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| 3M – Corporate Research Lab – SEMS Lab |
| Team Onboarding |
| Enterprise Team Foundation Server |

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# Foreword

As new Teams within 3M have a desire to start using the Enterprise Team Foundation Server (ETFS) service, they will go through an Onboarding process to familiarize the team with ETFS.

# The Onboarding Process

The onboarding process is shown the workflow below. Training and migration can be done simultaneously to shorten the onboard timeline.



Each of the steps in the onboarding process are outlined below.

# Enroll

The initial meeting with a team interested in ETFS will be presented with the capabilities of ETFS. Focus is on the needs of the team, and identifying if any gaps exist. The team is put into the onboarding queue, and a team meeting is scheduled to gather information to move forward.

# Elaboration

Elaboration is a team Interview and is performed by the ETFS Service Manager. Below is an outline of information needed for the onboarding process. These values are cover in more detail in the Onboarding Worksheet.

|  |  |  |
| --- | --- | --- |
|  | Description | Value |
|  | Team Project Name |  |
|  | Business Contact |  |
|  | Methodology |  |
|  | Regulatory needs |  |
|  | Migration from current system? | Y/N – If Yes, complete migration in Worksheet |
|  | Team Members | (see Onboarding Worksheet) |
|  | Export Control |  |

|  |  |
| --- | --- |
| NOTE | Data for the migration process is gathered in the Elaboration stage, and therefore a choice on how and what to migrate must be made early in the process. |



TFS Onboarding Start: for each workflow, start here.

Disable Source control in Team Project Creation: a new Team Project will be created without source control.

Point In Tim (PIT) migration: a new Team Project is created, and the lasts project assess are moved to the new team project. Depending on need, this could include the latest copy of source code and/or active work items.

Custom Migration required: if a source system is not supported by the TFS Migration tool, a custom migration may have to be done. This would likely involve a custom solution, or purchase of a migration tool.

## 

## Team Project Collection of new Team Project

Follow the Team Project Creation workflow to determine if the DefaultCollection or another project collection is the best fit for the onboarding team.

* Team Project requires isolation from other Team Projects
* Is Active Directory sufficient isolation?
* Is Area Paths sufficient isolation?
* Will team artifacts (source code, work items links) be shared across multiple Team Projects?
* Is the security model supported by an existing Team Project Collection?

Possible reasons for a new Team Project Collection may include required isolation from existing project work due to government or regulatory needs.

The goal is ultimately keep the number of project collections to a minimum.

## Identify Team Roles and Permissions

To assist with assignment of permissions, identification of roles within the team is necessary. Below is a reference guide for team roles and permission assignment. Each team determines proper role and permission assignment for team members.

|  |  |
| --- | --- |
| Team Role | Suggested TFS Permission Group |
| Project Manager | Contributor / Project Administrator |
| Scrum Master | Contributor / Project Administrator |
| Architect | Contributor |
| Developer | Contributor |
| Database Administrator | Contributor |
| QA / Tester | Contributor |
| DevOps | Contributor / Builder |
| Product Owner | Contributor / Project Administrator |
| Stakeholder | Viewer |

To aid in user management, obtaining a number of Active Directory groups for team member may be beneficial. This is not required, but may aid in the management of a large developer base. If this is pursued, suggested Active Directory Groups name are shown below.

|  |  |
| --- | --- |
| Role | Active Directory Group |
| Project Administrators | US-*TeamProjectName*-ProjectAdmin |
| Contributors | US-*TeamProjectName*-Contributors |
| [Team Name] | US-*TeamProjectName*-*TeamName* |
| Builders | US-*TeamProjectName*-Builders |
| Viewers | US-*TeamProjectName*-Viewers |
|  |  |
|  |  |

## Licensing

A user of ETFS can have different licensing model – depending on their licensing method. Below is a table outlining the web access levels to aid in determining the proper licensing level for each team member.

|  |  |
| --- | --- |
| Access Level | Required License Level |
| Full | One of these MSDN subscriptions: Visual Studio Ultimate with MSDN, Visual Studio Premium with MSDN, or Visual Studio Test Professional with MSDN. |
| Standard | TFS client-access license (CAL). |
| Limited | No license required. Assign Limited access to customers or stakeholders that you want to collaborate with but who aren’t on your team. |

Additionally, an Active directory group can be created to help manage users. Suggestions are listed below.

|  |  |
| --- | --- |
| Access Level | Active Directory Group |
| Full | US-*TeamProjectName*-Full-Access |
| Standard | US-*TeamProjectName*-Standard-Access |
| Limited | US-*TeamProjectName*-Limited-Access |

|  |  |
| --- | --- |
| NOTE | The ETFS Operations team aids in the purchase and maintenance of the TFS Client Access Licenses (CAL) from an enterprise perspective. This team performs purchasing and notifies team administrators when software assurance renewal is needed. |

## Source Code

If the onboarding team has a current system with source code, a source code migration must be performed.

A migration of source control can take on 2 methods. A migration of current version, or a full migration of current version with all history. A “current version” is relatively straight forward, and called Point-in-Time (PIT). A migration with full history has the potential to be more complex and time consuming, depending on the source system and support by available migration tools.

* Point in Time (PIT) migration – migrate latest version of all source code.
* If the Source project is supported by ETFS, leverage the migration tool to perform a source code migration
* If the Source project is not supported by ETFS, a custom solution for migration must be developed.

## Work Items / Plans

Migration of Work Items or requirements is supported in present methods. If a TFS -> ETFS migration, then Excel can be used in a controlled fashion. This will move existing work items, with history.

If the migration is supported by a migration tool, this path can be explored to aid in the process.

If the migration source is not supported by a migration tool, a custom solution may have to be developed – or, all the information will have to be enter manually.

# Training

The ETFS Training Curriculum strived to provide new users with a solid foundation for using TFS. A methodology curriculum is based on the Microsoft Visual Studio Scrum 2013 Template and Process Guidance. The following presentations would be presented to the respective team at a pace that reflects their knowledge of TFS, i.e., current users of TFS would have an accelerated pace vs. non-TFS users.

1. Intro
2. Source Control
3. Work Items
4. Scrum/Agile usage (Terminology)
5. SharePoint Portal
6. Reports

A key tenant is to Train in Context by demonstrating everyday uses of TFS for each of the appropriate user roles for a project.

## Hands-on Labs

Hands on Labs are modules of functionality that are adapted to user roles. An individual on a team may perform one or more roles, and thus may perform multiple Hand on Labs to explore the functionality of TFS.

1. Common Exercises
   1. Context
   2. Starting Visual Studio Environment
   3. Connecting to ETFS
   4. Connect to Team Project
2. Developer Exercises
   1. Get latest source code
   2. Check out source
   3. Check in source
   4. Update tasks
   5. Request Code Review
   6. Team Build – Create, Queue build, debug
   7. Alerts
3. BA Exercises
   1. Create Backlog Item
   2. Check in source
   3. Update tasks
   4. Save document to SharePoint portal (shared docs)
4. Tester Exercises
   1. Get latest source code
   2. Check out source
   3. Check in source
   4. Update tasks
   5. MTM – create Test Case
   6. MTM – perform Test Run
   7. MTM – create Test Plan
5. Project Manager/Scrum Master Exercises
   1. Create Product Backlog Item
   2. Update Product Backlog Item
   3. Create Task
   4. Update tasks
6. Stakeholder Exercises
   1. Create Feature
   2. View Team Status – current work in progress (Sprint)
   3. View Impediments

## Trial Server

A trial ETFS server will be available for users to ‘kick the tires’ and try out using ETFS. This will re-enforce the training, and give them confidence using ETFS on a daily basis.

The trial server is a demo/trial server maintained by a Microsoft employee – Brian Keller. The trial server has been configured slightly to work on the 3M network. This virtual machine is configured with:

* Microsoft Windows Server 2012 Standard Evaluation
* Microsoft Visual Studio Ultimate 2013
* Microsoft Visual Studio Team Foundation Server 2013
* Microsoft Office Professional Plus 2013 (Word, PowerPoint, Excel, Outlook)
* Microsoft Visio Professional 2013
* Microsoft Release Management for Visual Studio 2013
* Microsoft SQL Server 2012 Standard
* Sample users and data required to support hands-on-lab scripts which accompany this download and exercise 24 ALM scenarios.

|  |  |
| --- | --- |
| image | There are **24** hands-on-labs for you to take a scripted approach towards learning this content. These labs double as demo scripts in case you want to show off these features to others.  New features in Visual Studio 2013:   * [Agile Planning and Portfolio Management with Team Foundation Server 2013](http://download.microsoft.com/download/B/C/8/BC8558E1-192E-4286-B3B0-320A8B7CE49D/Agile%20Planning%20and%20Portfolio%20Management%20with%20Team%20Foundation%20Server%202013.docx) * [Getting Started with Git using Team Foundation Server 2013](http://download.microsoft.com/download/B/C/8/BC8558E1-192E-4286-B3B0-320A8B7CE49D/Getting%20Started%20with%20Git%20using%20Team%20Foundation%20Server%202013.docx) * [Embracing Continuous Delivery with Release Management for Visual Studio 2013](http://download.microsoft.com/download/B/C/8/BC8558E1-192E-4286-B3B0-320A8B7CE49D/Embracing%20Continuous%20Delivery%20with%20Release%20Management%20for%20Visual%20Studio%202013.docx) * [New Collaboration Experiences for Development Teams using Team Foundation Server 2013](http://download.microsoft.com/download/B/C/8/BC8558E1-192E-4286-B3B0-320A8B7CE49D/New%20Collaboration%20Experiences%20for%20Development%20Teams%20using%20Team%20Foundation%20Server%202013.docx)   Labs upgraded from Visual Studio 2010/2012: **NEW**   * [Authoring and Running Manual Tests using Microsoft Test Manager 2013](http://download.microsoft.com/download/B/C/8/BC8558E1-192E-4286-B3B0-320A8B7CE49D/Authoring%20and%20Running%20Manual%20Tests%20using%20Microsoft%20Test%20Manager%202013.docx) * [Branching and Merging Visualization with Visual Studio Team Foundation Server 2013](http://download.microsoft.com/download/B/C/8/BC8558E1-192E-4286-B3B0-320A8B7CE49D/Branching%20and%20Merging%20Visualization%20with%20Visual%20Studio%20Team%20Foundation%20Server%202013.docx) * [Building the Right Software - Generating Storyboards and Collecting Stakeholder Feedback with Visual Studio 2013](http://download.microsoft.com/download/B/C/8/BC8558E1-192E-4286-B3B0-320A8B7CE49D/Building%20the%20Right%20Software%20-%20Generating%20Storyboards%20and%20Collecting%20Stakeholder%20Feedback%20with%20Visual%20Studio%202013.docx) * [Code Discovery using the Architecture Tools in Visual Studio Ultimate 2013](http://download.microsoft.com/download/B/C/8/BC8558E1-192E-4286-B3B0-320A8B7CE49D/Code%20Discovery%20using%20the%20Architecture%20Tools%20in%20Visual%20Studio%20Ultimate%202013.docx) * [Debugging with IntelliTrace using Visual Studio Ultimate 2013](http://download.microsoft.com/download/B/C/8/BC8558E1-192E-4286-B3B0-320A8B7CE49D/Debugging%20with%20IntelliTrace%20using%20Visual%20Studio%20Ultimate%202013.docx) * [Diagnosing Issues in Production with IntelliTrace and Visual Studio 2013](http://download.microsoft.com/download/B/C/8/BC8558E1-192E-4286-B3B0-320A8B7CE49D/Diagnosing%20Issues%20in%20Production%20with%20IntelliTrace%20and%20Visual%20Studio%202013.docx) * [Exploratory Testing using Microsoft Test Manager 2013](http://download.microsoft.com/download/B/C/8/BC8558E1-192E-4286-B3B0-320A8B7CE49D/Exploratory%20Testing%20using%20Microsoft%20Test%20Manager%202013.docx) * [Introduction to Coded UI Tests with Visual Studio Ultimate 2013](http://download.microsoft.com/download/B/C/8/BC8558E1-192E-4286-B3B0-320A8B7CE49D/Introduction%20to%20Coded%20UI%20Tests%20with%20Visual%20Studio%20Ultimate%202013.docx) * [Introduction to Platform Testing with Microsoft Test Manager 2013](http://download.microsoft.com/download/B/C/8/BC8558E1-192E-4286-B3B0-320A8B7CE49D/Introduction%20to%20Platform%20Testing%20with%20Microsoft%20Test%20Manager%202013.docx) * [Introduction to PreEmptive Analytics](http://download.microsoft.com/download/B/C/8/BC8558E1-192E-4286-B3B0-320A8B7CE49D/Introduction%20to%20PreEmptive%20Analytics.docx) * [Introduction to Test Case Management with Microsoft Test Manager 2013](http://download.microsoft.com/download/B/C/8/BC8558E1-192E-4286-B3B0-320A8B7CE49D/Introduction%20to%20Test%20Case%20Management%20with%20Microsoft%20Test%20Manager%202013.docx) * [Introduction to Test Planning with Microsoft Test Manager 2013](http://download.microsoft.com/download/B/C/8/BC8558E1-192E-4286-B3B0-320A8B7CE49D/Introduction%20to%20Test%20Planning%20with%20Microsoft%20Test%20Manager%202013.docx) * [Introduction to Web Performance and Load Testing with Visual Studio Ultimate 2013](http://download.microsoft.com/download/B/C/8/BC8558E1-192E-4286-B3B0-320A8B7CE49D/Introduction%20to%20Web%20Performance%20and%20Load%20Testing%20with%20Visual%20Studio%20Ultimate%202013.docx) * [Lab Management using Standard Lab Environments in Visual Studio 2013](http://download.microsoft.com/download/B/C/8/BC8558E1-192E-4286-B3B0-320A8B7CE49D/Lab%20Management%20using%20Standard%20Lab%20Environments%20in%20Visual%20Studio%202013.docx) * [Making Developers More Productive with Visual Studio Team Foundation Server 2013](http://download.microsoft.com/download/B/C/8/BC8558E1-192E-4286-B3B0-320A8B7CE49D/Making%20Developers%20More%20Productive%20with%20Visual%20Studio%20Team%20Foundation%20Server%202013.docx) * [Testing and Debugging SharePoint Applications with Visual Studio 2013](http://download.microsoft.com/download/B/C/8/BC8558E1-192E-4286-B3B0-320A8B7CE49D/Testing%20and%20Debugging%20SharePoint%20Applications%20with%20Visual%20Studio%202013.docx) * [Understanding Class Coupling with Visual Studio Ultimate 2013](http://download.microsoft.com/download/B/C/8/BC8558E1-192E-4286-B3B0-320A8B7CE49D/Understanding%20Class%20Coupling%20with%20Visual%20Studio%20Ultimate%202013.docx) * [Unit Testing, Code Coverage and Code Clone Analysis with Visual Studio 2013](http://download.microsoft.com/download/B/C/8/BC8558E1-192E-4286-B3B0-320A8B7CE49D/Unit%20Testing,%20Code%20Coverage%20and%20Code%20Clone%20Analysis%20with%20Visual%20Studio%202013.docx) * [Using Code Analysis with Visual Studio 2013 to Improve Code Quality](http://download.microsoft.com/download/B/C/8/BC8558E1-192E-4286-B3B0-320A8B7CE49D/Using%20Code%20Analysis%20with%20Visual%20Studio%202013%20to%20Improve%20Code%20Quality.docx) * [Using the Architecture Explorer in Visual Studio Ultimate 2013 to Analyze Your Code](http://download.microsoft.com/download/B/C/8/BC8558E1-192E-4286-B3B0-320A8B7CE49D/Using%20the%20Architecture%20Explorer%20in%20Visual%20Studio%20Ultimate%202013%20to%20Analyze%20Your%20Code.docx) |

# Migration

Migration of existing data is an optional part of the onboarding process. A migration onto ETFS entails the migration of requirements, specifications or the Product Backlog into TFS work items, and the desired amount of source code from the source system.

Data for the migration process is gathered in the Elaboration stage, and therefore a choice on how and what to migrate must be made early in the process.

High level steps for a migration include:

The individual steps for migration are shown below.

| Step | Description | Done |
| --- | --- | --- |
| 1 | SEMS Team performs setup and development of the migration on TFSDEV | ⃣ |
| 2 | The migration process is tested TFSQA, and inspected by the team. | ⃣ |
| 3 | Build and Proxy machines provisioned - connected to ETFS | ⃣ |
| 4 | The migration is performed on the Production environment (tfs.mmm.com) | ⃣ |
| 5 | [optional] Hosting of ‘Source’ project collection on tfsarchive.mmm.com | ⃣ |

Checklist for migration

|  |  |  |  |
| --- | --- | --- | --- |
|  | Description | Source | Target |
| Team Project | | | |
|  | Team Project Name |  |  |
|  | Methodology |  |  |
|  | Regulatory needs |  |  |
|  | Other |  |  |
| Possible Migration Items | | | |
|  | Team Project Name – Source Control |  |  |
|  | Team Project Name - Work Items |  |  |
|  | Team Project – Process Template\* - if known |  |  |
|  | Area Path |  |  |
|  | Iterations |  |  |
|  | Username mapping |  |  |
|  | Automated Builds |  |  |
|  | Test Cases (Y/N) |  |  |
|  | Work Item Links |  |  |
|  | Automated builds |  |  |
|  | Work Item Attachments |  |  |
|  | Test Automation |  |  |

\* If Source and Target Process Template differ, a source -> target field mapping needs to be completed

Once the above list is completed, a detailed migration plan can be made. The complete migration plan includes details for each of the above categories, such as the source control structure – same layout, different, using branching more/less, etc. Also as noted, if a TFS -> TFS migration is performed, and the process template differs between servers a detailed mapping of field names from source to target needs to be completed.

The ETFS team can perform the migration, or assist the team if they desire to take on the migration.

|  |
| --- |
| Resources |
| Team Foundation Server Migration and Integration Solutions  <http://msdn.microsoft.com/en-us/vstudio/bb840033.aspx?ppud=4>  Test Case Migrator Plus  <http://tcmimport.codeplex.com/> |

# Go Live

Go Live is the transition of the team(s) to start leveraging ETFS on a scheduled date and time. Key to successful adoption is preparing the team for the transition, and obtaining buy-in from the team to leverage the capabilities.

Below is the final checklist to confirm a team is ready for switching to ETFS.

| Number | Description | Done |
| --- | --- | --- |
| 1 | New Team Project created to specification | ⃣ |
| 2 | The team members have appropriate permissions configured in new Team Project | ⃣ |
| 3 | Migration of project artifacts complete | ⃣ |
| 4 | “Source System” (or former system) has been put into read-only mode | ⃣ |
| 5 | If the “Source System” is TFS, the contents of the previous Project Collection may be available in a read-only project collection on <http://tfsarchive.mmm.com> | ⃣ |
| 6 | Communications to the team regarding the switch to ETFS has been communicated with details including the switch date and time. | ⃣ |

# Maintenance

After a team has been successfully on boarded onto ETFS, the Relationship Manager will stay in contact. Key items to monitor on a regular basis are include

* Are needs being met?
* Any functionality gaps?
* Projects running smoothly?
* Training helpful? Anything missing?
* Methodology working?

This is also an excellent time for the team to provide feedback on the on boarding process. The team strives for continual improvement, and feedback into the process (good or bad) improves the experience.

# Appendix

Team Onboard Checklist

| Step | Description | Done |
| --- | --- | --- |
| Enroll | Presentation - Overview of ETFS | ⃣ |
| Team put into onboarding queue | ⃣ |
| Elaboration | Checklist for migration completed | ⃣ |
| Identify roles on team | ⃣ |
| Complete Team Member Permissions form | ⃣ |
| Source code migration path defined | ⃣ |
| Work Item migration path defined | ⃣ |
| Training | All team members trained | ⃣ |
| Hands-on-Labs made available | ⃣ |
| Trial Server made available | ⃣ |
|  | Team Project created |  |
| Migration | Setup and development complete | ⃣ |
| Migration process tested in TFSQA, and approved by the team | ⃣ |
| Build and Proxy machines provisioned and connected to ETFS | ⃣ |
| Go Live | New Team Project Created on tfs.mmm.com (PROD) | ⃣ |
| Migration is performed on the Production environment (tfs.mmm.com) | ⃣ |
| “Source System” (or former system) has been put into read-only mode, or decommissioned | ⃣ |
| [Optional] Source System import and available on <http://etfsarchive.mmm.com> | ⃣ |
| Communications to the team regarding the switch to ETFS has been communicated with details including the switch date and time. | ⃣ |
| Maintain | Gather feedback to improve the onboarding process   * Are needs being met? * Any functionality gaps? * Projects running smoothly? * Training helpful? Anything missing? * Methodology working? | ⃣ |

Team Member Permissions

| Id | Name | TFS Permission Group | Licensing |  |
| --- | --- | --- | --- | --- |
|  |  |  |  | **MSDN Level** (if applicable indicate level) |
| AXXXXXX | Joe TFS User | Project Administrator |  | Chose an item |
|  |  |  |  |  |
|  |  |  |  |  |