local branch will be : Main
Fetching from dependent TFS remote 'Main'...
C74237 = 1ebf39ed2a4e9311c56aae8001ecc117a6e95d3
C75627 = a9afb1898bb2aa7acc45ca00de4ee9b55705e489
C75628 = f75641f156595e7d361364351e6a5dffaa074bdd
C75698 = 156485742c0f731405d545986a329c2e33581031
C75717 = c245eaa438f00d2d25172f5f6ca1c308d71ca6bd
C75718 = f0d48a9a12a96035daeb0d136c9edaf6130db713
C75821 = f31d6701a7f5868ffe6b9fb2bc058d616cfc9eba
C76006 = e018e0d523f220479f62facb674aeb4637f8760c
C76007 = 0169d77dff234c1007b4d2ad1f96231c584abfa3
```

2. After completion, verify all the files and folders that were downloaded from TFS.

Steps to Push source code from local repository to Azure DevOps :

1. Install Git Bash Tool
2. Go to the folder where TFS was copied and right click and open Git Bash tool to run set of commands to push code from local to Azure DevOps.



3. Add origin to Azuredevops -

git remote add origin https://TALContinuousDelivery@dev.azure.com/TALContinuousDelivery/TAL.RLS.AdviserManagement/_git/TAL.RLS.OnlineRegistrations

- Now pull the latest code from Azuredevops repo to local git repository - **git pull origin master --allow-unrelated-histories**
- Now push code to Azuredevops from local git repository - **git push -u origin --all**
- Go to Azure DevOps and verify the files and the history to make sure everything is migrated.

The top screenshot shows the Azure DevOps interface for the repository 'TAL.RLS.OnlineRegistrations'. The left sidebar contains navigation options: Overview, Boards, Repos, Files (selected), Commits, Pushes, Branches, and Tags. The main area displays the 'Files' view for the 'master' branch. It includes a search bar, a 'Set up build' button, and a 'Clone' button. Below these, a table lists the repository's contents:

Name ↑	Last change	Commits
DBup	25 Aug 2021	408d2db1 Config substitution Tarun Bhatt
Dependencies	5 Aug 2019	485a223a added Microsoft.IdentityModel.dll Kent W...
TALOnlineRegistrations	18 Feb	8a5231d6 change connection string for uat and pro...
TALOnlineRegistrations.Web	25 Feb	e93eaf14 Remove apdev@tal.com.au Tarun Bhatt

The bottom screenshot shows the 'History' view of the same repository. It displays a commit history with a vertical timeline on the left. The commit messages and their corresponding commit hashes and authors are listed:

- change log type for existing registration message (6258c4e2) by Catherine Wright 11 Jul 2017 at 23:24 (TFS_C76691)
- ignore failing unit tests - to fix (4f10256d) by Catherine Wright 11 Jul 2017 at 23:17 (TFS_C76690)
- Update log4net configuration (f4a0d4f8) by Catherine Wright 11 Jul 2017 at 23:14 (TFS_C76689)
- handle session timeout errors (1fa7b093) by Catherine Wright 11 Jul 2017 at 23:11 (TFS_C76688)
- Change logic for validating default agreement number, remove js lo... (9e3e5f24) by Catherine Wright 11 Jul 2017 at 15:23 (TFS_C76686)
- Change error to info message when invalid distributor no used (8814454a) by Catherine Wright 11 Jul 2017 at 15:22 (TFS_C76685)
- Update email addresses for error messages (2150f267) by Catherine Wright 11 Jul 2017 at 10:40 (TFS_C76671)

- The migrating source code from TFS to Azure DevOps is completed.