

5.– 8. September 2011  
in Nürnberg

# Herbstcampus

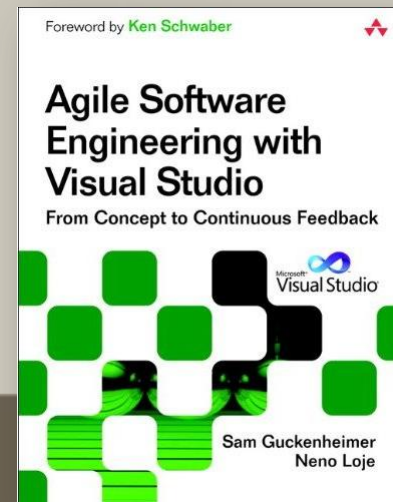
Wissenstransfer  
par excellence

## Keine Ausreden mehr!

### Test Case Management & Tools für Tester im TFS 2010

Beginn: 15:40

Basierend auf:

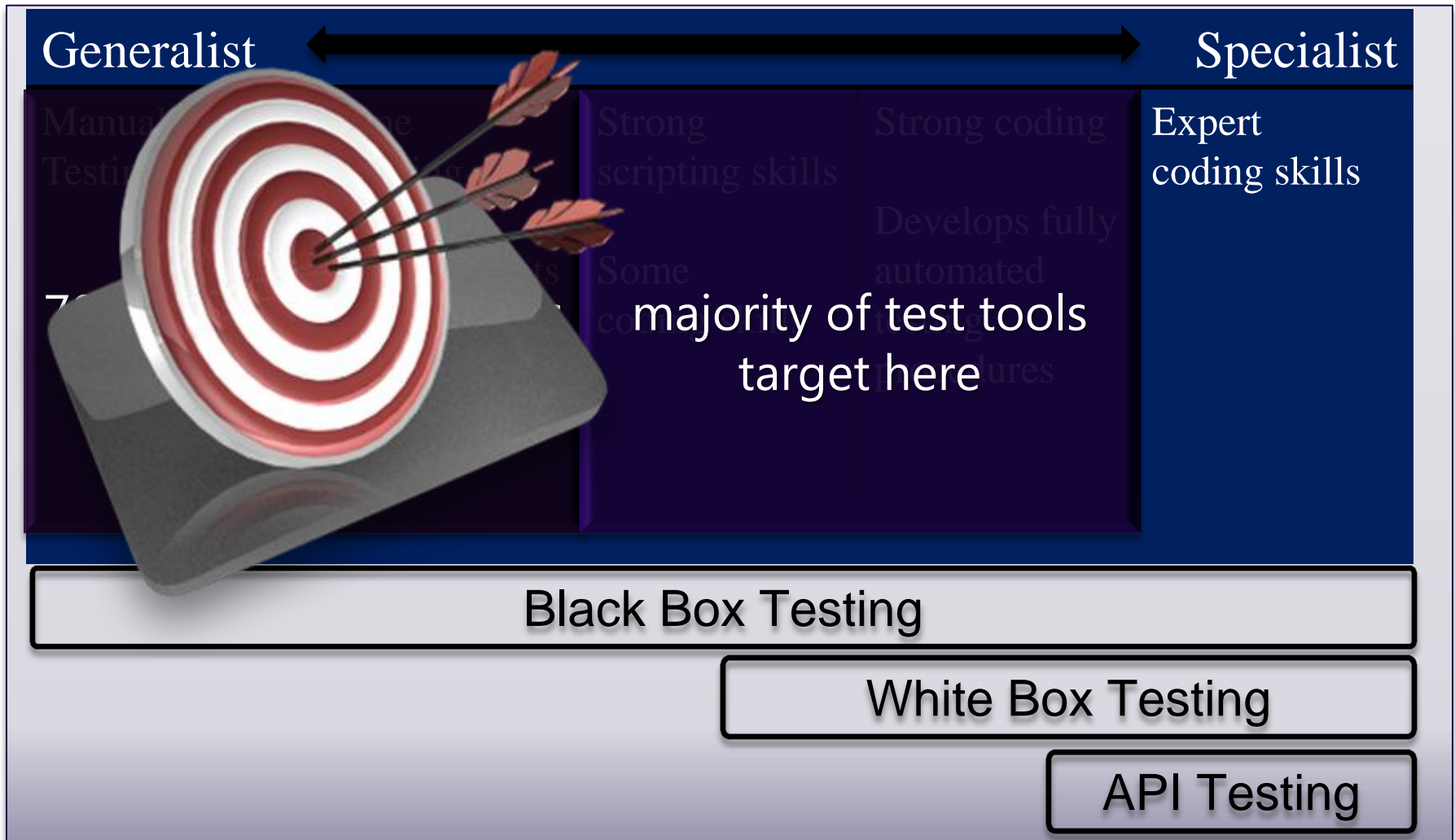


**Referent:** Neno Loje

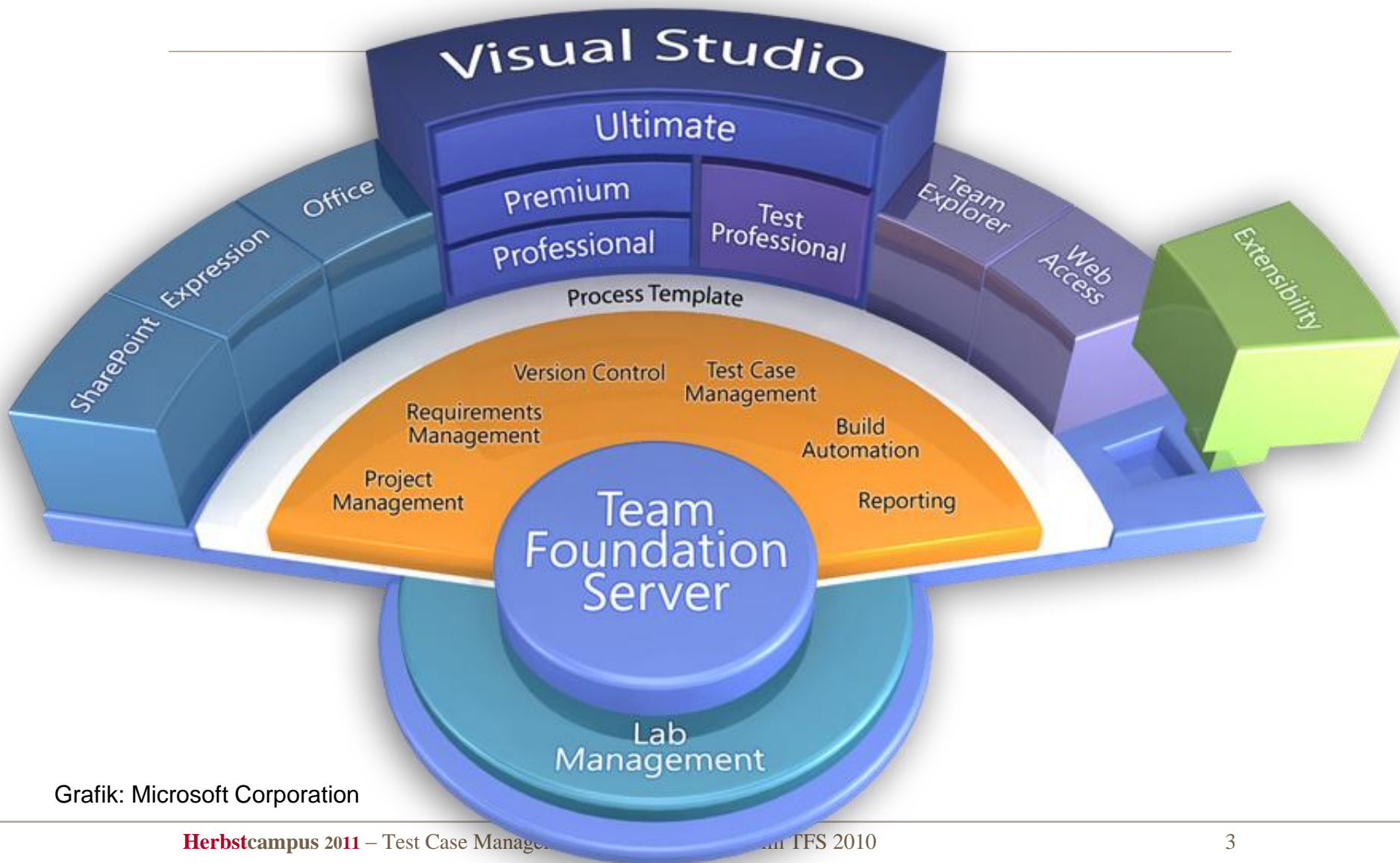
Freier Berater & MVP für Visual Studio ALM, TFS

[www.teamsystempro.de](http://www.teamsystempro.de)

# Tester Segmentation



# Visual Studio 2010



Grafik: Microsoft Corporation

# Requirement-Hierarchie

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DEMO

Work Breakdown [Results] X

Save Results Refresh | Open in Microsoft Office | Edit Query Column Options

Query Results: 10 items found (1 top level, 9 linked items, 1 currently selected).

ID	Title	Requirement Type	Work Item...	Priority	Assigned
11	Rechenschieber ablösen	Business Objective	Requirement	2	Neno Loj
12	Allgemein	Functional	Requirement	2	Neno Loj
13	Benutzer soll Versionsinformationen angezeigt bekommen	Feature	Requirement	2	Neno Loj
14	Benutzer soll direkt zur Dokumentation springen können	Feature	Requirement	2	Neno Loj
15	Benutzer soll das Programm installieren können	Feature	Requirement	2	Neno Loj
16	Grundrechenarten	Functional	Requirement	2	Neno Loj
17	Benutzer soll zwei Zahlen addieren können	Feature	Requirement	2	Neno Loj
18	Benutzer soll zwei Zahlen subtrahieren können	Feature	Requirement	2	Neno Loj
19	Benutzer soll zwei Zahlen multiplizieren können	Feature	Requirement	2	Neno Loj
20	Benutzer soll zwei Zahlen dividieren können	Feature	Requirement	2	Neno Loj

	A	B	C	D	E	F	G
1	Project: Taschenrechner Server: servertogo\DefaultCollection Query: Work Breakdown List type: Tree						
2	ID	Title 1	Title 2	Title 3	Title 4	Requirement Type	Work Item Type
3	11	Rechenschieber ablösen				Business Objective	Requirement
4	12		Allgemein			Functional	Requirement
5	13			Benutzer soll Versionsinformationen angezeigt bekommen		Feature	Requirement
6	14			Benutzer soll direkt zur Dokumentation springen können		Feature	Requirement
7	15			Benutzer soll das Programm installieren können		Feature	Requirement
8	16		Grundrechenarten			Functional	Requirement
9	17			Benutzer soll zwei Zahlen addieren können		Feature	Requirement
10	18			Benutzer soll zwei Zahlen subtrahieren können		Feature	Requirement
11	19			Benutzer soll zwei Zahlen multiplizieren können		Feature	Requirement
12	20			Benutzer soll zwei Zahlen dividieren können		Feature	Requirement

# Testplanung

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DEMO

Test Case 16 : Successfully withdraw cash from ATM

Title: Successfully withdraw cash from ATM

Status

Assigned To: Administrator

State: Design

Priority: 2

Automation Status: Not Automated

Classification

Area: AIT.ATM

Iteration: AIT.ATM\Version 1.0\2010-01 Beta

Test Phase: 2 System Test

Testschritte in eigenem Control

- Steps
- Summary
- Tested Requirements
- All Links
- Attachments
- Associated Automation

Insert step | Insert shared steps | Insert parameter

Action	Expected Result
<b>Login</b>	
Choose option "withdraw cash" in menu	Amount is requested
Enter @Amount and press "Withdraw"	@Amount is available in slot
<a href="#">Click here to add a step</a>	

Parameter für Testschritte

Parameter Values:

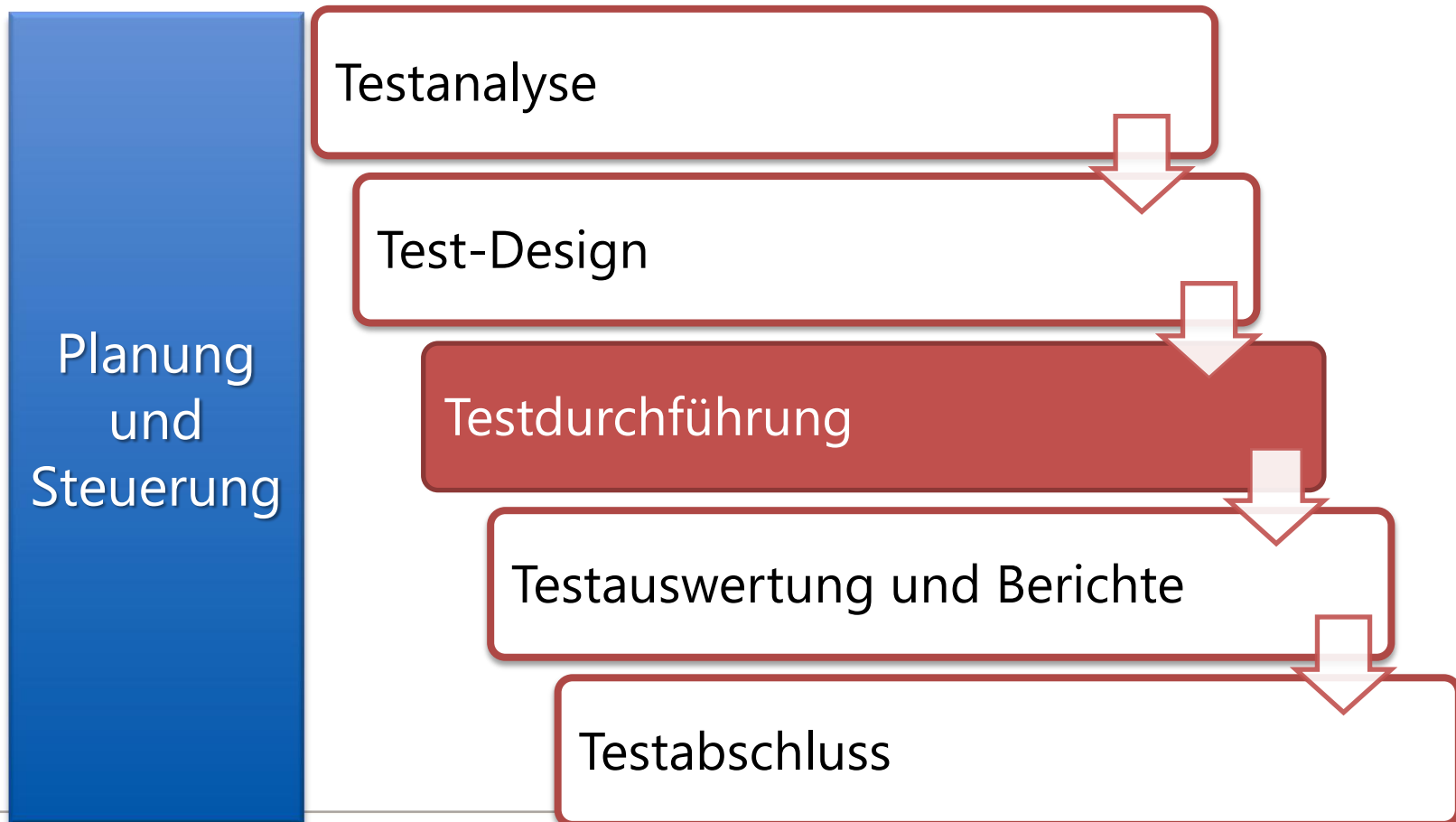
Delete iteration | Rename parameter | Delete parameter

Amount	Pin
23	1234
70	1234
100	1234

Werte für parametrisierte Testschritte

# Fundamentaler Testprozess

Nach ISTQB-Standard:





# Manuelles Testen

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DEMO

Save and Close

Test 1 of 1

16\*: Addiere zwei Zahlen

Windows 7 and IE 8

Play

1. Starte Taschenrechner ✓
2. Addiere 3 und 7 ✗
  - Expected - Ergebnis = 10
  - Screenshot1(TC16Iteration1Step2).png ✗
  - Fehler!
3. Schließe Taschenrechner wieder ?

End test

Calculator

View Edit Help

10

MC MR MS M+ M-

← CE C ± √

7 8 9 / %

4 5 6 \* 1/x

2 3 -

0 , + =

Pass Win+Ctrl+Q

Fail Win+Ctrl+W

3. Schließe Taschenrechner wieder ?

End

Playback of the action recording is in progress

Action 2 of 5 - Click '3' button

Cancel

Using the keyboard or mouse can interfere with playback

Calculator

View Edit Help

0

MC MR MS M+ M-

← CE C ± √

7 8 9 / %

4 5 6 \* 1/x

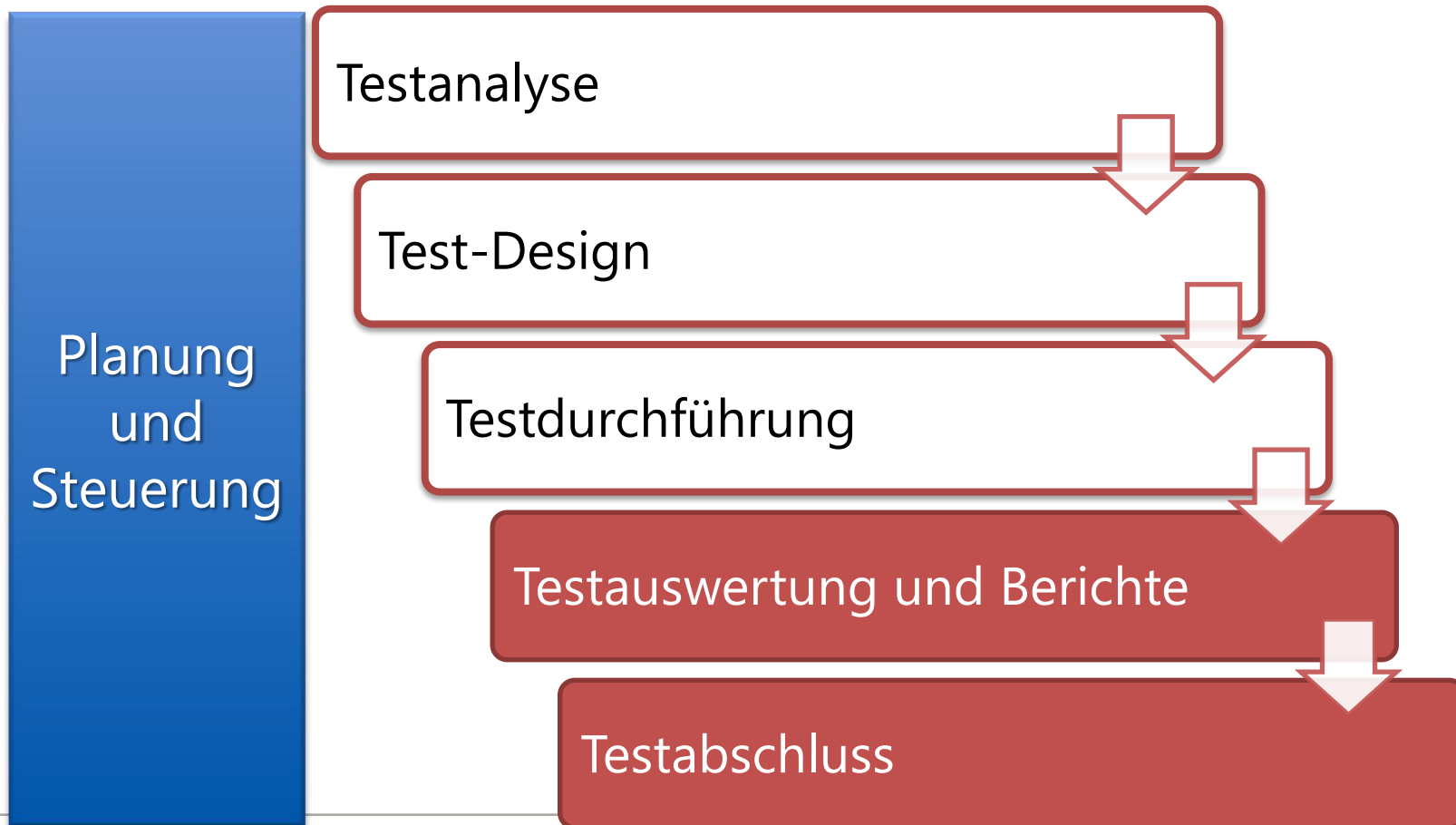
1 2 3 -

0 , + =

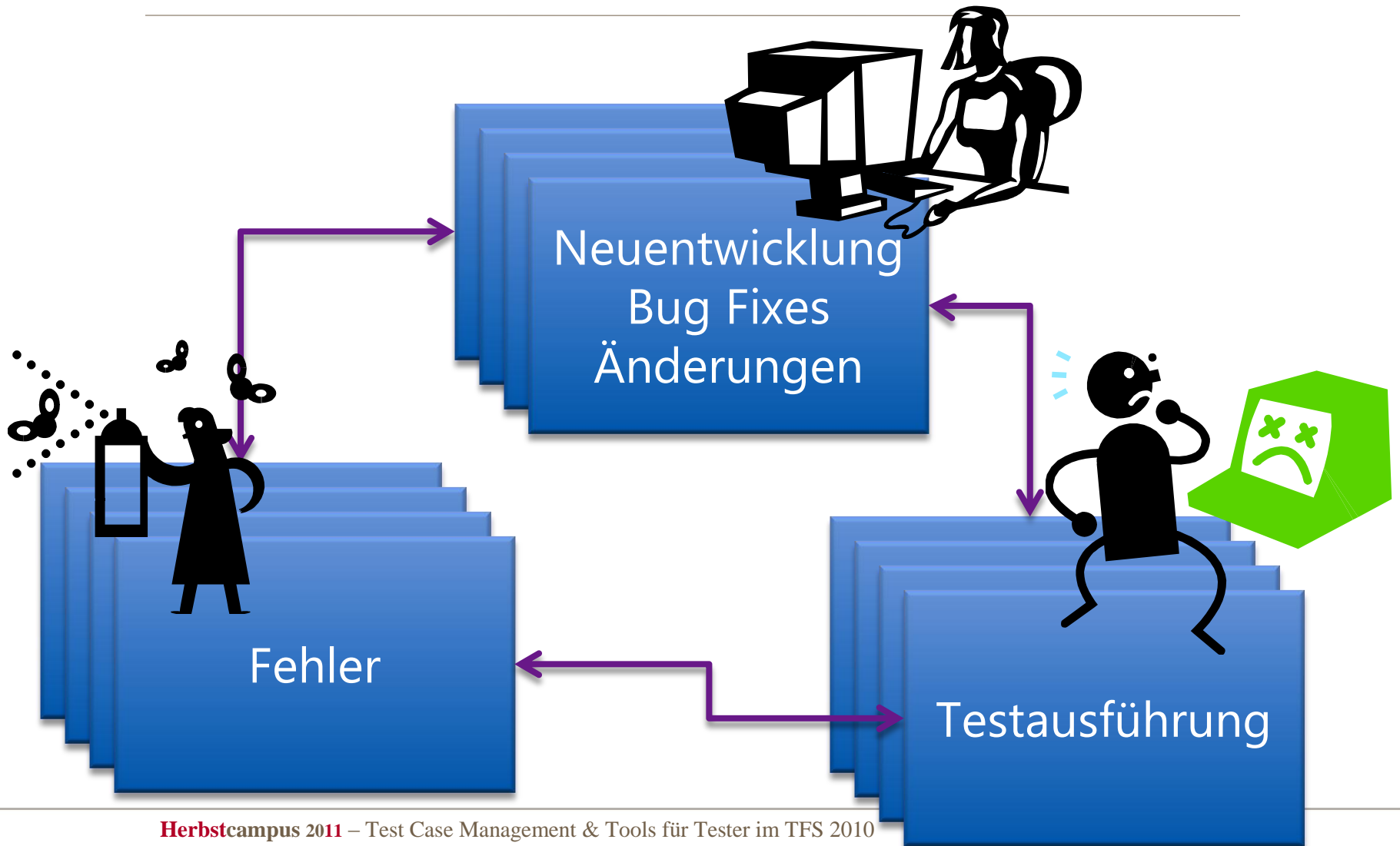
Host Name:  
OS Version:  
CPU:  
Memory:  
Boot Time:  
Free Space:

# Fundamentaler Testprozess

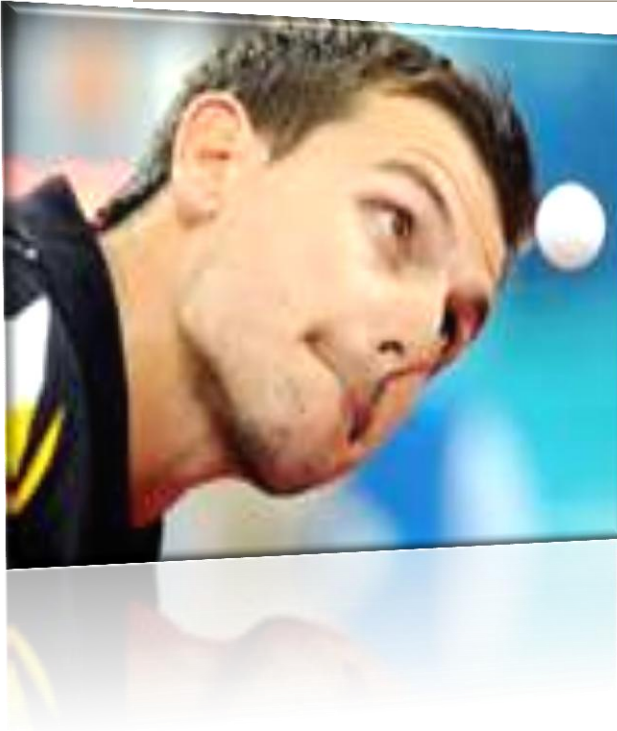
Nach ISTQB-Standard:



# "Bug-Ping-Pong-Teufelskreis"



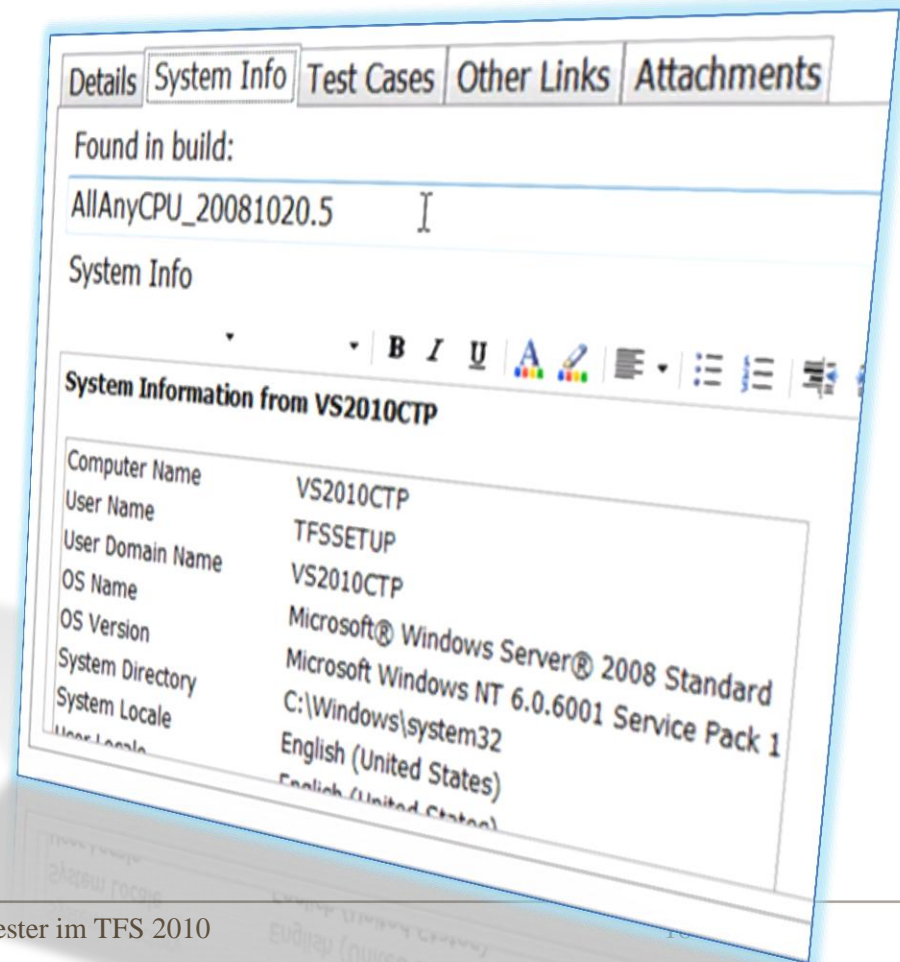
# Bug-Ping Pong vermeiden



- Entwickler benötigen mehr Informationen zum Fehler
  - Zuverlässig/Automatisch
  - Transparent

# A Better Solution – The Actionable Bug

- The tester files an “actionable” bug which includes:
  - Steps to reproduce
  - System information
  - Screen shots
  - Full screen video, indexed
  - IntelliTrace debug log
  - Test environment



Folie: Microsoft Corporation

# Reproduzierbare Bugs

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DEMO

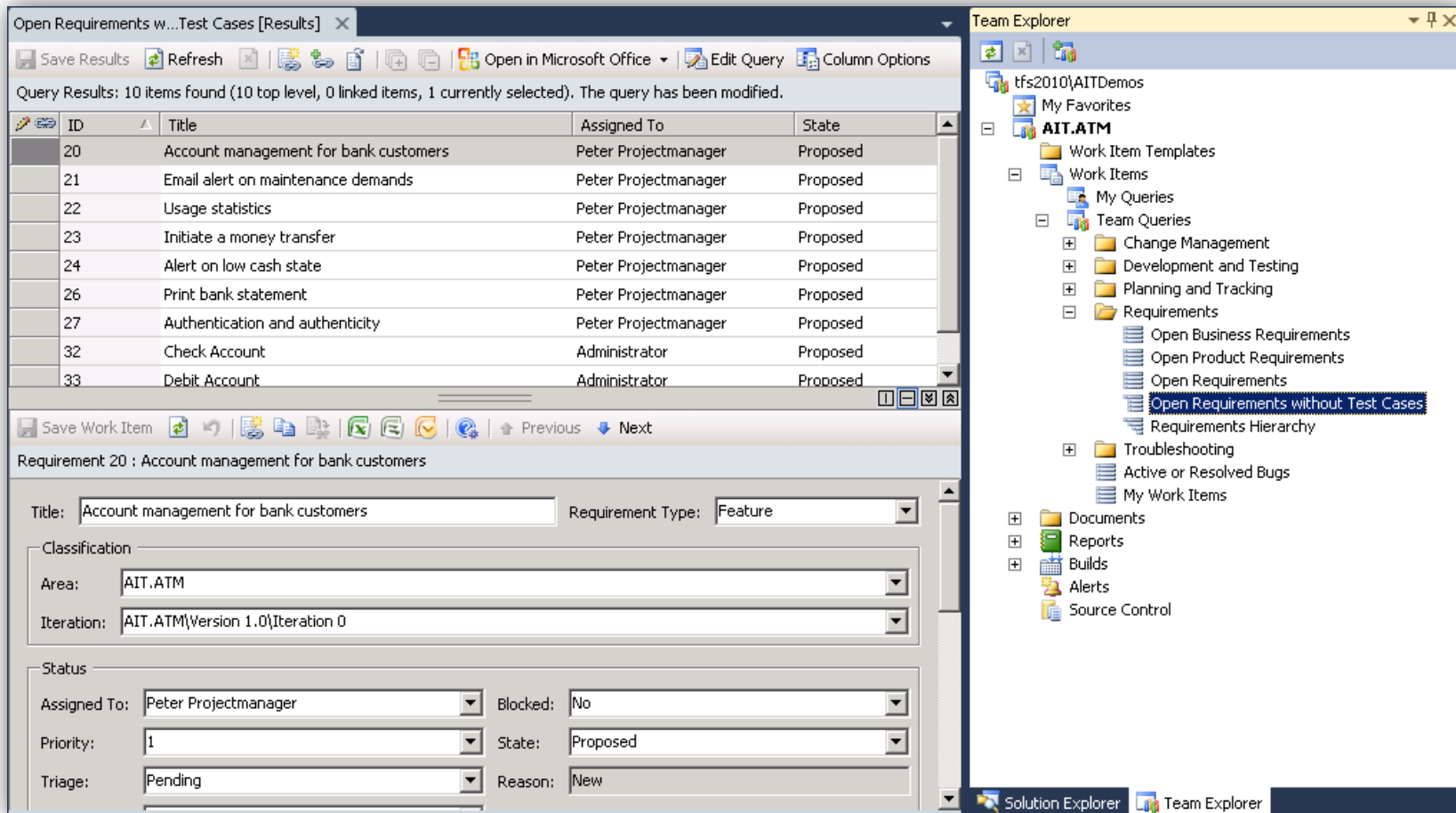
# Auswertungen über Berichte

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- Live-Daten
- Project Dashboards im Team-Portal
- Adhoc-Reporting mit Excel



# Live-Daten



The screenshot displays the TFS 2010 interface. The main window shows a query results table with 10 items. The selected item, ID 20, is detailed in the lower pane. The Team Explorer on the right shows the project structure, with 'Open Requirements without Test Cases' highlighted under the 'Requirements' folder.

ID	Title	Assigned To	State
20	Account management for bank customers	Peter Projectmanager	Proposed
21	Email alert on maintenance demands	Peter Projectmanager	Proposed
22	Usage statistics	Peter Projectmanager	Proposed
23	Initiate a money transfer	Peter Projectmanager	Proposed
24	Alert on low cash state	Peter Projectmanager	Proposed
26	Print bank statement	Peter Projectmanager	Proposed
27	Authentication and authenticity	Peter Projectmanager	Proposed
32	Check Account	Administrator	Proposed
33	Debit Account	Administrator	Proposed

**Requirement 20 : Account management for bank customers**

Title: Account management for bank customers    Requirement Type: Feature

**Classification**

Area: AIT.ATM

Iteration: AIT.ATM\Version 1.0\Iteration 0

**Status**

Assigned To: Peter Projectmanager    Blocked: No

Priority: 1    State: Proposed

Triage: Pending    Reason: New

# Live-Daten

Open Require...  
Save Resu...  
Query Results

Table Tools  
Home Insert Page Layout Formulas Data Review View Developer Load Test Team Design

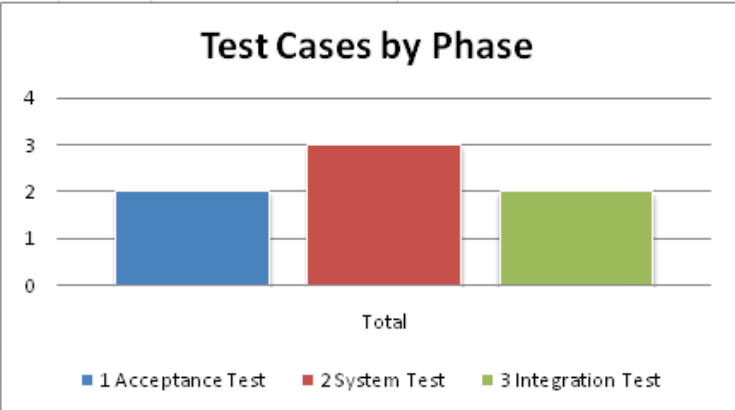
Get Work Items Edit Areas and Iterations Add Tree Level Outdent  
Choose Columns Configure Add Child Indent  
Links and Attachments Open in Web Access  
Work Items Tree New Report Reports Team Foundation Help Team Project Process Guidance Team Project Portal Help

F5 Successfully withdraw cash from ATM

Project: AIT.ATM Server: tfs2010\AITDemos Query: Open Test Cases List type: Flat

ID	Priority	Work Item Type	State	Assigned To	Title	Test Phase
28	1	Test Case	Design	Peter Projectmanager	Easy of use	1 Acceptance Test
7	2	Test Case	Design	Todt Tester	Login	3 Integration Test
16	2	Test Case	Design	Administrator	Successfully withdraw cash from ATM	2 System Test
30	2	Test Case	Design	Peter Projectmanager	Money transfer without personal assistance	1 Acceptance Test
31	2	Test Case	Design	Peter Projectmanager	Successful Login	2 System Test
37	2	Test Case	Design	Administrator	Approve fix	3 Integration Test
14	3	Test Case	Design	Administrator	Authentication fails because of wrong PIN	2 System Test

Save Work...  
Requirement z  
Title: Acco...  
Classificati...  
Area:  
Iteration:  
Status  
Assigned T...  
Priority:  
Triage:



**Test Cases by Phase**

Test Phase	Count
1 Acceptance Test	2
2 System Test	3
3 Integration Test	2

Live Daten

Testing Center
Plan
Test
Track
Organize
TeamLab\_RC\_DTP

---

Contents
Properties
Open Items (1)

### Test Plan 173: TeamLab\_RC\_DTP

Name:

Description:

Area path:

Iteration:

Owner:

State:

Start date:

End date:

**Run Settings**

<b>Manual runs:</b>	<b>Automated runs:</b>
Test settings: <input type="text" value="&lt;Default&gt;"/> <a href="#">Open</a>	Test settings: <input type="text" value="&lt;Default&gt;"/> <a href="#">Open</a>
Test environment: <input type="text" value="&lt;Local&gt;"/> <a href="#">Manage</a>	Test environment: <input type="text" value="None"/> <a href="#">Manage</a>

**Builds:**

Filter for builds:

Build in use:  [Modify](#)

**Configurations:**

In this plan:

**Results Overview**

**Tests**

317 Passed (88.5%)
24 Failed (6.7%)
15 Active (4.2%)
2 Blocked (0.6%)

**Failures by Type**

26 None (100%)
----------------

**Test Analysis by Type**

26 None (100%)
----------------

Open Requirements

Save Results

Query Results

ID	Proj	ID	Proj
20			
21			
22			
23	1		
24	2		
26	3		
27	4		
32	5		
33	6		
	7		
	8		
	9		
	10		
	11		
	12		
	13		
	14		
	15		
	16		
	17		
	18		
	19		
	20		
	21		
	22		

Save Work

Requirement

Title: Account

Classification

Area:

Iteration:

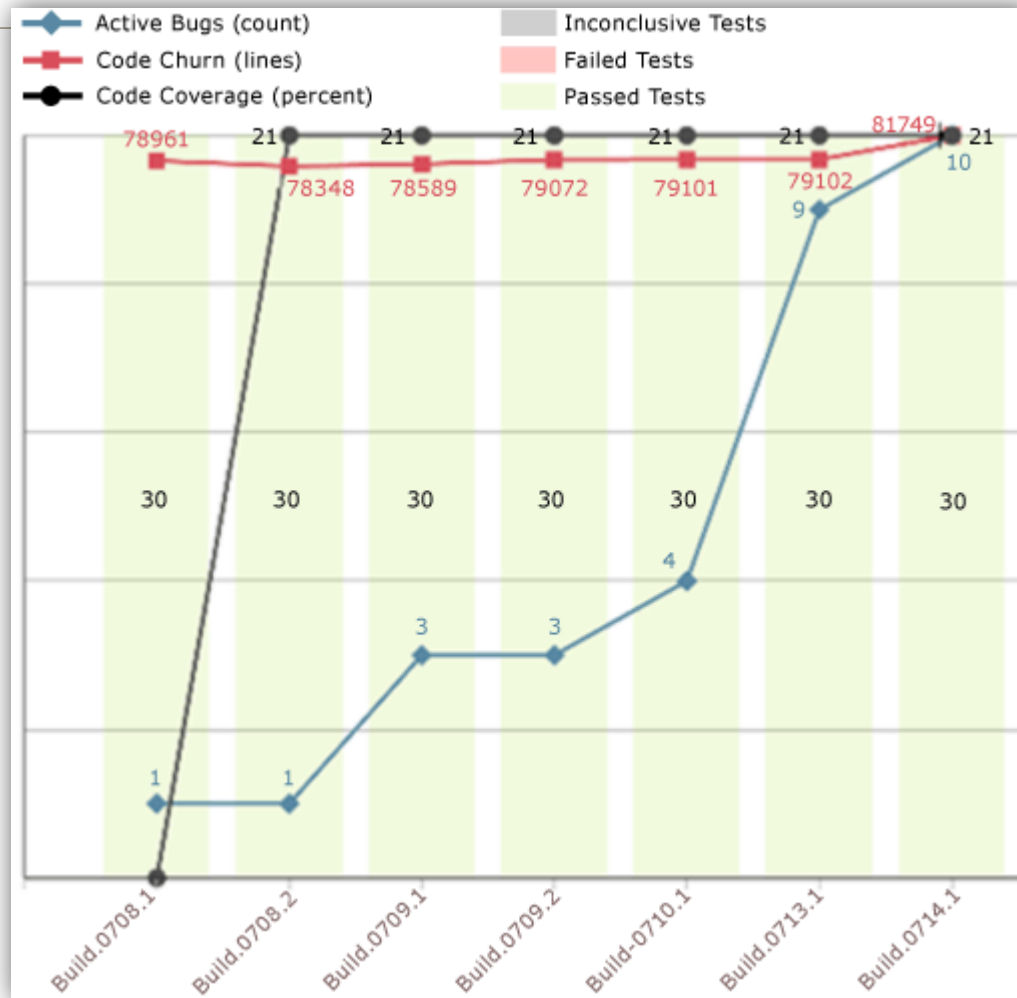
Status

Assigned To

Priority:

Triage:

# Build Quality Indicators



# Requirements Overview

## Requirements Overview

Helps you track how far each requirement has been implemented. Shows each requirement's actual number of hours of work remaining and completed, its acceptance test results, and the number of bugs that are linked to each requirement.

**Related Reports**

- [Bug Status](#)
- [Status on All Iterations](#)
- [Requirements Progress](#)

- [Test Case Readiness](#)
- [Test Plan Progress](#)

■ Hours Completed  
■ Hours Remaining

■ Passed  
■ Failed  
■ Not Run

■ Active  
■ Resolved

Title	Requirements Progress		Hours Remaining	Test Status		
	% Hours Completed			Tests	Test Results	Bugs
<input type="checkbox"/> <b>Account management for bank customers</b>	38%		5	8	88%	2   2
<b>Authentication and authenticity</b>			0	0		
<b>Initiate a money transfer</b>	25%		3	0		
<b>Login to personal account</b>	25%		0	4	75%	
<b>Print bank statement</b>	50%		0	0		
<b>Withdraw cash from ATM</b>	50%		2	4	100%	
<b>Check Account</b>			0	0		
<b>Debit Account</b>			0	0		
<input type="checkbox"/> <b>Email alert on maintenance demands</b>			0	0		
<input type="checkbox"/> <b>Extended Functions</b>	50%		0	2	50%	50%
<b>Provide bank customers an easy to use experience managing their account</b>	50%		0	1	100%	
<b>Provide more personal service by having to handle less everyday tasks</b>			0	1		
<b>Usage statistics</b>			0	0		

**Questions This Report Helps Answer**

- How much work does each requirement need?
- How much work has the team completed for each requirement?
- Are the tests for each requirement passing?
- How many active bugs does each requirement have?

[How to Use This Report](#)

**Parameter Values**

Iteration: All (No Filter)

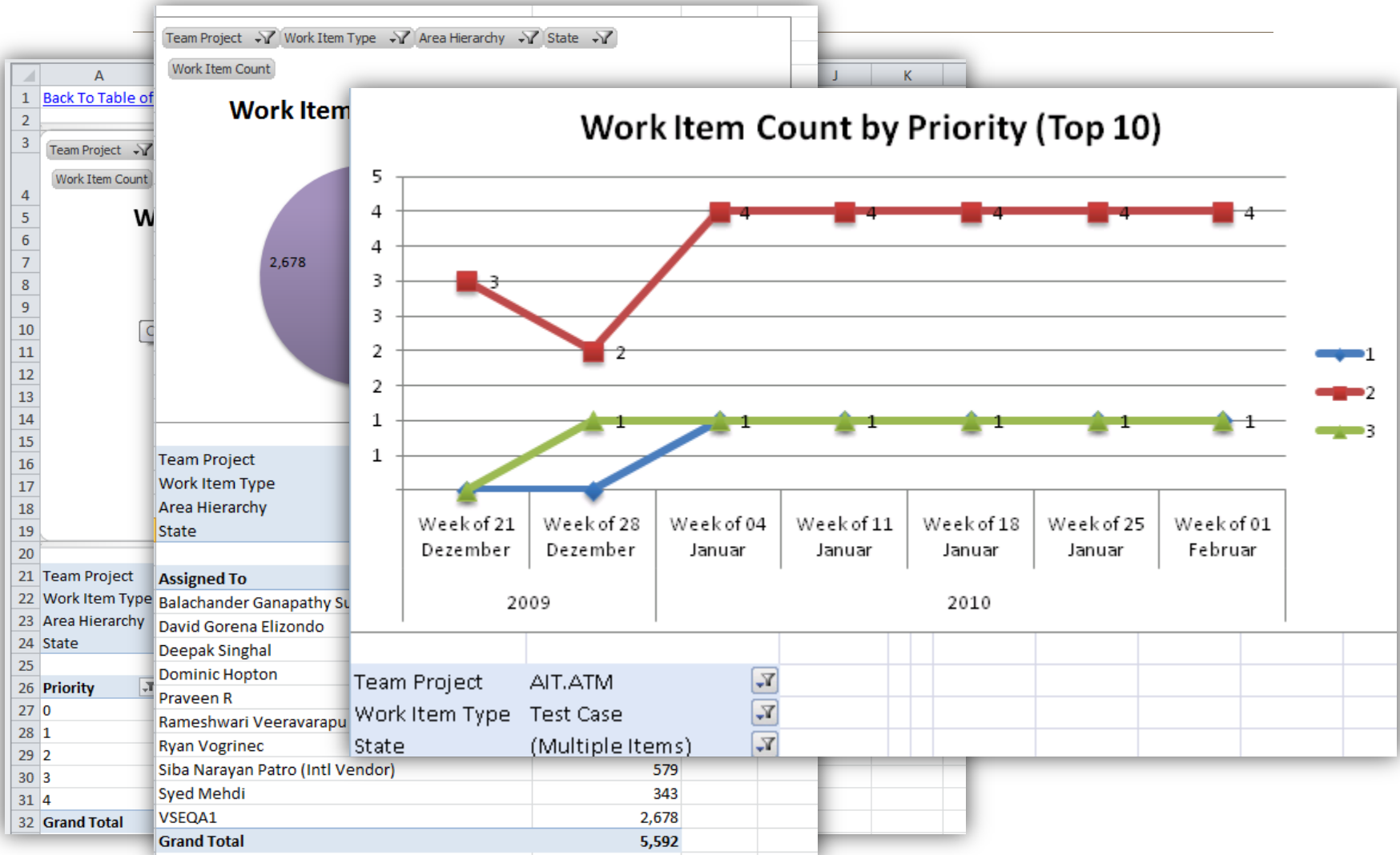
Area: All (No Filter)

Generated: 16.02.2010 11:17:40

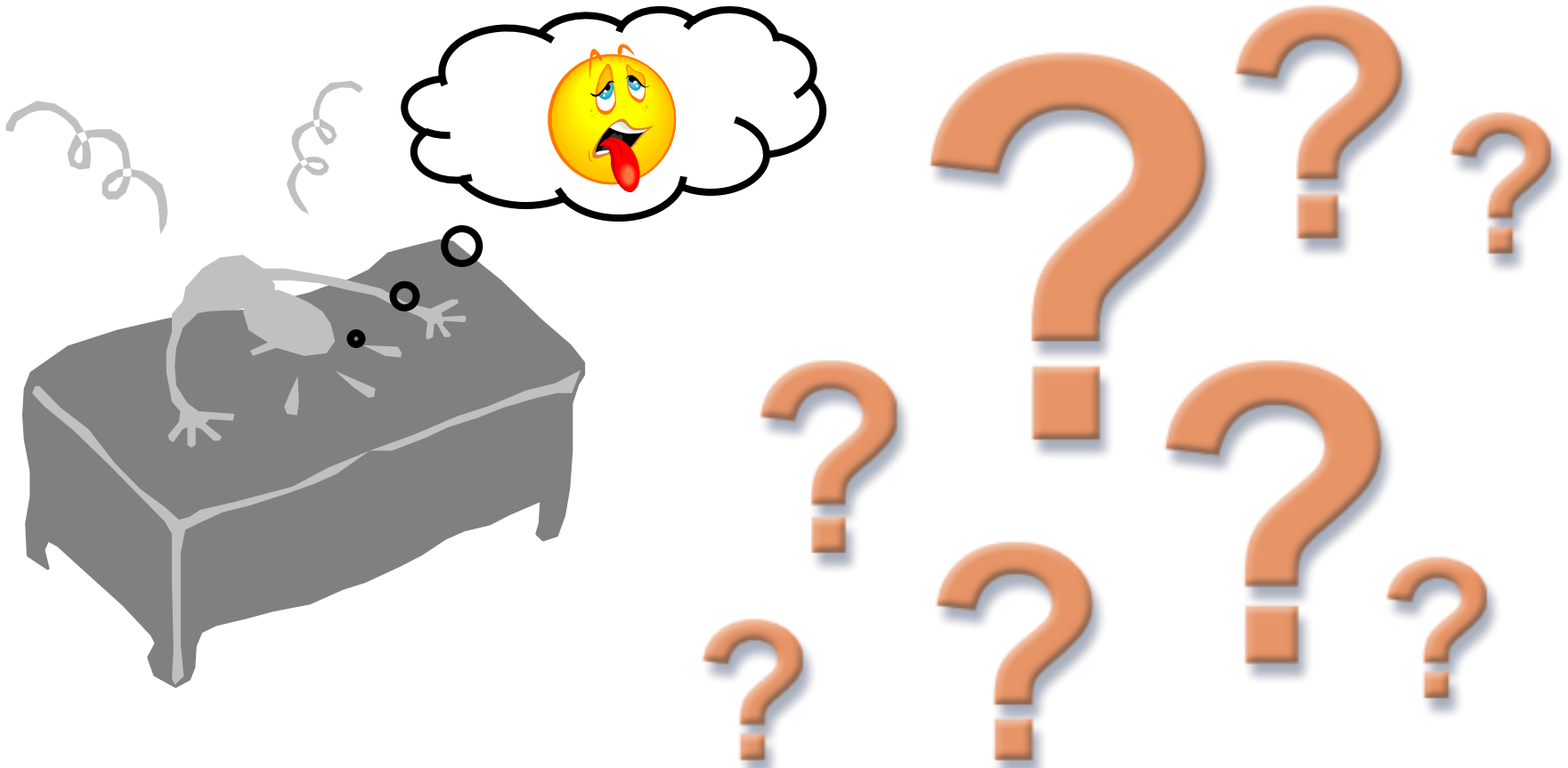
By: TFS2010\Administrator

Warehouse Update: 16.02.2010 11:17:24

# One Click reports – Team Test



# Danke für Ihre Aufmerksamkeit!



Im Anschluss oder per E-Mail an:  
[nenloje@teamsystempro.de](mailto:nenloje@teamsystempro.de)

# Visual Studio 2010

## Ultimate

Web Testing

Load Testing

UML Modeling

Architecture Explorer

IntelliTrace®

Arch. Validation

Eclipse Plug-In

Microsoft Test Manager

## Premium

UI Test Automation

Test Impact Analysis

Code Profiler

Code Analysis

Code Metrics

Code Coverage

DB Change Mmgt.

DB Deployment

DB Testing

Test Data Generation

## Test Professional

Microsoft Test Manager

## Professional

Unit Testing

Team Foundation Server





# Welche Testlizenz brauche ich?

