Drive Git development from a work item

03/12/2018 • 7 minutos para ler • Colaboradores

Neste artigo

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Create a branch for several work items

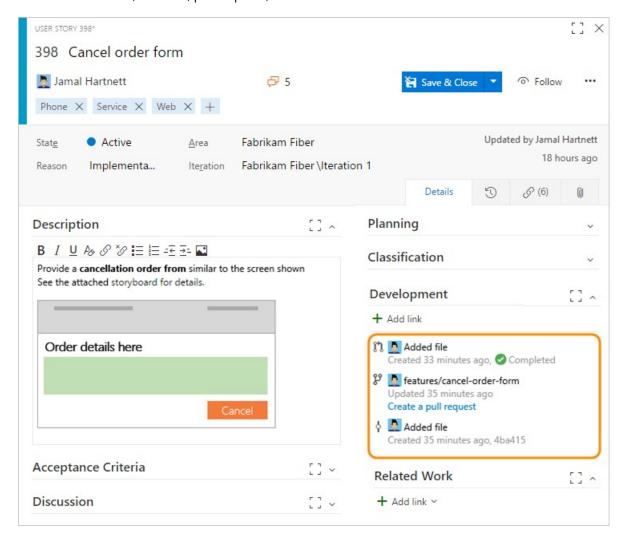
Link to existing development and build objects

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One of the ways your team can drive their development and stay in sync is to link your work items to the objects created during development, such as branches, commits, pull requests, and builds. You can begin that linking by creating a branch from one or more work items. Later, you can create pull requests, quickly open commits, and maintain a record of development operations performed to complete specific work.

The Development section records all Git development processes that support completion of the work item. This section can show your team information needed to take the next development step and minimize navigational steps to accomplish common development tasks. It also supports traceability, providing visibility into all the branches, commits, pull requests, and builds related to the work item.



From it, you can quickly access branches, pull requests, and commits which are linked to the work item. Also,

you can initiate a pull request for a branch you've created or linked to from the work item.

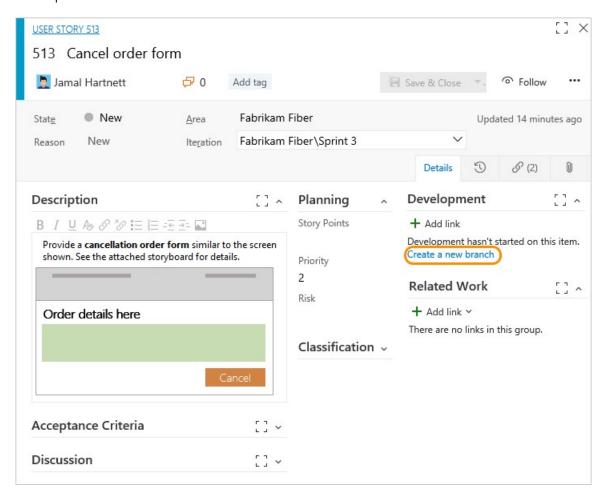
Prerequisites

- You must connect to a project. If you don't have a project yet, create one.
- You must be added to a project as a member of the Contributors or Project Administrators security group. To get added, Add users to a project or team.
- To add or modify work items, you must be granted Stakeholder access or higher. For details, see About access levels.
- To view or modify work items, you must have your View work items in this node and Edit work items in this node permissions set to Allow. By default, the Contributors group has this permission set. To learn more, see Set permissions and access for work tracking.
- To create new tags to add to work items, you must have **Basic** access or higher and have the project-level **Create new tag definition** permissions set to **Allow**. By default, the **Contributors** group has this permission set. Even if the permission is explicitly set for a **Stakeholder**, they won't have permission to add new tags, as they are prohibited through their access level.

Workflow process to create a branch and pull request

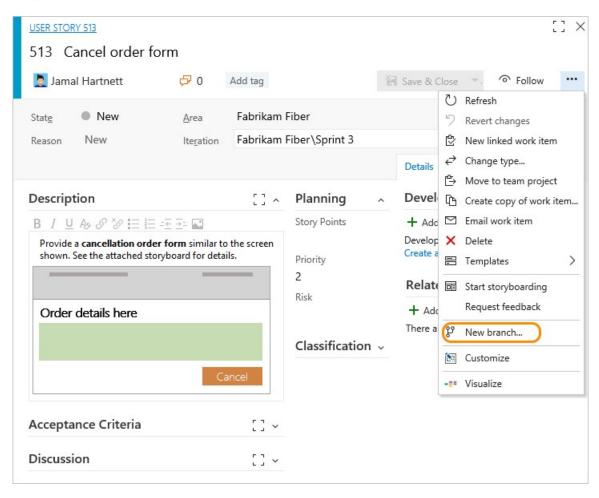
Consider creating a new branch when there are no linked code artifacts. If there is a branch but no pull requests, consider creating a pull request. Here's a typical workflow sequence when working with a Git repository.

1. Start work on the work item by creating a branch. You can add a new Git branch from within the Development section...

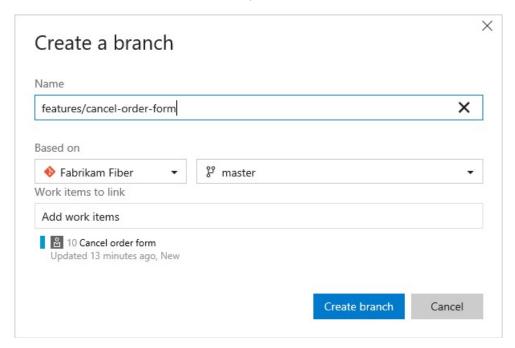


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... or, from the form's *** Actions menu.



Name the branch and select the repository on which it's based.



Branches you create are automatically linked to the work item.

Observação You can only create a branch once you've added files to the main branch, which is always named master. The system automatically adds a README file to the initial repo created with each new

project.

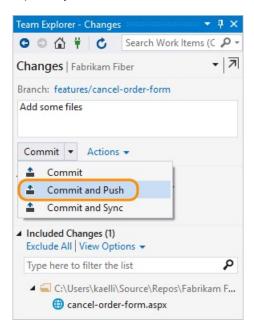
2. The system will open to the repository and branch that you just created.

You can edit a file within the web portal.

Or, if you have extensive file edits or need to add files, then you'll need to work from Visual Studio or other supported IDE. You'll want to add a new local branch from the branch you just created. For details, see Update code with fetch and pull, Download changes with fetch. (While any code editing and committing process will work, we work best with an edition of Visual Studio.)

3. Add or modify files in the branch that you created.

From Visual Studio or other supported IDE, commit and push changes from your local branch to the repository.

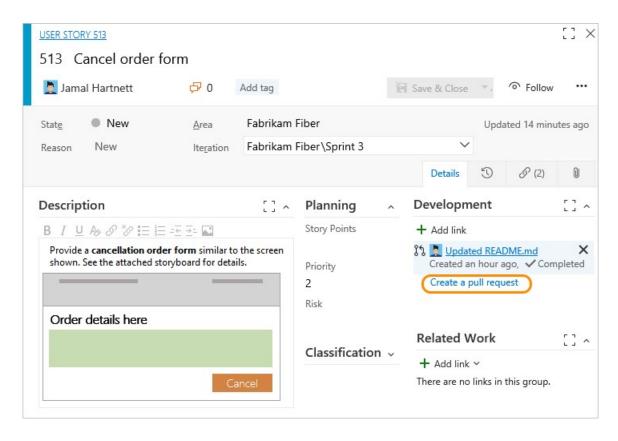


If this is the first time pushing changes from a new branch, you'll need to publish the branch before pushing your changes. For more details, see Share code with push.

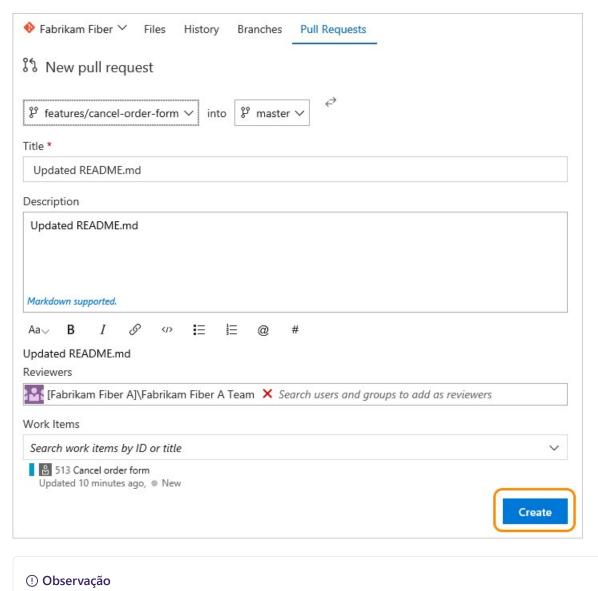
4. Create a pull request from the work item form.

You create a pull request to merge the changes you made to a master branch and get your changes reviewed by other members of your team.

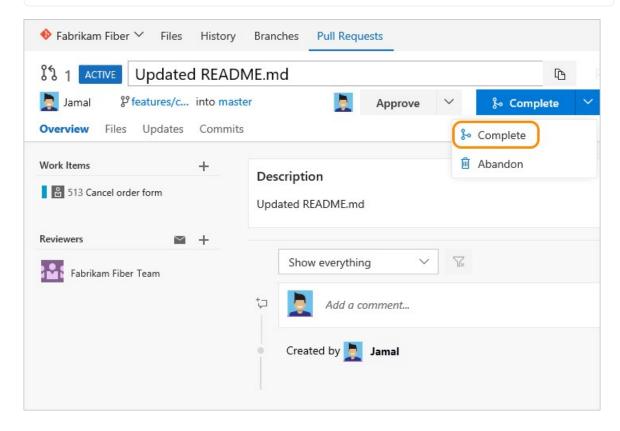
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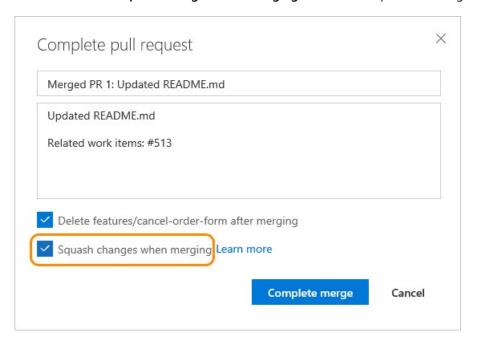
5. Your view will switch to **Code**, Pull Requests page. Complete creating the pull request as shown.



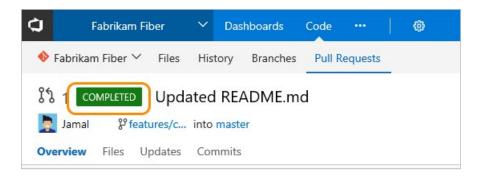
Once you've created a pull request, you can't create a new pull request for the same branch until you complete the previous pull request.



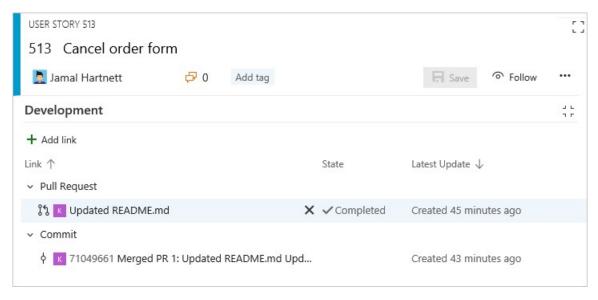
Check the box for Squash changes when merging and then complete the merge.



6. Upon completion, you should see a similar screen as follows.



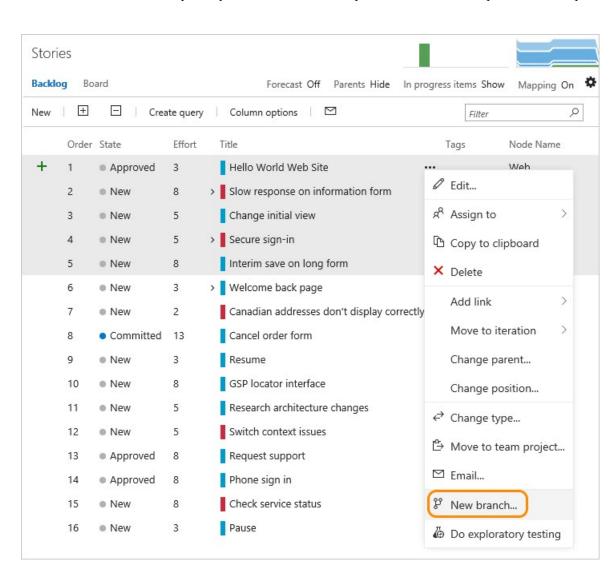
7. Open the work item form or refresh the form, expand the Development section (click the you'll see the links that have been added to support the operations you just completed.



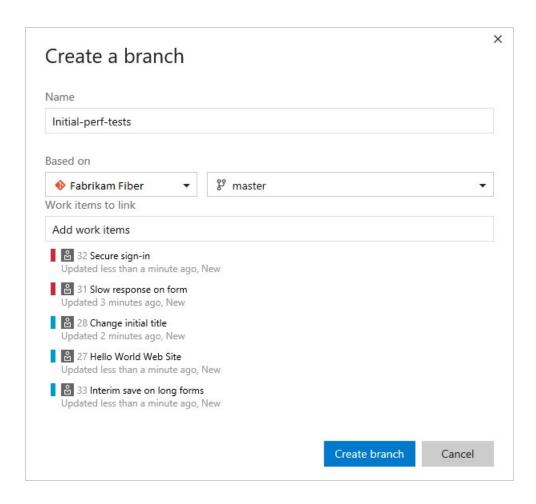
Create a branch for several work items

You can also add a new branch from the work item listed on the backlog or Kanban board without having to open the work item. Using <u>multi-select</u>, you can select several work items and create a new branch where they're all linked to the branch.

For example, here we select the first five items to link to a new branch.

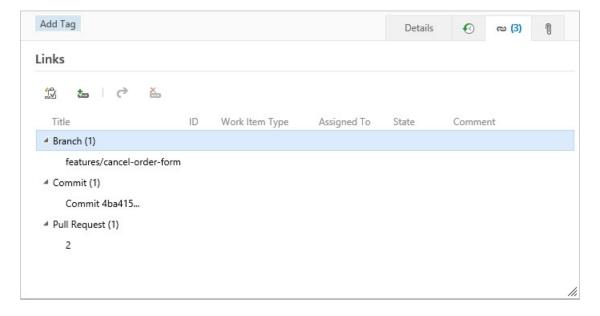


And, we specify the name of the branch.

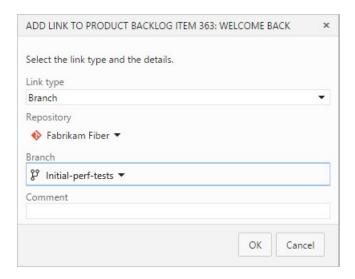


Link to existing development and build objects

All items listed under the Development section also appear under the Links tab. All development actions initiated from the Development section are also logged under the History tab.



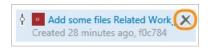
To link a work item to an existing object, click the 🖢 Add links icon and then choose the link type.



Linking, traceability, and managing dependencies.

Remove a link

If you want to remove a link, you can do so from the Development section by highlighting it first and then click the \times delete icon.



Or, you can select it from the A Links tab and click the remove link icon.

Related articles

Learn more about tracking work with work items and developing with Git from these resources:

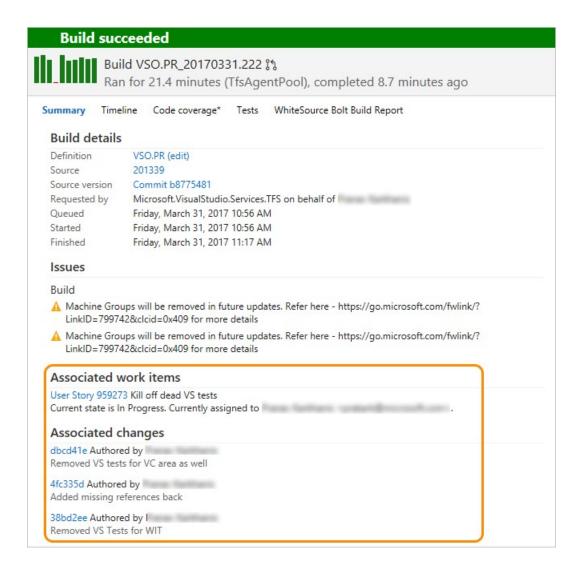
- Add work items
- Git overview
- TFVC overview
- Create your backlog

Keep in mind that the Development section only appears within the web portal work item form. The work item tracking experience and forms that appear in Visual Studio or other supported clients will be missing several of the features that the web portal makes available.

Associated work items in build

With Git commits, any work items that have been linked to a commit will be listed under the Associated work items in the build summary page.

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Link types showing in the Development section

Links shown in this section appear as a result of these actions:

- Creating a branch, commit, or pull request from the work item
- Specifying the work item ID during a commit, pull request, or other supported Git or TFVC operation
- Specifically linking the work item from the Development section or

 Links tab to a source code branch, build, or other supported Git or TFVC operation.

Hovering over any entry listed under the Development section activates the hyperlink to the associated object.

The link types you can add within the development section are Branch, Build, Changeset, Commit, Pull Request, and Versioned Item.

To learn more about the links control or to customize the Development links control, see <u>LinksControlOptions</u> <u>elements</u>, <u>Development links control</u>.