Training Program Overview

Day 1 - SQL Server 2012 & SQL Azure
Day 2 - Visual Studio 2012
Day 3 - Application LifeCycle Management and Team Foundation Server

SQL Server 2012 & SQL Azure

Day 1

New Features in Database Engine

- Programmability Enhancements
- Scalability & Performance Enhancements
- Security Enhancements
- Backup and Restore Enhancements

New Features in Database Engine

- Sequences
- Data Paging
- Conversion Functions
- Logical Functions
- Date/Time Functions
- String Functions

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- Sequences
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Sequence

- New construct to generate numeric sequences
- Ability to set min and max values
- Cycle will set the current value to the min value when the max value is reached
- Future values can be cached minimizing disk IO
- Table: *sys.sequences*

Sequence

CREATE SEQUENCE

ALTER SEQUENCE

DROP SEQUENCE

NEXT VALUE FOR

sp_sequence_get_range

Sequence

```
CREATE SEQUENCE Schema.SequenceName
    AS int
    INCREMENT BY 1 ;
```

-2,147,483,648 to 2,147,483,647

```
CREATE SEQUENCE Test.CountBy1
    AS int
    START WITH 1
    INCREMENT BY 1 ;
```

```
INSERT INTO Test.Orders (OrderID, Name, Qty)
   VALUES (NEXT VALUE FOR Test.CountBy1, 'Windows Phone', 2);
```

OFFSET and FETCH

- Allows for server side data paging for the web.
- OFFSET and FETCH are arguments of the ORDER BY clause
- OFFSET - Number of rows to skip
- FETCH - Number of rows to return

OFFSET and FETCH

-- Skip the first 5 rows from the sorted result set and return all remaining rows.

```
SELECT DepartmentID, Name, GroupName
FROM HumanResources.Department
ORDER BY DepartmentID OFFSET 5 ROWS;
```

OFFSET and FETCH

-- Skip 0 rows and return only the first 10 rows from the sorted result set.

```
SELECT DepartmentID, Name, GroupName
FROM HumanResources.Department
ORDER BY DepartmentID
    OFFSET 0 ROWS
    FETCH NEXT 10 ROWS ONLY;
```

PARSE, TRY_PARSE & TRY_CONVERT

- PARSE - Parse a string to number or datetime
  - When cannot parse, returns error
  - Uses .Net CLR
- TRY_PARSE - Similar to Parse. On error returns NULL instead.
  - Still Uses the .Net CLR
- CONVERT - Cast a value to a specified data type.

Logical Functions - IIF

- Immediate IF or Inline IF
- Takes a boolean expression and returns one of two values.
- Shorthand for CASE
- Has the same limitations as CASE

  - Can only be nested to 10 levels

IIF(@Parameter=ColumnName, 1, 0)

Logical Functions - CHOOSE

- Returns the item at the specified index from a list of values

CHOOSE (index, val_1, val_2 [, val_n])

*FROMPARTS

- DATEFROMPARTS (year, month, day)
- DATETIME2FROMPARTS (year, month, day, hour, minute, seconds, fractions, precision)
- DATETIMEFROMPARTS (year, month, day, hour, minute, seconds, milliseconds)
- DATETIMEOFFSETFROMPARTS (year, month, day, hour, minute, seconds, fractions, hour_offset, minute_offset, precision)
- SMALLDATETIMEFROMPARTS (year, month, day, hour, minute)
- TIMEFROMPARTS (hour, minute, seconds, fractions, precision)

CONCAT

- Concatenates strings together.
- NULLs are automatically converted to empty strings.
- Can pass other data types for concatenation.

CONCAT (string_value1, string_value2 [, string_valueN])

FORMAT

- Simplifies the string formatting of dates and other data types
- No more memorising numeric predefined format values
- Returns a string
- Uses .Net CLR

FORMAT (value, format [, culture])

THROW

- Reduces the need to use RAISEERROR in TRY/CATCH blocks
- Can provide custom error messages
- Always uses severity level 16

Spatial Data Enhancements

- Using Circular arcs the locations on the earth can be represented more accurately e.g. curved roads or water bodies.
- CircularStrings - Collection of 0 or more continuous arc segments
- LineStrings - Collection of 0 or more continouous lines
- CompoundCurve - Collection object of CircularStrings & LineStrings
- CurvePolygon - 4 or more points and same start and end X&Y coordinates

```
SELECT * FROM table t WITH(SPATIAL_WINDOW_MAX_CELLS=1024) WHERE t.geom.
STIntersects(@window)=1;
```

Scalability & Performance Features

- Columnstore Indexes
- Online Index: XML, varchar(max), nvarchar(max) and varbinary(max)
- FILESTREAM FileGroup Can contain multiple files

```
CREATE NONCLUSTERED COLUMNSTORE INDEX  CSIDT DemoTable(Column1, Column2, Column3)
```

Security Enhancements

- To enhance role separation, BUILTIN\administrators and Local System (NT AUTHORITY\SYSTEM) are not automatically provisioned in the sysadmin fixed server role. Local administrators can still access the Database Engine when in single user mode.
- SQL Server now supports Managed Service Accounts and Virtual Accounts when installed on Windows 7 or Windows Server 2008 R2.
- The protection of operating services under a per-service SID is now extended to all operating systems.
- New GRANT, DENY, and REVOKE permissions to the CREATE SEQUENCE permission.
    - and 18 more for CONTROL/VIEW DEFINITION/TAKE OWNERSHIP/REFERENCES/ALTER/ALTER ANY SERVER ROLE, CREATE SERVER ROLE, ALTER ANY AVAILABILITY GROUP, CREATE AVAILABILITY GROUP, ALTER ANY EVENT SESSION
- User-defined server roles: CREATE/ALTER/DROP SERVER ROLE with ADD MEMBER
- IS_ROLEMEMBER
- DEFAULT SCHEMA FOR A WINDOWS GROUP
- HASHBYTES function now supports the SHA2_256, and SHA2_512 algorithms.

Backup & Restore Features

- Backup and Restore with Windows Azure Blob Storage Service
- Flexible, reliable off-site storage
- The maximum backup size supported is 1 TB.
- Use the WITH COMPRESSION option
- Set the access level for Windows Azure Blob container to private

```
BACKUP DATABASE AdventureWorks2012
TO URL = 'https://mystorageaccount.blob.core.windows.net/mycontainer/AdventureWorks2012_1.bak'
   URL = 'https://mystorageaccount.blob.core.windows.net/mycontainer/AdventureWorks2012_2.bak'
      WITH CREDENTIAL = 'mycredential',
     , COMPRESSION, STATS = 5;
GO

IF NOT EXISTS
(SELECT * FROM sys.credentials
WHERE credential_identity = 'mycredential')
CREATE CREDENTIAL mycredential WITH IDENTITY = 'mystorageaccount'
,SECRET = '<storage access key>' ;
```

SQL Azure

- Cloud Database as a Service
- SQL server Authentication only
- All tables must have a clustered index before data can be inserted
- Replication via BCP or SQL Data Sync Tool
- Data Migration via SSIS (on site), BCP, and SQLBulkCopyAPI
- Connect via SQL Server 2008 R2 Management Studio, SQLCMD, VS2012, ADO.NET
- No "USE" command, Log shipping or Database Mirroring

SS Data Tools

Day 2

SSDT

- Online Database development with SSMS like tree view in Server Explorer
- Import from existing database, snapshot of DACPAC project
- Intellisense support across all the database object files
- New designer tool for visual experience
- Refactoring table names, field names, etc. without losing data
- Navigation tools for offline development in T-SQL Editor
- Errors caused immediately show up in the Error list pane and are platform specific
- Previewing database updates with an option to publish on target database
- Schema comparison between current project and existing state of the database
- Option to sync the changes once schema comparison is reviewed
- Online vs Offline Project Development

SSDT

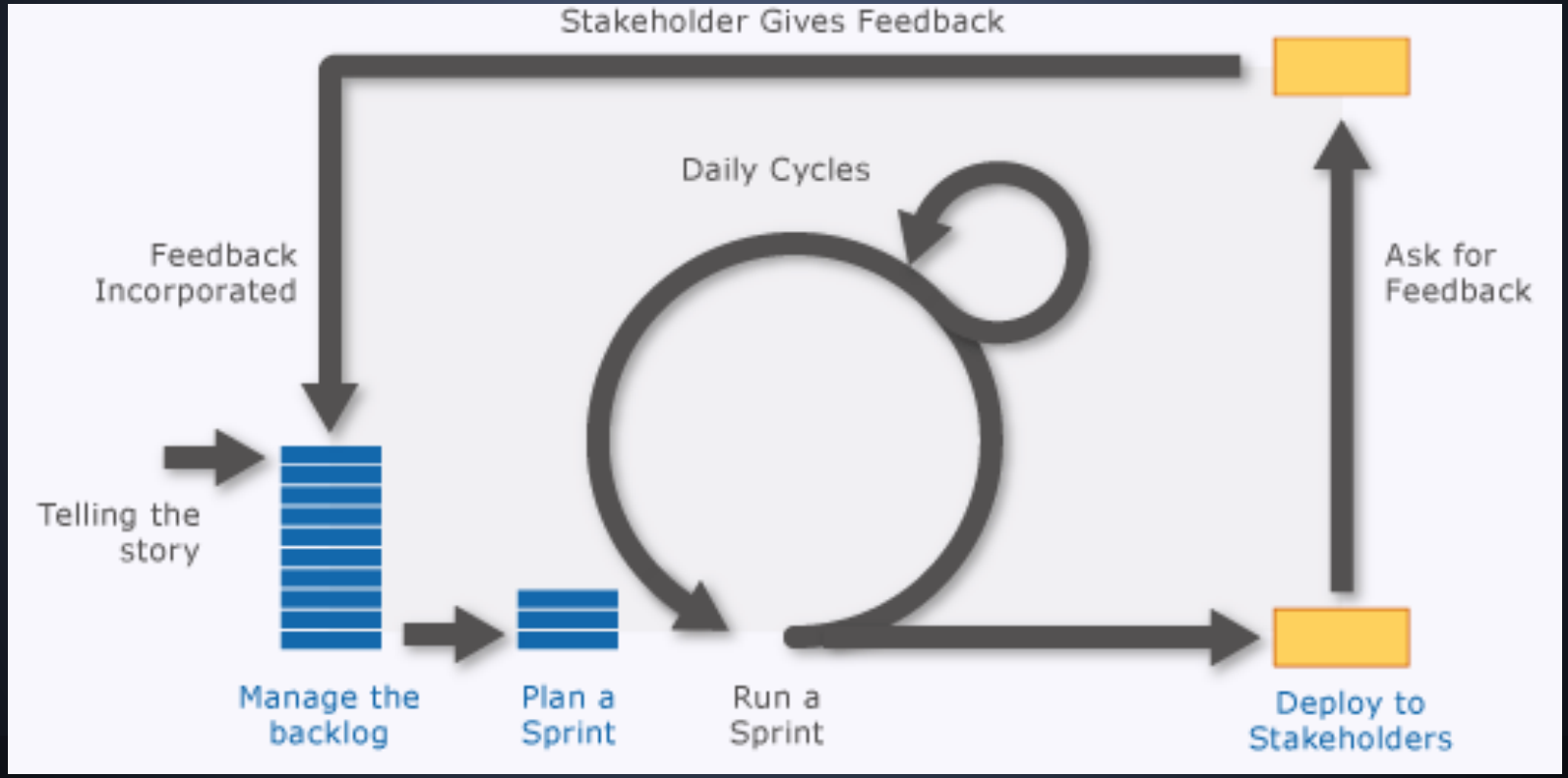
- DACPAC file
- SQL Script file
- SQL Azure
- Previous versions: SQL Server 2005, SQL Server 2008/2008 R2

Practical Sessions
Day 2

Application Lifecycle Management

Day 3

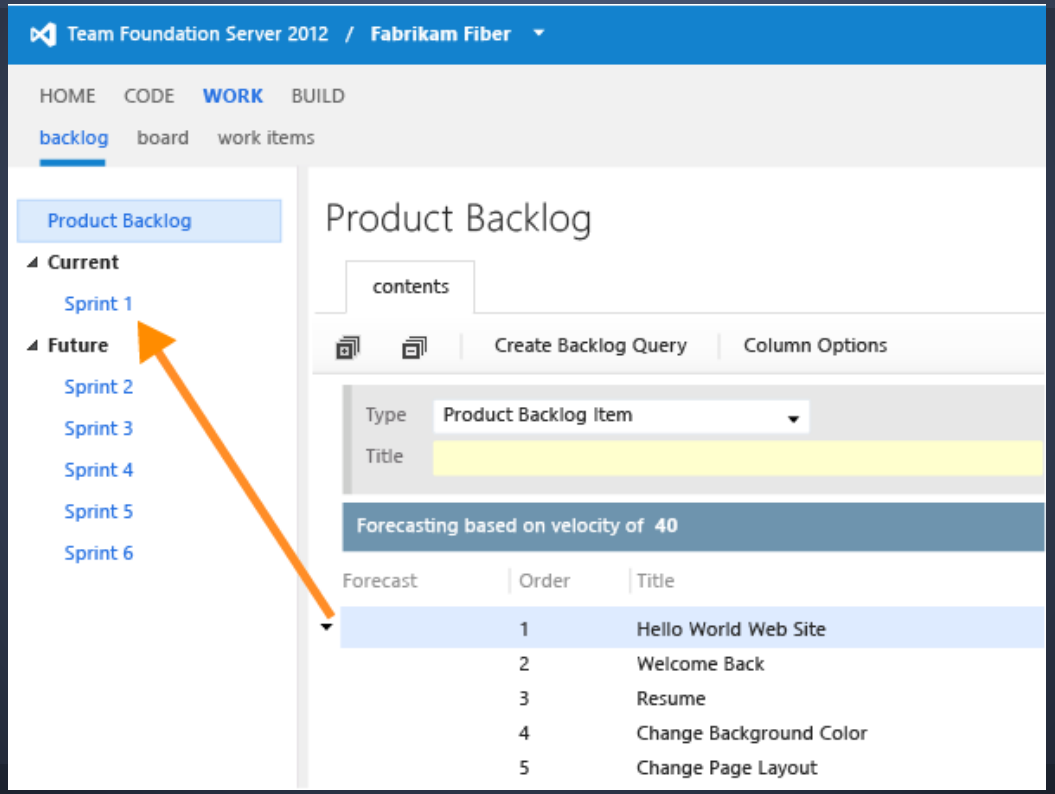
Application LifeCycle Management

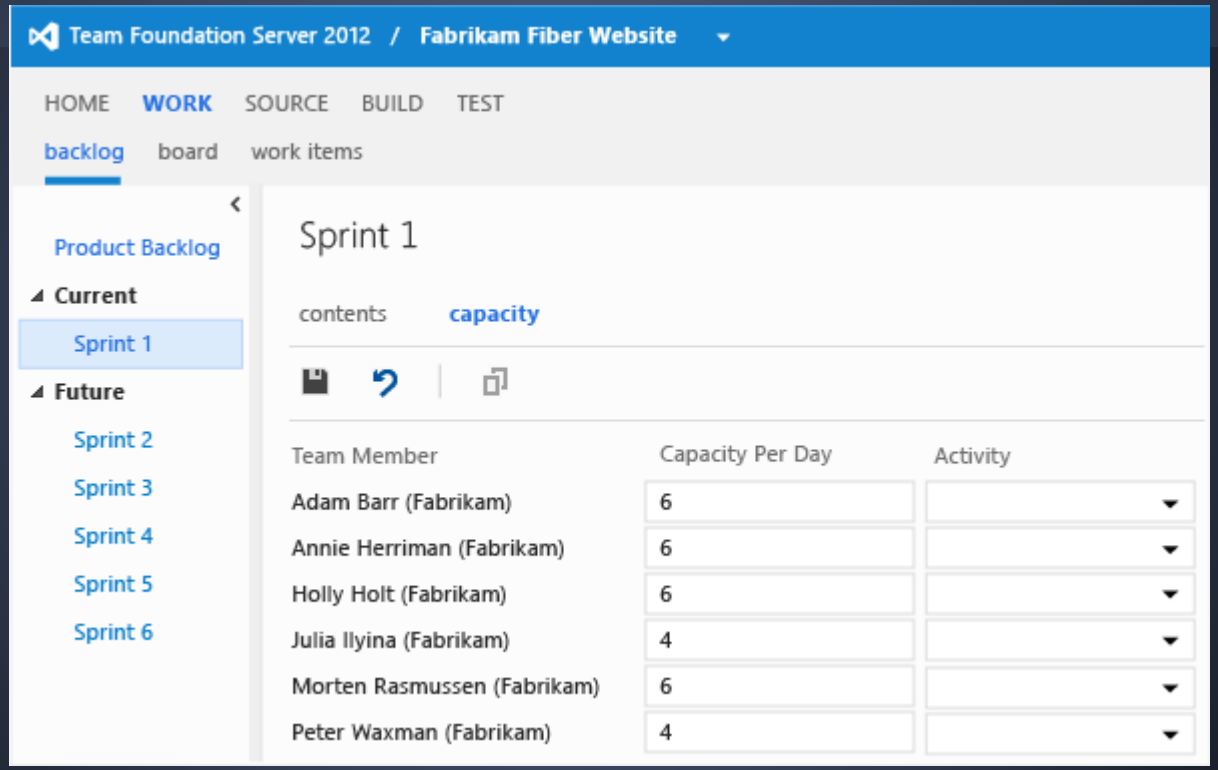


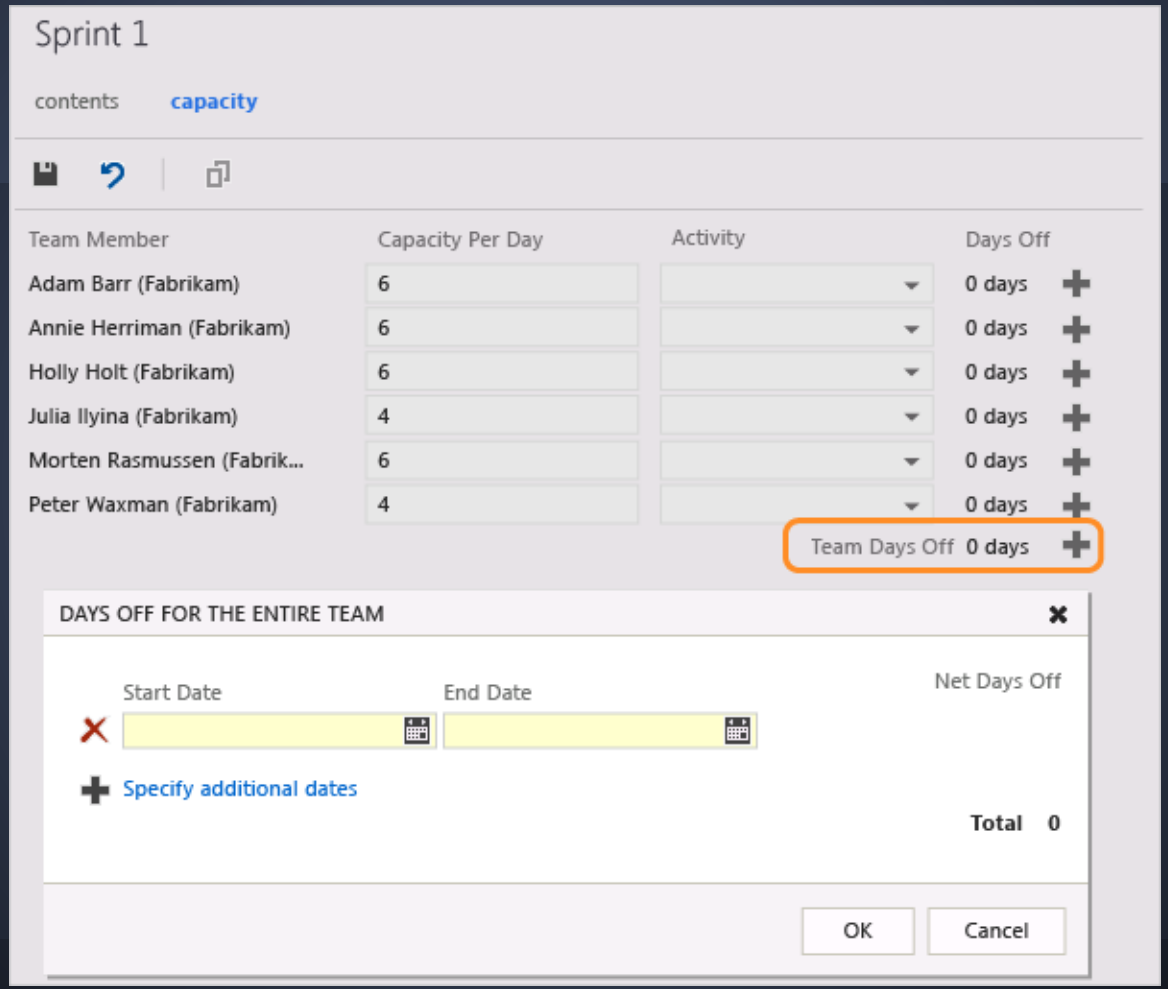
Tools for managing the application lifecycle

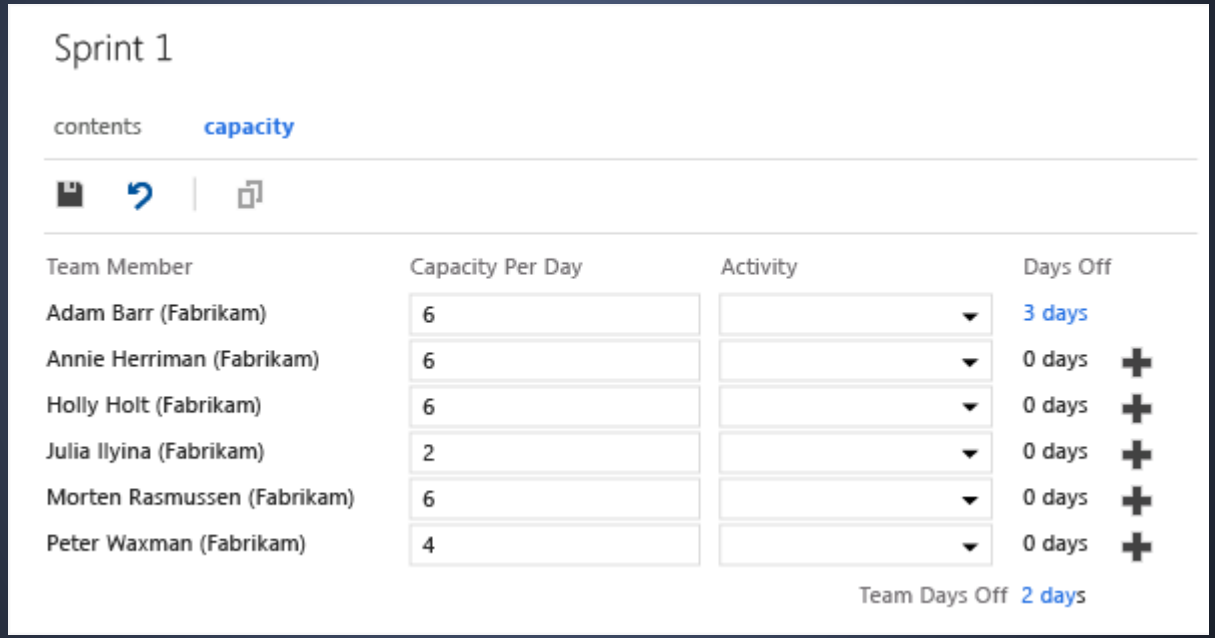
- PowerPoint Storyboarding: You can quickly illustrate a user story, requirement, or experience by using PowerPoint Storyboarding. With this tool you can build a storyboard from a collection of pre-defined storyboard shapes, capture existing user interfaces and customize the layouts of your web pages or phone application, as well as link the storyboard to a work item stored in Team Foundation Server.
- Product backlog: The product backlog page shows a single view of the current backlog of work that can be dynamically re-ordered and grouped. Product Owners can quickly prioritize work and outline dependencies and relationships.
- Sprint backlog and team capacity: The sprint backlog page reflects in real time the data you input that includes work items assigned to the iteration path, and specifying dates, individual work capacity, and work interruptions both for the team and individuals. Teams can get instant feedback on the rate of burndown and where they are over capacity.
- Task board and burndown chart: As a daily practice, the team can view and update the task board to reflect the status of work items visually. The team sees the progress they are making against each product backlog item and can quickly focus on remaining work. Also, integrated into the task board is a real-time burndown chart of the remaining work in the team's sprint.
- Request Feedback and Microsoft Feedback Client: The Request Feedback and Microsoft Feedback Client tools enable teams to engage stakeholders to provide frequent and continuous feedback. The feedback client enables stakeholders to directly interact with working software while recording rich and actionable data for the team in the background through action scripts, annotations, screenshots, and video or audio recordings.

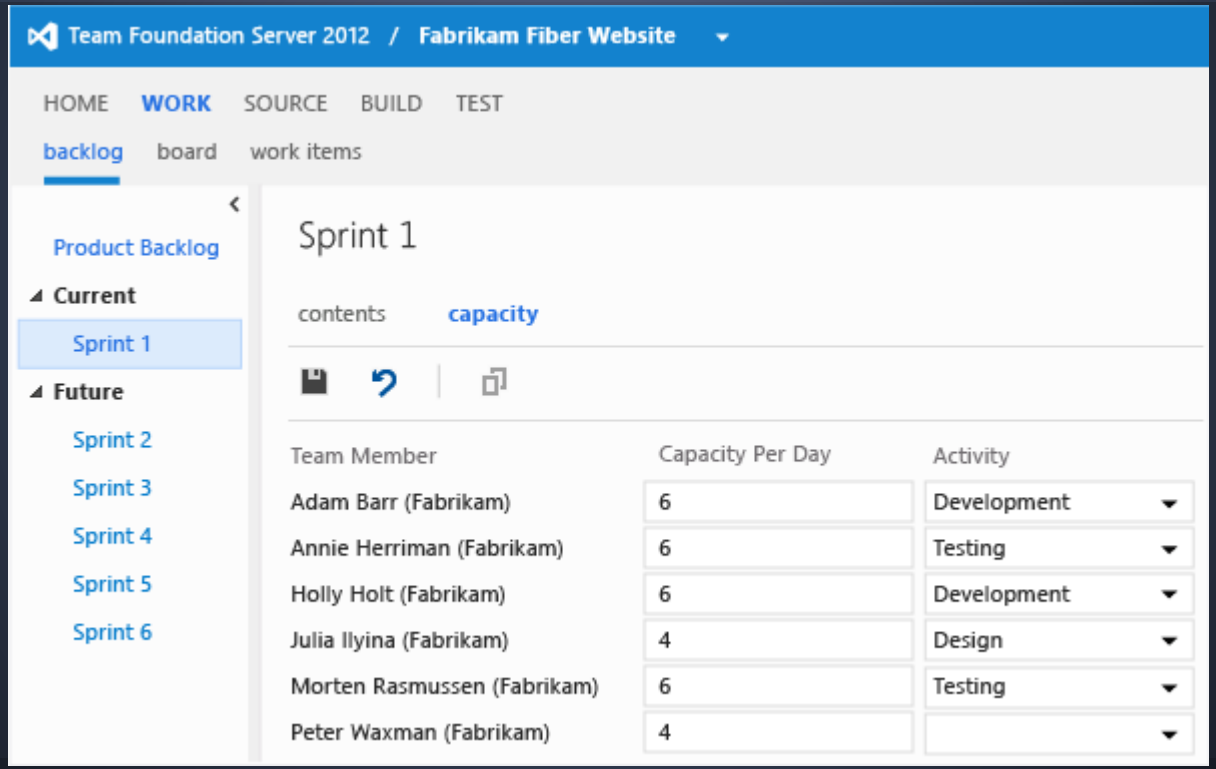
Managing ALM - Product Backlog

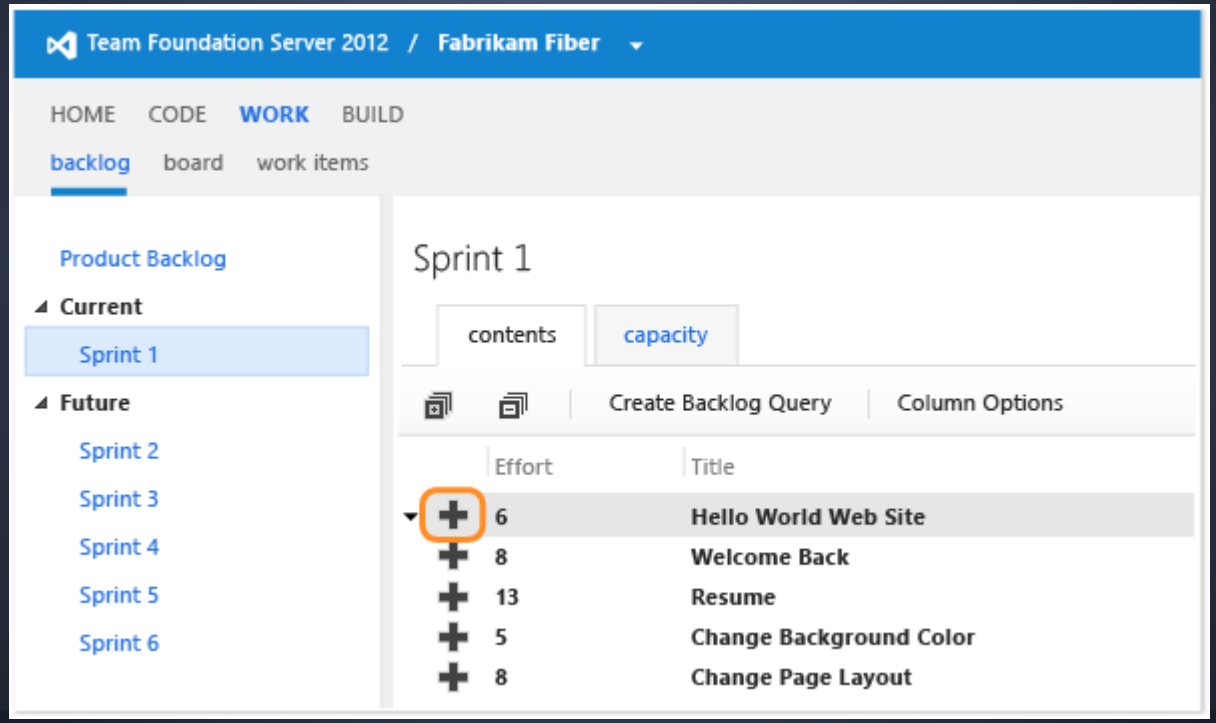


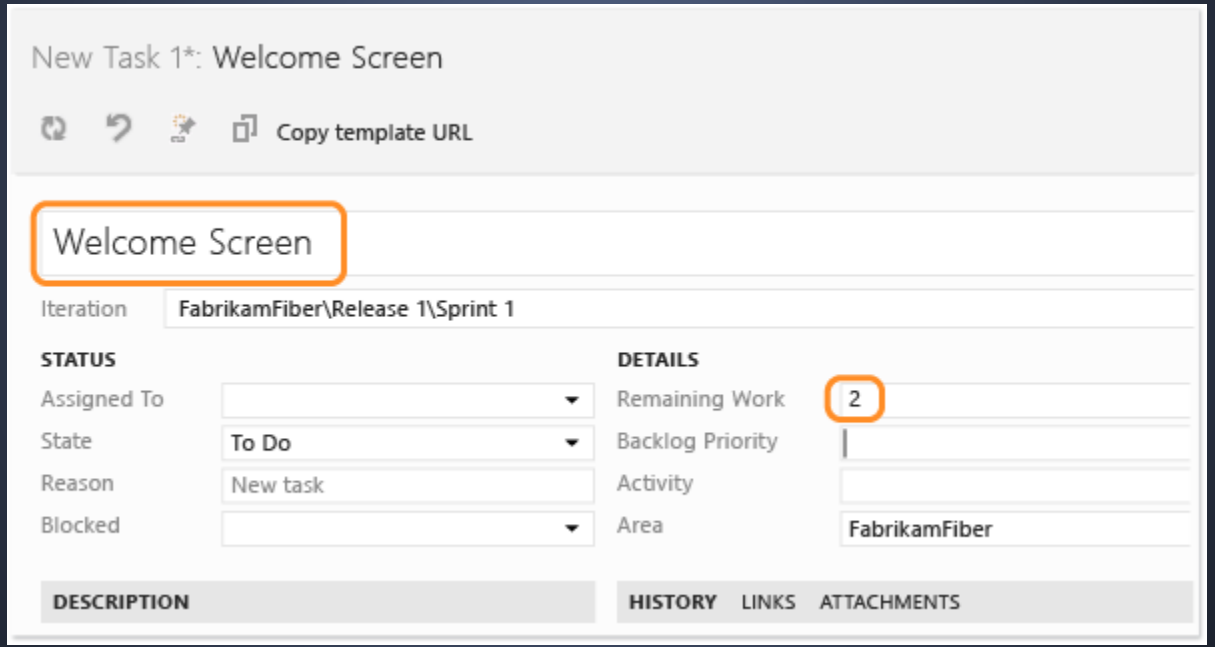

Team Foundation Server 2012 / Fabrikam Fiber Website
HOME
WORK
SOURCE
BUILD
TEST
backlog
board
work items
Product Backlog
Current
Sprint 1
Future
Sprint 2
Sprint 3
Sprint 4
Sprint 5
Sprint 6
Sprint 1
contents
capacity
Team Member
Capacity Per Day
Activity
Adam Barr (Fabrikam) 6
Annie Herriman (Fabrikam) 6
Holly Holt (Fabrikam) 6
Julia Ilyina (Fabrikam) 4
Morten Rasmussen (Fabrikam) 6
Peter Waxman (Fabrikam) 4

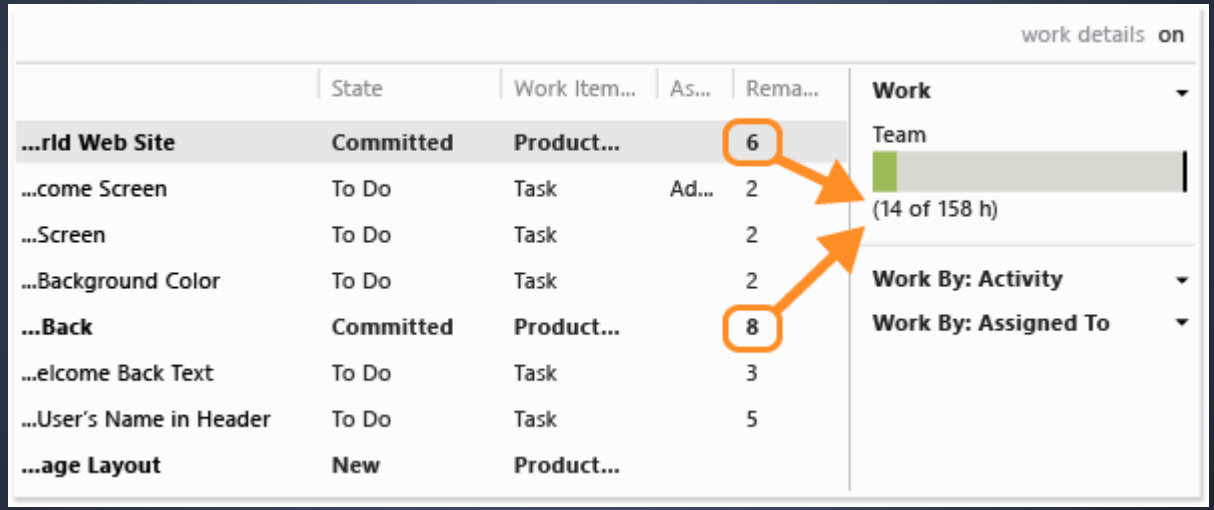

Sprint 1
contents
capacity
Team Member
Capacity Per Day
Activity
Days Off
Adam Barr (Fabrikam)
6
0 days
Annie Herriman (Fabrikam)
6
0 days
Holly Holt (Fabrikam)
6
0 days
Julia Ilyina (Fabrikam)
4
0 days
Morten Rasmussen (Fabrik...
6
0 days
Peter Waxman (Fabrikam)
4
0 days
Team Days Off 0 days
DAYS OFF FOR THE ENTIRE TEAM
Start Date
End Date
Net Days Off
Specify additional dates
Total 0
OK
Cancel

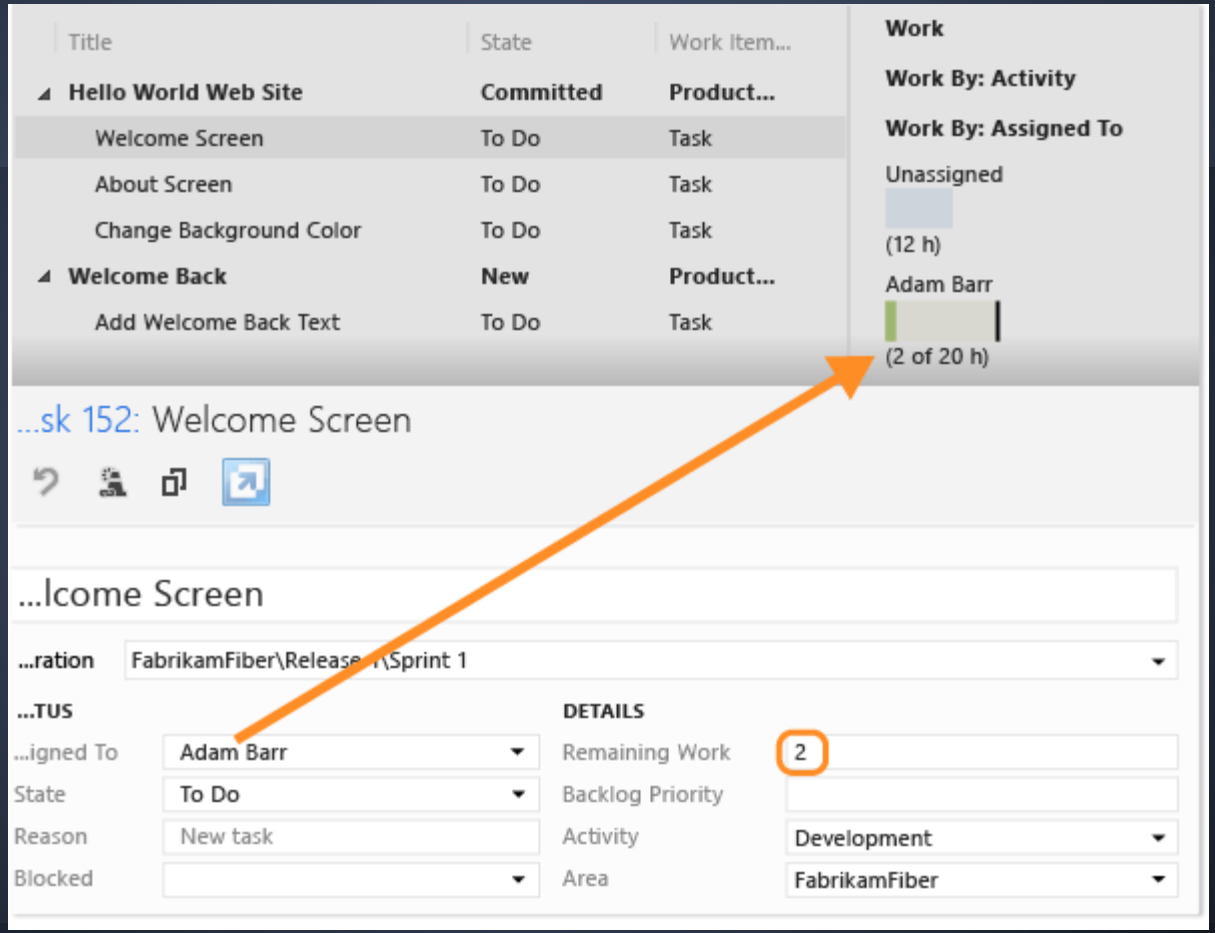

Sprint 1
contents
capacity
Team Member
Capacity Per Day
Activity
Days Off
Adam Barr (Fabrikam)
6
3 days
Annie Herriman (Fabrikam)
6
0 days
Holly Holt (Fabrikam)
6
0 days
Julia Ilyina (Fabrikam)
2
0 days
Morten Rasmussen (Fabrikam)
6
0 days
Peter Waxman (Fabrikam)
4
0 days
Team Days Off 2 days

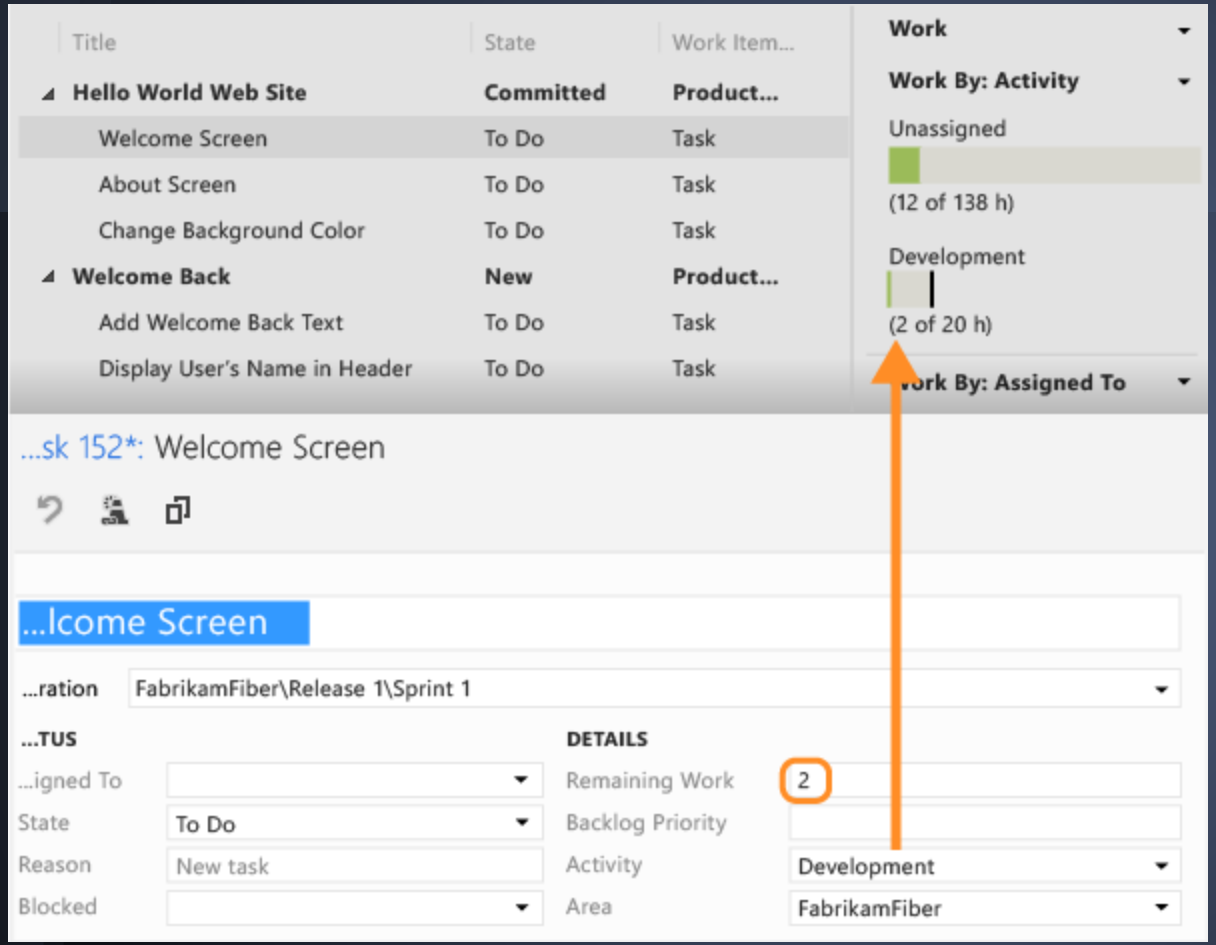

Team Foundation Server 2012 / Fabrikam Fiber Website
HOME
WORK
SOURCE
BUILD
TEST
backlog
board
work items
Product Backlog
Current
Sprint 1
Future
Sprint 2
Sprint 3
Sprint 4
Sprint 5
Sprint 6
Sprint 1
contents
capacity
Team Member
Capacity Per Day
Activity
Adam Barr (Fabrikam)
6
Development
Annie Herriman (Fabrikam)
6
Testing
Holly Holt (Fabrikam)
6
Development
Julia Ilyina (Fabrikam)
4
Design
Morten Rasmussen (Fabrikam)
6
Testing
Peter Waxman (Fabrikam)
4

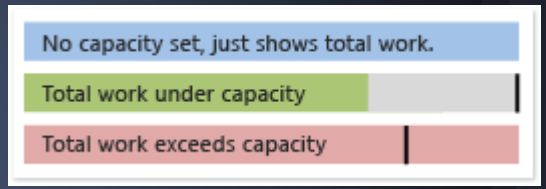

Team Foundation Server 2012 / Fabrikam Fiber
HOME
CODE
WORK
BUILD
backlog
board
work items
Product Backlog
Current
Sprint 1
Future
Sprint 2
Sprint 3
Sprint 4
Sprint 5
Sprint 6
Sprint 1
contents
capacity
Create Backlog Query
Column Options
Effort
Title
6
Hello World Web Site
8
Welcome Back
13
Resume
5
Change Background Color
8
Change Page Layout

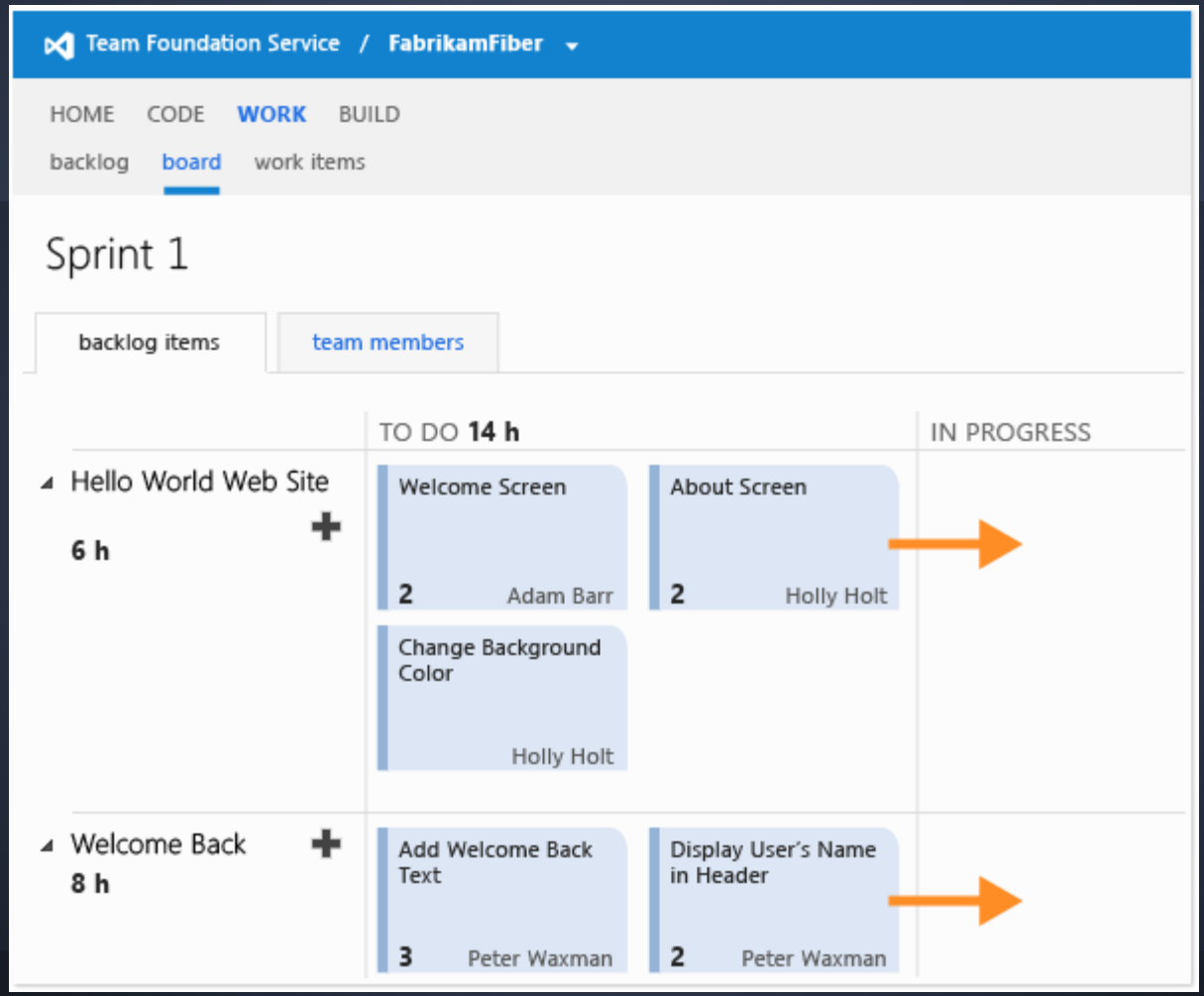

New Task 1*: Welcome Screen
Copy template URL
Welcome Screen
Iteration
FabrikamFiber\Release 1\Sprint 1
STATUS
Assigned To
State
To Do
Reason
New task
Blocked
DETAILS
Remaining Work
2
Backlog Priority
Activity
Area
FabrikamFiber
DESCRIPTION
HISTORY
LINKS
ATTACHMENTS

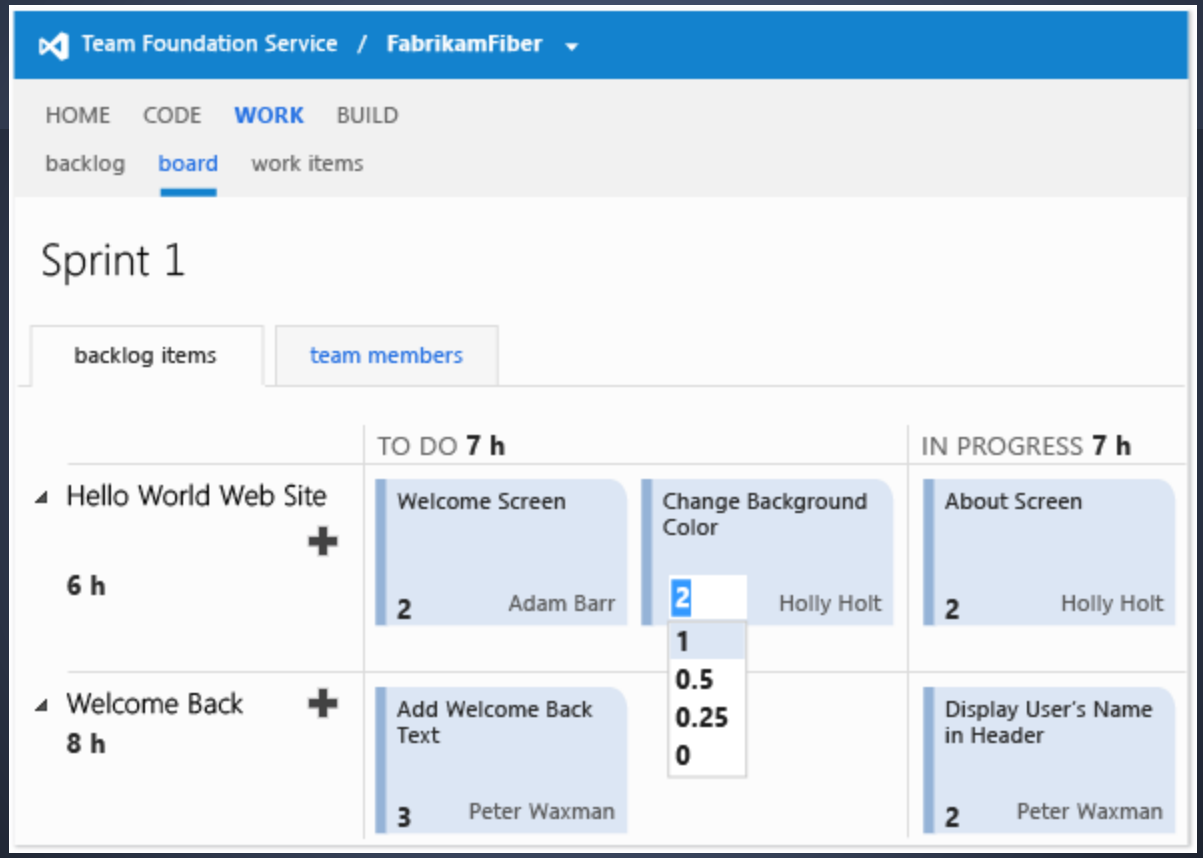

work details on
State
Work Item...
As...
Rema...
...rld Web Site
Committed
Product...
6
...come Screen
To Do
Task
Ad...
2
...Screen
To Do
Task
2
...Background Color
To Do
Task
2
...Back
Committed
Product...
8
...elcome Back Text
To Do
Task
3
...User's Name in Header
To Do
Task
5
...age Layout
New
Product...
Work
Team
(14 of 158 h)
Work By: Activity
Work By: Assigned To

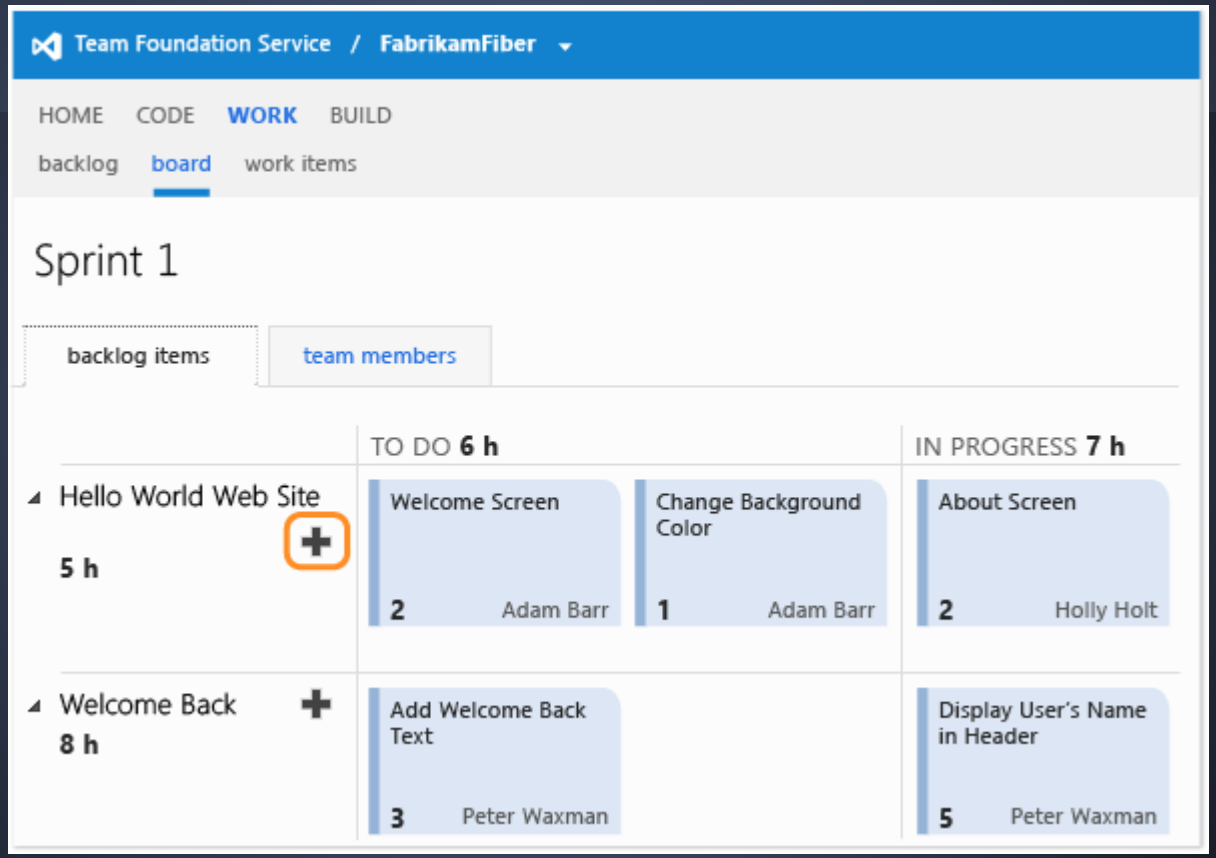

Title
State
Work Item...
Hello World Web Site
Committed
Product...
Welcome Screen
To Do
Task
About Screen
To Do
Task
Change Background Color
To Do
Task
Welcome Back
New
Product...
Add Welcome Back Text
To Do
Task
Work
Work By: Activity
Work By: Assigned To
Unassigned
(12 h)
Adam Barr
(2 of 20 h)
...sk 152: Welcome Screen
...lcome Screen
...ration
FabrikamFiber\Release 1\Sprint 1
...TUS
DETAILS
...igned To
Adam Barr
Remaining Work
2
State
To Do
Backlog Priority
Reason
New task
Activity
Development
Blocked
Area
FabrikamFiber

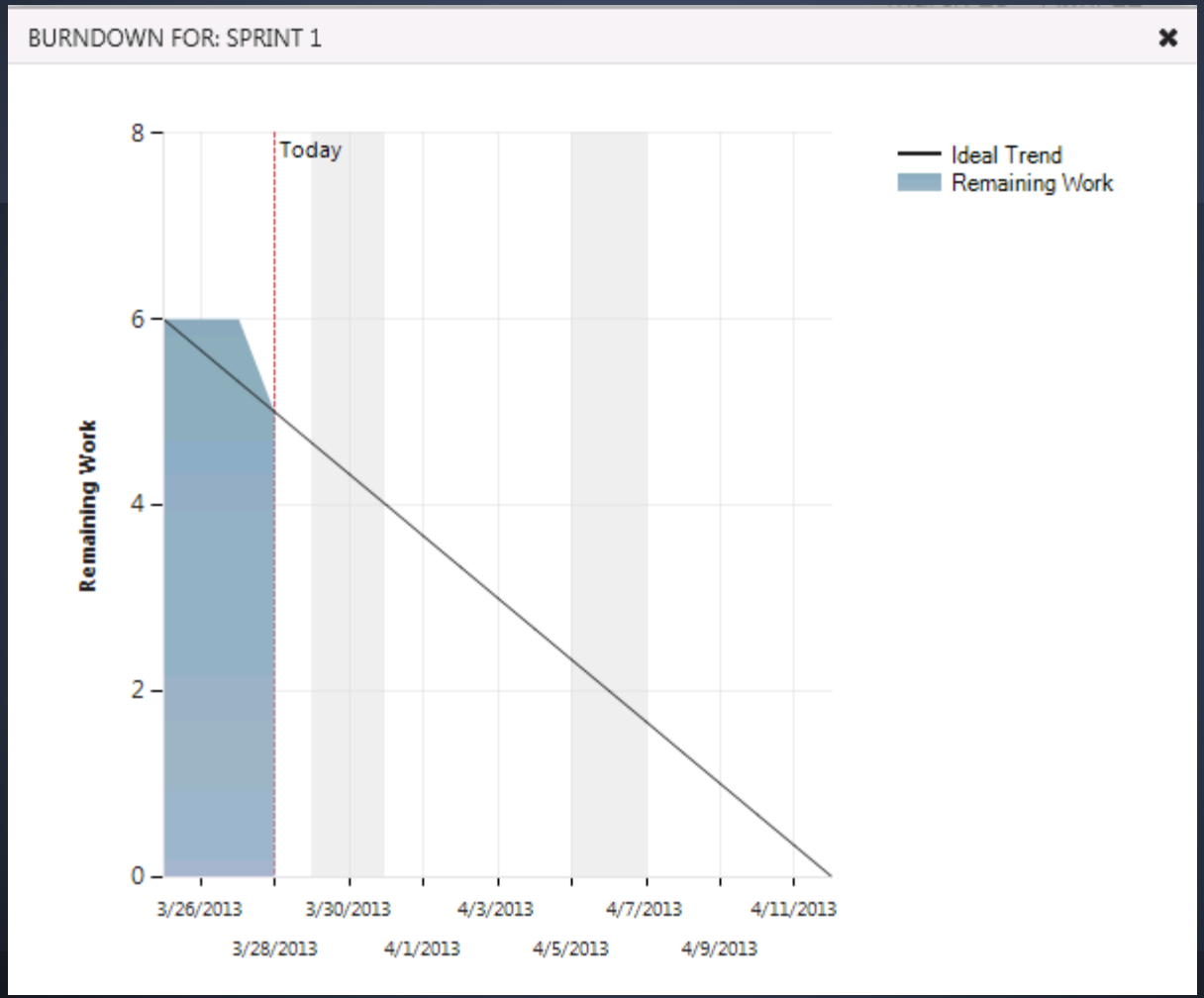

Title
State
Work Item...
Hello World Web Site
Committed
Product...
Welcome Screen
To Do
Task
About Screen
To Do
Task
Change Background Color
To Do
Task
Welcome Back
New
Product...
Add Welcome Back Text
To Do
Task
Display User's Name in Header
To Do
Task
Work
Work By: Activity
Unassigned
(12 of 138 h)
Development
(2 of 20 h)
...sk 152*: Welcome Screen
...lcome Screen
...ration
FabrikamFiber\Release 1\Sprint 1
...TUS
DETAILS
...igned To
State
To Do
Reason
New task
Blocked
Remaining Work
2
Backlog Priority
Activity
Development
Area
FabrikamFiber

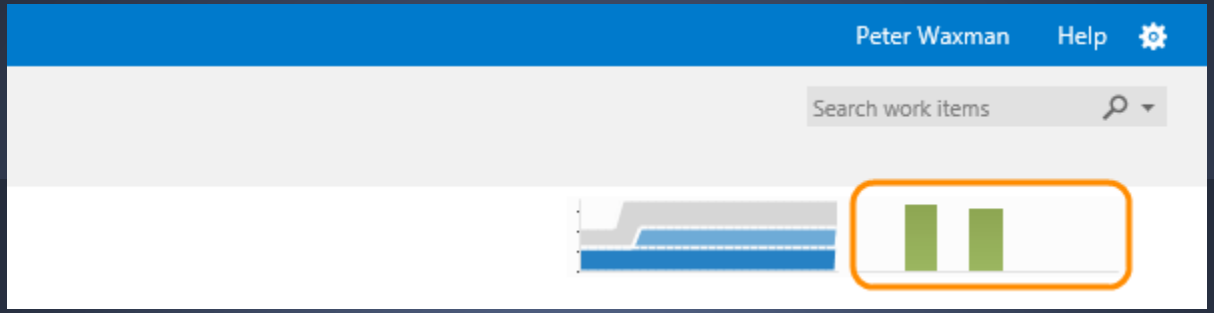

No capacity set, just shows total work.
Total work under capacity
Total work exceeds capacity

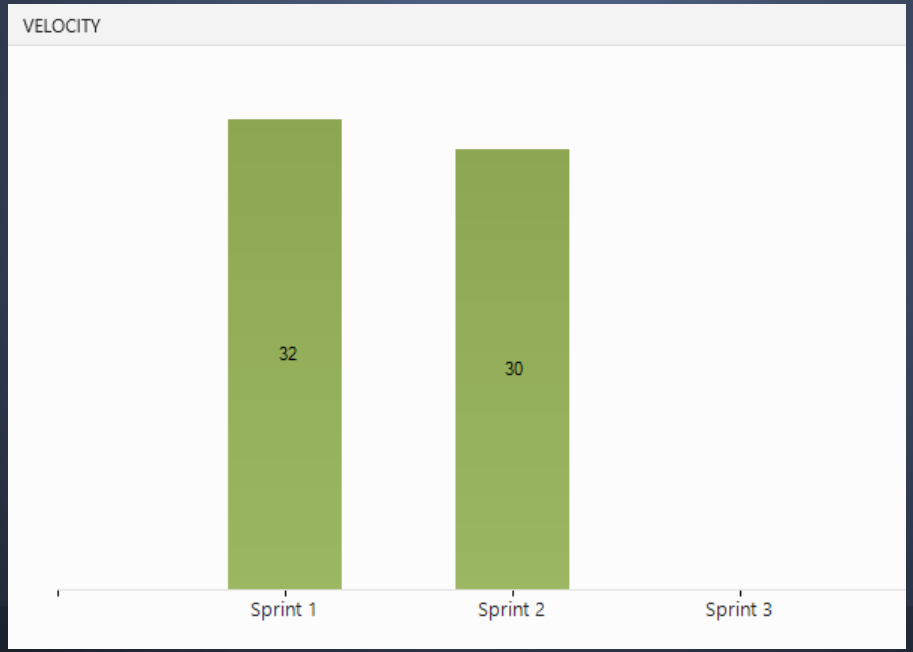

Team Foundation Service / FabrikamFiber
HOME CODE WORK BUILD
backlog board work items
Sprint 1
backlog items
team members
TO DO 14 h
IN PROGRESS
Hello World Web Site
6 h
Welcome Screen
2 Adam Barr
About Screen
2 Holly Holt
Change Background Color
Holly Holt
Welcome Back
8 h
Add Welcome Back Text
3 Peter Waxman
Display User's Name in Header
2 Peter Waxman

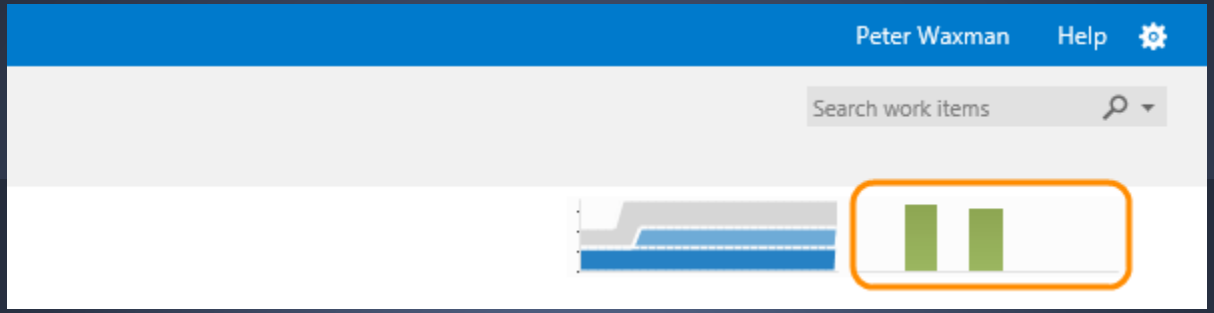

Team Foundation Service / FabrikamFiber
HOME
CODE
WORK
BUILD
backlog
board
work items
Sprint 1
backlog items
team members
TO DO 7 h
IN PROGRESS 7 h
Hello World Web Site
6 h
Welcome Screen
2
Adam Barr
Change Background Color
2
Holly Holt
1
0.5
0.25
0
About Screen
2
Holly Holt
Welcome Back
8 h
Add Welcome Back Text
3
Peter Waxman
Display User's Name in Header
2
Peter Waxman

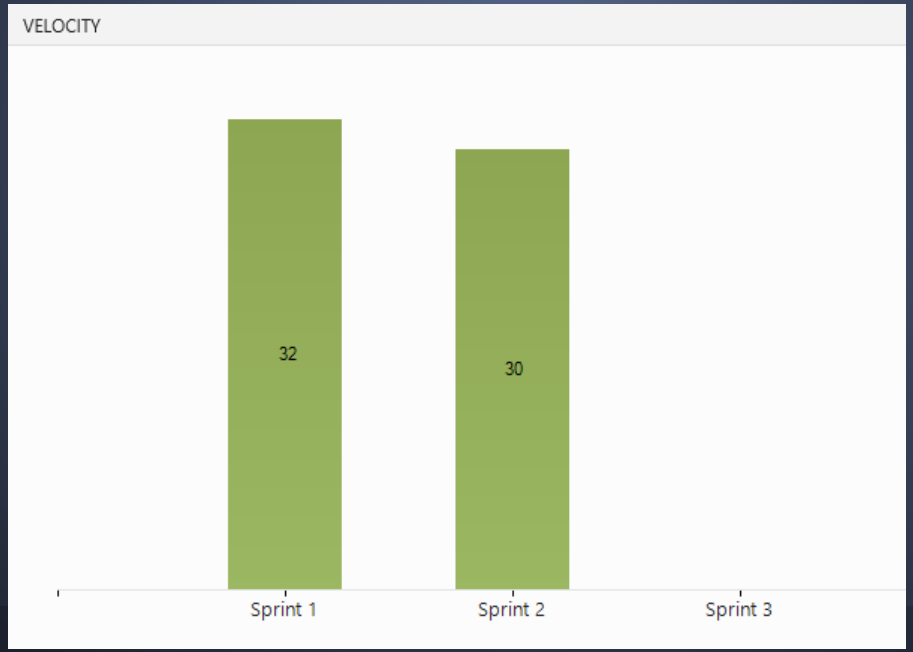

Team Foundation Service / FabrikamFiber
HOME
CODE
WORK
BUILD
backlog
board
work items
Sprint 1
backlog items
team members
TO DO 6 h
IN PROGRESS 7 h
Hello World Web Site
5 h
Welcome Screen
2
Adam Barr
Change Background Color
1
Adam Barr
About Screen
2
Holly Holt
Welcome Back
8 h
Add Welcome Back Text
3
Peter Waxman
Display User's Name in Header
5
Peter Waxman

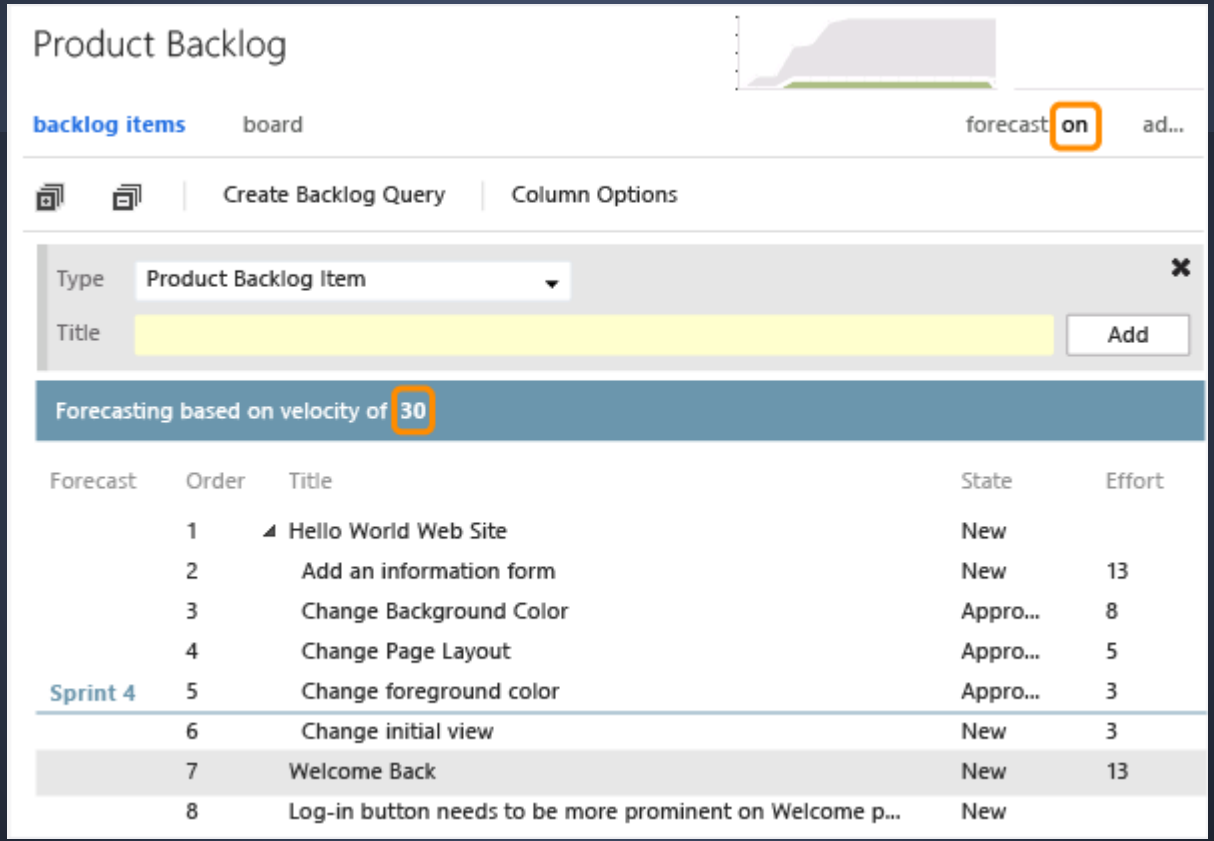

BURNDOWN FOR: SPRINT 1
Today
Ideal Trend
Remaining Work
Remaining Work
8
6
4
2
0
3/26/2013
3/28/2013
3/30/2013
4/1/2013
4/3/2013
4/5/2013
4/7/2013
4/9/2013
4/11/2013


Peter Waxman
Help
Search work items

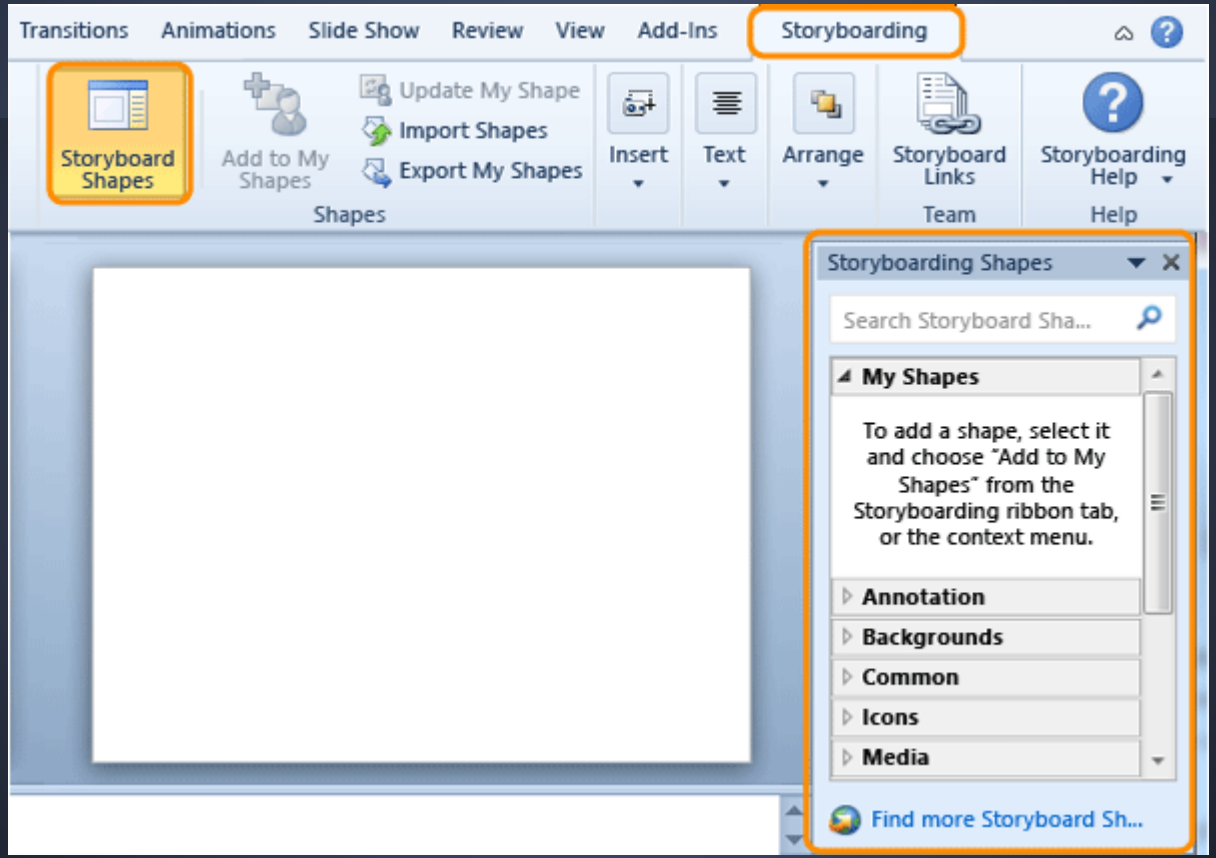

VELOCITY
32
30
Sprint 1
Sprint 2
Sprint 3

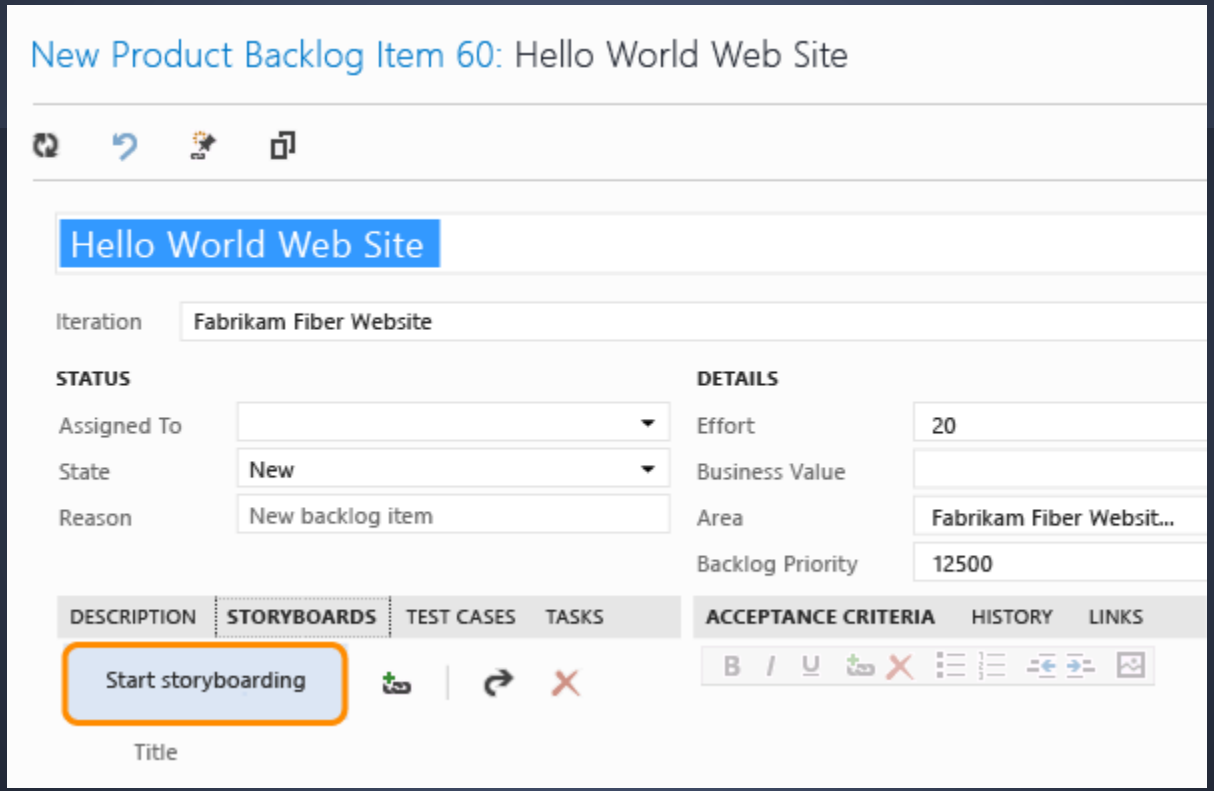

Peter Waxman
Help
Search work items

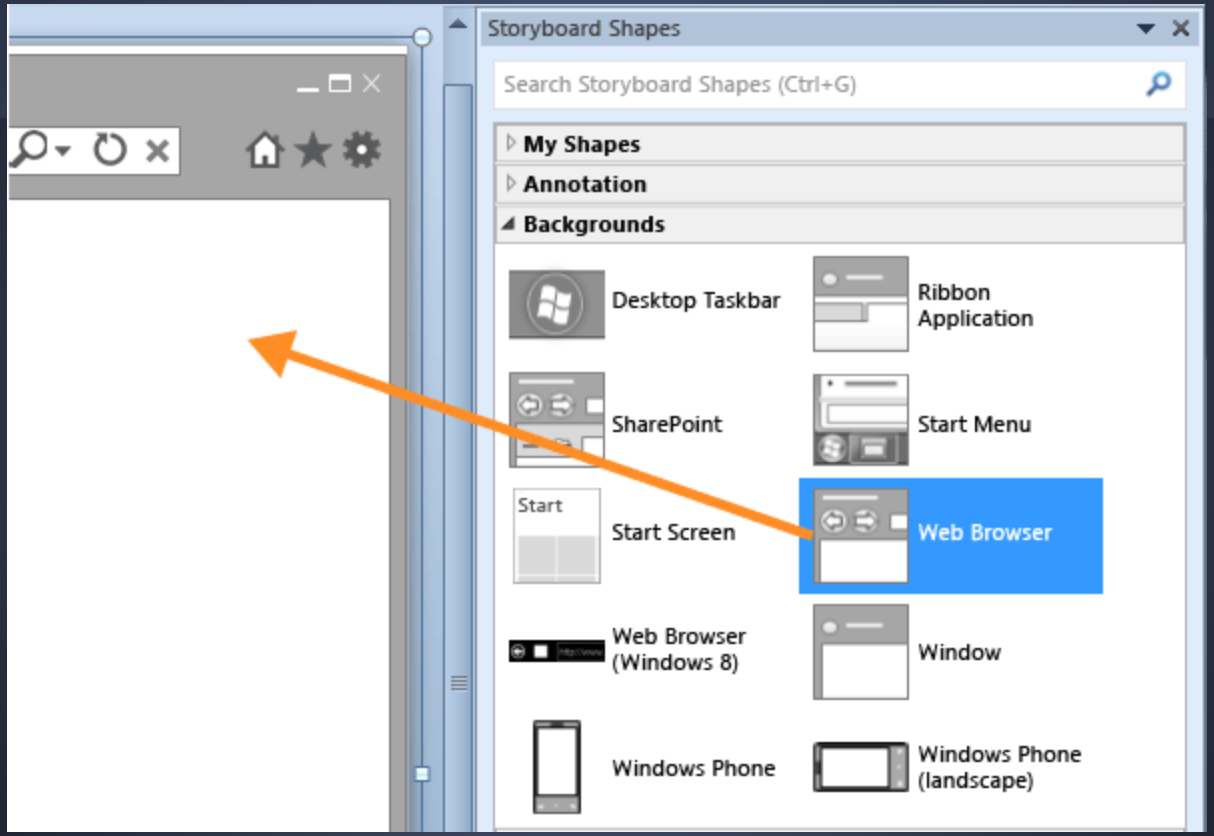

VELOCITY
32
30
Sprint 1
Sprint 2
Sprint 3

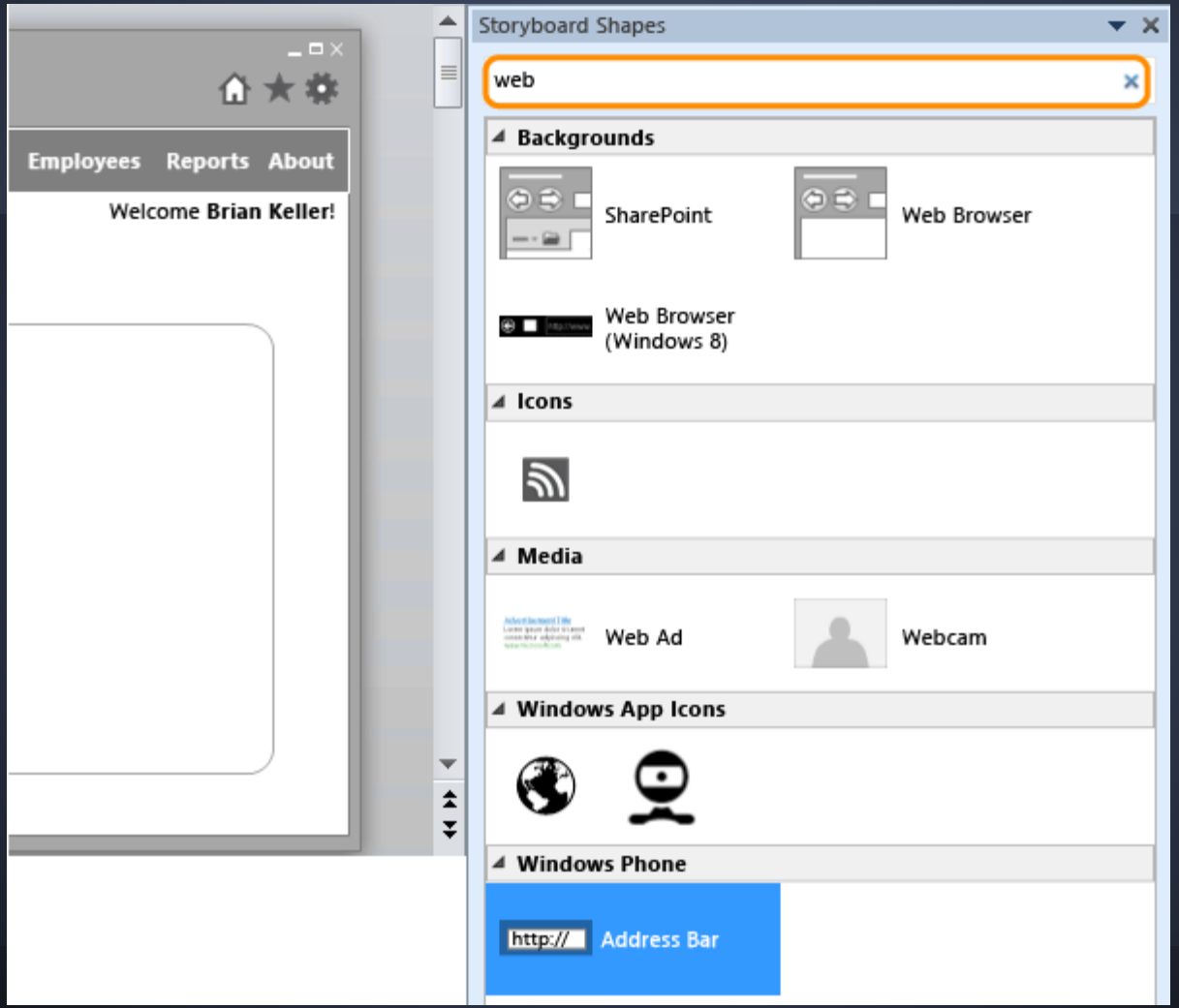

Product Backlog
backlog items
board
forecast
on
ad...
Create Backlog Query
Column Options
Type
Product Backlog Item
Title
Add
Forecasting based on velocity of 30
Forecast
Order
Title
State
Effort
1
Hello World Web Site
New
2
Add an information form
New
13
3
Change Background Color
Appro...
8
4
Change Page Layout
Appro...
5
Sprint 4
5
Change foreground color
Appro...
3
6
Change initial view
New
3
7
Welcome Back
New
13
8
Log-in button needs to be more prominent on Welcome p...
New

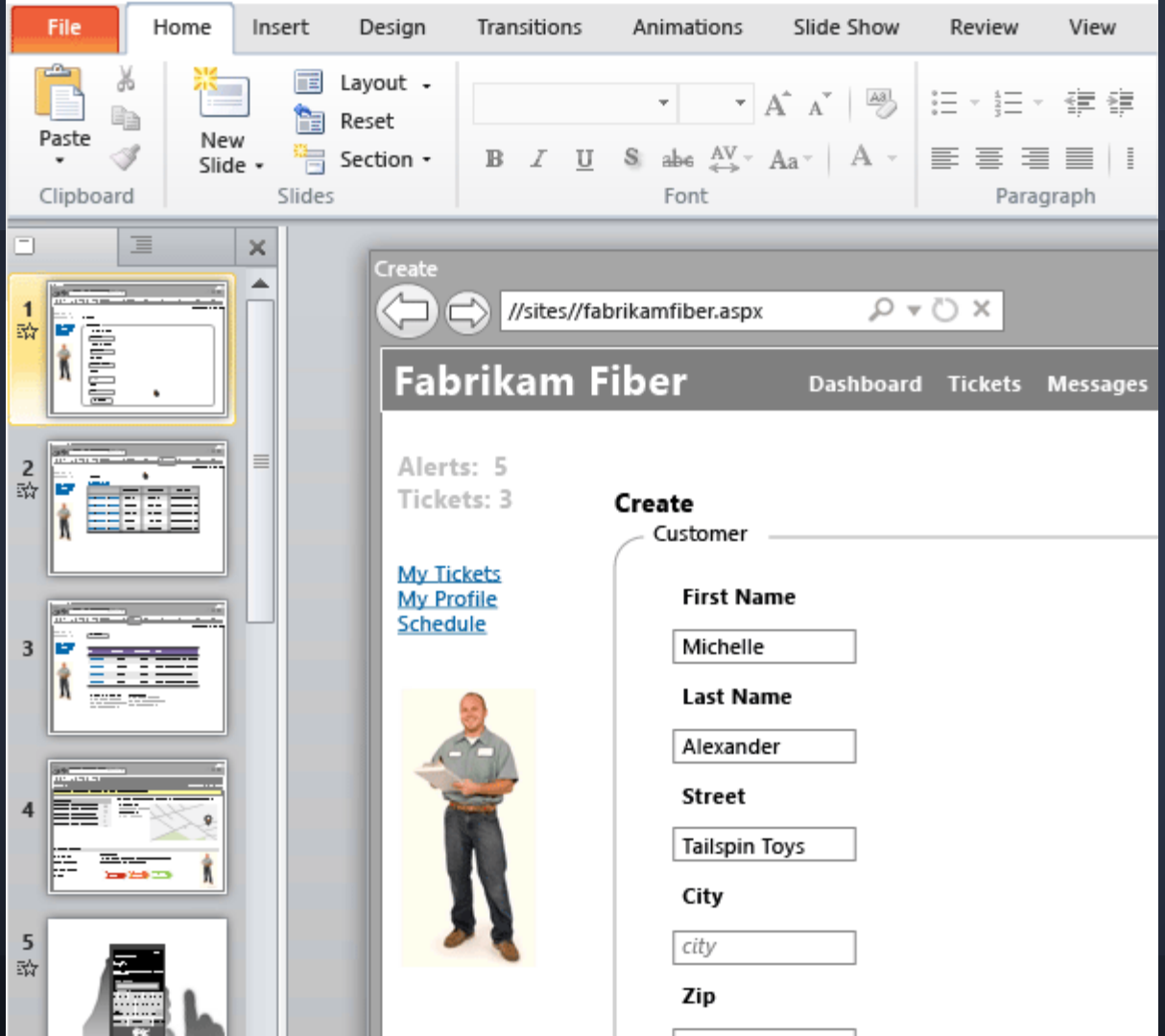
Powerpoint Storyboarding

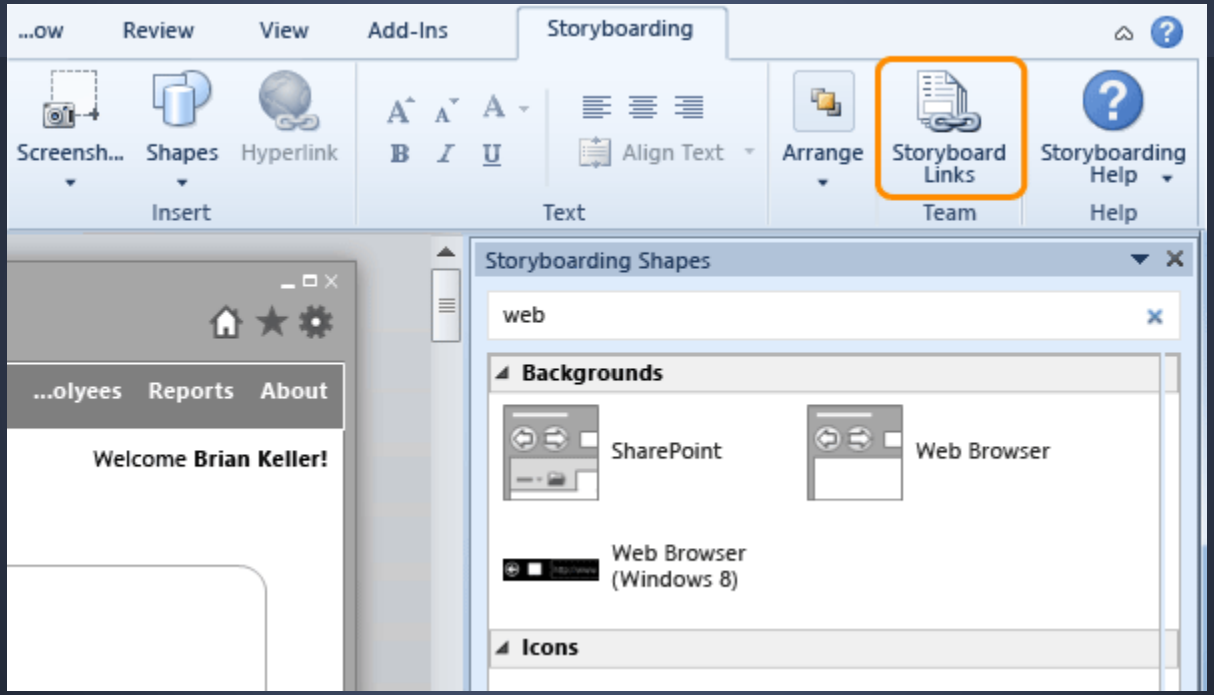

Transitions
Animations
Slide Show
Review
View
Add-Ins
Storyboarding
Storyboard Shapes
Add to My Shapes
Update My Shape
Import Shapes
Export My Shapes
Shapes
Insert
Text
Arrange
Storyboard Links
Team
Storyboarding Help
Help
Storyboarding Shapes
Search Storyboard Sha...
My Shapes
To add a shape, select it and choose "Add to My Shapes" from the Storyboarding ribbon tab, or the context menu.
Annotation
Backgrounds
Common
Icons
Media
Find more Storyboard Sh...

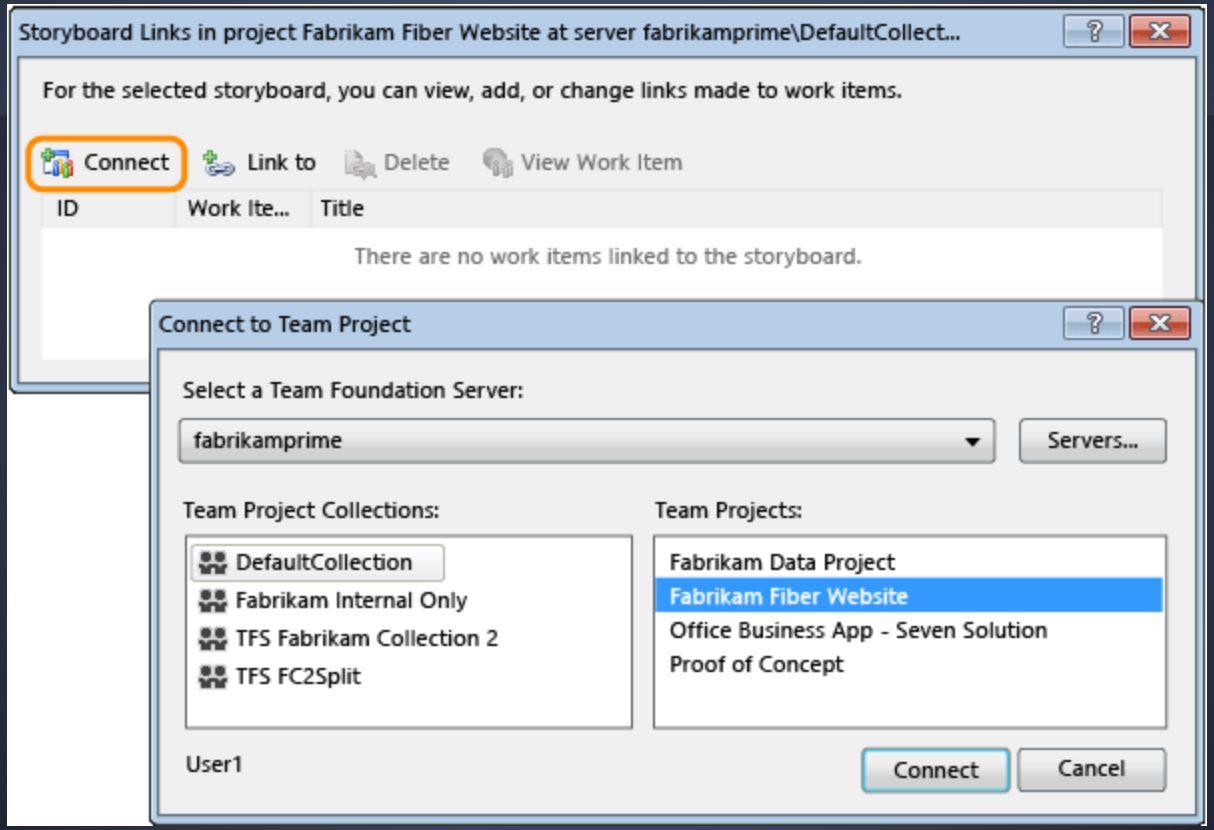

New Product Backlog Item 60: Hello World Web Site
Hello World Web Site
Iteration
Fabrikam Fiber Website
STATUS
Assigned To
State
New
Reason
New backlog item
DETAILS
Effort
20
Business Value
Area
Fabrikam Fiber Websit...
Backlog Priority
12500
DESCRIPTION
STORYBOARDS
TEST CASES
TASKS
ACCEPTANCE CRITERIA
HISTORY
LINKS
Start storyboarding
Title

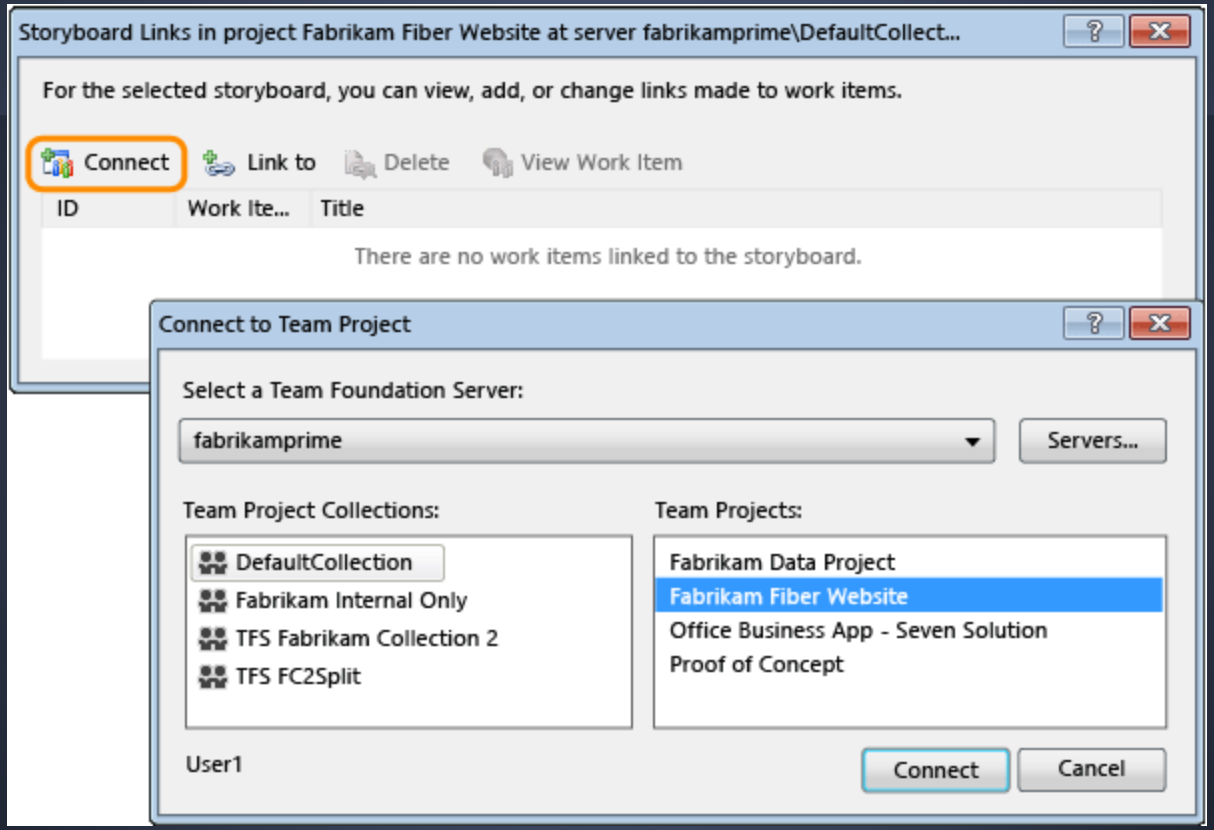

Storyboard Shapes
Search Storyboard Shapes (Ctrl+G)
My Shapes
Annotation
Backgrounds
Desktop Taskbar
Ribbon Application
SharePoint
Start Menu
Start
Start Screen
Web Browser
Web Browser (Windows 8)
Window
Windows Phone
Windows Phone (landscape)

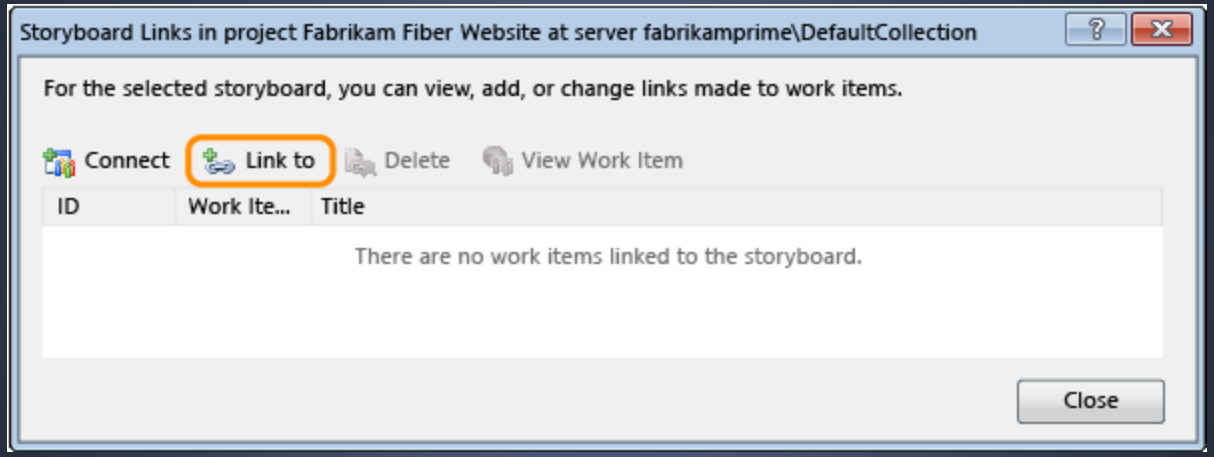

Employees
Reports
About
Welcome Brian Keller!
Storyboard Shapes
web
Backgrounds
SharePoint
Web Browser
Web Browser (Windows 8)
Icons
Media
Web Ad
Webcam
Windows App Icons
Windows Phone
http://
Address Bar

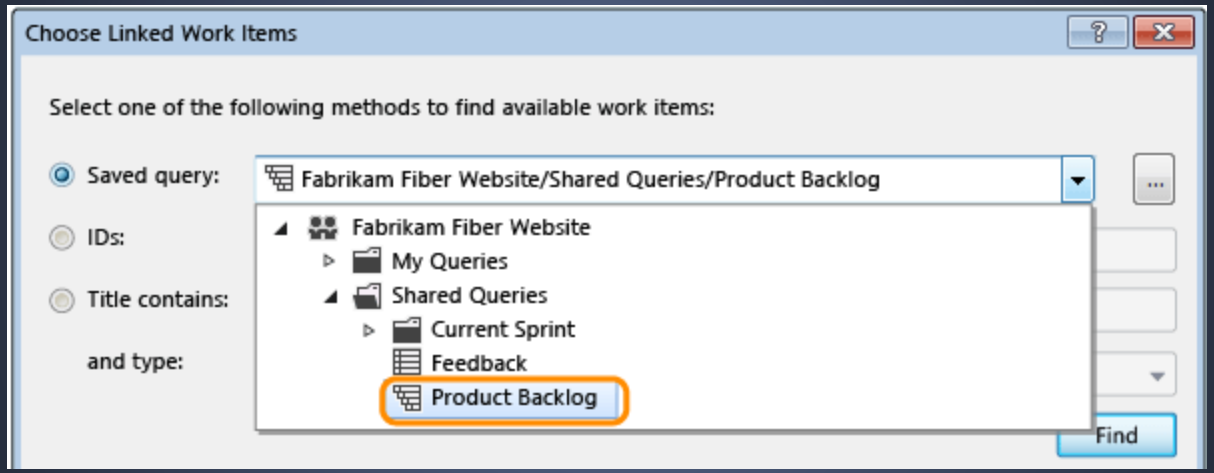

File
Home
Insert
Design
Transitions
Animations
Slide Show
Review
View
Paste
Clipboard
New Slide
Layout
Reset
Section
Slides
Font
Paragraph
1
2
3
4
5
Create
//sites//fabrikamfiber.aspx
Fabrikam Fiber
Dashboard
Tickets
Messages
Alerts: 5
Tickets: 3
My Tickets
My Profile
Schedule
Create
Customer
First Name
Michelle
Last Name
Alexander
Street
Tailspin Toys
City
city
Zip

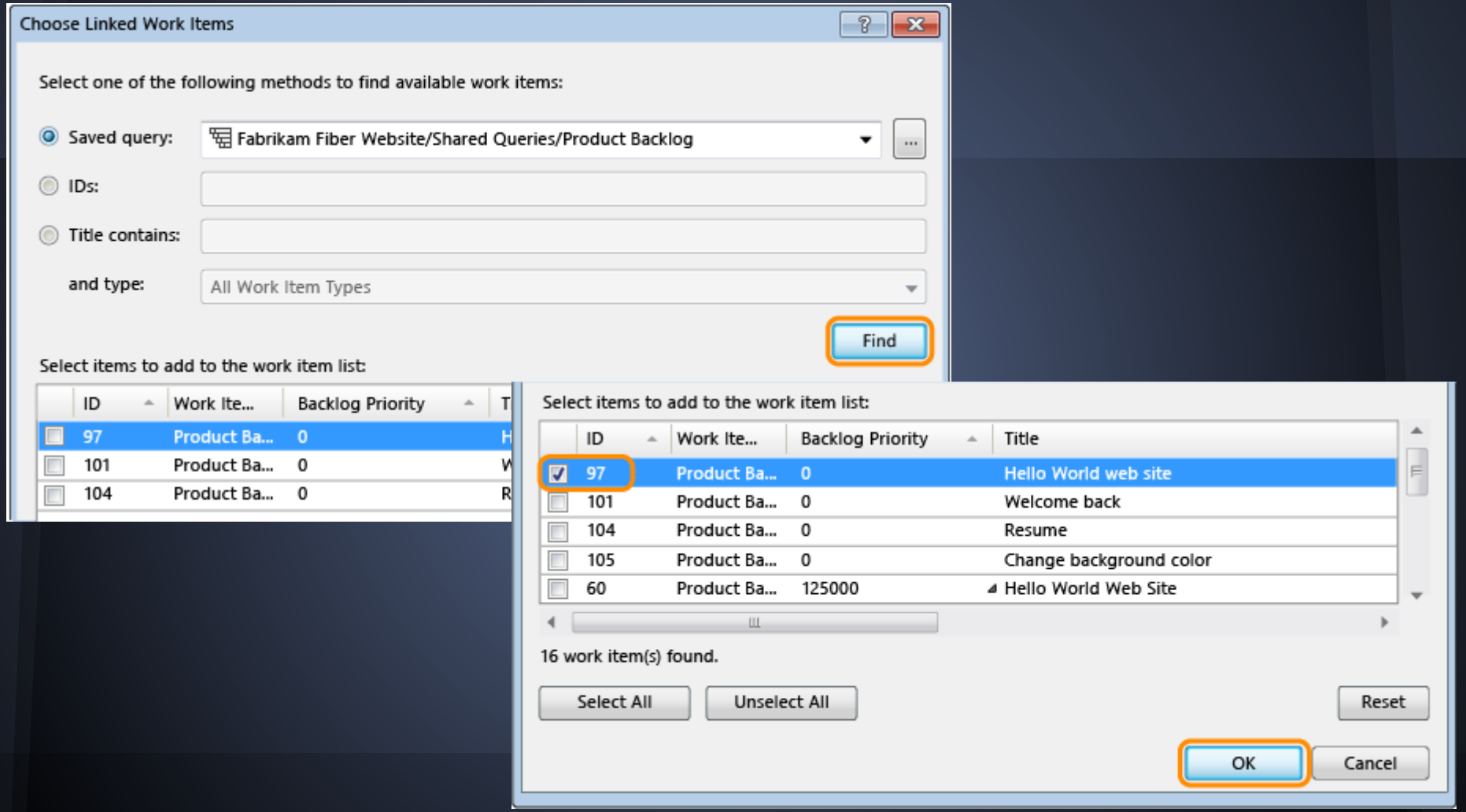

...ow
Review
View
Add-Ins
Storyboarding
Screensh...
Shapes
Hyperlink
Insert
Align Text
Text
Arrange
Storyboard Links
Team
Storyboarding Help
Help
...olyees
Reports
About
Welcome Brian Keller!
Storyboarding Shapes
web
Backgrounds
SharePoint
Web Browser
Web Browser (Windows 8)
Icons

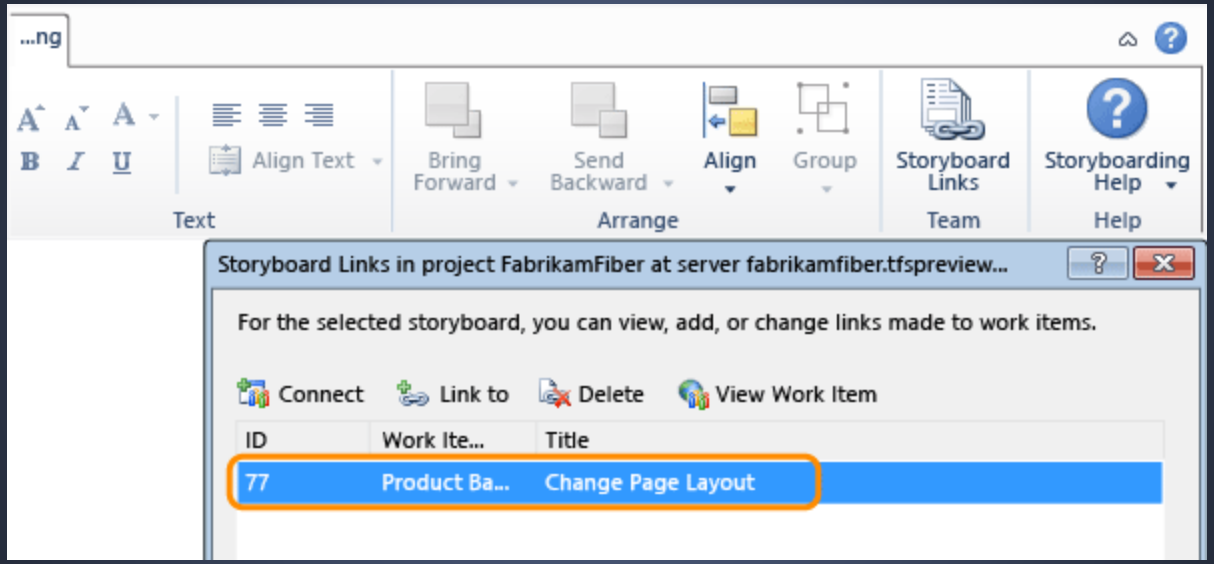

Storyboard Links in project Fabrikam Fiber Website at server fabrikamprime\DefaultCollect...
For the selected storyboard, you can view, add, or change links made to work items.
Connect
Link to
Delete
View Work Item
ID
Work Ite...
Title
There are no work items linked to the storyboard.
Connect to Team Project
Select a Team Foundation Server:
fabrikamprime
Servers...
Team Project Collections:
DefaultCollection
Fabrikam Internal Only
TFS Fabrikam Collection 2
TFS FC2Split
Team Projects:
Fabrikam Data Project
Fabrikam Fiber Website
Office Business App - Seven Solution
Proof of Concept
User1
Connect
Cancel

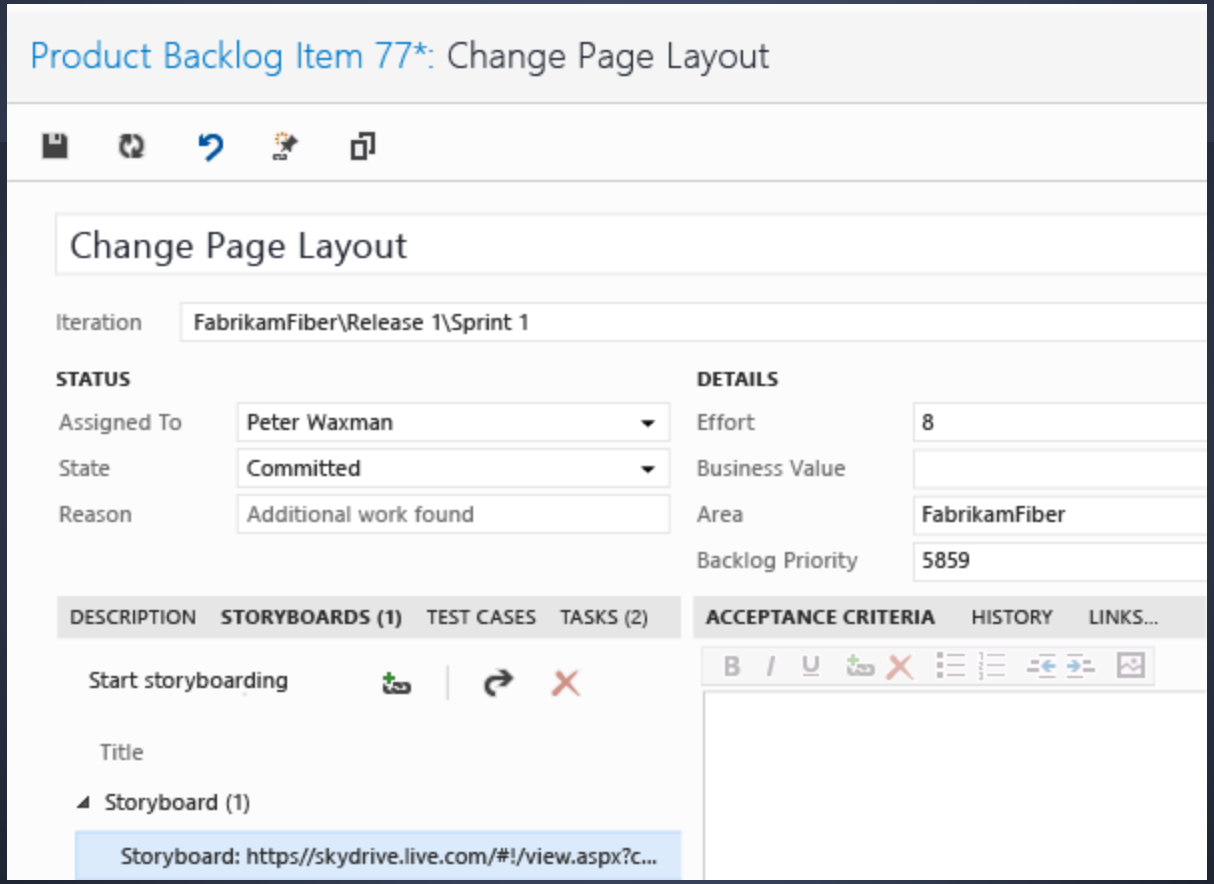

Storyboard Links in project Fabrikam Fiber Website at server fabrikamprime\DefaultCollect...
For the selected storyboard, you can view, add, or change links made to work items.
Connect
Link to
Delete
View Work Item
ID
Work Ite...
Title
There are no work items linked to the storyboard.
Connect to Team Project
Select a Team Foundation Server:
fabrikamprime
Servers...
Team Project Collections:
DefaultCollection
Fabrikam Internal Only
TFS Fabrikam Collection 2
TFS FC2Split
Team Projects:
Fabrikam Data Project
Fabrikam Fiber Website
Office Business App - Seven Solution
Proof of Concept
User1
Connect
Cancel


Storyboard Links in project Fabrikam Fiber Website at server fabrikamprime\DefaultCollection
For the selected storyboard, you can view, add, or change links made to work items.
Connect
Link to
Delete
View Work Item
ID
Work Ite...
Title
There are no work items linked to the storyboard.
Close


Choose Linked Work Items
Select one of the following methods to find available work items:
Saved query:
Fabrikam Fiber Website/Shared Queries/Product Backlog
IDs:
Title contains:
and type:
Fabrikam Fiber Website
My Queries
Shared Queries
Current Sprint
Feedback
Product Backlog
Find

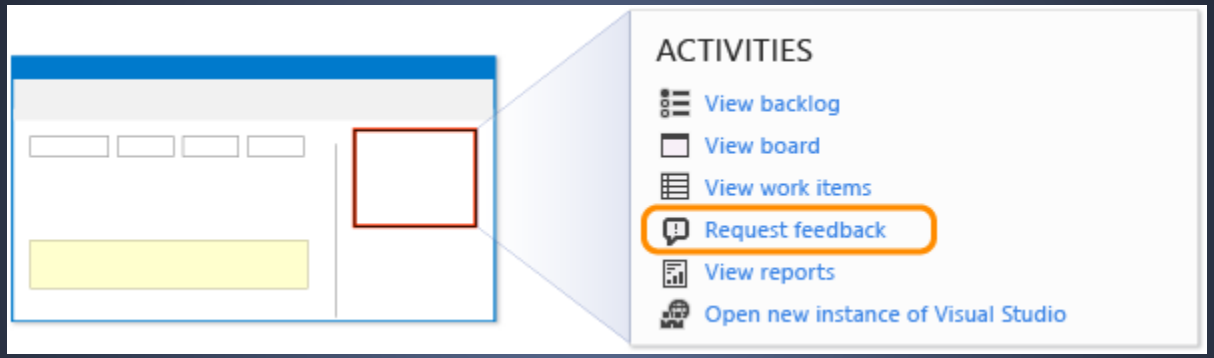

Choose Linked Work Items
Select one of the following methods to find available work items:
Saved query:
Fabrikam Fiber Website/Shared Queries/Product Backlog
IDs:
Title contains:
and type:
All Work Item Types
Find
Select items to add to the work item list:
ID
Work Ite...
Backlog Priority
97 Product Ba... 0
101 Product Ba... 0
104 Product Ba... 0
Select items to add to the work item list:
ID
Work Ite...
Backlog Priority
Title
97 Product Ba... 0 Hello World web site
101 Product Ba... 0 Welcome back
104 Product Ba... 0 Resume
105 Product Ba... 0 Change background color
60 Product Ba... 125000 Hello World Web Site
16 work item(s) found.
Select All
Unselect All
Reset
OK
Cancel

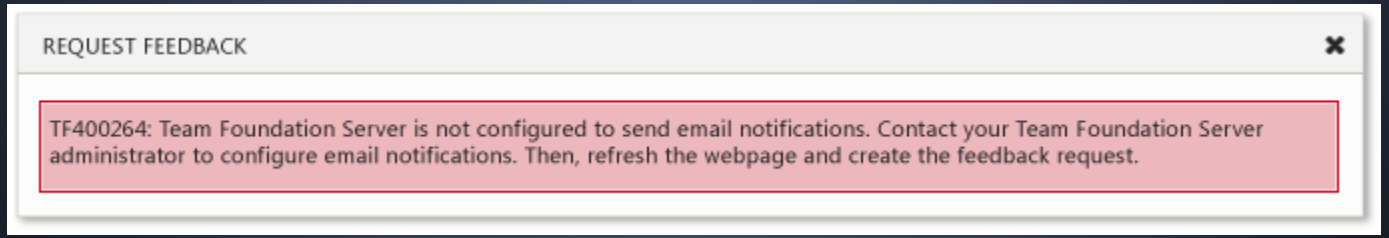

...ng
Align Text
Bring Forward
Send Backward
Align
Group
Storyboard Links
Storyboarding Help
Text
Arrange
Team
Help
Storyboard Links in project FabrikamFiber at server fabrikamfiber.tfspreview...
For the selected storyboard, you can view, add, or change links made to work items.
Connect
Link to
Delete
View Work Item
ID
Work Ite...
Title
77
Product Ba...
Change Page Layout

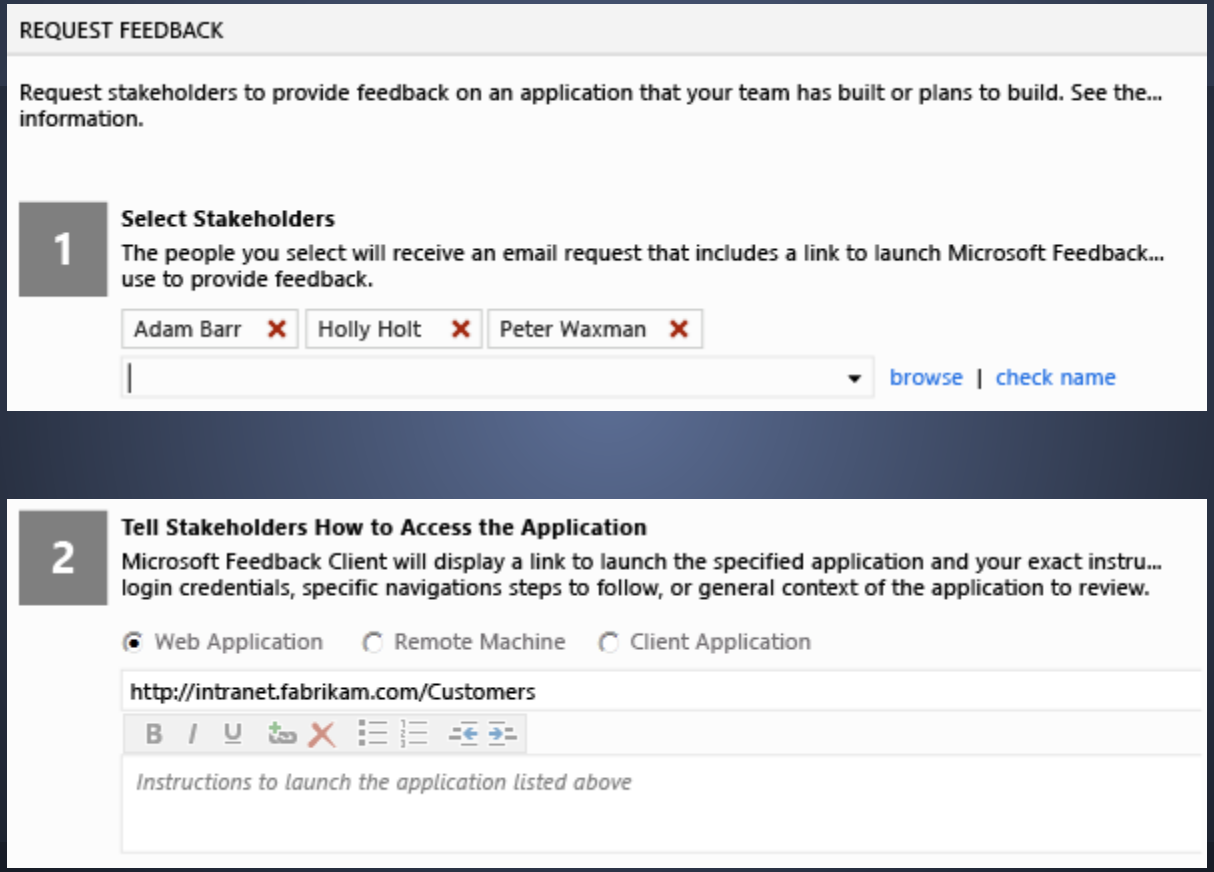

Product Backlog Item 77*: Change Page Layout
Change Page Layout
Iteration
FabrikamFiber\Release 1\Sprint 1
STATUS
Assigned To
Peter Waxman
State
Committed
Reason
Additional work found
DETAILS
Effort
8
Business Value
Area
FabrikamFiber
Backlog Priority
5859
DESCRIPTION
STORYBOARDS (1)
TEST CASES
TASKS (2)
ACCEPTANCE CRITERIA
HISTORY
LINKS...
Start storyboarding
Title
Storyboard (1)
Storyboard: https//skydrive.live.com/#!/view.aspx?c...

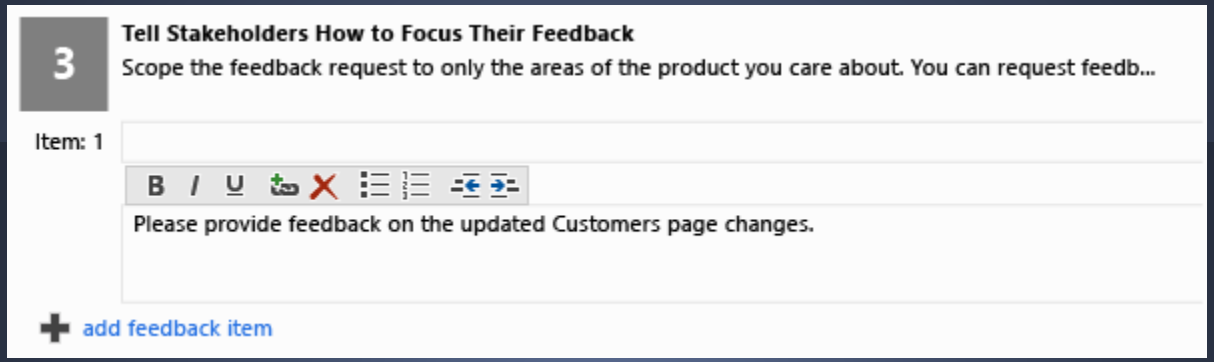
Request & Review FEEDBACK

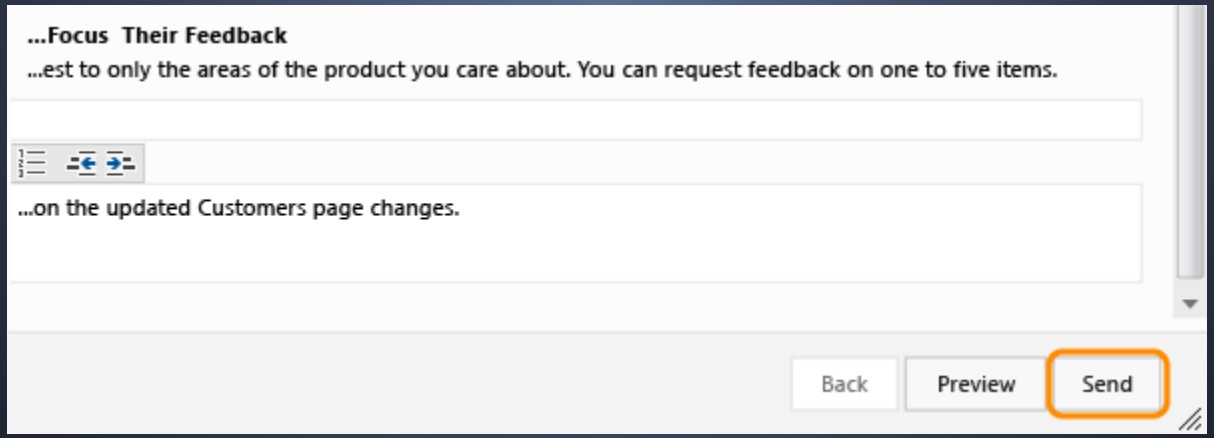
Request & Review FEEDBACK



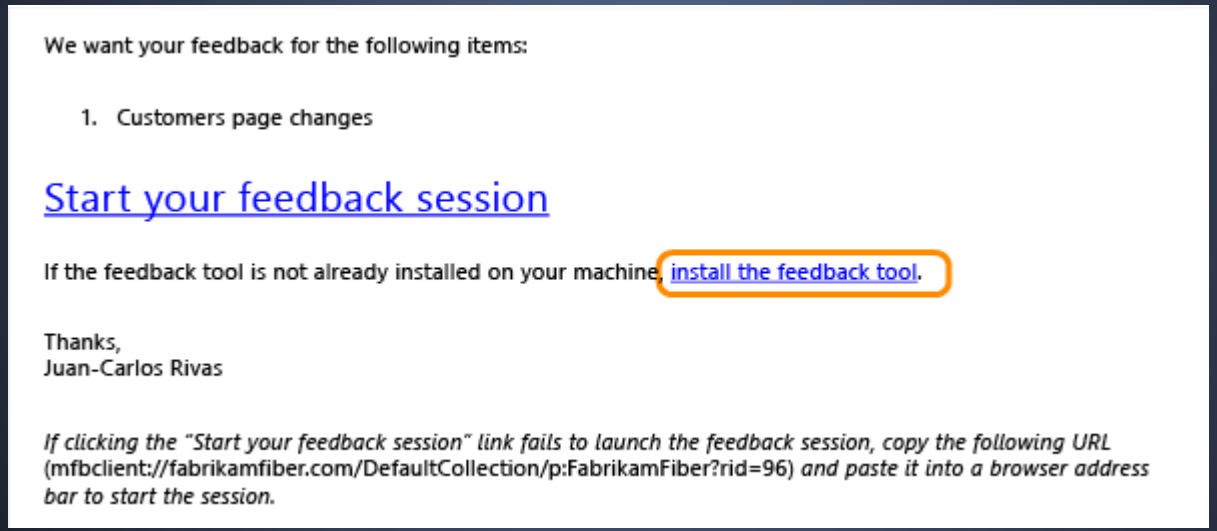



REQUEST FEEDBACK
Request stakeholders to provide feedback on an application that your team has built or plans to build. See the... information.
1
Select Stakeholders
The people you select will receive an email request that includes a link to launch Microsoft Feedback... use to provide feedback.
Adam Barr
Holly Holt
Peter Waxman
browse | check name
2
Tell Stakeholders How to Access the Application
Microsoft Feedback Client will display a link to launch the specified application and your exact instru... login credentials, specific navigations steps to follow, or general context of the application to review.
Web Application
Remote Machine
Client Application
http://intranet.fabrikam.com/Customers
Instructions to launch the application listed above


3
Tell Stakeholders How to Focus Their Feedback
Scope the feedback request to only the areas of the product you care about. You can request feedb...
Item: 1
Please provide feedback on the updated Customers page changes.
add feedback item


...Focus Their Feedback
...est to only the areas of the product you care about. You can request feedback on one to five items.
...on the updated Customers page changes.
Back
Preview
Send

Providing Feedback



We want your feedback for the following items:

1. Customers page changes

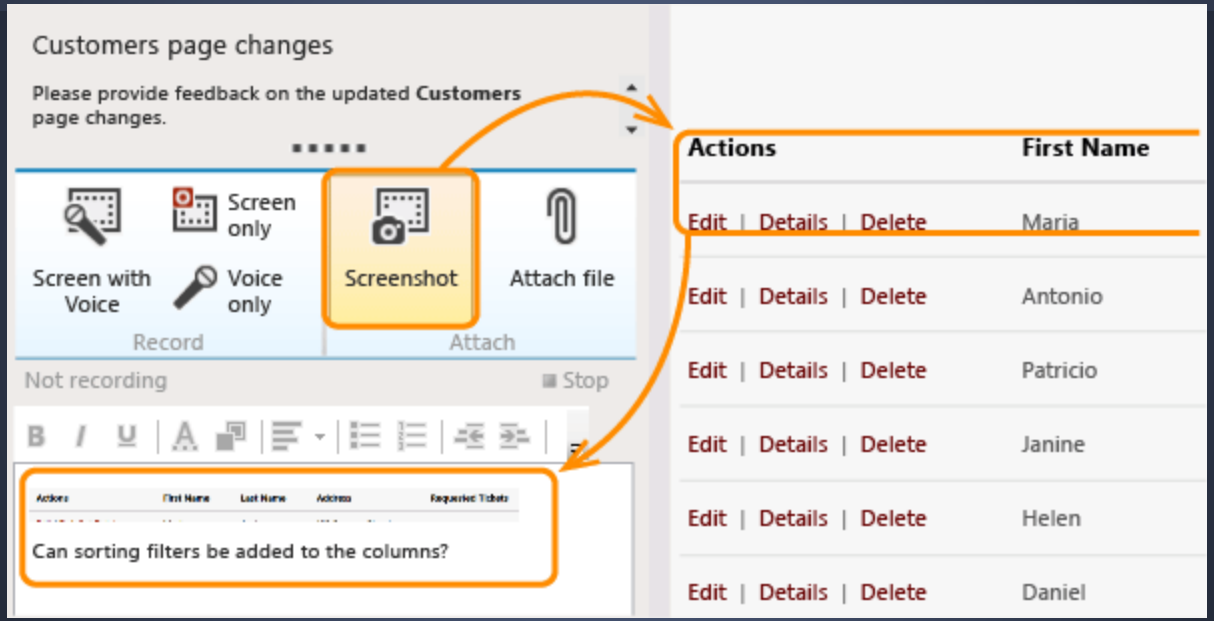
Start your feedback session

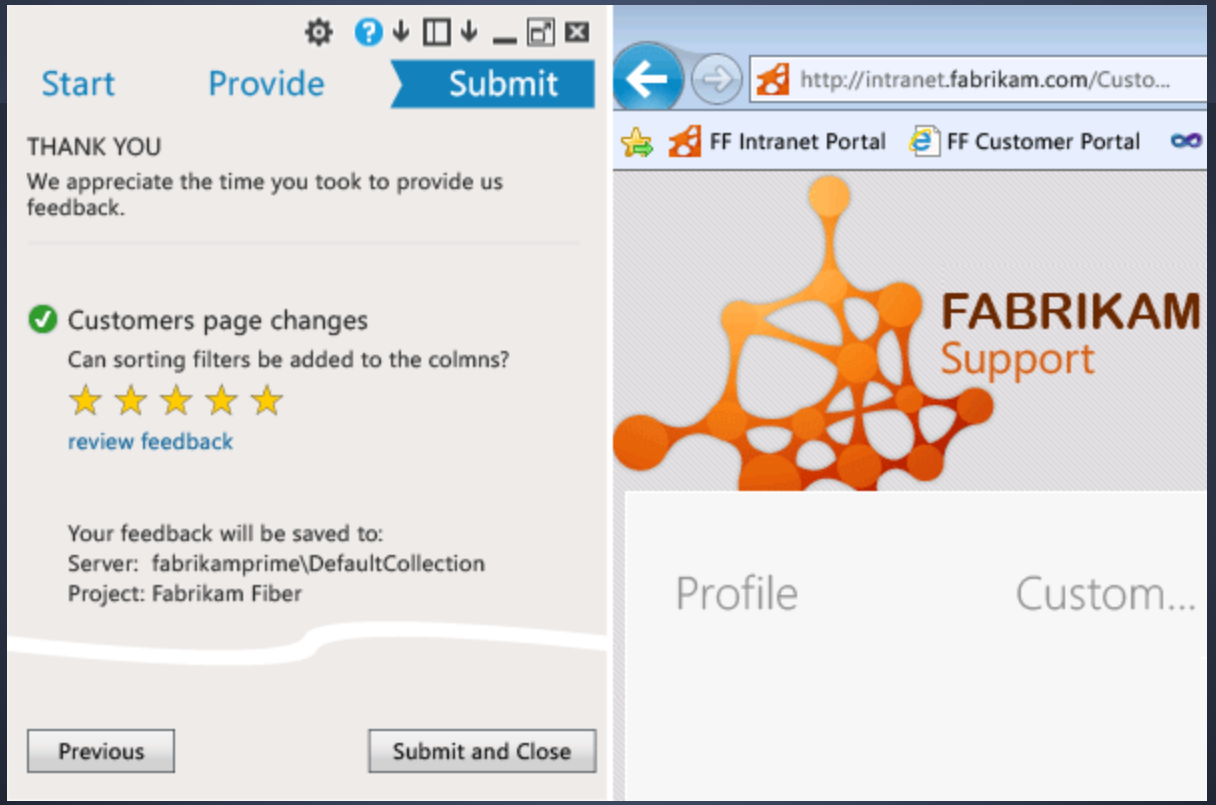
If the feedback tool is not already installed on your machine, install the feedback tool.

Thanks,
Juan-Carlos Rivas

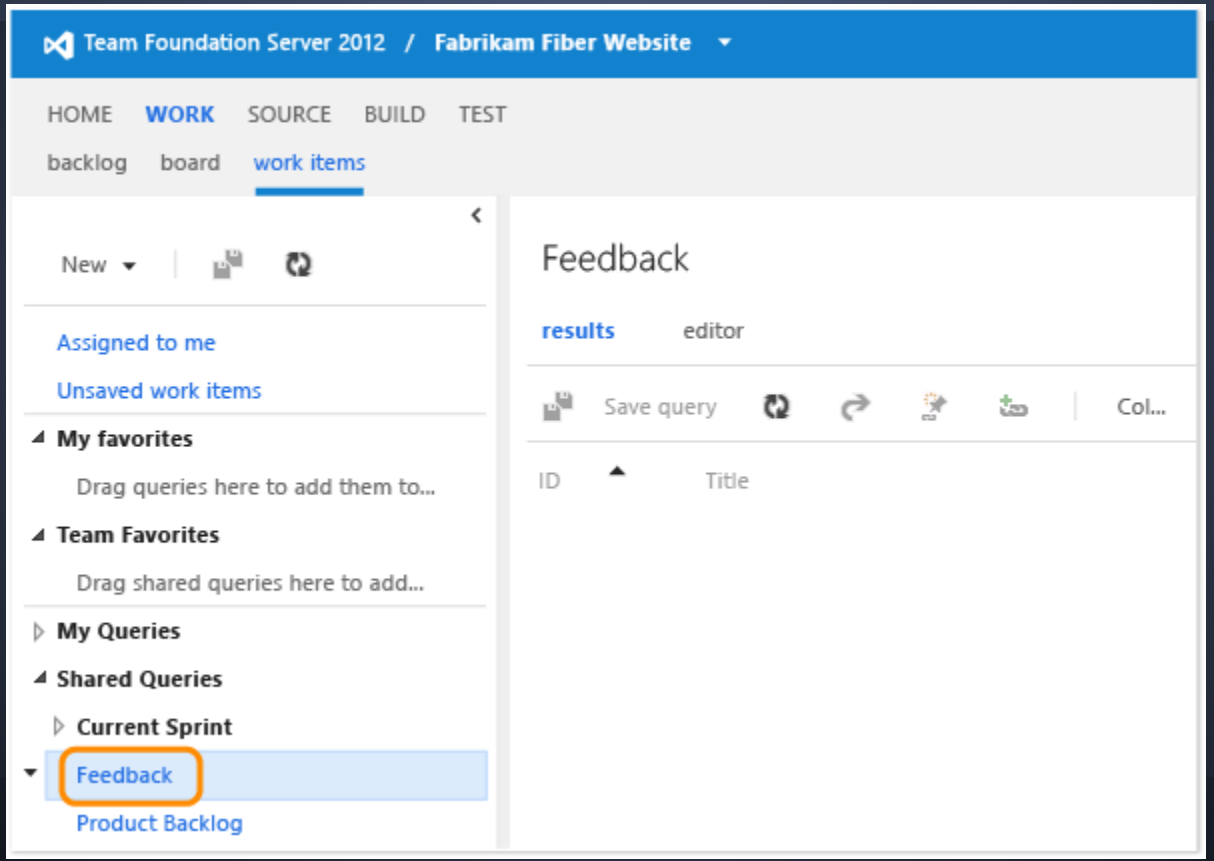
If clicking the "Start your feedback session" link fails to launch the feedback session, copy the following URL (mfbclient://fabrikamfiber.com/DefaultCollection/p:FabrikamFiber?rid=96) and paste it into a browser address bar to start the session.

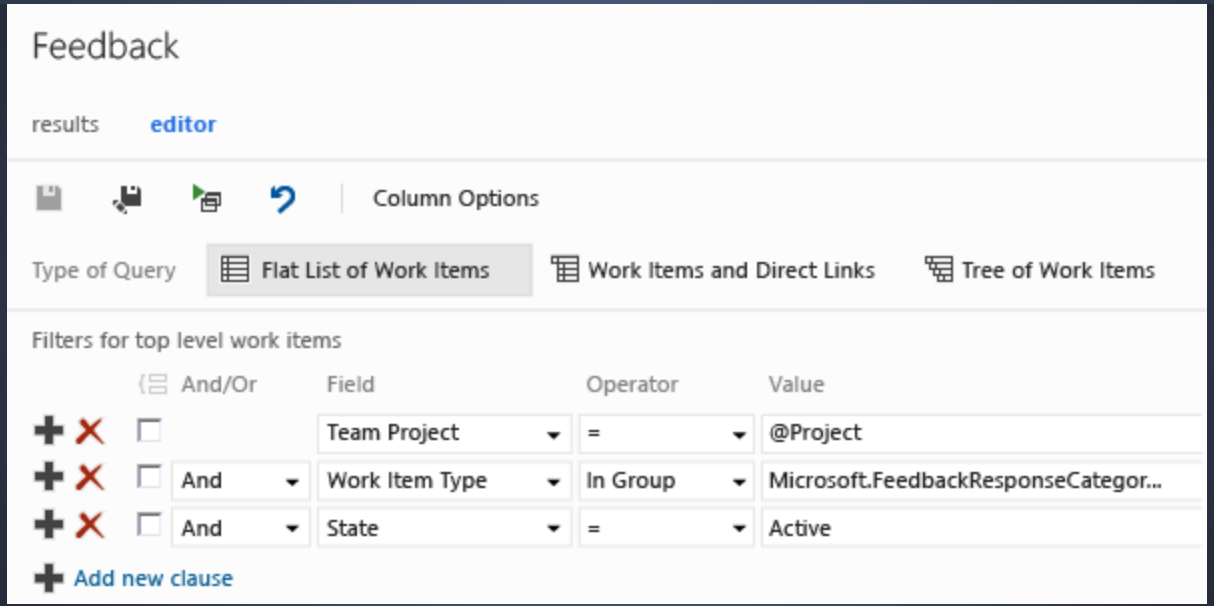
Start
Provide
Submit
LAUNCH
Follow the instructions below to launch the application to provide feedback on.
APPLICATION
http://intranet.fabrikam.com/Customers
INSTRUCTIONS
No instructions were provided by Juan-Carlos Rivas.
http://intranet.fabrikam.com/Custo...
FF Intranet Portal
FF Customer Portal
FABRIKAM
Support
Start
Provide
Submit
ITEM: 1
Customers page changes
Please provide feedback on the updated Customers page changes.
Screen only
Screen with Voice
Voice only
Screenshot
Attach f...
Record
Attach
Not recording
Stop
http://intranet.fabrikam.com/Custo...
FF Intranet Portal
FF Customer Portal
FABRIKAM
Support
Profile
Custom...

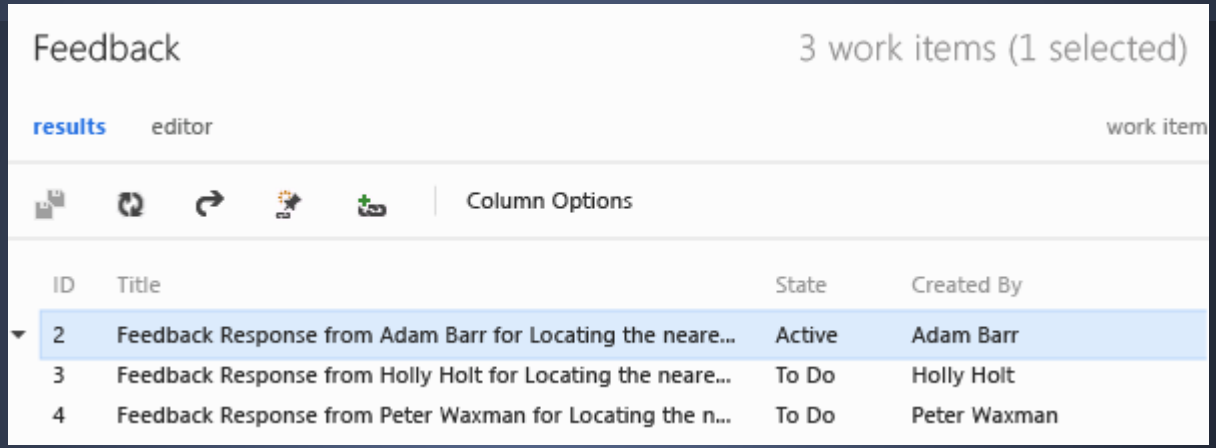

Customers page changes
Please provide feedback on the updated Customers page changes.
Screen only
Screen with Voice
Voice only
Screenshot
Attach file
Record
Attach
Not recording
Stop
Can sorting filters be added to the columns?
Actions
First Name
Edit | Details | Delete
Maria
Edit | Details | Delete
Antonio
Edit | Details | Delete
Patricio
Edit | Details | Delete
Janine
Edit | Details | Delete
Helen
Edit | Details | Delete
Daniel

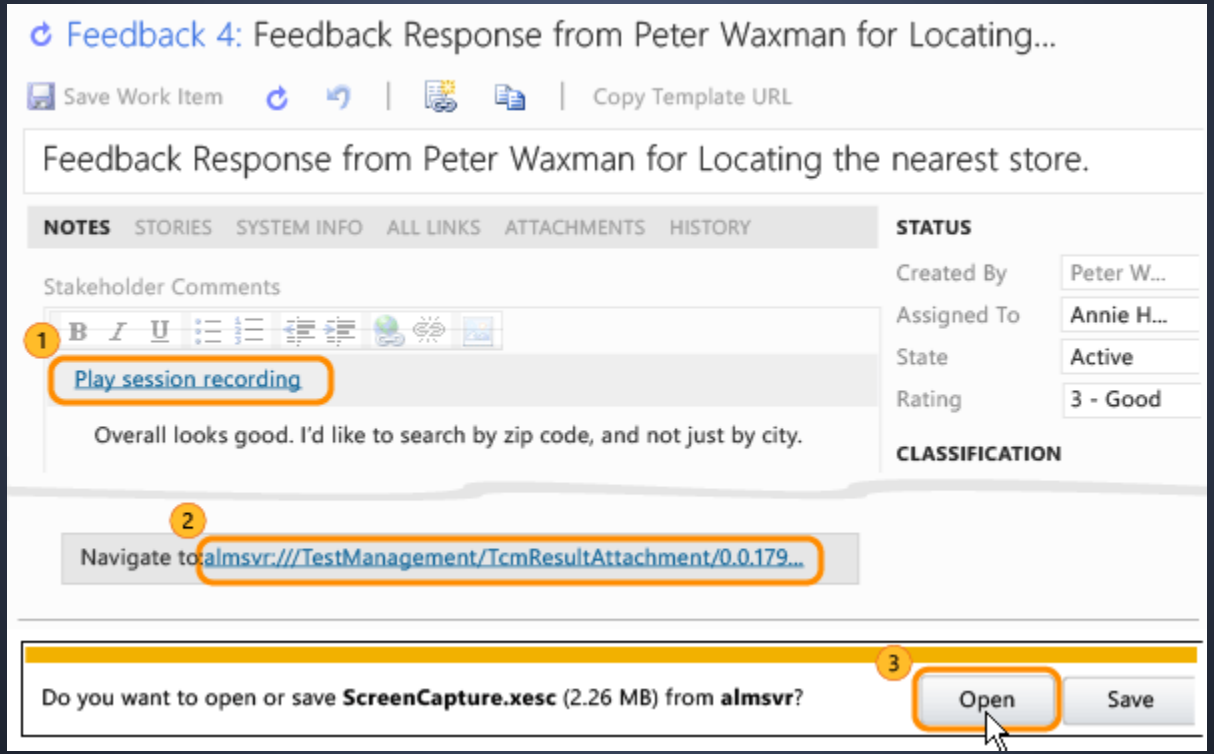

Start
Provide
Submit
THANK YOU
We appreciate the time you took to provide us feedback.
Customers page changes
Can sorting filters be added to the colmns?
review feedback
Your feedback will be saved to:
Server: fabrikamprime\DefaultCollection
Project: Fabrikam Fiber
Previous
Submit and Close
http://intranet.fabrikam.com/Custo...
FF Intranet Portal
FF Customer Portal
FABRIKAM
Support
Profile
Custom...

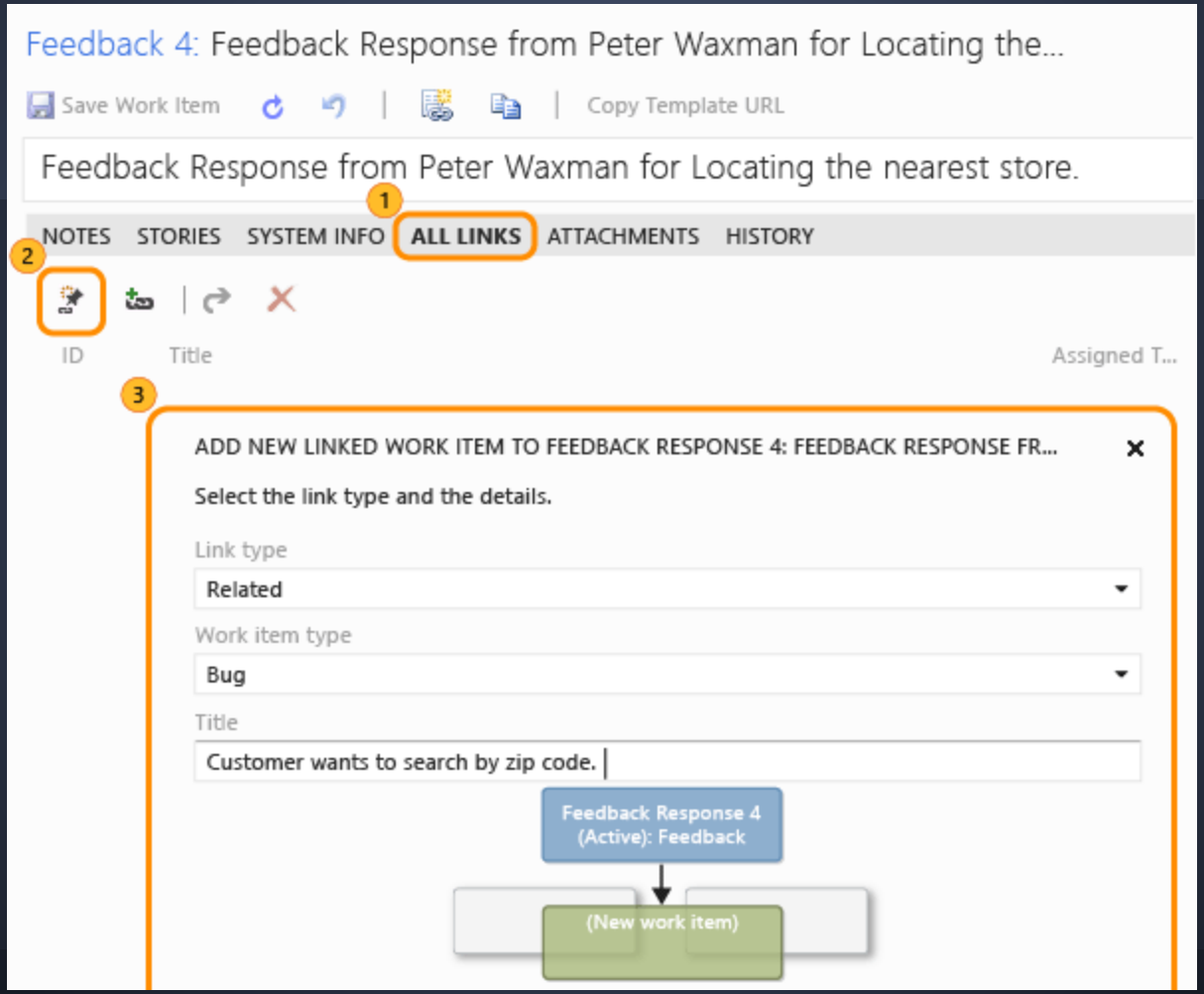
Review feedback




Feedback
results
editor
Column Options
Type of Query
Flat List of Work Items
Work Items and Direct Links
Tree of Work Items
Filters for top level work items
And/Or
Field
Operator
Value
Team Project
=
@Project
And
Work Item Type
In Group
Microsoft.FeedbackResponseCategor...
And
State
=
Active
Add new clause


Feedback
3 work items (1 selected)
results
editor
work item
Column Options
ID
Title
State
Created By
2
Feedback Response from Adam Barr for Locating the neare...
Active
Adam Barr
3
Feedback Response from Holly Holt for Locating the neare...
To Do
Holly Holt
4
Feedback Response from Peter Waxman for Locating the n...
To Do
Peter Waxman


Feedback 4: Feedback Response from Peter Waxman for Locating...
Save Work Item
Copy Template URL
Feedback Response from Peter Waxman for Locating the nearest store.
NOTES
STORIES
SYSTEM INFO
ALL LINKS
ATTACHMENTS
HISTORY
Stakeholder Comments
1
Play session recording
Overall looks good. I'd like to search by zip code, and not just by city.
STATUS
Created By
Peter W...
Assigned To
Annie H...
State
Active
Rating
3 - Good
CLASSIFICATION
2
Navigate to:
almsvr:///TestManagement/TcmResultAttachment/0.0.179...
3
Do you want to open or save ScreenCapture.xesc (2.26 MB) from almsvr?
Open
Save


Feedback 4: Feedback Response from Peter Waxman for Locating the...
Save Work Item
Copy Template URL
Feedback Response from Peter Waxman for Locating the nearest store.
1
NOTES
STORIES
SYSTEM INFO
ALL LINKS
ATTACHMENTS
HISTORY
2
ID
Title
Assigned T...
3
ADD NEW LINKED WORK ITEM TO FEEDBACK RESPONSE 4: FEEDBACK RESPONSE FR...
Select the link type and the details.
Link type
Related
Work item type
Bug
Title
Customer wants to search by zip code.
Feedback Response 4 (Active): Feedback
(New work item)

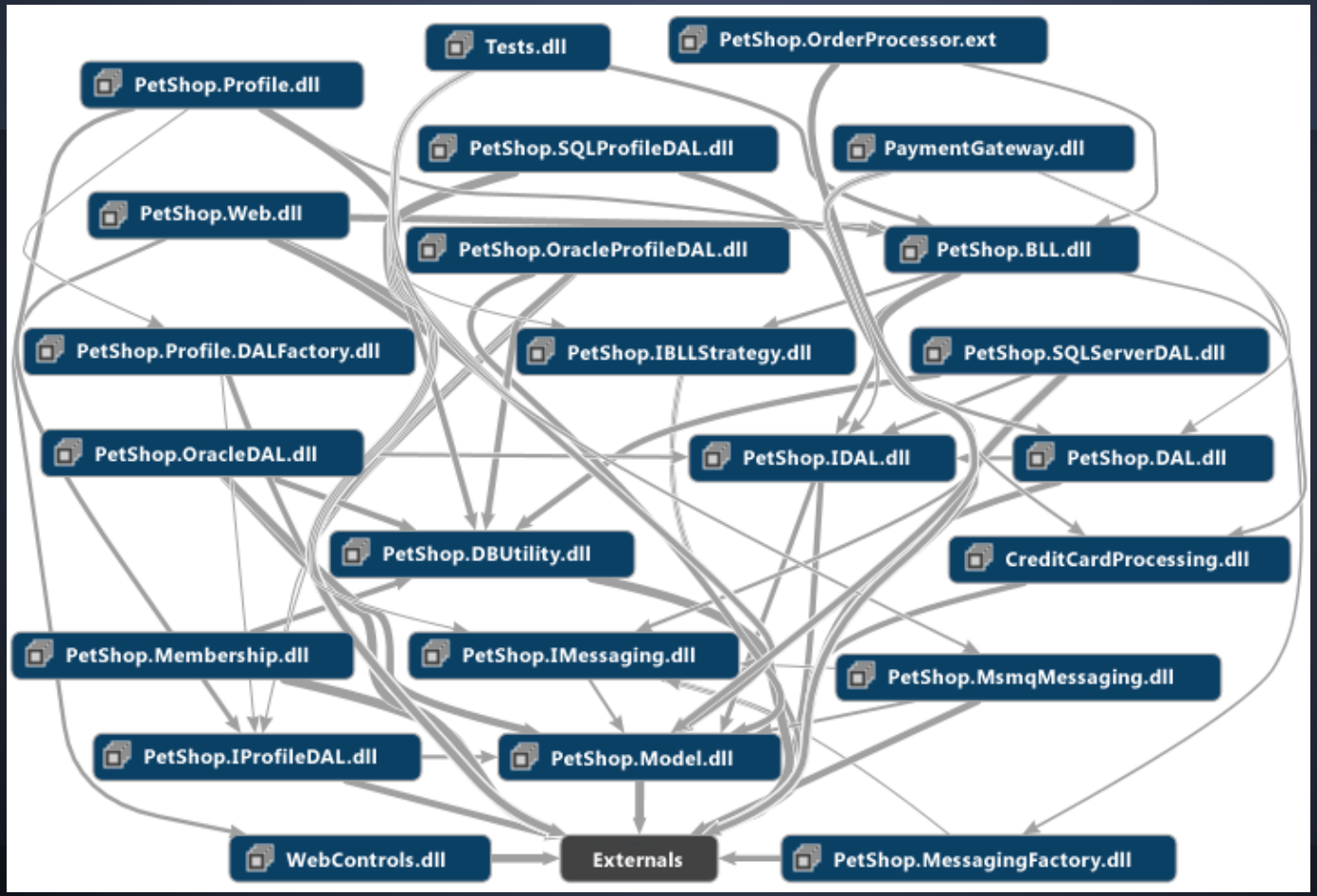
Modelling Applications

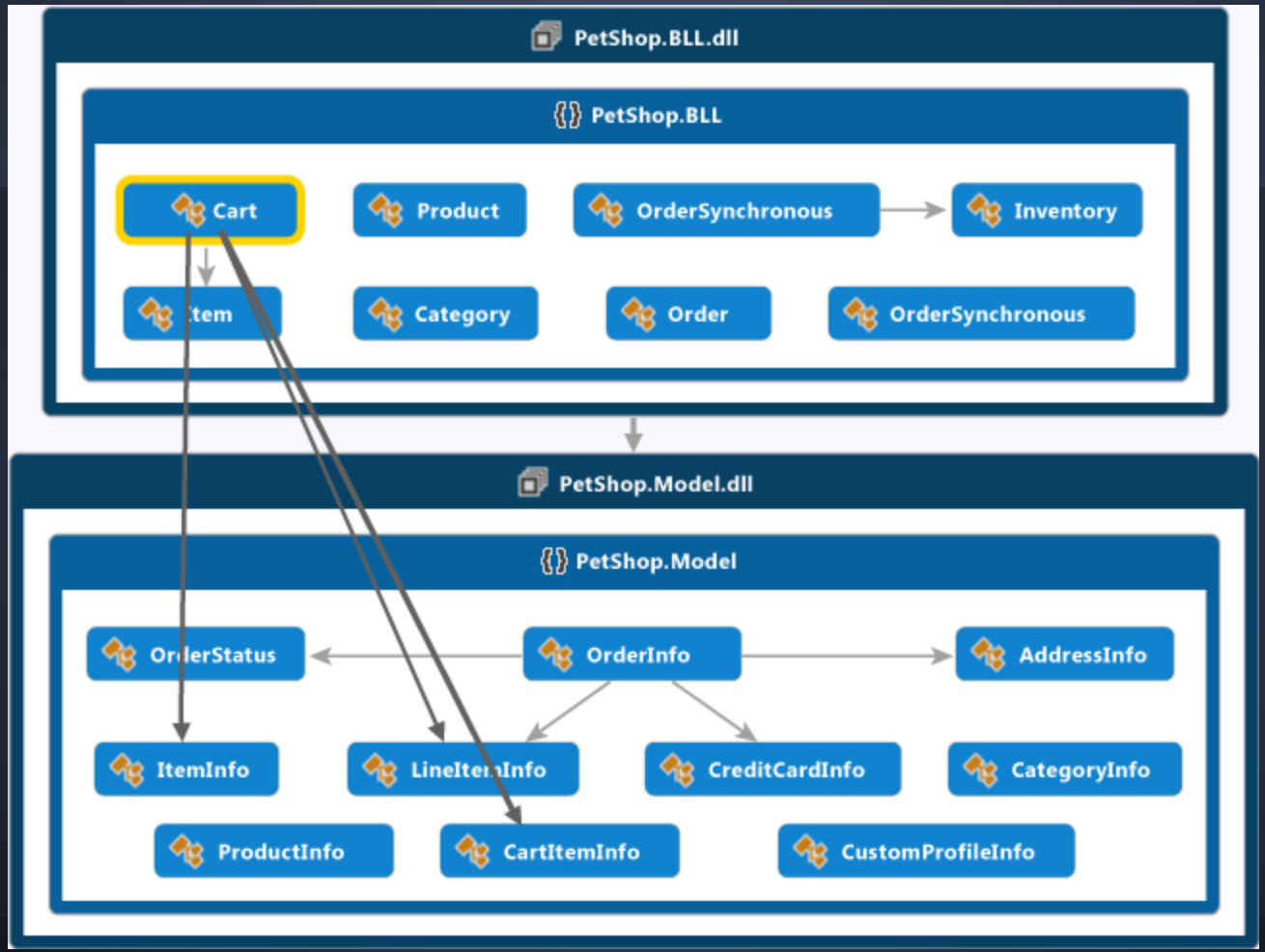
- Browse graphs and rearrange their items to make them easier to read and to improve rendering performance.
- Open and view linked model elements in work items.
- Generate C# code from UML class diagrams.
- Create UML class diagrams from existing code.
- Import UML class, use case, and sequence diagram model elements exported as XMI 2.1 files from other tools.

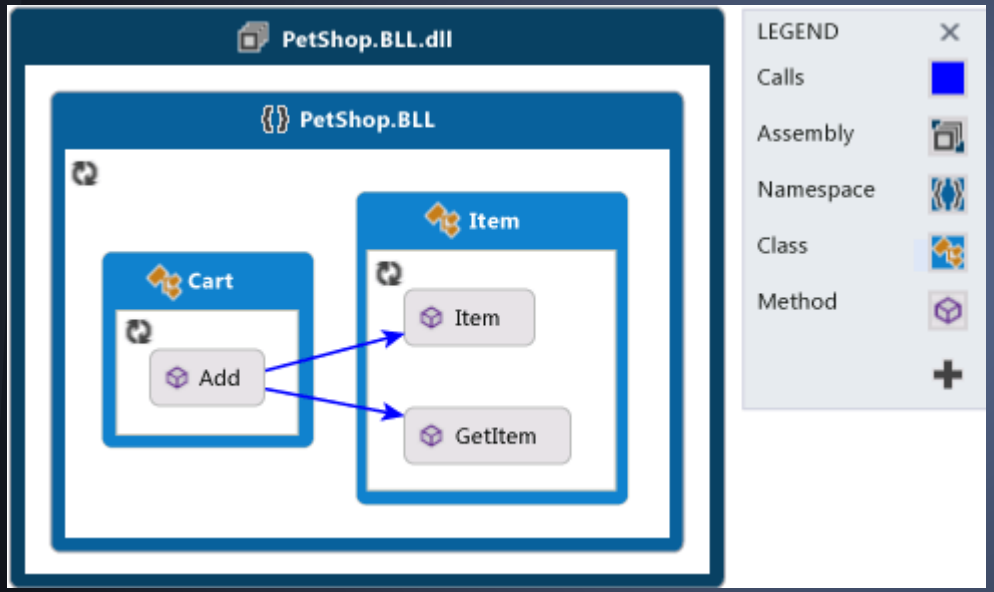
Dependency Graph

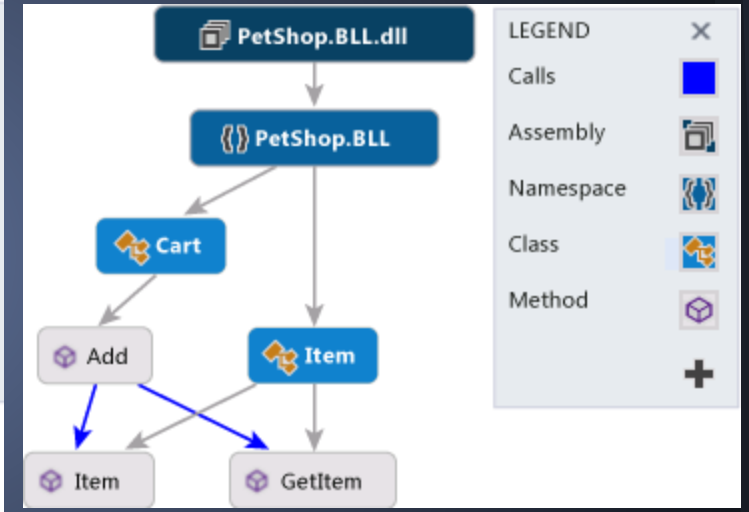
Supported projects:

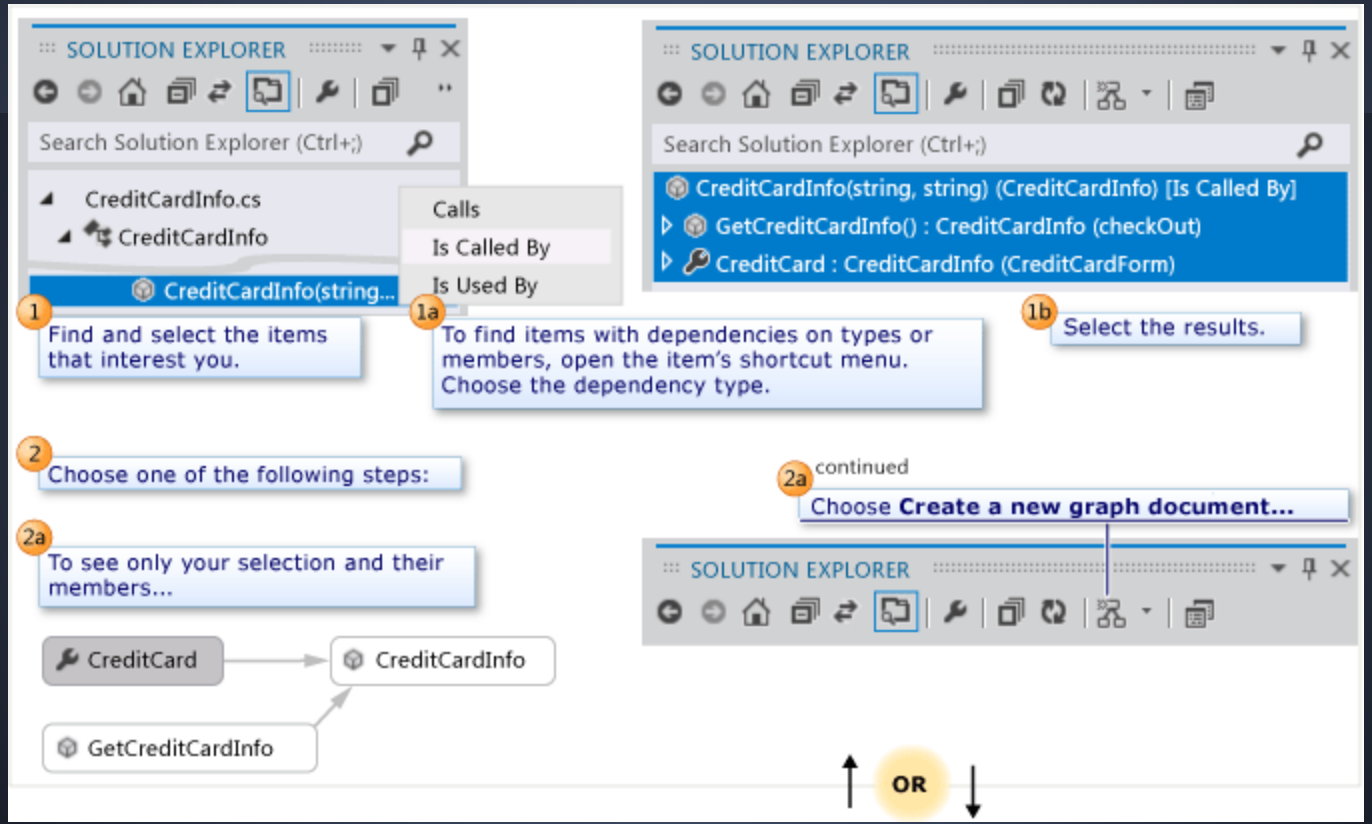
- Visual C# .NET and Visual Basic .NET projects, including Windows Store apps, and assembly files (.dll or .exe).
- Visual C++ projects, including Windows Store apps, that have C or C++ code (managed or native), header files (.h or #include), and binary files.
- Get an overview of your solution: On the Architecture menu, choose Generate Dependency Graph, For Solution.
- You get a graph that shows the top-level assemblies. You can now explore these assemblies by expanding them. Move the mouse pointer on top of an assembly, and then choose the chevron (^) button when it appears. Do the same for namespaces, types, and members to continue exploring your code.

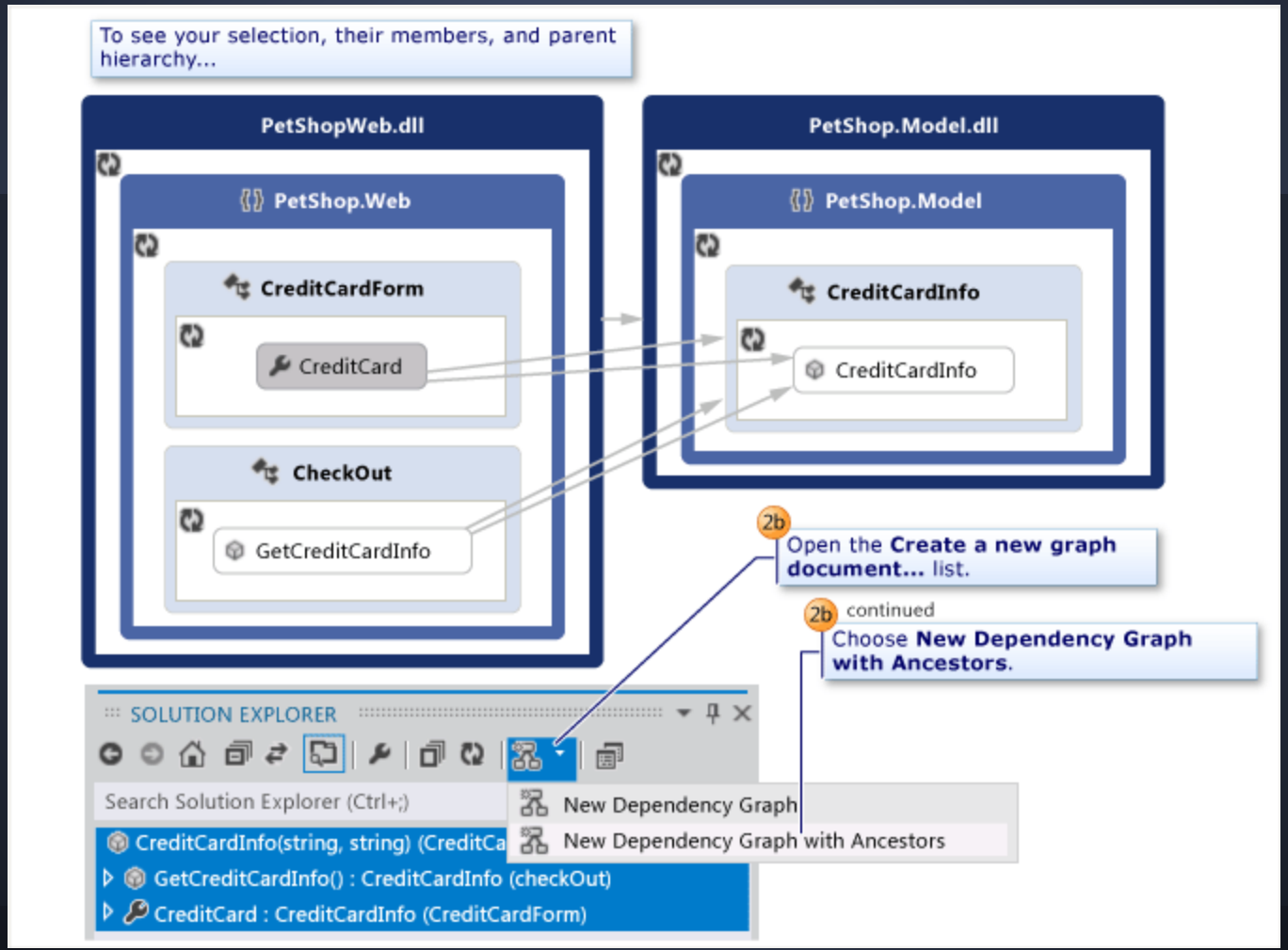

Tests.dll
PetShop.OrderProcessor.ext
PetShop.Profile.dll
PetShop.SQLProfileDAL.dll
PaymentGateway.dll
PetShop.Web.dll
PetShop.OracleProfileDAL.dll
PetShop.BLL.dll
PetShop.Profile.DALFactory.dll
PetShop.IBLLStrategy.dll
PetShop.SQLServerDAL.dll
PetShop.OracleDAL.dll
PetShop.IDAL.dll
PetShop.DAL.dll
PetShop.DBUtility.dll
CreditCardProcessing.dll
PetShop.Membership.dll
PetShop.IMessaging.dll
PetShop.MsmqMessaging.dll
PetShop.IProfileDAL.dll
PetShop.Model.dll
WebControls.dll
Externals
PetShop.MessagingFactory.dll


PetShop.BLL.dll
PetShop.BLL
Cart
Product
OrderSynchronous
Inventory
Item
Category
Order
OrderSynchronous
PetShop.Model.dll
PetShop.Model
OrderStatus
OrderInfo
AddressInfo
ItemInfo
LineItemInfo
CreditCardInfo
CategoryInfo
ProductInfo
CartItemInfo
CustomProfileInfo


PetShop.BLL.dll
PetShop.BLL
Item
Cart
Item
Add
GetItem
LEGEND
Calls
Assembly
Namespace
Class
Method

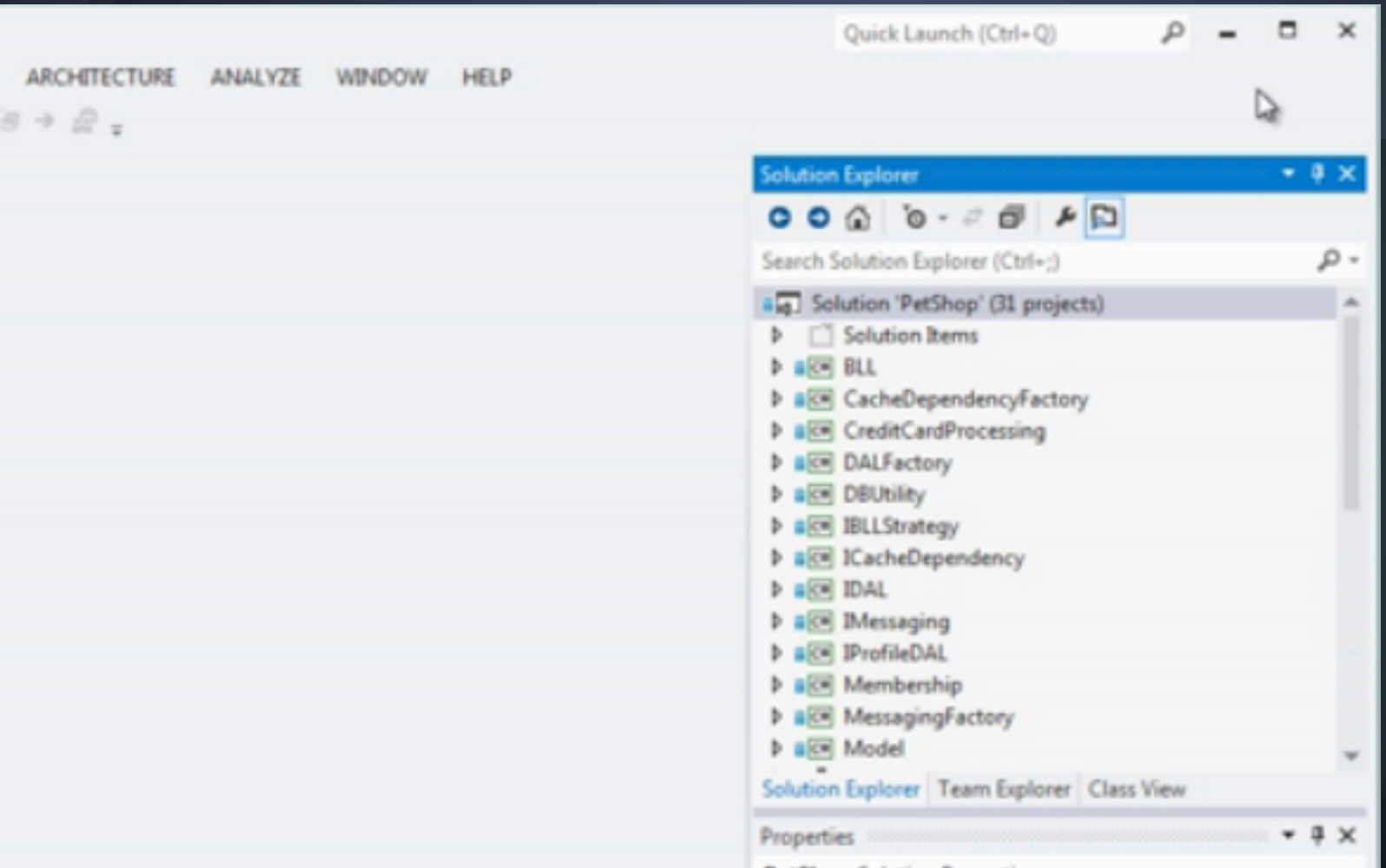

PetShop.BLL.dll
PetShop.BLL
Cart
Add
Item
Item
GetItem
LEGEND
Calls
Assembly
Namespace
Class
Method

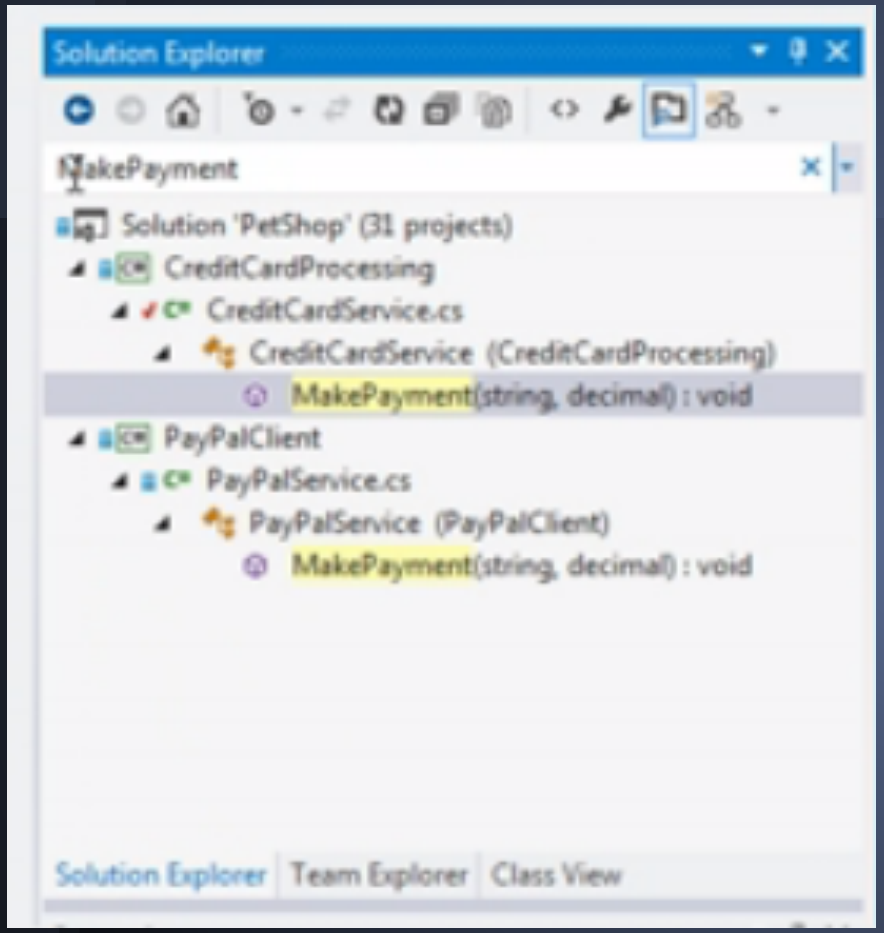

SOLUTION EXPLORER
Search Solution Explorer (Ctrl+;)
CreditCardInfo.cs
CreditCardInfo
CreditCardInfo(string...
Calls
Is Called By
Is Used By
1
Find and select the items that interest you.
1a
To find items with dependencies on types or members, open the item's shortcut menu. Choose the dependency type.
SOLUTION EXPLORER
Search Solution Explorer (Ctrl+;)
CreditCardInfo(string, string) (CreditCardInfo) [Is Called By]
GetCreditCardInfo() : CreditCardInfo (checkOut)
CreditCard : CreditCardInfo (CreditCardForm)
1b
Select the results.
2
Choose one of the following steps:
2a
continued
Choose Create a new graph document...
2a
To see only your selection and their members...
SOLUTION EXPLORER
CreditCard
CreditCardInfo
GetCreditCardInfo
OR

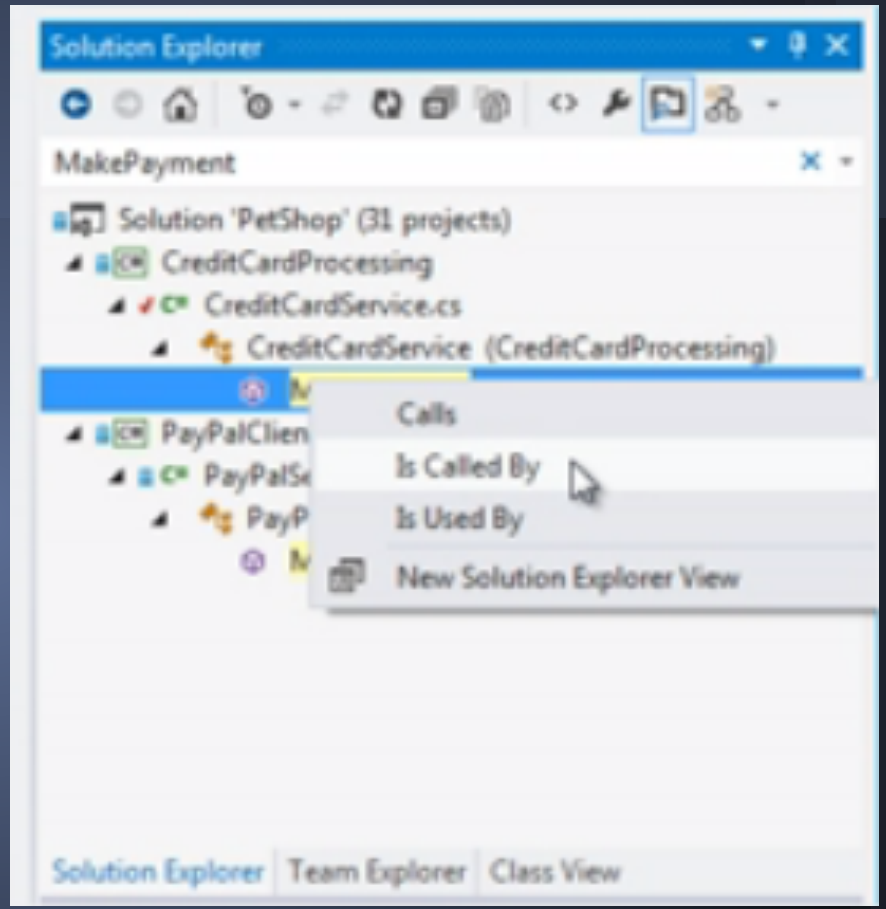

To see your selection, their members, and parent hierarchy...
PetShopWeb.dll
PetShop.Web
CreditCardForm
CreditCard
CheckOut
GetCreditCardInfo
PetShop.Model.dll
PetShop.Model
CreditCardInfo
CreditCardInfo
2b
Open the Create a new graph document... list.
2b continued
Choose New Dependency Graph with Ancestors.
SOLUTION EXPLORER
Search Solution Explorer (Ctrl+;)
New Dependency Graph
New Dependency Graph with Ancestors
CreditCardInfo(string, string) (CreditCa
GetCreditCardInfo() : CreditCardInfo (checkOut)
CreditCard : CreditCardInfo (CreditCardForm)

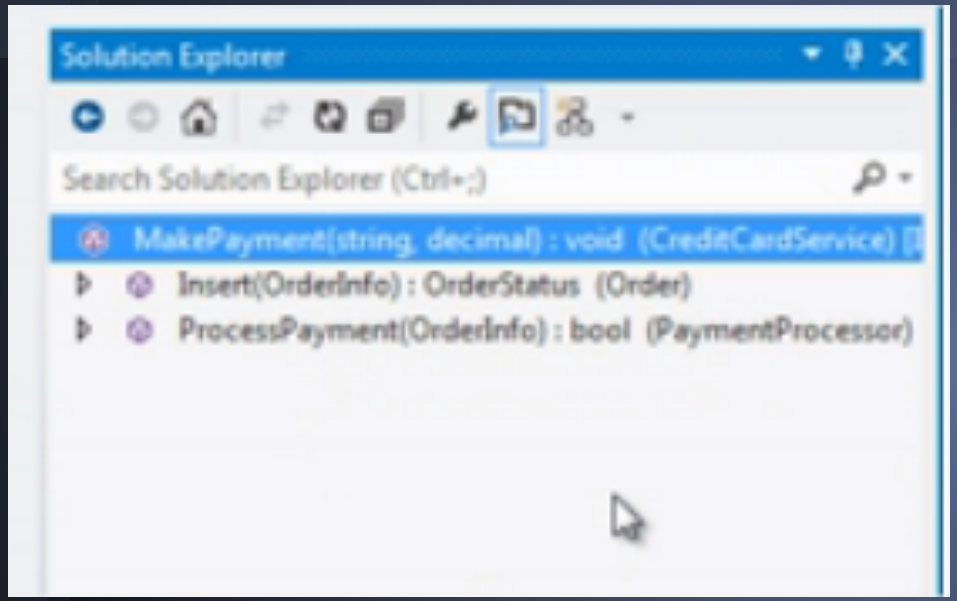
Modeling Tools for VS 2012

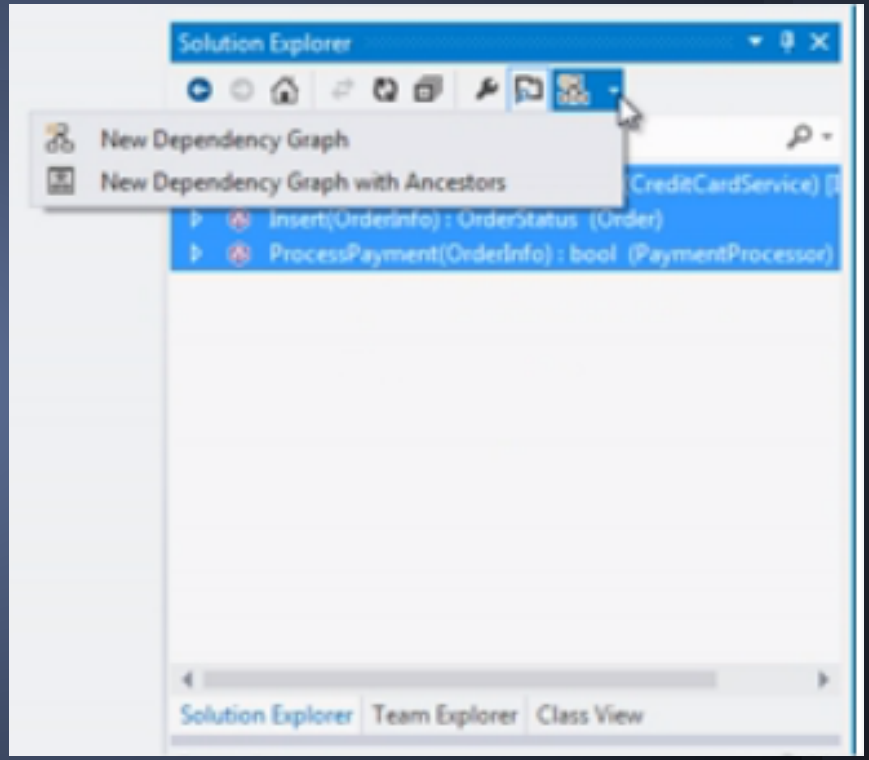
- Rearrange nodes by dragging them.
- Add new undefined nodes and links.
- Delete existing nodes.
- Add comments to the graph.
- Retrieve missing members of groups.
- Show hidden members of groups.
- Examine dependencies that participate in a link.
- Add nodes related to a node on the graph.
- Change the group layout independently of the graph layout.

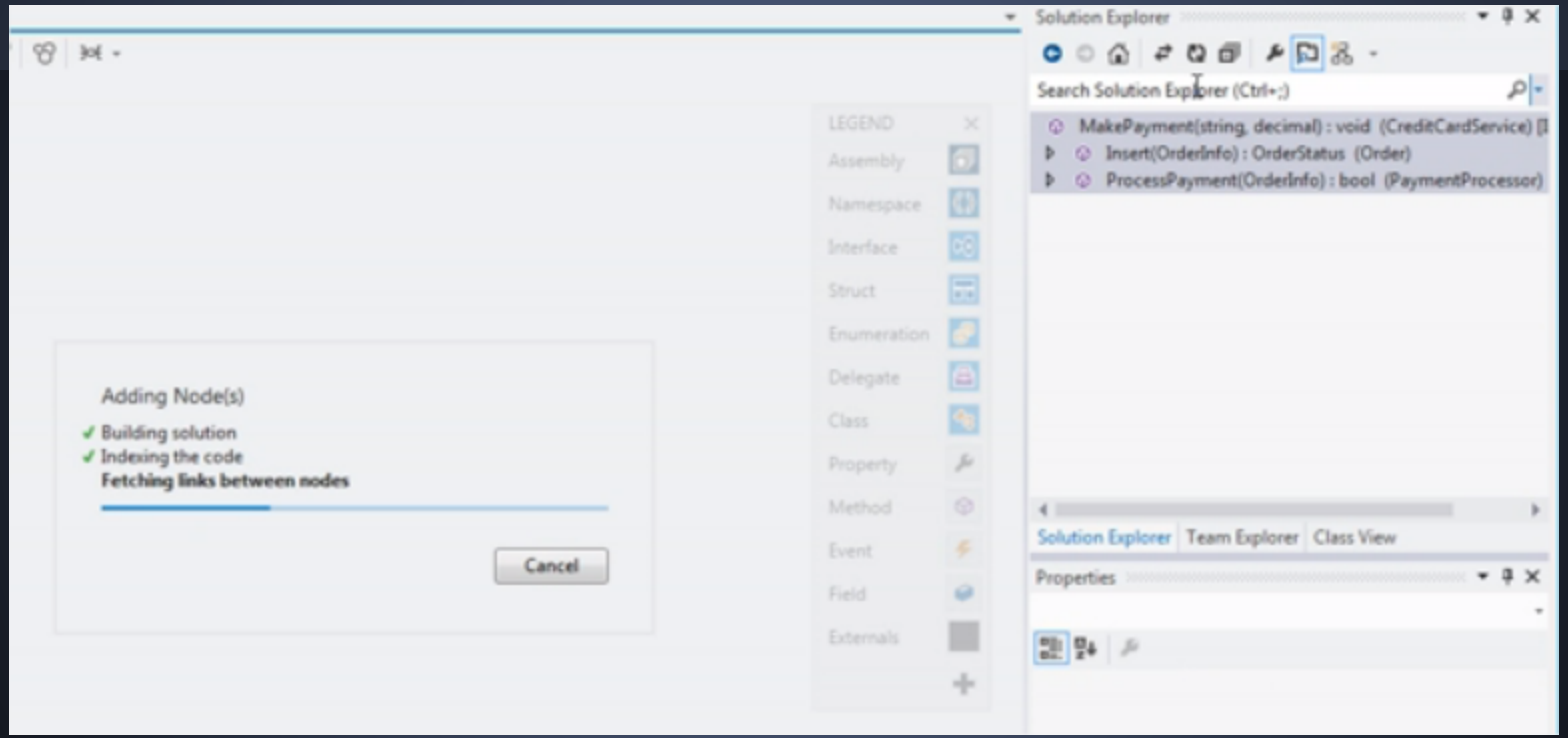

Quick Launch (Ctrl+Q)
ARCHITECTURE
ANALYZE
WINDOW
HELP
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'PetShop' (31 projects)
Solution Items
BLL
CacheDependencyFactory
CreditCardProcessing
DALFactory
DBUtility
IBLLStrategy
ICacheDependency
IDAL
IMessaging
IProfileDAL
Membership
MessagingFactory
Model
Solution Explorer
Team Explorer
Class View
Properties

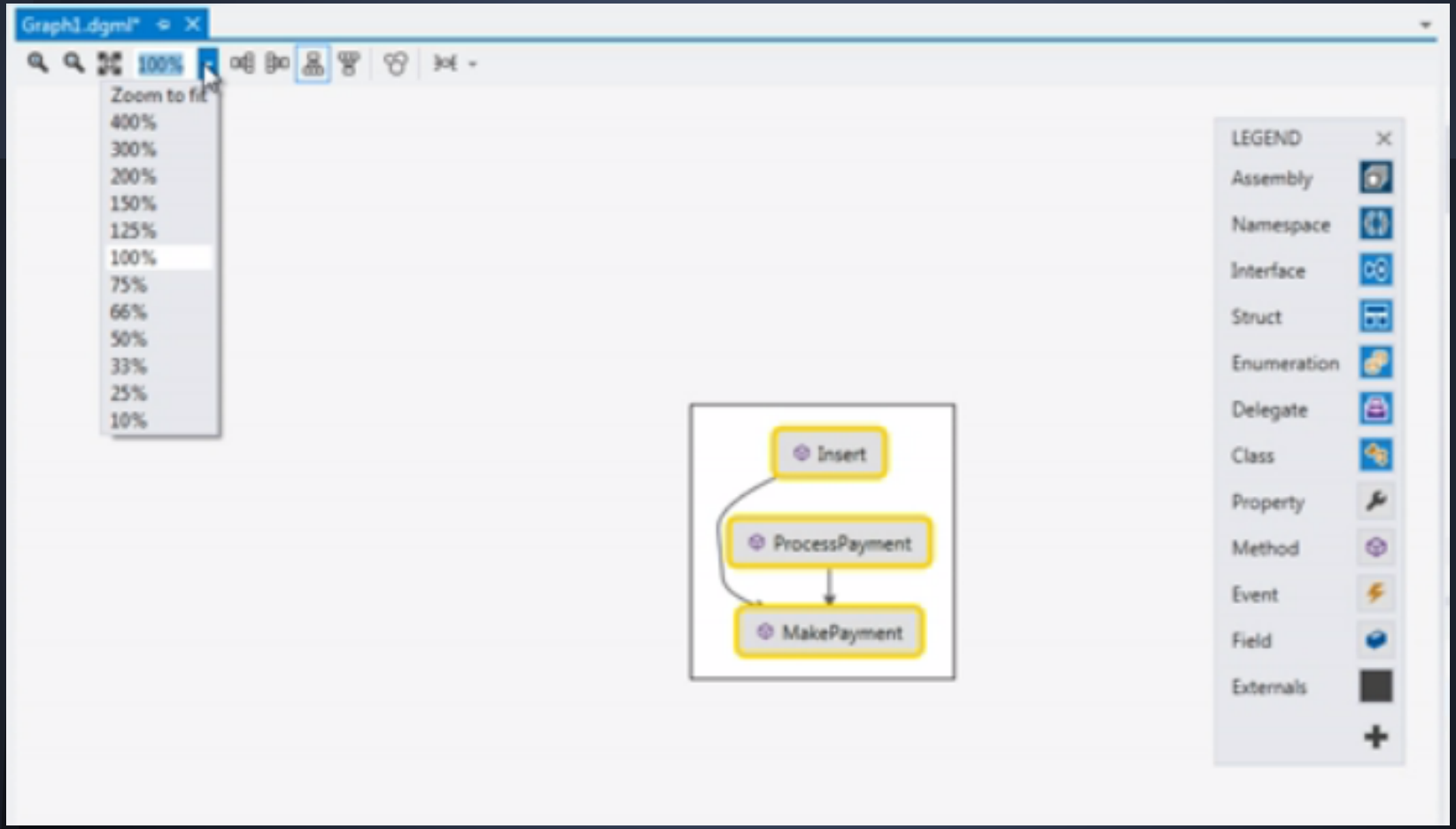

Solution Explorer
MakePayment
Solution 'PetShop' (31 projects)
CreditCardProcessing
CreditCardService.cs
CreditCardService (CreditCardProcessing)
MakePayment(string, decimal) : void
PayPalClient
PayPalService.cs
PayPalService (PayPalClient)
MakePayment(string, decimal) : void
Solution Explorer
Team Explorer
Class View

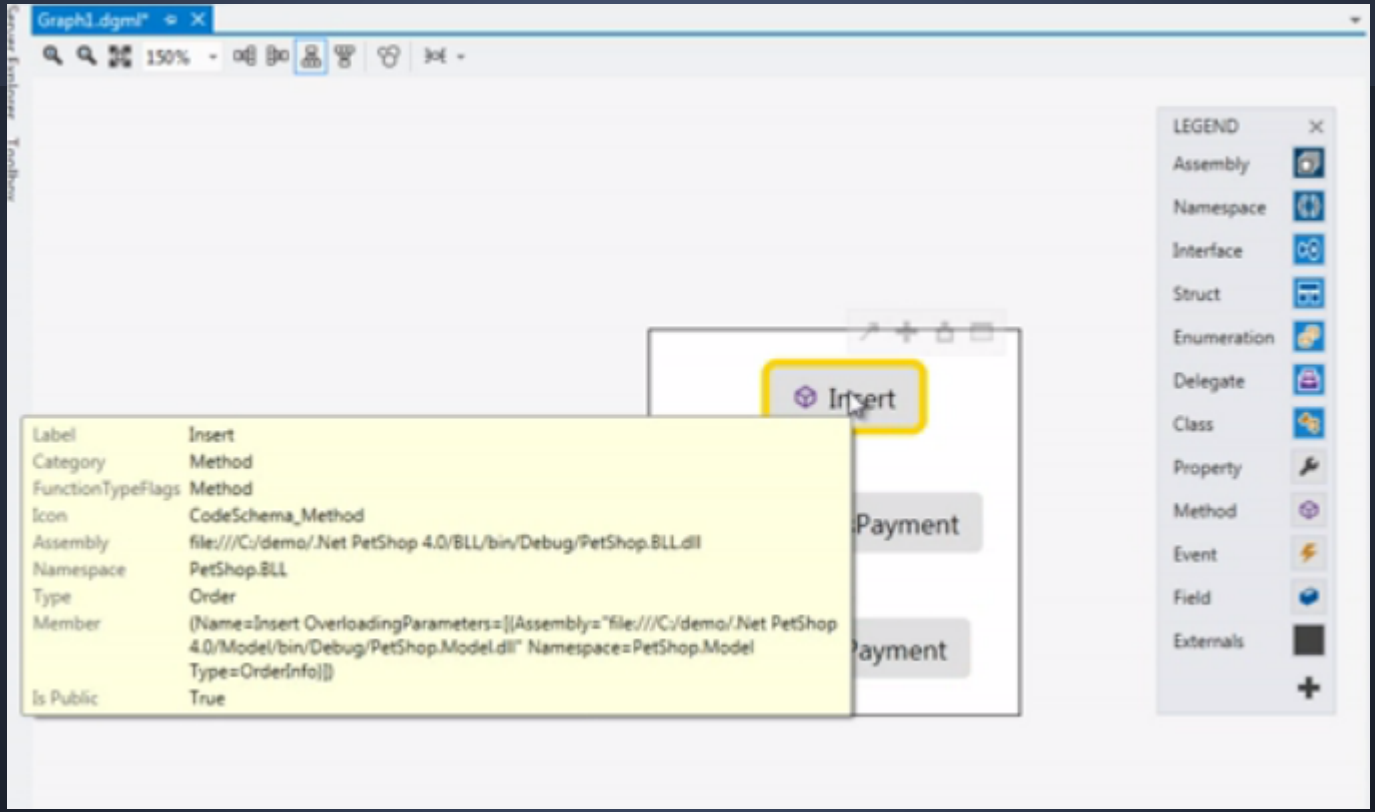

Solution Explorer
MakePayment
Solution 'PetShop' (31 projects)
CreditCardProcessing
CreditCardService.cs
CreditCardService (CreditCardProcessing)
Calls
Is Called By
Is Used By
New Solution Explorer View
Solution Explorer
Team Explorer
Class View

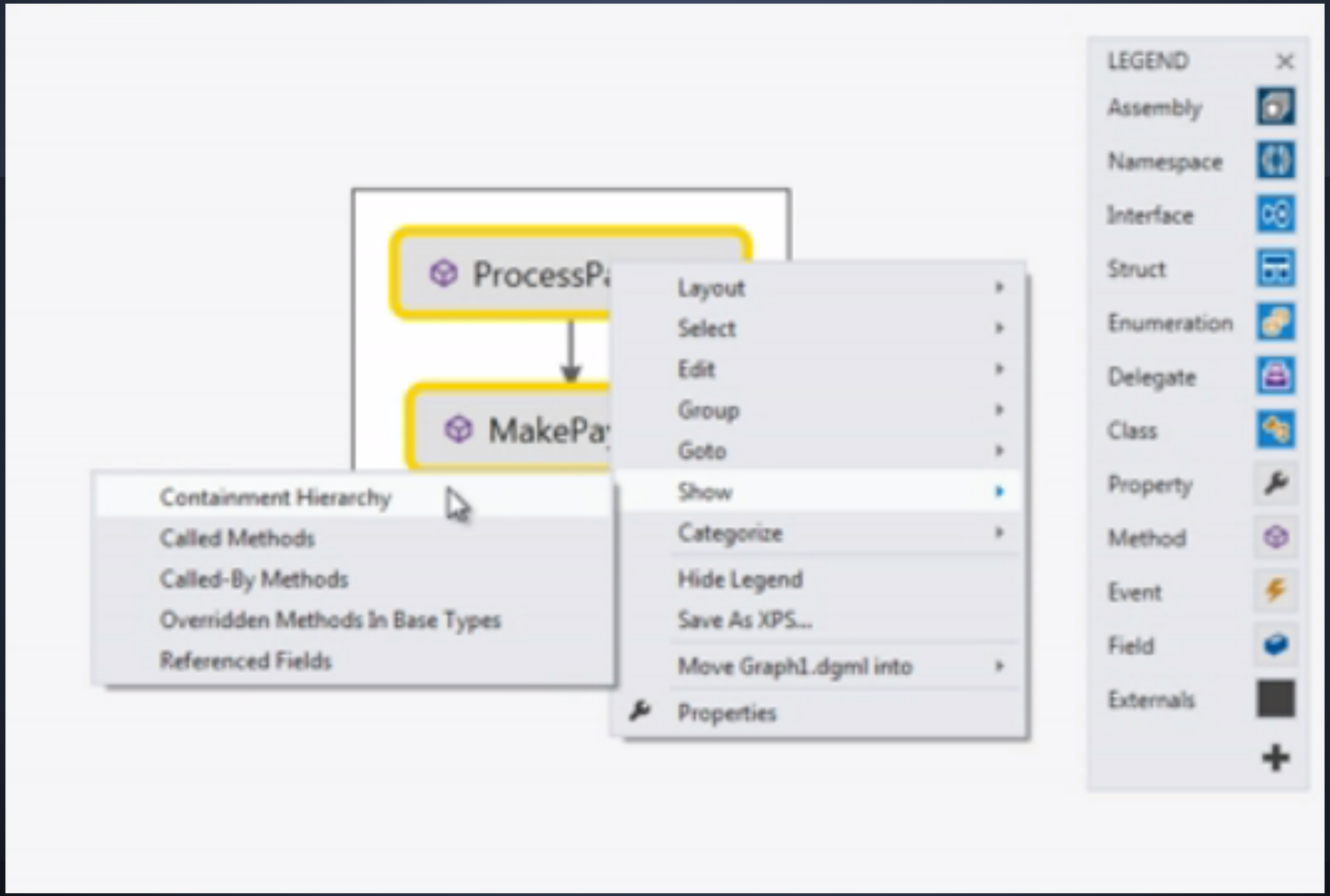

Solution Explorer
Search Solution Explorer (Ctrl+;)
MakePayment(string, decimal) : void (CreditCardService)
Insert(OrderInfo) : OrderStatus (Order)
ProcessPayment(OrderInfo) : bool (PaymentProcessor)

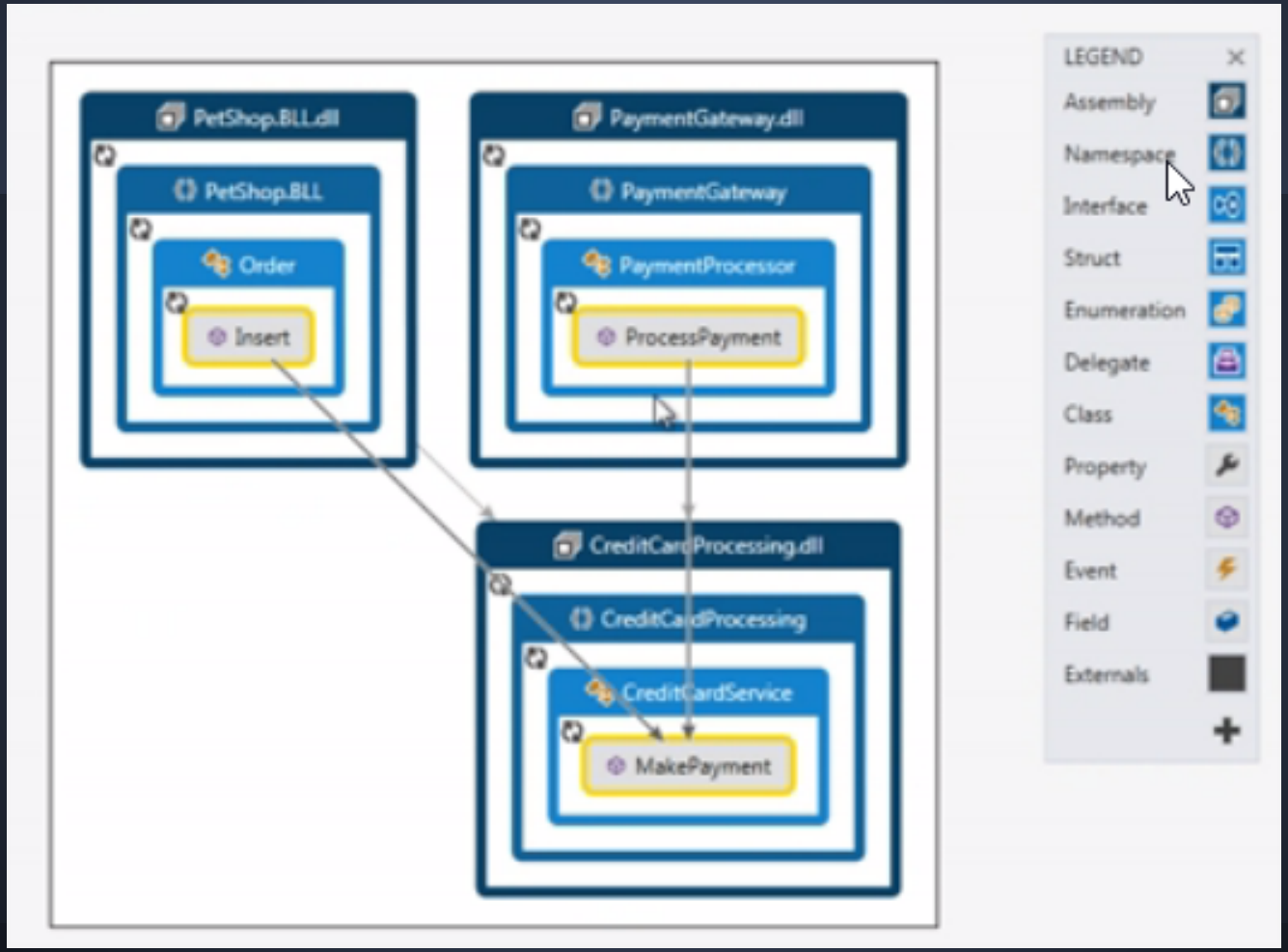

Solution Explorer
New Dependency Graph
New Dependency Graph with Ancestors
Insert(OrderInfo) : OrderStatus (Order)
ProcessPayment(OrderInfo) : bool (PaymentProcessor)
Solution Explorer
Team Explorer
Class View

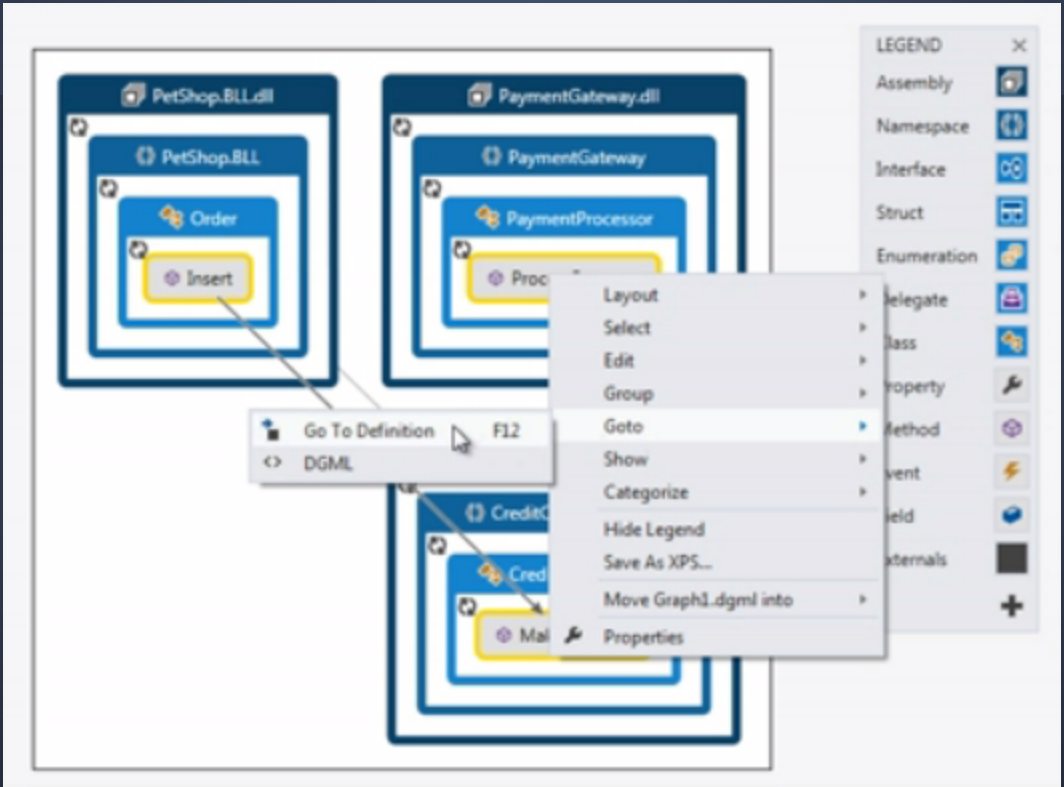

Solution Explorer
Search Solution Explorer (Ctrl+;)
MakePayment(string, decimal) : void (CreditCardService)
Insert(OrderInfo) : OrderStatus (Order)
ProcessPayment(OrderInfo) : bool (PaymentProcessor)
Solution Explorer
Team Explorer
Class View
Properties
LEGEND
Assembly
Namespace
Interface
Struct
Enumeration
Delegate
Class
Property
Method
Event
Field
Externals
Adding Node(s)
Building solution
Indexing the code
Fetching links between nodes
Cancel

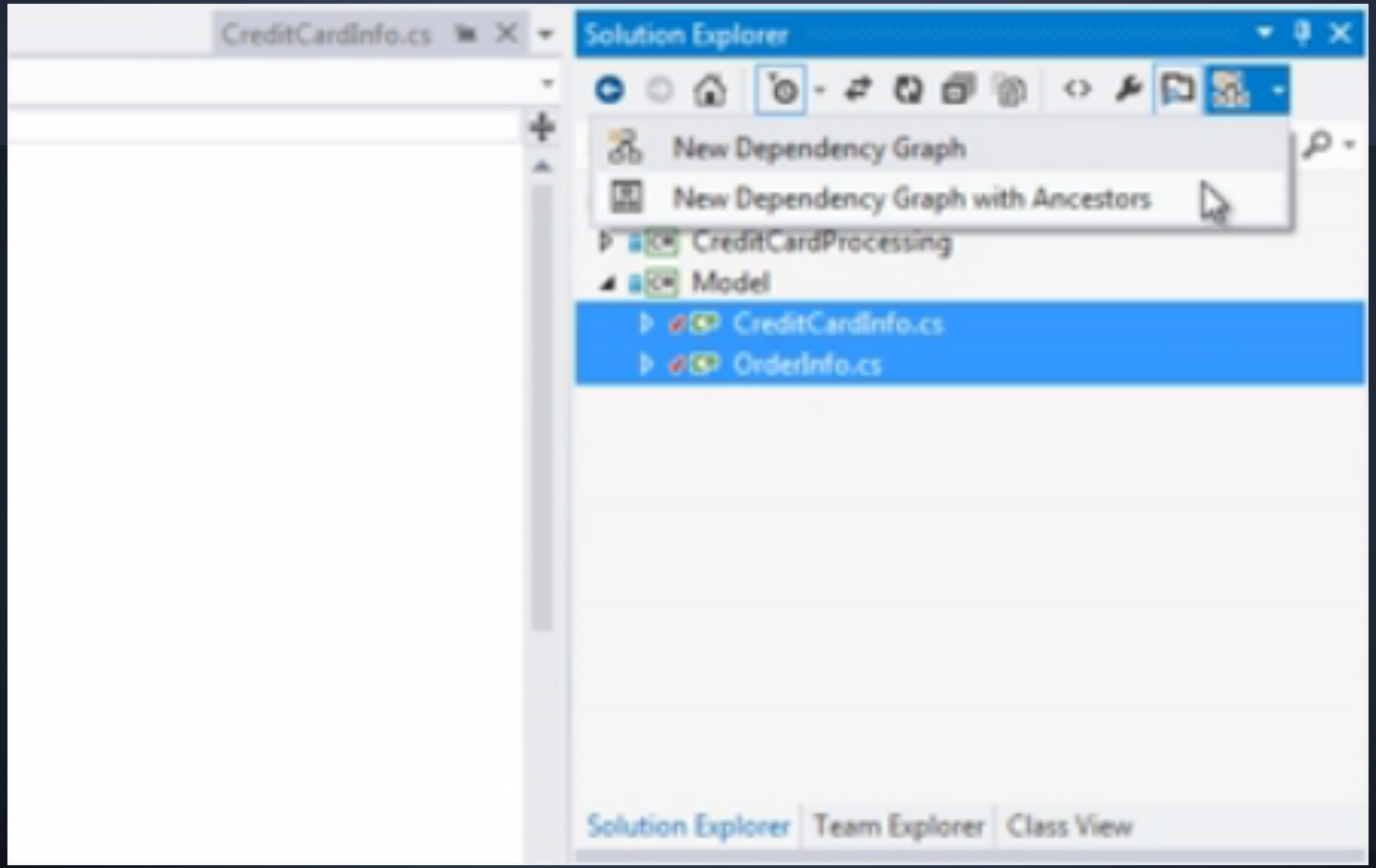

Graph1.dgml*
100%
Zoom to fit
400%
300%
200%
150%
125%
100%
75%
66%
50%
33%
25%
10%
Insert
ProcessPayment
MakePayment
LEGEND
Assembly
Namespace
Interface
Struct
Enumeration
Delegate
Class
Property
Method
Event
Field
Externals


Graph1.dgml*
150%
LEGEND
Assembly
Namespace
Interface
Struct
Enumeration
Delegate
Class
Property
Method
Event
Field
Externals
Insert
Payment
Label Insert
Category Method
FunctionTypeFlags Method
Icon CodeSchema_Method
Assembly file:///C:/demo/.Net PetShop 4.0/BLL/bin/Debug/PetShop.BLL.dll
Namespace PetShop.BLL
Type Order
Member (Name=Insert OverloadingParameters=[[Assembly="file:///C:/demo/.Net PetShop 4.0/Model/bin/Debug/PetShop.Model.dll" Namespace=PetShop.Model Type=OrderInfo]])
Is Public True

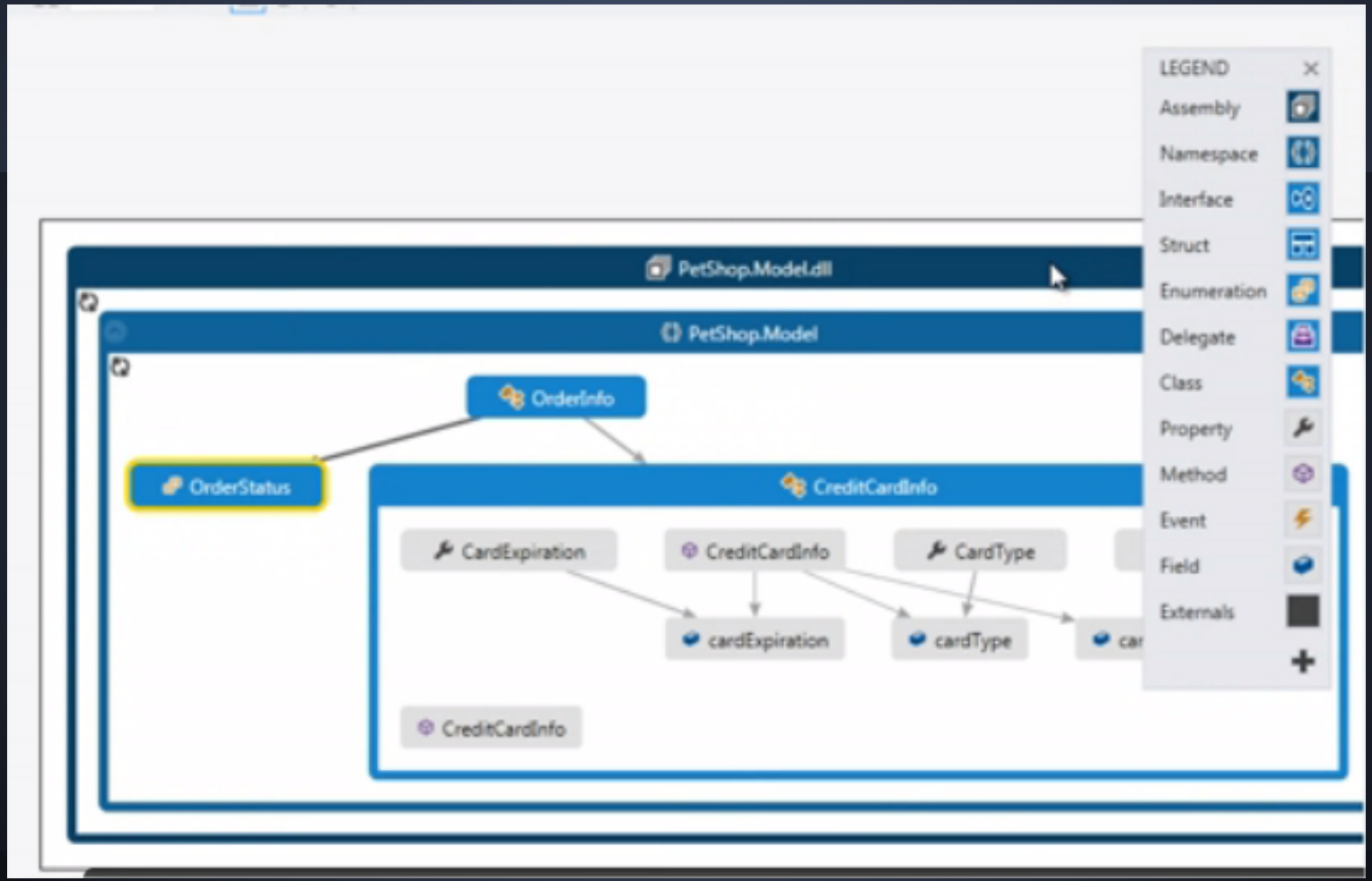

ProcessP
MakePa
Containment Hierarchy
Called Methods
Called-By Methods
Overridden Methods In Base Types
Referenced Fields
Layout
Select
Edit
Group
Goto
Show
Categorize
Hide Legend
Save As XPS...
Move Graph1.dgml into
Properties
LEGEND
Assembly
Namespace
Interface
Struct
Enumeration
Delegate
Class
Property
Method
Event
Field
Externals


PetShop.BLL.dll
PetShop.BLL
Order
Insert
PaymentGateway.dll
PaymentGateway
PaymentProcessor
ProcessPayment
CreditCardProcessing.dll
CreditCardProcessing
CreditCardService
MakePayment
LEGEND
Assembly
Namespace
Interface
Struct
Enumeration
Delegate
Class
Property
Method
Event
Field
Externals


PetShop.BLL.dll
PetShop.BLL
Order
Insert
PaymentGateway.dll
PaymentGateway
PaymentProcessor
Go To Definition F12
DGML
Layout
Select
Edit
Group
Goto
Show
Categorize
Hide Legend
Save As XPS...
Move Graph1.dgml into
Properties
LEGEND
Assembly
Namespace
Interface
Struct
Enumeration

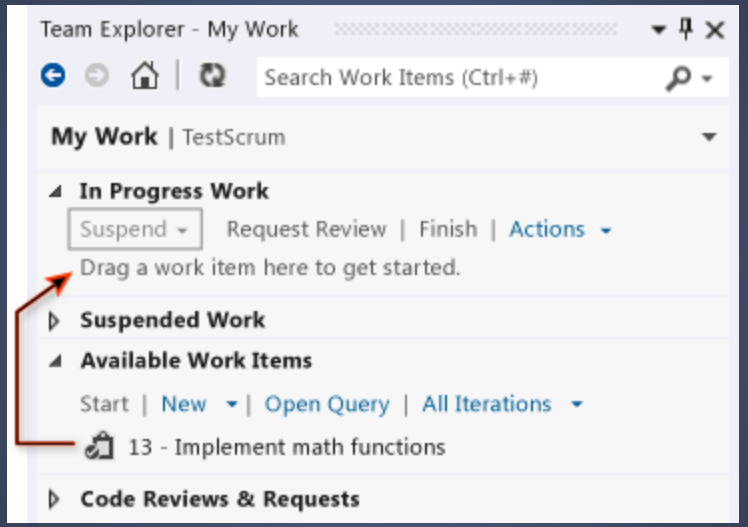

CreditCardInfo.cs
Solution Explorer
New Dependency Graph
New Dependency Graph with Ancestors
CreditCardProcessing
Model
CreditCardInfo.cs
OrderInfo.cs
Solution Explorer
Team Explorer
Class View

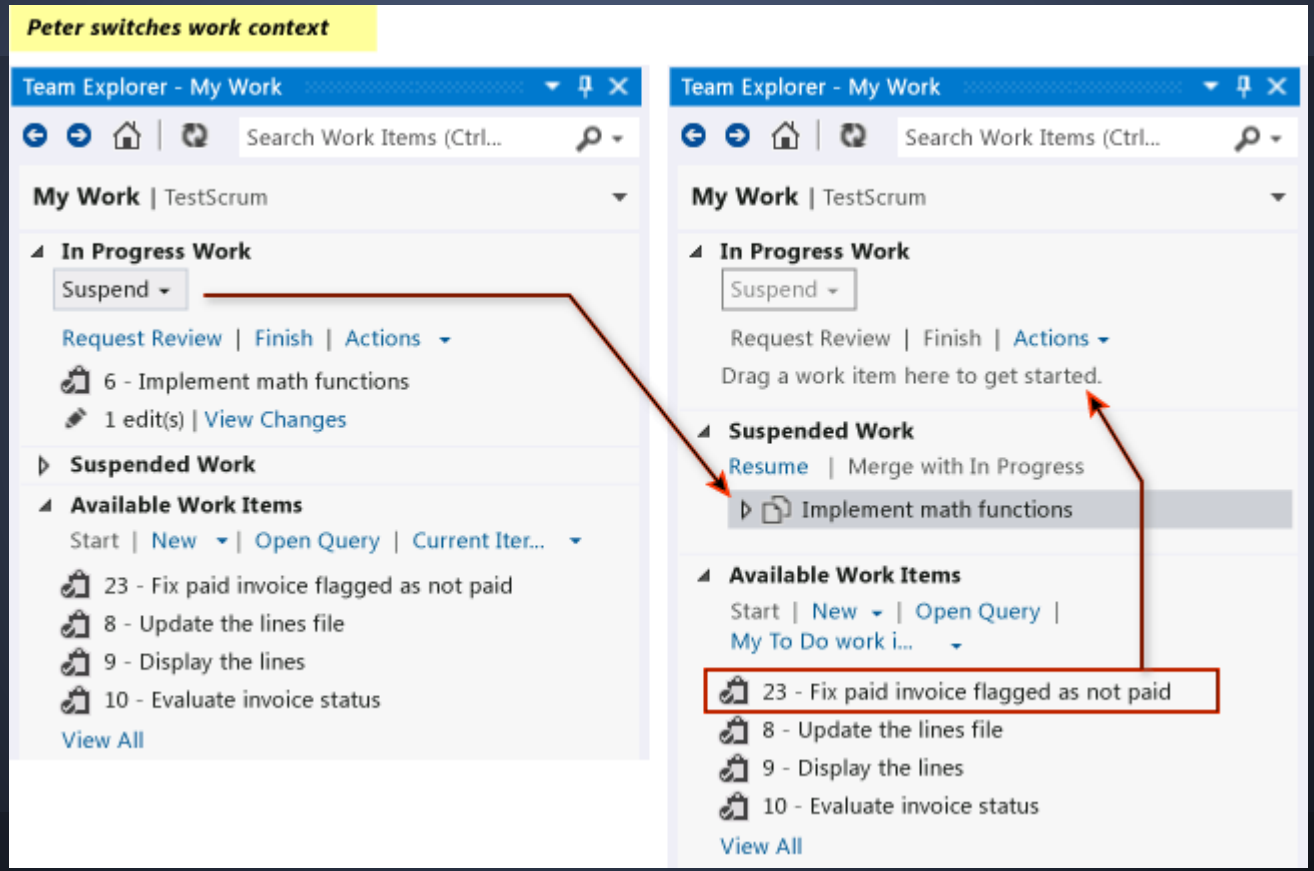
LEGEND
Assembly
Namespace
Interface
Struct
Enumeration
Delegate
Class
Property
Method
Event
Field
Externals
PetShop.Model.dll
PetShop.Model
OrderInfo
OrderStatus
CreditCardInfo
Label CreditCardInfo
Category Class
Group Collapsed
Icon CodeSchema_Class
Assembly file:///C:/demo/.Net PetShop 4.0/Model/bin/Debug/PetShop.Model.dll
Namespace PetShop.Model
Type CreditCardInfo
Is Public True

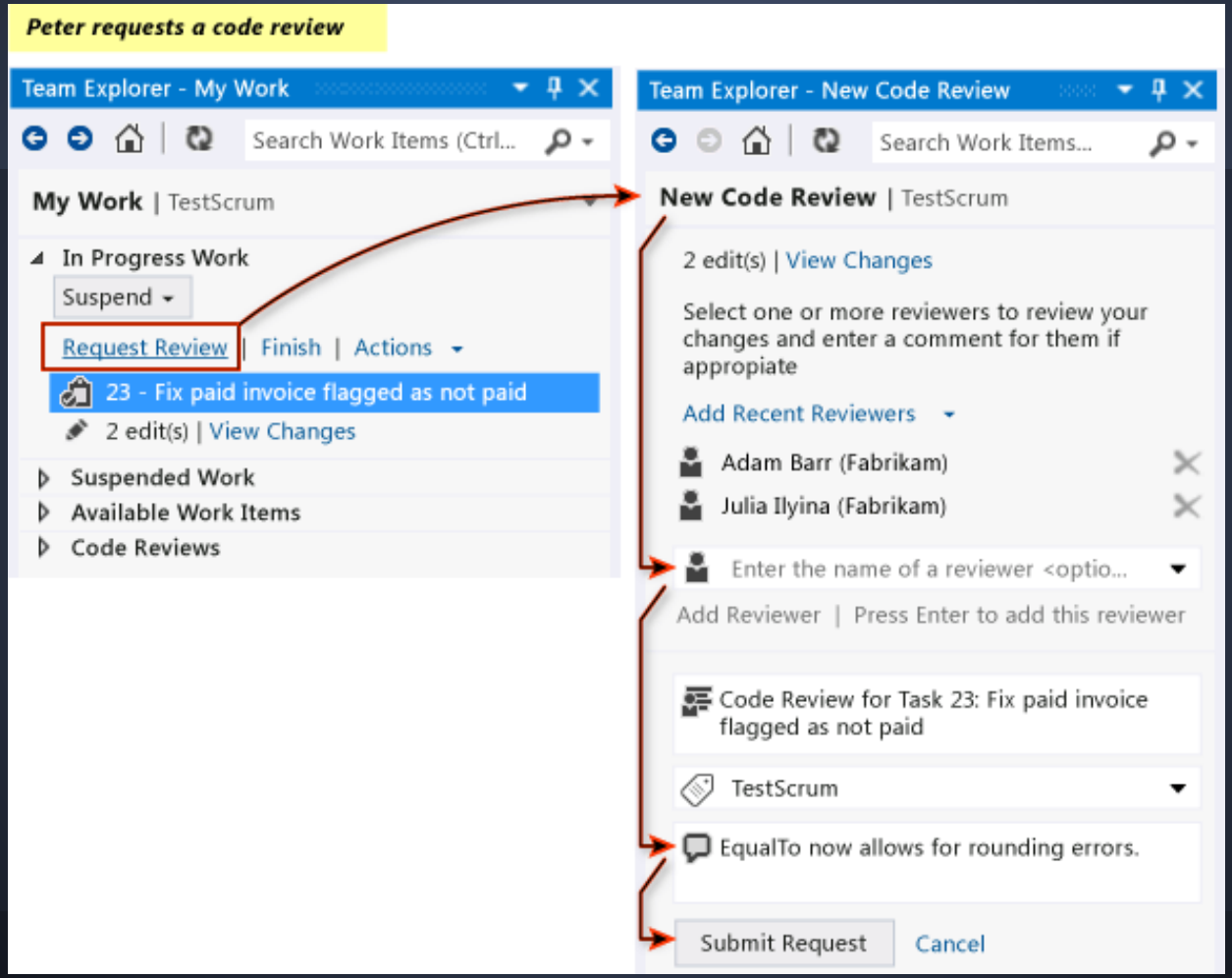

LEGEND
Assembly
Namespace
Interface
Struct
Enumeration
Delegate
Class
Property
Method
Event
Field
Externals
PetShop.Model.dll
PetShop.Model
OrderInfo
OrderStatus
CreditCardInfo
CardExpiration
CreditCardInfo
CardType
cardExpiration
cardType
CreditCardInfo

Developing applications and collaborating more effectively as a team

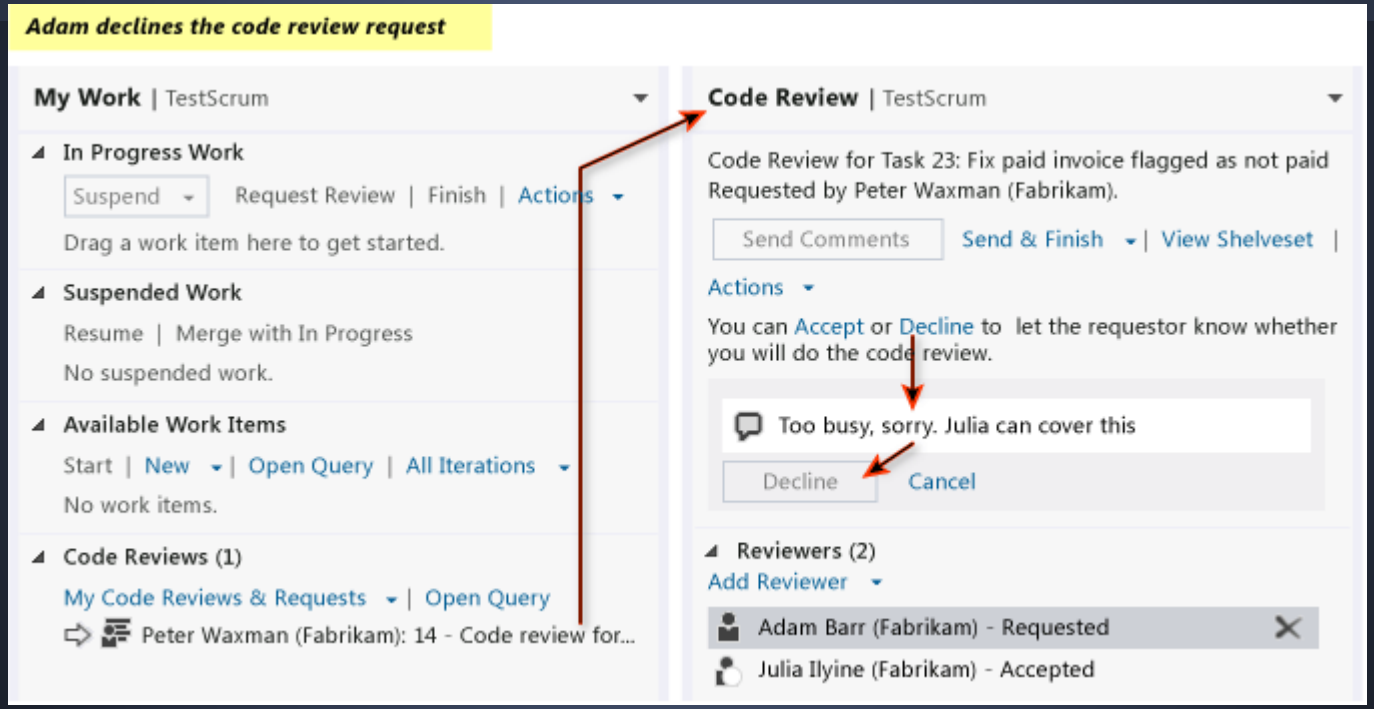
- Track tasks and boost productivity by using an enhanced interface.
- Organize upcoming, ongoing, and suspended work while increasing transparency and reducing the impact of interruptions.
- Work more efficiently in a version-controlled codebase.
- Organize your work, reduce the impact of interruptions, and manage shelvesets and changesets.
- Conduct and track code reviews by using new tools.
- Perform unit testing by using a dedicated tool.
- Test code as part of your workflow. For more information, see Running Unit Tests with Test Explorer.
- Find duplicate code so that you can refactor.
- Compare code versions by using an enhanced diff tool.
- Work offline: Work in local workspaces either inside or outside of Visual Studio, even when you're not connected to Team Foundation Server.


Team Explorer - My Work
Search Work Items (Ctrl+#)
My Work | TestScrum
In Progress Work
Suspend
Request Review | Finish | Actions
Drag a work item here to get started.
Suspended Work
Available Work Items
Start | New | Open Query | All Iterations
13 - Implement math functions
Code Reviews & Requests

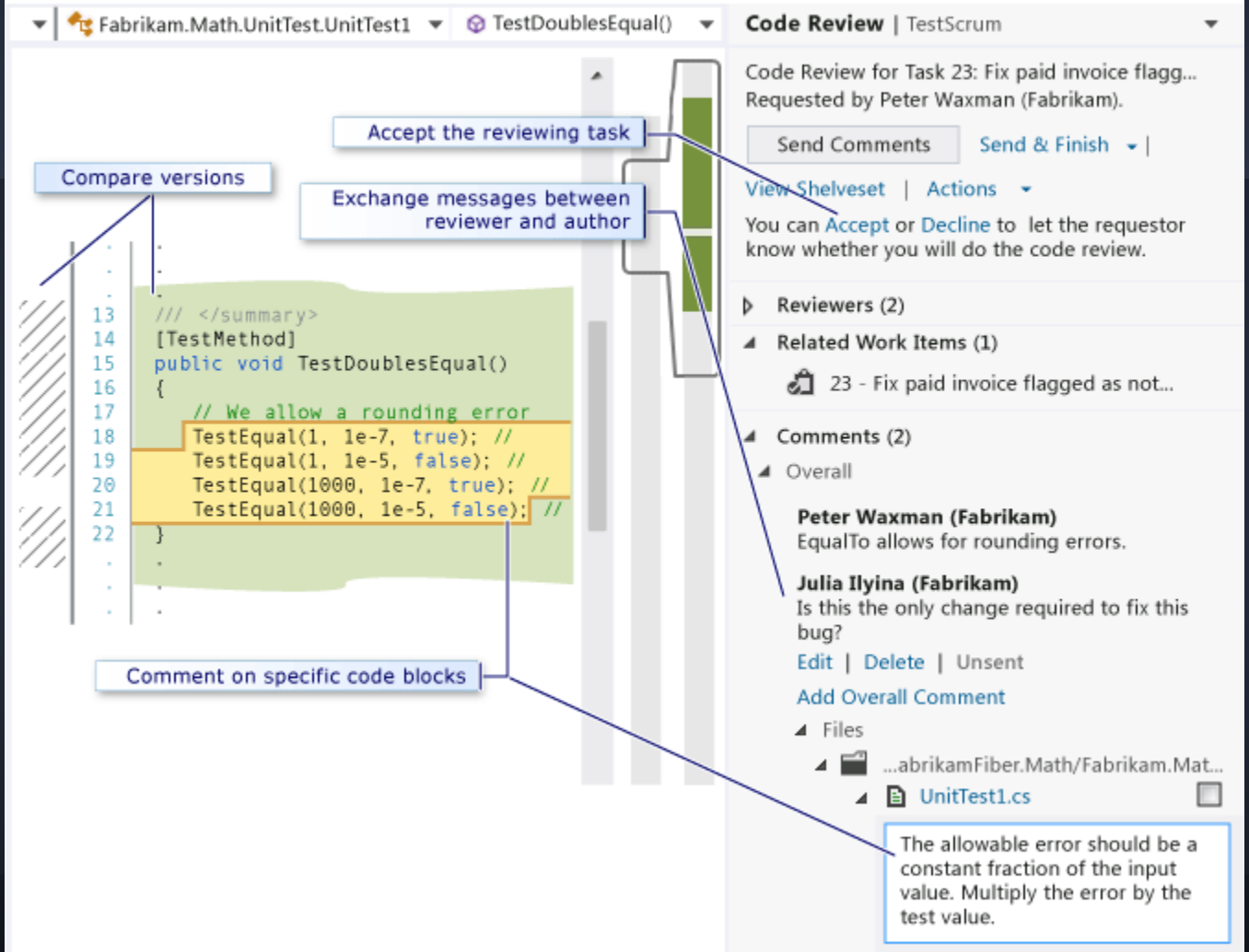

Peter switches work context
Team Explorer - My Work
Search Work Items (Ctrl...
My Work | TestScrum
In Progress Work
Suspend
Request Review | Finish | Actions
6 - Implement math functions
1 edit(s) | View Changes
Suspended Work
Available Work Items
Start | New | Open Query | Current Iter...
23 - Fix paid invoice flagged as not paid
8 - Update the lines file
9 - Display the lines
10 - Evaluate invoice status
View All
Team Explorer - My Work
Search Work Items (Ctrl...
My Work | TestScrum
In Progress Work
Suspend
Request Review | Finish | Actions
Drag a work item here to get started.
Suspended Work
Resume | Merge with In Progress
Implement math functions
Available Work Items
Start | New | Open Query |
My To Do work i...
23 - Fix paid invoice flagged as not paid
8 - Update the lines file
9 - Display the lines
10 - Evaluate invoice status
View All

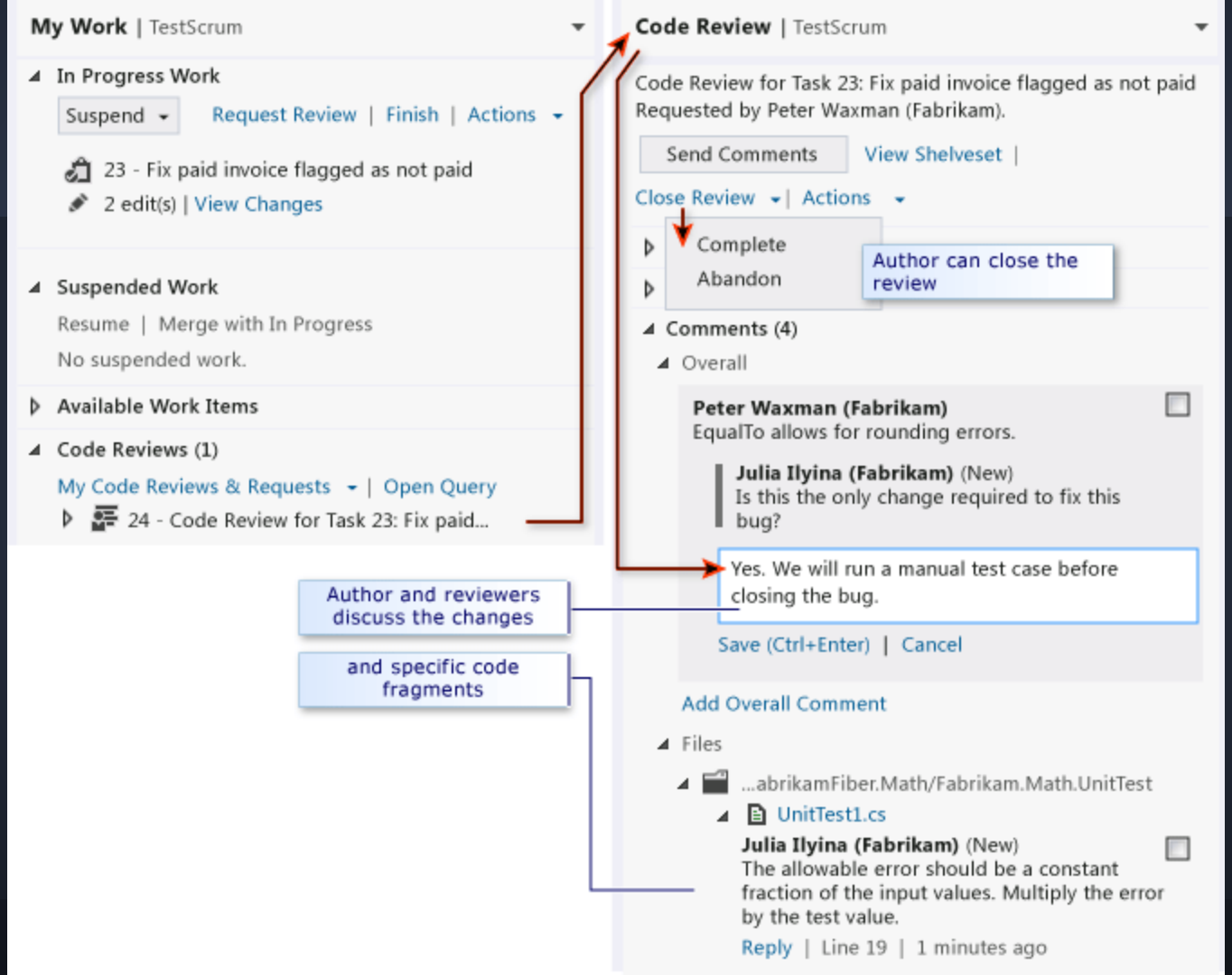

Peter requests a code review
Team Explorer - My Work
Search Work Items (Ctrl...
My Work | TestScrum
In Progress Work
Suspend
Request Review | Finish | Actions
23 - Fix paid invoice flagged as not paid
2 edit(s) | View Changes
Suspended Work
Available Work Items
Code Reviews
Team Explorer - New Code Review
Search Work Items...
New Code Review | TestScrum
2 edit(s) | View Changes
Select one or more reviewers to review your changes and enter a comment for them if appropiate
Add Recent Reviewers
Adam Barr (Fabrikam)
Julia Ilyina (Fabrikam)
Enter the name of a reviewer <optio...
Add Reviewer | Press Enter to add this reviewer
Code Review for Task 23: Fix paid invoice flagged as not paid
TestScrum
EqualTo now allows for rounding errors.
Submit Request
Cancel

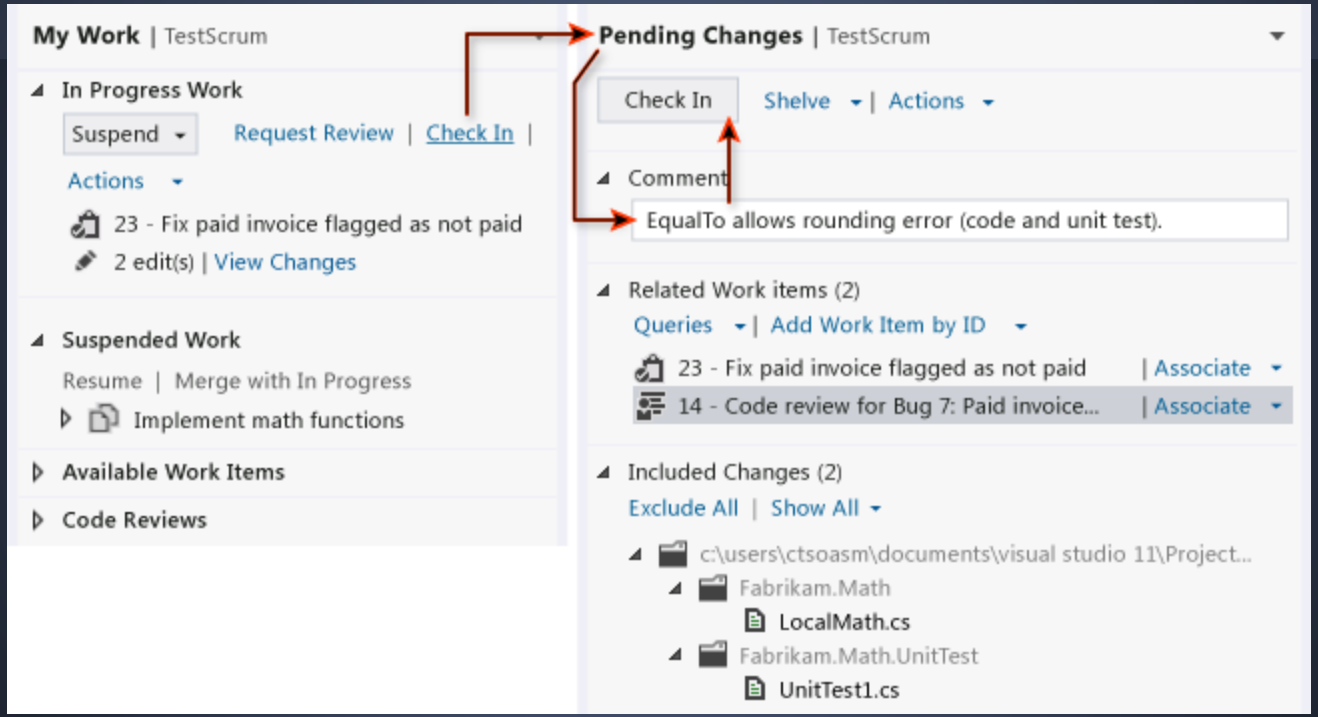
Adam declines the code review request

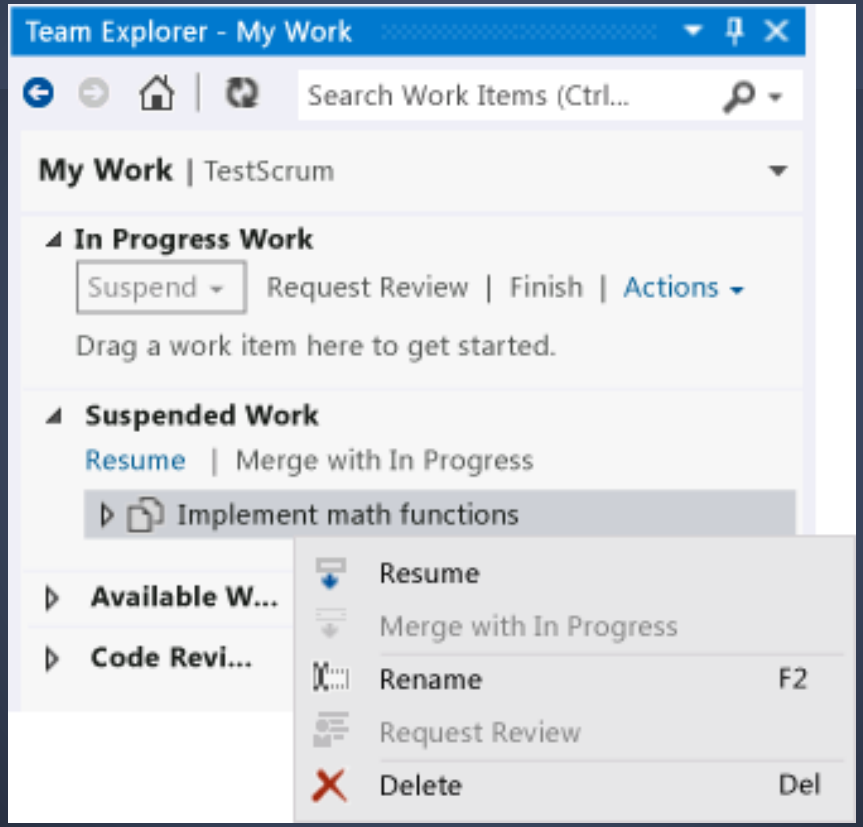


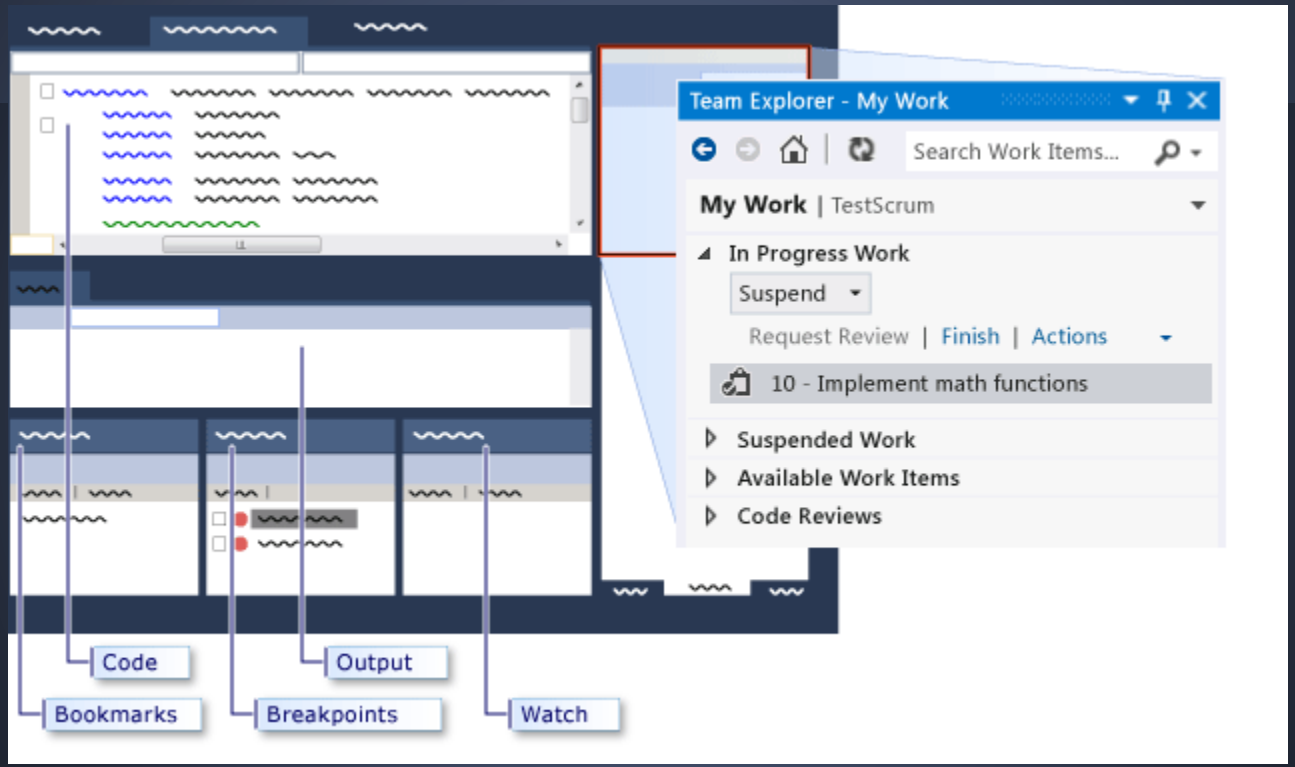
Julia accepts the code review request



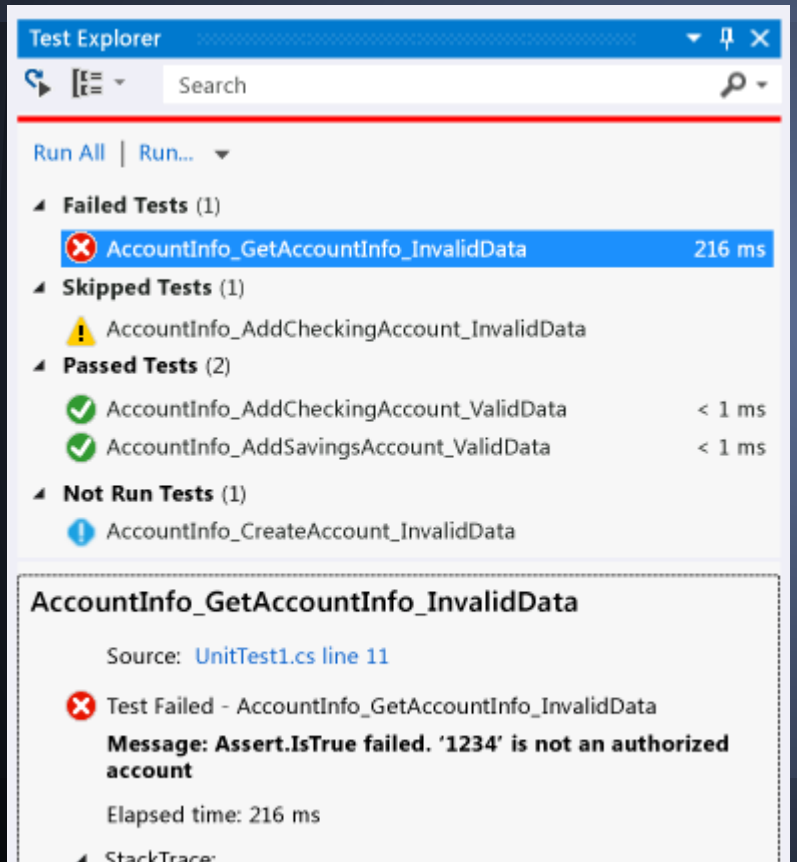

My Work | TestScrum
In Progress Work
Suspend
Request Review | Finish | Actions
23 - Fix paid invoice flagged as not paid
2 edit(s) | View Changes
Suspended Work
Resume | Merge with In Progress
No suspended work.
Available Work Items
Code Reviews (1)
My Code Reviews & Requests | Open Query
24 - Code Review for Task 23: Fix paid...
Code Review | TestScrum
Code Review for Task 23: Fix paid invoice flagged as not paid
Requested by Peter Waxman (Fabrikam).
Send Comments
View Shelveset |
Close Review | Actions
Complete
Abandon
Author can close the review
Comments (4)
Overall
Peter Waxman (Fabrikam)
EqualTo allows for rounding errors.
Julia Ilyina (Fabrikam) (New)
Is this the only change required to fix this bug?
Yes. We will run a manual test case before closing the bug.
Save (Ctrl+Enter) | Cancel
Add Overall Comment
Files
...abrikamFiber.Math/Fabrikam.Math.UnitTest
UnitTest1.cs
Julia Ilyina (Fabrikam) (New)
The allowable error should be a constant fraction of the input values. Multiply the error by the test value.
Reply | Line 19 | 1 minutes ago
Author and reviewers discuss the changes
and specific code fragments

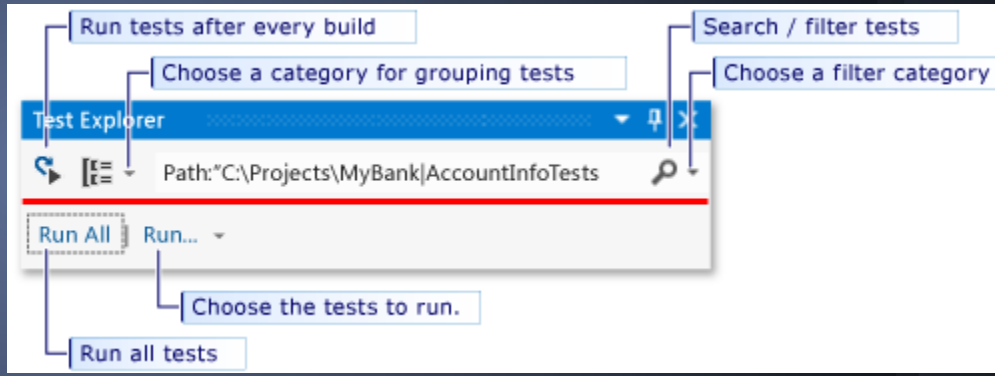

My Work | TestScrum
In Progress Work
Suspend
Request Review | Check In |
Actions
23 - Fix paid invoice flagged as not paid
2 edit(s) | View Changes
Suspended Work
Resume | Merge with In Progress
Implement math functions
Available Work Items
Code Reviews
Pending Changes | TestScrum
Check In
Shelve | Actions
Comment
EqualTo allows rounding error (code and unit test).
Related Work items (2)
Queries | Add Work Item by ID
23 - Fix paid invoice flagged as not paid | Associate
14 - Code review for Bug 7: Paid invoice... | Associate
Included Changes (2)
Exclude All | Show All
c:\users\ctsoasm\documents\visual studio 11\Project...
Fabrikam.Math
LocalMath.cs
Fabrikam.Math.UnitTest
UnitTest1.cs

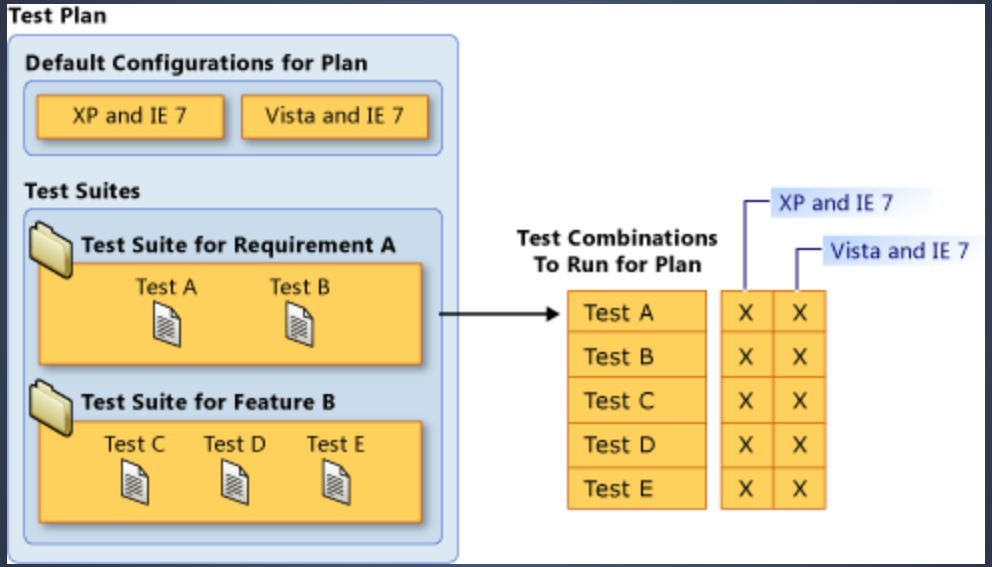

Team Explorer - My Work
Search Work Items (Ctrl...
My Work | TestScrum
In Progress Work
Suspend
Request Review | Finish | Actions
Drag a work item here to get started.
Suspended Work
Resume | Merge with In Progress
Implement math functions
Available W...
Code Revi...
Resume
Merge with In Progress
Rename F2
Request Review
Delete Del

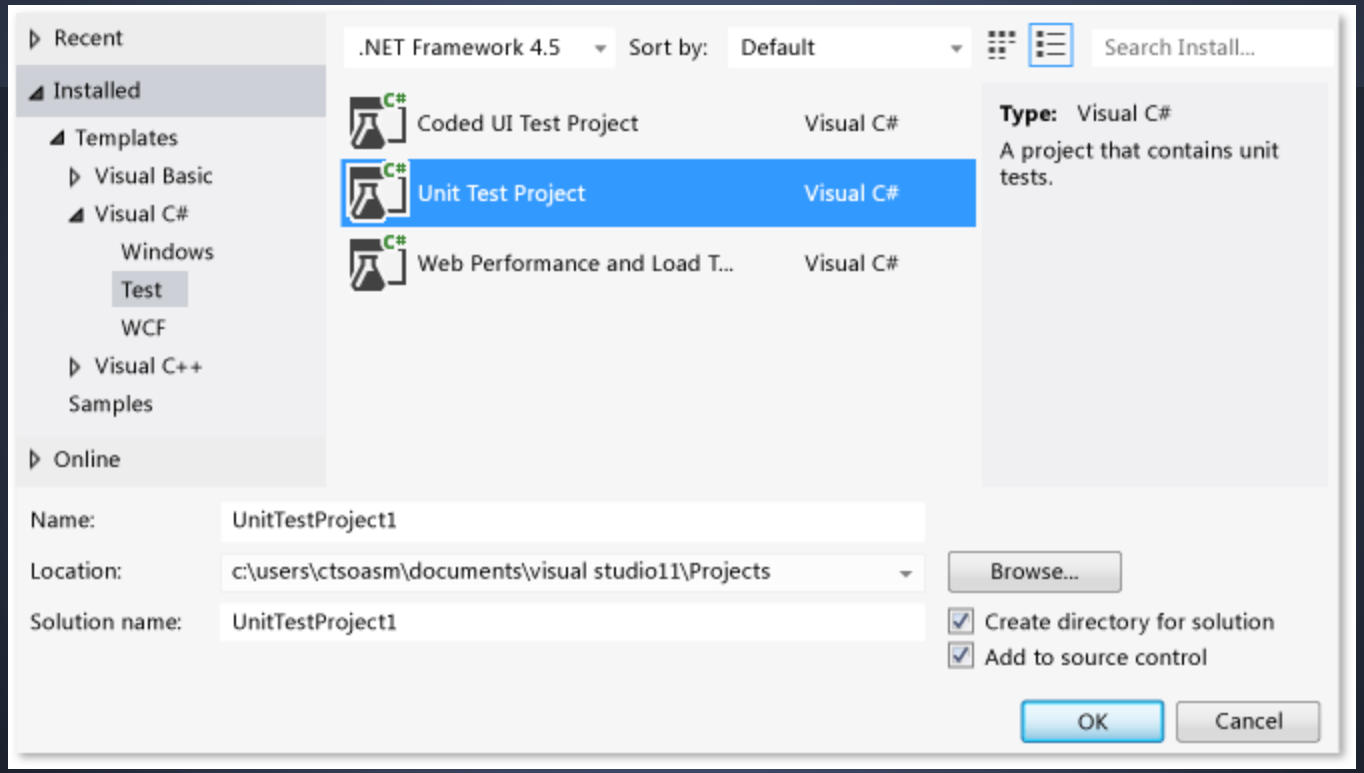

Team Explorer - My Work
Search Work Items...
My Work | TestScrum
In Progress Work
Suspend
Request Review | Finish | Actions
10 - Implement math functions
Suspended Work
Available Work Items
Code Reviews
Code
Output
Bookmarks
Breakpoints
Watch

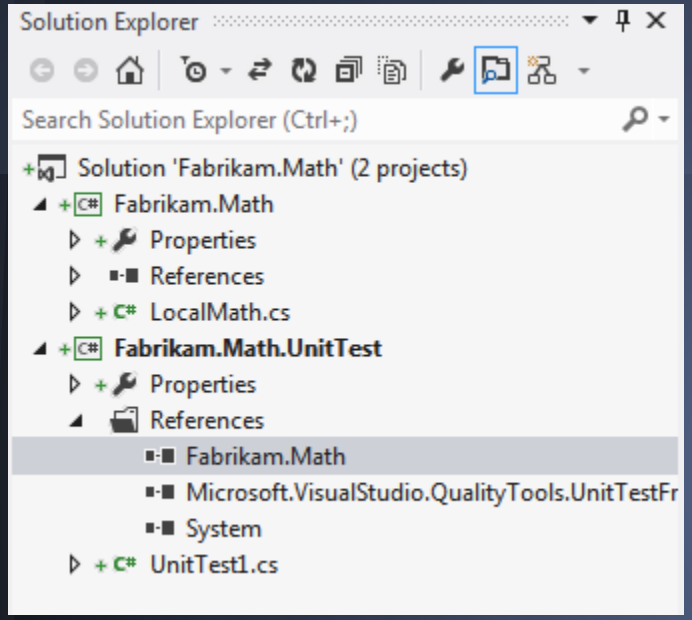
Running Unit Tests with Test Explorer



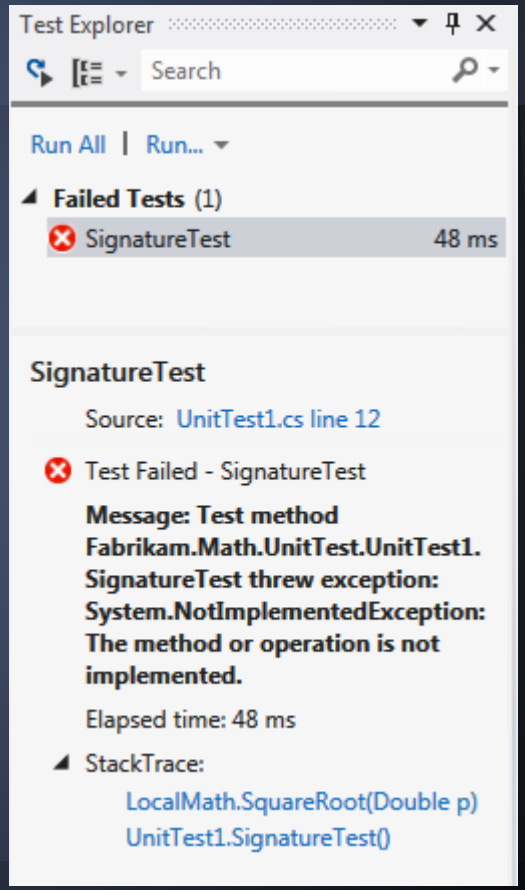



Test Plan
Default Configurations for Plan
XP and IE 7
Vista and IE 7
Test Suites
Test Suite for Requirement A
Test A
Test B
Test Suite for Feature B
Test C
Test D
Test E
Test Combinations To Run for Plan
XP and IE 7
Vista and IE 7
Test A
Test B
Test C
Test D
Test E
X
X
X
X
X
X
X
X
X
X

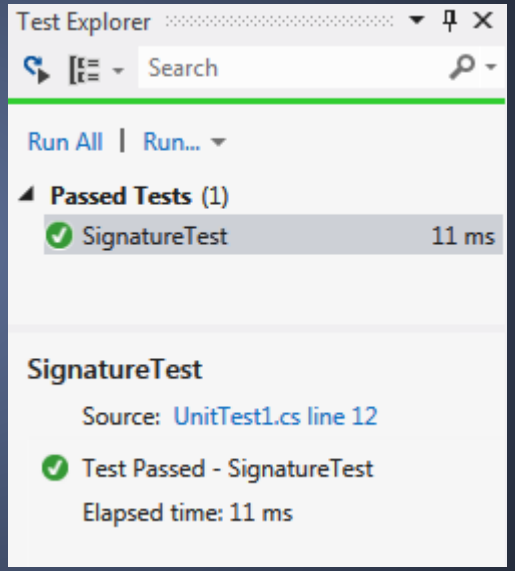

Recent
Installed
Templates
Visual Basic
Visual C#
Windows
Test
WCF
Visual C++
Samples
Online
.NET Framework 4.5
Sort by:
Default
Search Install...
Coded UI Test Project
Visual C#
Unit Test Project
Visual C#
Web Performance and Load T...
Visual C#
Type: Visual C#
A project that contains unit tests.
Name:
UnitTestProject1
Location:
c:\users\ctsoasm\documents\visual studio11\Projects
Browse...
Solution name:
UnitTestProject1
Create directory for solution
Add to source control
OK
Cancel

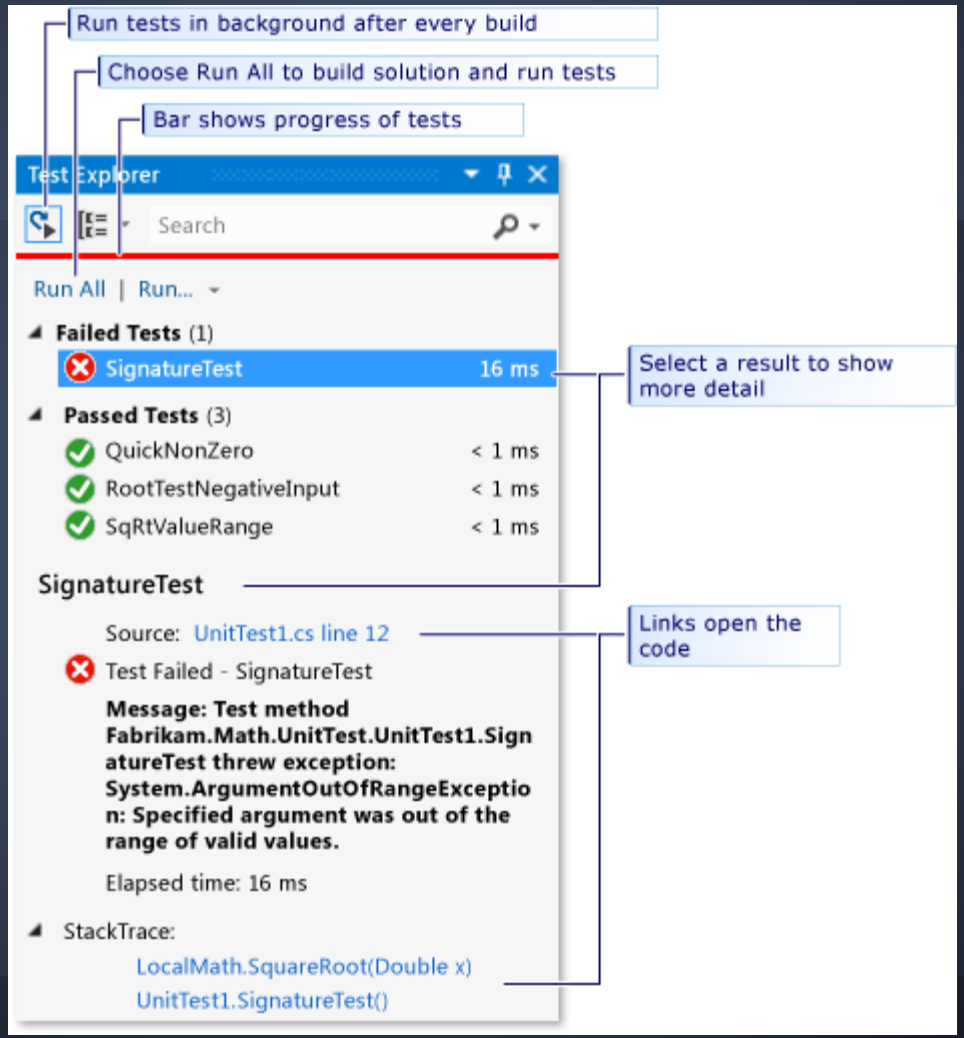



```
public double SquareRoot(double p)
{
    throw new NotImplementedException();
}
```



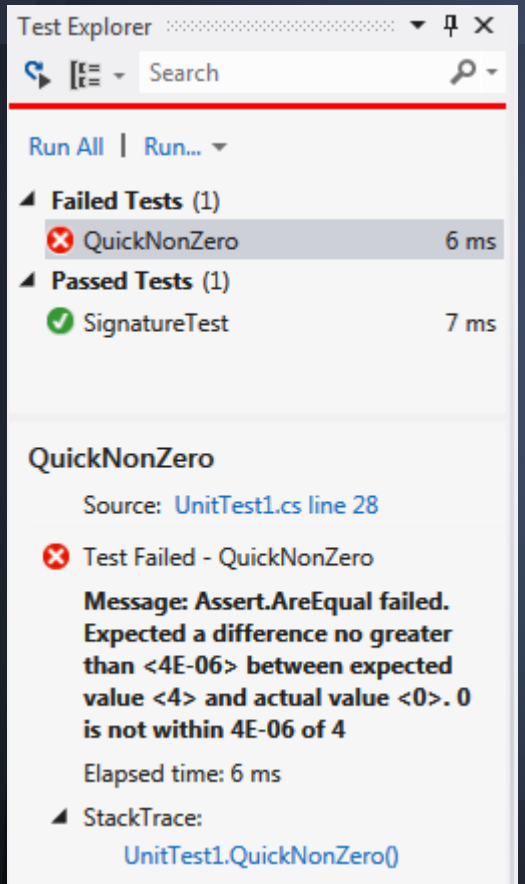
```
public double SquareRoot(double p)
 {
     return 0.0;
 }
```



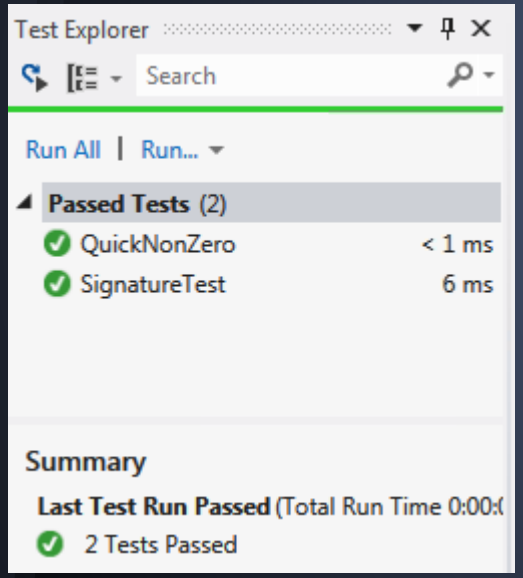

Run tests in background after every build
Choose Run All to build solution and run tests
Bar shows progress of tests
Test Explorer
Search
Run All | Run...
Failed Tests (1)
SignatureTest 16 ms
Passed Tests (3)
QuickNonZero < 1 ms
RootTestNegativeInput < 1 ms
SqRtValueRange < 1 ms
SignatureTest
Source: UnitTest1.cs line 12
Test Failed - SignatureTest
Message: Test method Fabrikam.Math.UnitTest.UnitTest1.SignatureTest threw exception: System.ArgumentOutOfRangeException: Specified argument was out of the range of valid values.
Elapsed time: 16 ms
StackTrace:
LocalMath.SquareRoot(Double x)
UnitTest1.SignatureTest()
Select a result to show more detail
Links open the code

```
[TestMethod]
  public void QuickNonZero()
  {
      // Create an instance to test:
      LocalMath math = new LocalMath();

      // Create a test input and expected value:
      var expectedResult = 4.0;
      var inputValue = expectedResult * expectedResult;

      // Run the method:
      var actualResult = math.SquareRoot(inputValue);

      // Validate the result:
      var allowableError = expectedResult/1e6;
      Assert.AreEqual(expectedResult, actualResult, allowableError,
          "{0} is not within {1} of {2}", actualResult, allowableError, expectedResult);
  }
```

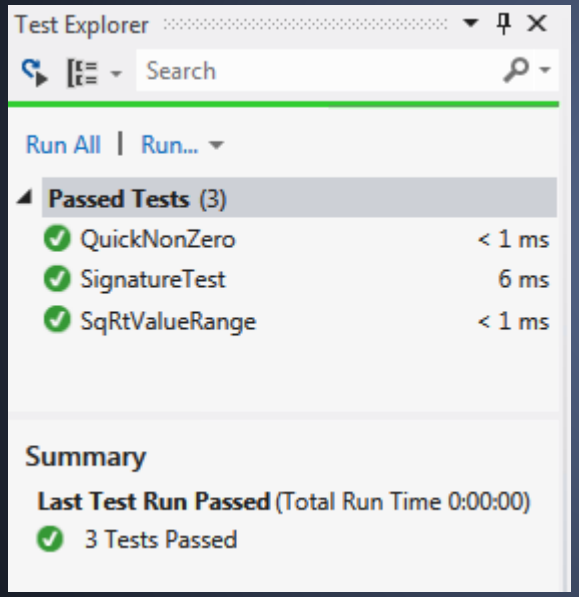
Red, Green, Refactor...

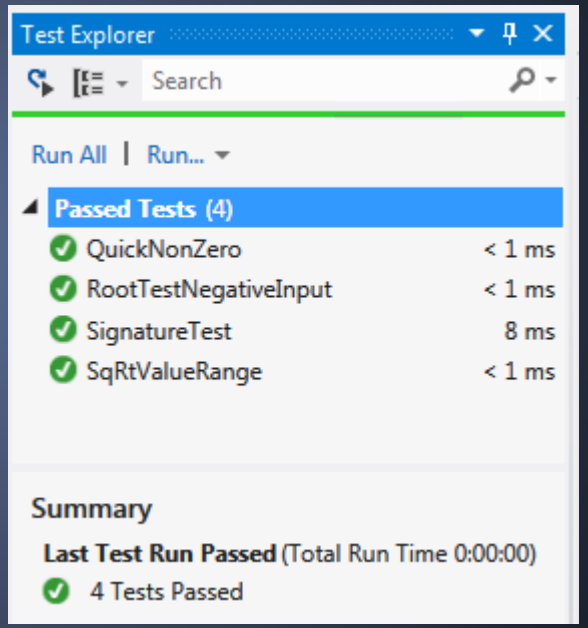


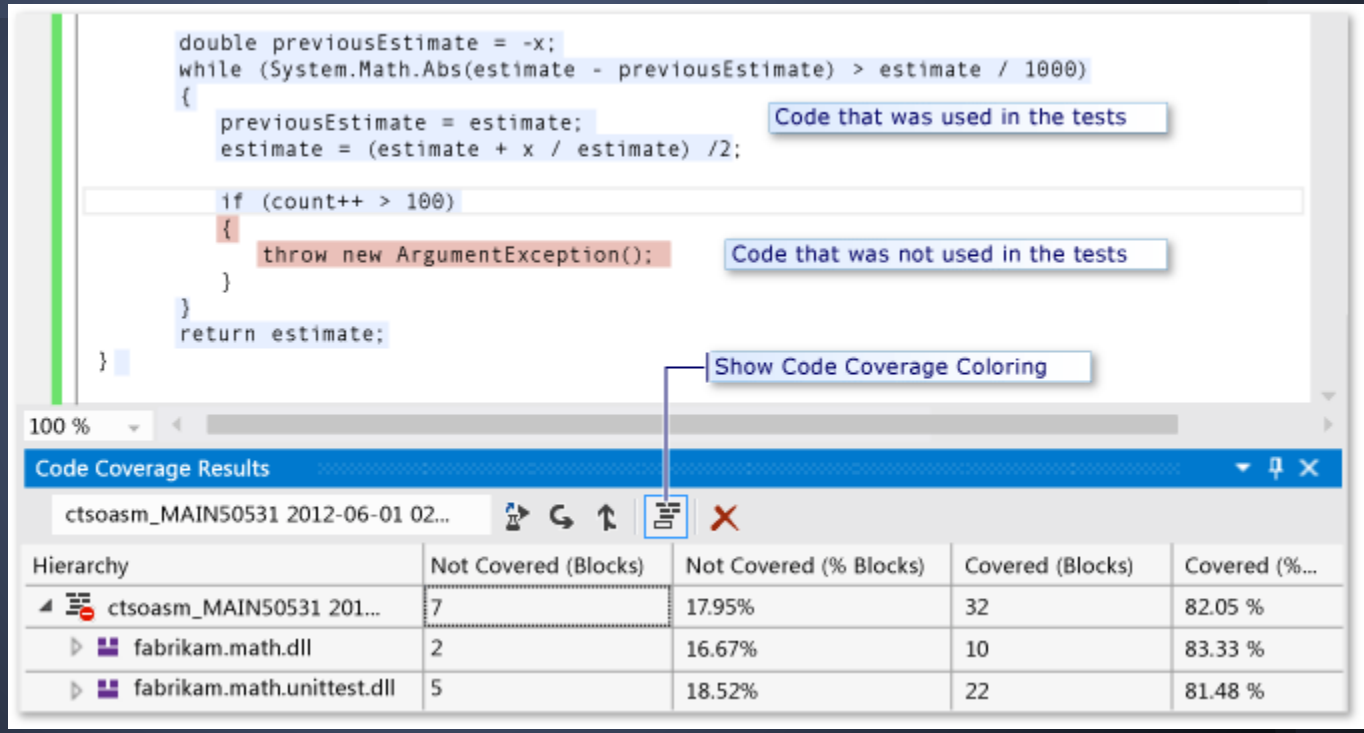

```
public class LocalMath
{
    public double SquareRoot(double x)
    {
        double estimate = x;
        double previousEstimate = -x;
        while (System.Math.Abs(estimate - previousEstimate) > estimate / 1000)
        {
            previousEstimate = estimate;
            estimate = (estimate * estimate - x) / (2 * estimate);
        }
        return estimate;
    }
```




```
public double SquareRoot(double x)
{
    double estimate = x;
    double previousEstimate = -x;
    while (System.Math.Abs(estimate - previousEstimate) > estimate / 1000)
    {
        previousEstimate = estimate;
        estimate = (estimate + x / estimate) / 2;
        //was: estimate = (estimate * estimate - x) / (2 * estimate);
    }
    return estimate;
}
```

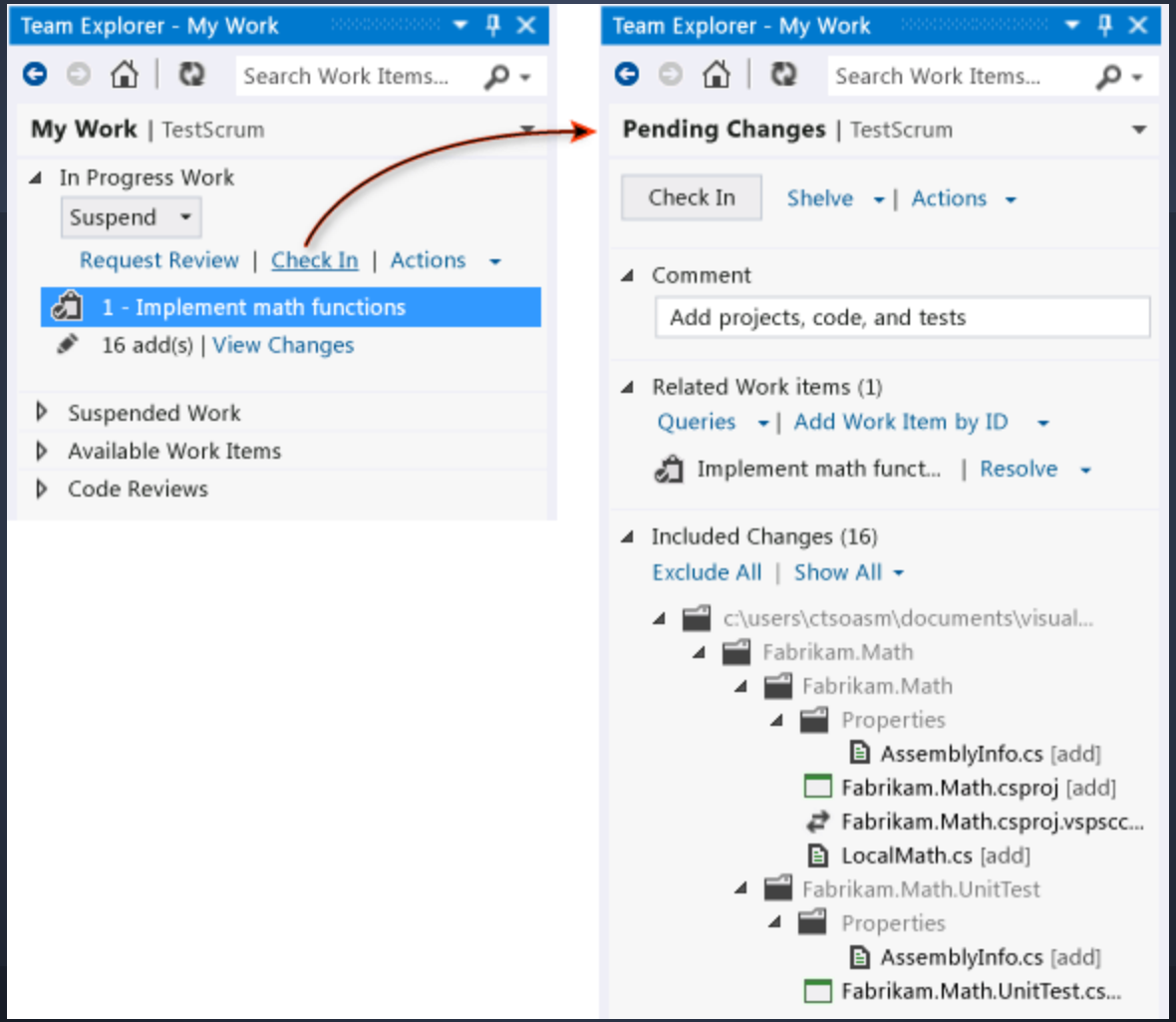

Test Explorer
Search
Run All | Run...
Passed Tests (3)
QuickNonZero < 1 ms
SignatureTest 6 ms
SqRtValueRange < 1 ms
Summary
Last Test Run Passed (Total Run Time 0:00:00)
3 Tests Passed

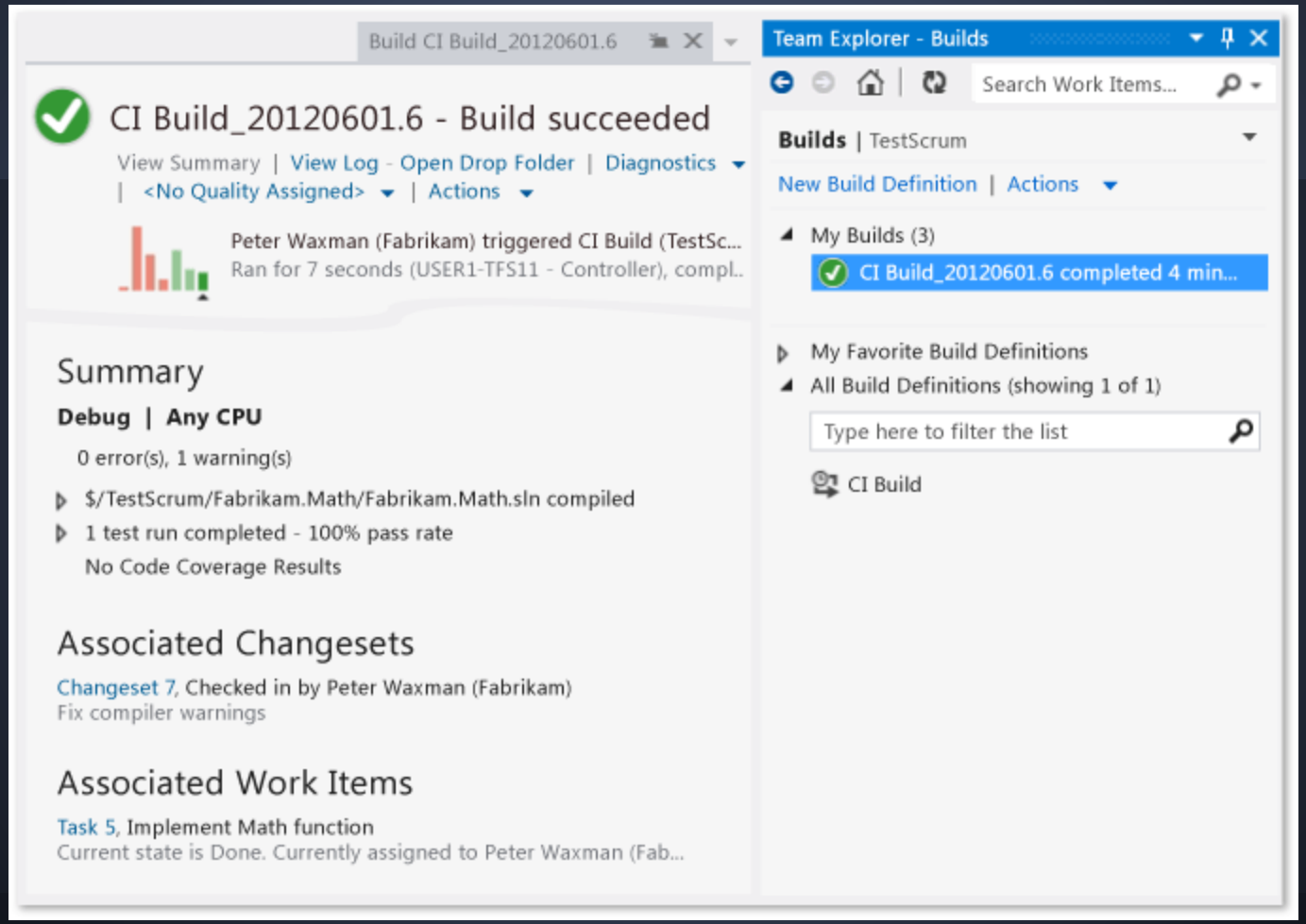

Test Explorer
Search
Run All | Run...
Passed Tests (4)
QuickNonZero < 1 ms
RootTestNegativeInput < 1 ms
SignatureTest 8 ms
SqRtValueRange < 1 ms
Summary
Last Test Run Passed (Total Run Time 0:00:00)
4 Tests Passed


double previousEstimate = -x;
while (System.Math.Abs(estimate - previousEstimate) > estimate / 1000)
{
previousEstimate = estimate;
estimate = (estimate + x / estimate) /2;
if (count++ > 100)
{
throw new ArgumentException();
}
}
return estimate;
}
Code that was used in the tests
Code that was not used in the tests
Show Code Coverage Coloring
100 %
Code Coverage Results
ctsoasm_MAIN50531 2012-06-01 02...
Hierarchy
Not Covered (Blocks)
Not Covered (% Blocks)
Covered (Blocks)
Covered (%...
ctsoasm_MAIN50531 201...
7
17.95%
32
82.05 %
fabrikam.math.dll
2
16.67%
10
83.33 %
fabrikam.math.unittest.dll
5
18.52%
22
81.48 %

Automating and debugging builds

- Run, monitor, and manage builds by using an enhanced interface.
- Run automated builds from Team Foundation Service.
- Define gated check-in build processes that support multiple check-ins.
- Run native and third-party framework unit tests in your build process.
- Debug your build process more easily.


Team Explorer - My Work
Search Work Items...
My Work | TestScrum
In Progress Work
Suspend
Request Review | Check In | Actions
1 - Implement math functions
16 add(s) | View Changes
Suspended Work
Available Work Items
Code Reviews
Team Explorer - My Work
Search Work Items...
Pending Changes | TestScrum
Check In
Shelve | Actions
Comment
Add projects, code, and tests
Related Work items (1)
Queries | Add Work Item by ID
Implement math funct... | Resolve
Included Changes (16)
Exclude All | Show All
c:\users\ctsoasm\documents\visual...
Fabrikam.Math
Fabrikam.Math
Properties
AssemblyInfo.cs [add]
Fabrikam.Math.csproj [add]
Fabrikam.Math.csproj.vspscc...
LocalMath.cs [add]
Fabrikam.Math.UnitTest
Properties
AssemblyInfo.cs [add]
Fabrikam.Math.UnitTest.cs...


Build CI Build_20120601.6
CI Build_20120601.6 - Build succeeded
View Summary | View Log - Open Drop Folder | Diagnostics
| <No Quality Assigned> | Actions
Peter Waxman (Fabrikam) triggered CI Build (TestSc...
Ran for 7 seconds (USER1-TFS11 - Controller), compl...
Summary
Debug | Any CPU
0 error(s), 1 warning(s)
$/TestScrum/Fabrikam.Math/Fabrikam.Math.sln compiled
1 test run completed - 100% pass rate
No Code Coverage Results
Associated Changesets
Changeset 7, Checked in by Peter Waxman (Fabrikam)
Fix compiler warnings
Associated Work Items
Task 5, Implement Math function
Current state is Done. Currently assigned to Peter Waxman (Fab...
Team Explorer - Builds
Search Work Items...
Builds | TestScrum
New Build Definition | Actions
My Builds (3)
CI Build_20120601.6 completed 4 min...
My Favorite Build Definitions
All Build Definitions (showing 1 of 1)
Type here to filter the list
CI Build

Improving Quality with Visual Studio Diagnostic Tools

- Debug Your App by Recording Code Execution with IntelliTrace
- Verifying Code by Using Unit Tests
- Analyzing Application Quality by Using Code Analysis Tools
- Analyzing Application Performance by Using Profiling Tools
- Concurrency Visualizer
- Measuring Complexity and Maintainability of Managed Code
- Finding Duplicate Code by using Code Clone Detection
- PreEmptive Analytics for Team Foundation Server
- PreEmptive Dotfuscator and Analytics CE
- Profile Guided Optimization in the Performance and Diagnostics Hub

Deploying Applications and Components

- Publish to the cloud
- Publish a Windows Store app
- Publish a Windows Phone app
- Deploy a LightSwitch application or service
- Publish an app for SharePoint
- Publish an app for Office
- Deploy a WCF service
- Deploy an OData service
- Deploy a desktop application
- Create a setup program
- Deploy a Visual C++ application
- Deploy an application for testing
- Install prerequisites - Bootstrapper

Thank you

Sheriff M
http://sheriffm.com