



Visual Studio Team Foundation Server.

Real People in Real Projects

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Why Team Foundation Server?

- ❑ What we had
 - ❑ Growing number of large Visual SourceSafe databases (2 Gb - 8 Gb)
 - ❑ Larger projects
 - ❑ More things to do
 - ❑ Tasks scattered in different data stores (e-mail, Outlook Tasks, Excel Sheets, SharePoint Task Lists etc.)
 - ❑ Harder to know if we're on schedule and on budget

- ❑ What we wanted
 - ❑ Give control back to Project Managers
 - ❑ Increase predictability and tracability
 - ❑ Tighter cooperation between team members
 - ❑ Tight integration with Visual Studio

- ❑ Evaluated Vault from SourceGear (www.sourcegear.com/vault/)

Using Team Foundation Server in Phases.

1. Source Control
 - ✓ Migration from SourceSafe
2. Work Items
 - ✓ Requirements, Use Cases, Tasks, Risks, Bugs, Etc...
3. Team Build (build automation)
 - ✓ Deploy to Integration Testing
 - ✓ Different builds for different environments
4. Reports
5. Custom Process Template (adapted to TE RUP)

Team Foundation Server Statistics

November 2008

Team Foundation Server Statistics - Nov. 2008.

- ❑ 129 Projects
- ❑ 175 users who have checked in code
- ❑ 82 000 000+ lines of code
- ❑ ~12 000 Work Items
- ❑ 17 000+ builds during 2008 (~ 53 builds every day)

Row Labels	Values					Total Lines
	Lines Added	Lines Deleted	Lines Modified	Total Churn	Total Lines	
2006	743 032	183 384	24 046	950 462		559 648
September, 2006	193 110	16 970	2 534	212 614		176 140
October, 2006	205 064	82 917	6 006	293 987		298 287
November, 2006	74 931	23 135	6 280	104 346		350 083
December, 2006	269 927	60 362	9 226	339 515		559 648
2007	41 267 047	13 383 646	816 182	55 466 875		28443049
January, 2007	1 113 163	282 590	20 904	1 416 657		1 390 221
February, 2007	4 077 545	204 260	35 196	4 317 001		5 263 506
March, 2007	2 262 122	447 062	33 989	2 743 173		7 078 566
April, 2007	5 490 410	1 553 094	23 208	7 066 712		11 015 882
May, 2007	1 363 902	365 108	51 266	1 780 276		12 014 676
June, 2007	2 386 857	859 846	78 738	3 325 441		13 541 687
July, 2007	3 647 399	437 646	64 077	4 149 122		16 751 440
August, 2007	851 002	458 317	71 622	1 380 941		17 144 125
September, 2007	1 211 619	513 618	65 872	1 791 109		17 842 126
October, 2007	4 268 516	4 717 755	171 352	9 157 623		17 392 887
November, 2007	6 433 302	1 056 140	129 113	7 618 555		22 770 049
December, 2007	8 161 210	2 488 210	70 845	10 720 265		28 443 049
2008	97 719 317	43 492 421	1 604 840	142 816 578		82669945
January, 2008	10 301 984	3 551 601	84 353	13 937 938		35 193 432
February, 2008	8 101 751	4 173 811	64 466	12 340 028		39 121 372
March, 2008	3 343 092	2 003 069	89 662	5 435 823		40 461 395
April, 2008	3 704 172	805 903	74 040	4 584 115		43 359 664
May, 2008	8 908 218	4 668 762	153 831	13 730 811		47 599 120
June, 2008	5 787 740	1 415 921	405 330	7 608 991		51 970 939
July, 2008	19 181 352	2 277 480	115 957	21 574 789		68 874 811
August, 2008	5 734 199	1 385 331	119 326	7 238 856		73 223 679
September, 2008	19 119 313	2 348 353	240 880	21 708 546		89 994 639
October, 2008	7 967 248	2 445 637	172 779	10 585 664		95 516 250
November, 2008	5 570 248	18 416 553	84 216	24 071 017		82 669 945
Grand Total	139 729 396	57 059 451	2 445 068	199 233 915		82 669 945

Values			
Row Labels	Cumulative Work Item Count	Work Item Revision Count	
2006		849	2 538
⊕ September, 2006		472	761
⊕ October, 2006		593	976
⊕ November, 2006		680	315
⊕ December, 2006		849	486
2007		5 986	26 494
⊕ January, 2007		1 068	756
⊕ February, 2007		1 252	654
⊕ March, 2007		1 322	253
⊕ April, 2007		1 626	983
⊕ May, 2007		1 951	1 687
⊕ June, 2007		2 606	3 134
⊕ July, 2007		2 983	1 822
⊕ August, 2007		3 420	2 539
⊕ September, 2007		4 063	2 965
⊕ October, 2007		4 778	3 929
⊕ November, 2007		5 692	5 439
⊕ December, 2007		5 986	2 333
2008		11 880	35 027
⊕ January, 2008		6 297	2 663
⊕ February, 2008		6 830	3 169
⊕ March, 2008		7 123	2 233
⊕ April, 2008		7 801	5 424
⊕ May, 2008		8 221	2 716
⊕ June, 2008		8 794	3 669
⊕ July, 2008		9 075	1 573
⊕ August, 2008		9 586	2 586
⊕ September, 2008		10 797	5 262
⊕ October, 2008		11 541	3 938
⊕ November, 2008		11 880	1 794
Grand Total		11 880	64 059

Row Labels	Values	Build Project Count	Compile Errors	Errors / Build
2006			2 550	19 738
September, 2006			552	15 450
October, 2006			511	40
November, 2006			799	4 140
December, 2006			688	108
2007			5 831	10242
January, 2007			698	4 365
February, 2007			458	4 084
March, 2007			15	0
April, 2007			133	18
May, 2007			788	58
June, 2007			748	62
July, 2007			396	87
August, 2007			263	6
September, 2007			300	18
October, 2007			595	1 467
November, 2007			823	76
December, 2007			614	1
2008			17 420	1679
January, 2008			601	102
February, 2008			1 187	264
March, 2008			855	8
April, 2008			1 310	380
May, 2008			709	10
June, 2008			1 082	16
July, 2008			2 005	50
August, 2008			1 053	99
September, 2008			4 119	222
October, 2008			2 762	392
November, 2008			1 737	136
Grand Total			25 801	31 659

Report Samples

Requirement Details

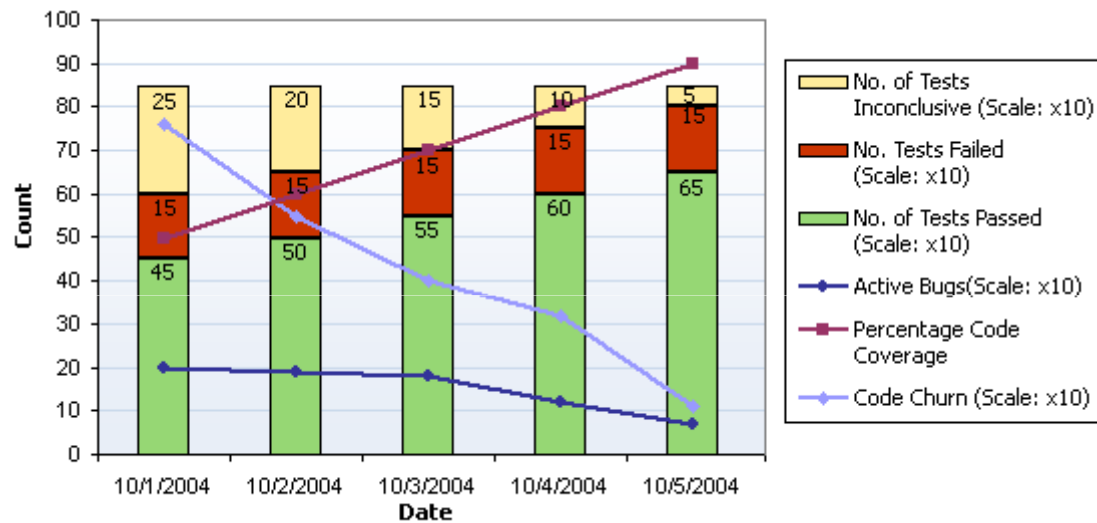
Report Generated: 31/10/2007 10:20:32 by EU\bergmik; Last Warehouse Update: 31/10/2007 09:35:49

Are we making progress with our requirements?

ID	Requirement			
4304	Project Managers must be able to add members to a team project.			
	Development Task	0 Active, 0 Resolved, 1 Closed	■	Completed
4305	Project owners should have their own user profile			
	Development Task	0 Active, 0 Resolved, 1 Closed	■	Completed
4439	Work Items must have a Comment tab			
	Development Task	0 Active, 1 Resolved, 5 Closed	■	In Progress
	Review	1 Active, 0 Resolved, 0 Closed	■	In Progress
4572	The process template must have a Use Case work item type			
	Development Task	1 Active, 1 Resolved, 0 Closed	■	In Progress
	Bug	0 Active, 1 Resolved, 0 Closed	■	In Progress
	Review	1 Active, 0 Resolved, 0 Closed	■	In Progress
4575	Only Project Managers should have the ability to close Requirement work items			
4576	Only testers should have the ability to close Bug work items			
4577	Only developers should have the ability to check code in and out in the version control system of TFS			
4578	Default tasks must give specific instructions how to complete them			
	Task	0 Active, 0 Resolved, 1 Closed	■	Completed
	Development Task	0 Active, 0 Resolved, 0 Closed	■	Completed

Requirement Details.

Easy to see when all requirements are satisfied.



Quality Indicators I.

This project is most likely going in the right direction.

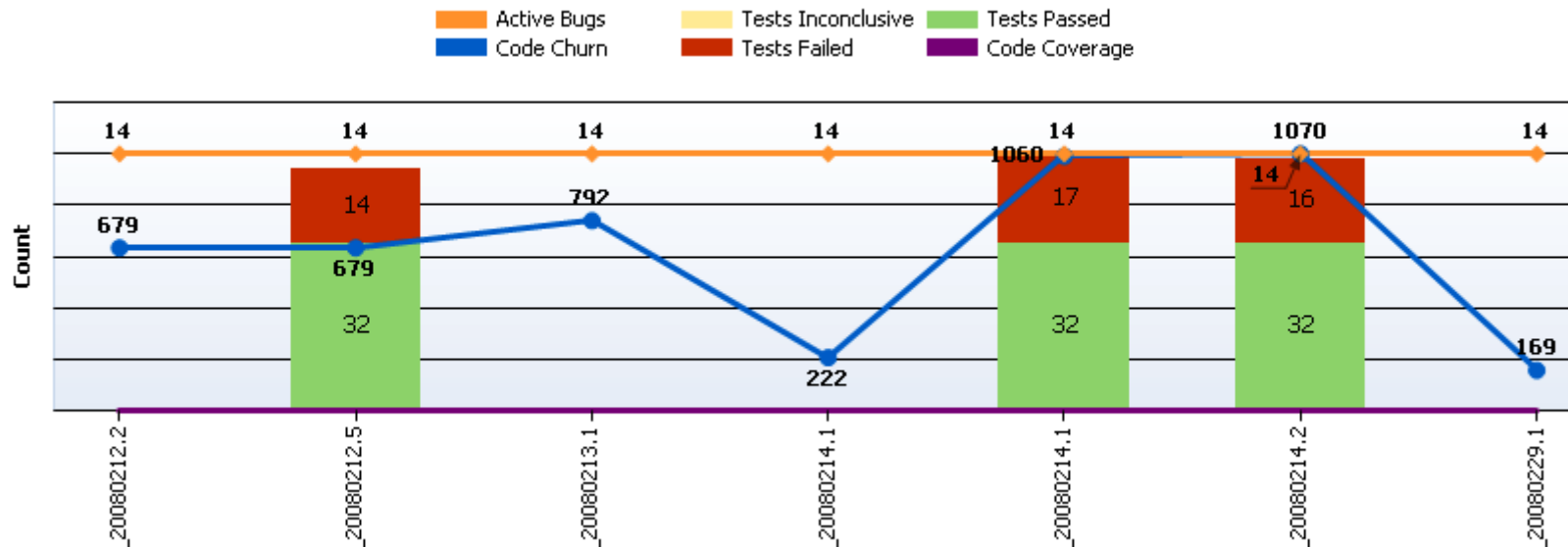
- Passing tests increasing
- Code coverage increasing
- Inconclusive tests decreasing
- Code churn decreasing
- Active bugs decreasing

Why is the number of failing tests not decreasing?

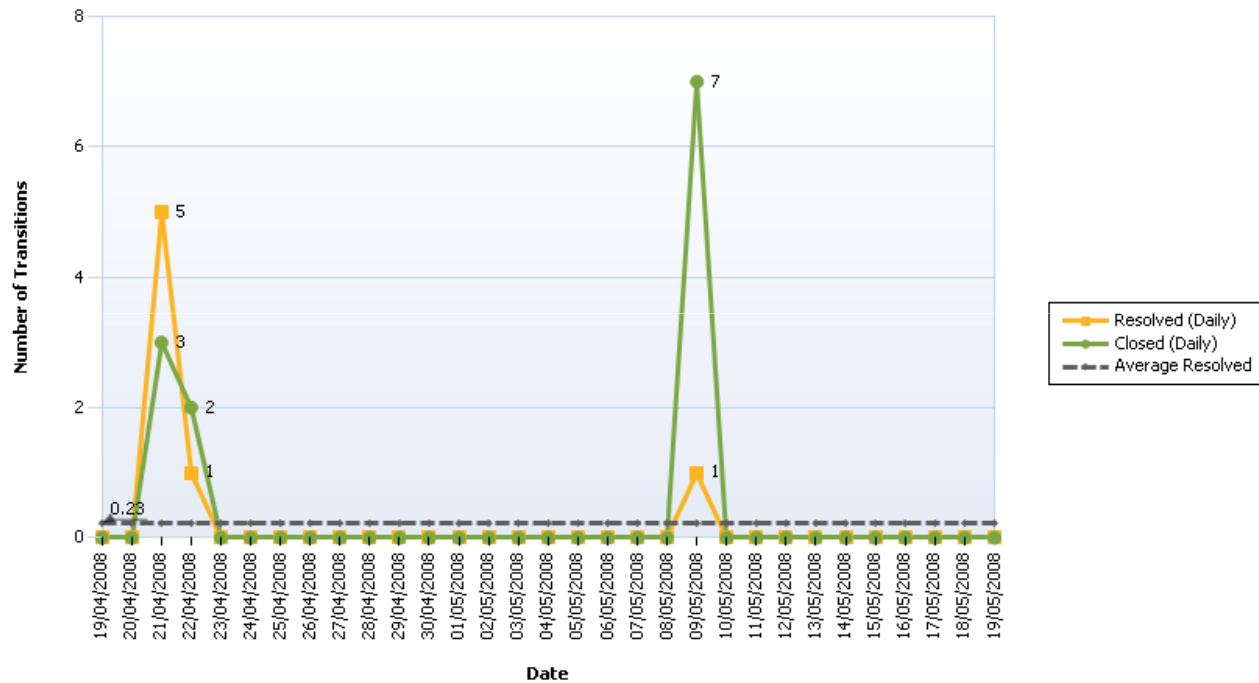
Quality Indicators II.

This project probably needs to be looked over.

- Active bugs constant
- Failing tests increasing
- Code churn going up and down
- No code coverage (No unit tests?)

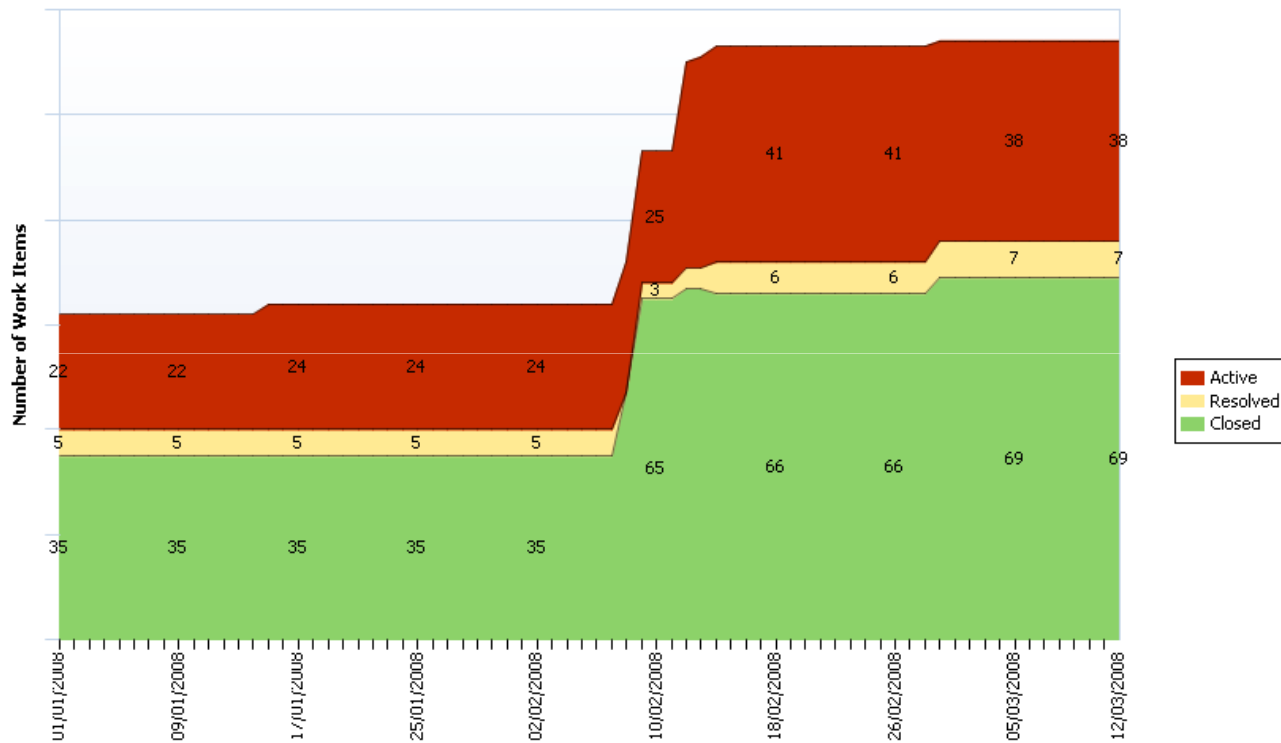


How do the resolve and close rates compare?



Project Velocity.

The members of this project are doing something else than they should, i.e. what has been recorded as Work Items.



Remaining Work.

Hard to say when this project will be ready.

Why is the required amount of work increasing in mid-project?

Is the customer trying to sneak in new features?

Will we get paid for those new features?

Additional Information.

- ❑ Team Development with Team Foundation Server
<http://www.codeplex.com/TFSGuide>
- ❑ Visual Studio Team System 2008 Technical Articles
<http://msdn.microsoft.com/en-gb/library/cc787964.aspx>
- ❑ TietoEnator Case Study
<http://www.microsoft.com/casestudies/casestudy.aspx?casestudyid=201520>

Thank you.

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