

Numerics

64-bit processor support 243

A

access control policies 120

 Allow settings 120

 Deny settings 120

 determining 121–124

 locks 123

 priority 120

 selecting 121–124

 TFSSecurity tool 123

activities

 CallExternalMethod 281–282

 CallExternalMethodActivity
 293

 Code 279, 284

 Delay 305

 HandleExternalEvent 281

 HandleExternalEventActivity
 293

 IfElse 279

 Listen 298, 305

 MailReceived 293

 SendMail 293

 Terminate 281

 While 279, 284

add while offline 44

AdditionalReferencePath
 property 278

administration 15

AfterCompile target 171, 202

AfterDropBuild 79

AfterDropBuild target 188, 202
 overriding 221

AfterTest target 171

AgentService 19

AllowedTeamServer
 attribute 173

Analysis Services 7, 14

annotate 45

annotations 18, 47

 viewing with TFS Power
 Tools 145

applications, WF 275–276

application-tier machines
 and build machines 163

 load balancing 241

 reducing load 242

 talking to data-tier
 machines 240

ApplicationVersion
 property 185

architects 4

artifacts 6

aspnet_merge.exe tool 228

assemblies

 Microsoft.TeamFoundation.
 WorkItemTracking.Client
 247

 Microsoft.TeamFoundation.
 WorkItemTracking.Controls
 247

 numbering with Team
 Build 209–221

 strong-named 206

 versioning 206–207

assembly version number
 206, 209

 and ItemGroup 226

 AssemblyInfo.cs 207–209

 build number 207

 major version 207

 minor version 207

 revision 207

AssemblyAttributes item
 group 228

AssemblyBuildNumberFormat
 214

AssemblyFileBuildNumber-
 Format 214

AssemblyFileVersion entry 210

AssemblyInfo task 185

 error 220

 overriding properties 216

AssemblyInfo.cs 217

 assembly version
 number 207–208

 AssemblyFileVersion
 entry 210

 AssemblyVersion entry 210

 build number 209

 copying to build location 219

 file version number 207–208

 modifying 208

 multiple copies 209

 read-only 219

 reference copy 210

 version number 209

AssemblyInfoTask task 210

AssemblyVersion entry 210

- associating
 - changesets 174–175
 - related work items 174–175
- attributes
 - AllowedTeamServer 173
 - DependsOnTargets 165
- authentication, digest 91

B

- backups 244
- base 148
- baseless merges 95, 152–153
 - parent-child relationship 153
 - tf merge command 152
- BeforeCompile target 202
- BeforeGet target 202
- BI. *See* business intelligence (BI)
- Binaries 21
- binaries, releasing to
 - customers 90
- BinariesRoot property 172
- BinariesSubdirectory 22
- BisSubscribe utility 156
- BPEL 276
- BPM 269
- branch policies 120
 - access control
 - policies 120–124
 - check-in policies 120
 - custom 125, 139–140
 - Custom Path policy 124
 - order of execution 125
 - technical
 - implementation 128–139
- branch-by-release model 96–97
- branching 88
 - across team projects 108
 - associating check-in
 - policies 124
 - at solution level 92
 - based on company size 90–91
 - branching models 92–100
 - builds, and 111–115
 - child folders 92
 - comparing two
 - branches 145–146
 - creating branches 106
 - folder restrictions 92
 - for isolation 100
 - for policy variation 100
 - from labels 101
 - identifying changes 103–106
 - in parallel 100

- locking branches 123
- parallel development,
 - and 100, 107
- partial branches 102
- path space branching 100
- policies, and 120
- Team Build, and 111
- versus folders 90, 106–107
- versus labels 100–106
- when to branch 120
- with distributed TFS 90–91
- branching models 92–100
 - branch-by-release
 - model 96–97
 - code promotion model 92–94
 - codeline-per-release
 - model 94–96
 - for distributed teams 99–100
 - for large companies 90
 - for large projects 97–98
 - for small companies 90
 - remote 99–100
 - with distributed TFS 90–91
- BranchPolicy class 132
- btnAddPolicy_Click
 - method 129
- Bug_Active_Count_Ratio
 - 257, 259
- Bug_Reactivation_Ratio
 - 257–258
- build
 - automation 14
 - build results 171
 - database project 64
 - deployment script 56
 - failures, detecting 171
 - farms 303
 - management 7
 - Microsoft.VersionNumber
 - target 215
 - options 56
 - process, launching 196–197
 - qualities 17, 32
 - indicating 32
 - quality 11
 - requests 28
 - results
 - evaluating 198–199
 - Succeeded 171
 - retention policies 26
 - scripts 170, 199
 - server, accessing in code 35
 - triggering 27
 - workspace 23

- build agents 17, 20, 24, 26, 35
 - accessing in code 35
 - directory path property 21
 - managing 20
- Build Defaults 26
- build definition 17, 28, 35
 - creating 22
 - description 22
 - editing 22, 29
 - security 29
 - workspace mapping 22
- build definition variable
- BinariesSubdirectory 22
- BuildDefinitionId 21
- BuildDefinitionPath 21
- SourcesSubdirectory 22
- Temp 21
- Build Definition wizard 112
- Build Definition, disabling 22
- build directory 21, 24, 193
 - 260-character limit 22, 173
 - subfolders 172
- Build Explorer 17, 30–32, 37
 - filtering builds 32
- build machines 20, 26
 - and application-tier
 - machines 163
 - coupling with TFS 173
 - distributed 202–203
 - where to locate 164
- build number 207
 - autoincrementing 226
 - incrementing 207
 - integer 207
 - yyMMdd format 207, 214
- build project files
 - executing with MSBuild 199
 - version number 209
- build reports 11, 246
 - based on build number 248
 - build report form 251
 - displaying 248
- build verification tests
 - (BVTs) 24, 163, 192
 - failure 171, 286
 - skipping 199
 - WF, and 278
 - workflow, and 278, 286
- Build Web Site option 222
- BuildAgent 36
- BuildBreak property 171
- BuildConfigurationsInParallel
 - 29
- BuildController class 286

- BuildDirectoryPath
 - property 172
 - BuildInParallel 29
 - BuildNumberOverride
 - target 217–219
 - BuildNumberOverrideTarget-DependsOn property 217
 - BuildNumberPrefix
 - property 217
 - builds
 - associated work items 37
 - autoincrementing build numbers 226
 - avoiding errors 163
 - branching, and 111–115
 - build directories 171–173
 - build farms 303
 - build number conflicts 173
 - build process 196–197
 - build script 170
 - central builds 276–278
 - code quality standards 163
 - creating from labels 176
 - creating from source files 176–182
 - desktop builds 199–200
 - detecting build failures 171
 - different version numbers 208
 - distributed build machines 202–203
 - distributed build process and WF 278–303
 - distributed builds 200–203
 - evaluating results 198–199
 - executing concurrently 28
 - integrated 90
 - local 163, 199
 - making changes 112
 - modifying project file 215–221
 - modifying team project file 227–228
 - parallel 192
 - prebuild checks 195–196
 - project files 165
 - public 163
 - queuing 28
 - reproducing from labels 177–182
 - shared 199
 - source files, and 163
 - targets file 165
 - testing 163
 - with central build machine 201–202
 - BuildScriptName 65, 76
 - BuildServiceManager 19
 - BuildSolutionsInParallel 29
 - BuildStore class 286
 - BuildTypes 21
 - business intelligence (BI) 243
 - business intelligence project 253–254
 - Business Project Exception Language 276
 - business project management 269
 - BVTs. *See* build verification tests (BVTs)
- ## C
-
- caches
 - Group Security Service cache 241
 - Version Control cache 242
 - work item tracking metadata cache 239
 - calculated members, creating 255
 - CallExternalMethod
 - activity 281–282
 - CallExternalMethodActivity
 - activity 293
 - central builds 276–278
 - change conflicts 99
 - change information, submitting 190
 - change management 4
 - changes
 - identifying 103–106
 - notifying users 154–159
 - propagating 95
 - viewing 144–145
 - changesets 24
 - annotation information 45–46
 - associating 174–175
 - base 148
 - comparing folders by 45
 - unmerged 147
 - check-in 42
 - locks 123
 - notes 196
 - policies 120
 - associating with branches 124
 - installing 139
 - override 9
 - TFS Power Tools 124
 - triggering builds 27
 - version conflicts 42
 - CheckIn method 198
 - Check-In permission 122
 - CheckinEvent 154
 - subscribing to 156
 - check-ins
 - and remote team 91
 - CheckIn method 198
 - check-in policies 120
 - notes 196
 - to another branch 96
 - check-out 41, 43
 - default behavior 41
 - getting latest on 40
 - locks 123
 - offline mode 43
 - permissions 122
 - classes
 - BranchPolicy 132
 - BuildController 286
 - BuildStore 286
 - Event 155
 - PolicyBase 127
 - ShelveSet 195
 - SmtplibClient 298
 - SmtplibMailServices 298–299
 - SqlTrackingQuery 310
 - SqlTrackingService 308
 - SqlWorkflowPersistence-Service 304
 - WorkItemStore 234
 - Workspace 198
 - Workstation 129
 - ClickOnce 182–189
 - configuring 183–185
 - configuring deployment files 186–188
 - extending Team Build with 185–186, 188
 - client certificate 19
 - clustering 244
 - code
 - analysis 24
 - preparing for release 90
 - promoting 92
 - Code activity 279
 - code promotion model 92–94
 - propagating changes 95
 - codeline-per-release
 - model 94–96
 - limitations 95–96
 - column 53, 55

- command-line utilities
 - witexport 247
 - witimport 247
- commands
 - tf destroy 241
 - tf history 103
 - tf labels 103
 - tf lock 116
 - tf merge 147–148, 152
 - tf merges 143
 - tf permission 120
 - tf resolve 148
 - tf rollback 150
 - tf workspace 116
 - tfpt annotate 145–146
 - tfpt history 144
 - TfsAdminUtil ActivateAT 244
- compare folders 44
 - filtering files 45
- Compare with Previous 46
- comparing
 - branches 145–146
 - folders in Source Control Explorer 146
- Completed 31
- components 108
- Configuration Manager 78
- configure multiple 21
- configuring
 - ClickOnce 183–185
 - TFS 232–233
- conflicts 42
 - resolve dialog 42
- connectionString
 - parameter 304
- constraints 59
- content merge 148
- continuous integration
 - 22, 26–27, 31, 47, 93
 - building incrementally 33
 - builds 11
- CopyAssemblyInfoFile
 - target 220
- CoreCompileDependsOn 214
- CoreDropBuild target 173
- CoreGet target 176
- CoreLabel 113
- CoreLabel target 217
- CoreTest target 171
- cost of ownership 15
- create script 51
- CreateBuildRequest 36
- CreateWorkItem target 175
- CreateWorkspaceTask task 202

- creating
 - custom controls 245–253
 - custom policies 125–140
 - KPIs 257–259
 - WF applications 275–276
- Crystal 6
- custom controls
 - creating 245–253
 - deploying 252
 - in work item forms 244–253
 - modifying work item type 247
- custom generator 79
- Custom Path policy 124
 - alphabetical order 125
 - order of execution 125
- custom policies 125–140
 - associating with branches 125
 - installing 139–140
 - interfaces 127–128
 - order of execution 125
 - technical
 - implementation 128–139
- custom reports 13
- custom retention policies 26
- custom web parts 13
- custom workflows 13
- CustomCheckinPolicyEditDialog 129
- customizing
 - properties 170
 - targets 170

D

- data
 - comparing 64
 - loss
 - avoiding 55
 - preventing 63
 - warehouse 7
- Data Bound generator 59
- data generator 57
 - creating custom 79
 - custom 59
 - Data Bound 58
 - registering custom 81
 - regular expression 57
 - signing custom 81
 - type-specific 57
- database 48, 54
 - administrator 49
 - deploying 56, 61
 - modifying 50
 - professional role 4
 - reverse engineering 52
 - schema 49
 - comparing 62
- database projects 51
 - building 64
 - building with msbuild 75
 - building with Team Build 76
 - comparing 63
- data-tier machine
 - reducing load 243
 - talking to application-tier machines 240
- DB Pro 49
 - building 51
 - code coverage 59
 - creating builds 65
 - exporting scripts 63
 - preventing data loss 55
 - renaming a database 55
 - test data 56
- DBA 63
 - .dbproj 76, 78
 - .dbproj file 75
- DDL 49, 53
- default configuration 78
- DefaultDataPath 78
- Delay activity 305
- delay signing approach 208
- DeleteWorkspaceTask task 202
- deleting team projects 241
- DependsOnTargets
 - attribute 165
- deploy databases 75
- deployment script 56
- design database 53, 63
- design patterns, Mainline 93
- desktop builds 199–200
 - versus Team Build builds 200
- DesktopBuild target 199
- developer, role 4
- development process
 - ad hoc 5
 - agile 6
 - Iterative 6
 - waterfall 5
- digest authentication 91
- directories, build 171–173
- disaster recovery 243–244
- displaying build reports 248
- distributed builds 200, 202–203
 - and TFS 200–203
- distributed TFS
 - branching 90–91
 - workflow 271

DocumentService service 248
 downloading
 source files 279–281, 284
 to remote server 91
 drop location 11, 25–26
 DropLocation property 173

E

edit
 pending 41
 while offline 44
 Edit method 127
 elements,
 SolutionToPublish 185
 email, handling with
 WF 292–303
 EndToEndIteration target 165
 EndToEndIterationDepends-
 On property 165
 enterprise software 3
 environment variables 170
 Evaluate method 128
 Event class 155
 events
 CheckinEvent 154
 event receiver
 service 156–159
 FFS event engine 154–156
 WorkItemChangedEvent 272
 eventXml input parameter 156
 Excel 14
 viewing KPIs 260–261
 exceptions 26
 Extensible Application Markup
 Language (XAML) 276
 extreme programming 6, 50

F

failed download
 primary project 284–286
 reference project 281
 feature-driven development 6
 file version number 206
 AssemblyInfo.cs 207–208
 build number 207
 major version 207
 minor version 207
 revision 207
 files
 AssemblyInfo.cs.
 See AssemblyInfo.cs file

AssemblyInfo.dll 228
 build project file 165
 solution files 224
 unlocking 116
 wdproj files 226
 WorkspaceMapping.xml 112
 filter condition 63
 FireAsyncEvent method 155
 FireBulkAsyncEvent
 methods 155
 folders
 comparing 44
 versus branching 106–107
 foreign key 59
 form, build report 251
 forward integration 94
 functions 59

G

GenCheckinNotesUpdateWork-
 Item 112
 GenCheckinNotesUpdate-
 WorkItems task 175
 GenerateApplication-
 Manifest task 189
 GenerateAssemblyInfo task 228
 GenerateBootStrapper task 189
 GenerateDeploymentManifest
 task 189
 Generator class 79
 Get Latest Version 40, 43
 get latest version on check-
 out 17
 enabling 41
 Get Specific Version 40
 GetAssociatedWorkItems 39
 GetBuildDefinition 36
 GetChangeSetsAndUpdate-
 WorkItems target 174
 GetChangeSetsOnBuildBreak
 target 174
 GetEffectivePermissions 121
 GetRegistrationEntries
 method 154
 GetService 34
 GetService method 248
 GetTestResultsForBuild
 method 286
 Group Security Service
 cache 241

H

HandleExternalEvent
 activity 281
 HandleExternalEventActivity
 activity 293
 high availability 241, 243–244
 standby machine 243
 History pane 143
 History Sidekick 115, 144
 Hosting layer 274

I

IBuildAgent 35
 IBuildDefinition 35–36
 IBuildDetail 35, 38
 IBuildInformation 39
 IBuildInformationNode 39
 IBuildServer 27, 33, 38
 identifying changes 103–106
 IEventService interface 156
 IfElse activity 279
 implementing event receiver
 web service 156–159
 Inconclusive test condition 61
 incremental builds 17, 33
 IncrementalBuild 33
 IncrementalGet 33
 index 53
 information technology 4
 InformationNodeConverters 39
 Initialize method 127
 in-progress builds 31
 Input attribute 80
 input parameters,
 eventXml 156
 InsertInstanceState stored
 procedure 304
 installing custom
 policies 139–140
 instance ID 240
 InstanceInfo.exe 240
 InstanceInfo.exe tool 240
 instanceOwnershipDuration
 parameter 305
 integrated builds 90
 Integrated Development
 Environment 43
 integrated development
 environment 4
 integration
 continuous 93
 forward integration 94

integration (*continued*)
 reverse integration 94
 services 7

IntelliSense 48

interfaces
 custom policies 127–128
 IEventService 156
 IPolicyDefinition 127
 IPolicyEvaluation 127
 IServiceProvider 248
 ISmtpMailServices 298
 IWorkItemControl 245
 Microsoft.TeamFounda-
 tion.WorkItemTracking.
 Controls.IWorkItemControl
 248
 UserControl 245

InternalMapping 112

InvalidateDatasource
 method 248

IPendingCheckInPending-
 Changes 128

IPolicyDefinition 127

IPolicyEvaluation 127

IServiceProvider interface 248

ISmtpMailServices interface 298

ItemGroup 226
 assembly version
 numbers 226
 Condition attribute 226

IWorkItemControl
 interface 245

IWorkItemSummary 39

K

Kerberos 19

key 53

key performance indicators
 (KPIs) 12, 253–264
 Bug_Active_Count_Ratio
 257, 259
 Bug_Reactivation_Ratio
 257–258

business intelligence
 project 253–254

calculated members 255

constructing 257–259

creating 257–259

creating with SASS 253
 and SASS 253

Task_Actual_vs_Estimated_
 Ratio 257, 259

viewing 259–264
 viewing with Excel 260–261
 viewing with MOSS 261–264

L

labels
 branching 101
 comparing folders by 45
 creating builds from 176
 for grouping files from
 different times 100
 identifying changes 103–106
 lack of versioning 100
 partial branches 102
 permissions 101
 properties 101
 reproducing builds
 from 177–182
 source files, and 176–182
 team projects, and 100
 updating 101
 versus branching 100–106

large companies
 and Team Build 163
 configuring TFS 232
 distributed TFS 233
 Team Build and distributed
 TFS 163
 workflow 270

latest version, comparing
 folders by 45

Listen activity 298, 305

load
 balancing 241
 application-tier
 machines 241
 moving MOSS site 242
 reducing on application-tier
 machine 242
 reducing on data-tier
 machine 243

loadingInterval parameter 305

local version 41

LocalItem 112

locks 115, 123
 check-in locks 123
 check-out locks 123
 permissions 123
 recursivity 123
 removing 116

M

MailReceived activity 293

Mainline pattern 93

major version 207

Management Studio 53

mapping, modifying map 113

MaxAssemblyVersion
 property 185

maxcpucount 29

MaxProcesses 30

merge candidates 147

merge history
 detailed history 142
 viewing 142–144
 with TFS Power Tools 143

merge window 42

merging 88, 95
 base 148
 baseless merges 95, 99,
 152–153
 between noncontiguous
 branches 95
 between parents and
 children 95
 comparing two
 branches 145–146
 conflicts 147
 resolving 148–150
 content merge 148
 direction 141
 latest version 142
 local changes 99
 merge candidates 147
 remote changes 99
 resolving merge
 conflicts 148–150
 rollbacks 150–151
 rolling back 150–151
 Source Control Merge
 Wizard 151
 Source Control UI 92
 testing, and 95
 tree merge 148
 viewing changes 144–145
 viewing history 142–144

methods
 btnAddPolicy_Click 129
 CheckIn 198
 Edit 127
 Evaluate 128
 FireAsyncEvent 155
 FireBulkAsyncEvent 155
 GetEffectivePermissions 121
 GetRegistrationEntries 154

- methods (*continued*)
 - GetService 248
 - GetTestResultsForBuild 286
 - Initialize 127
 - InvalidateDataSource 248
 - pAddPoliciesToList 129
 - pGetCheckedInItems 156
 - pGetMailingList 156
 - pRaiseMailReceivedEvent 298
 - QueryPendingSets 156
 - SetSite 248
 - SubscribeEventWith-
Classification 156
 - Microsoft Excel 7
 - Microsoft Message Queue 191
 - Microsoft Office SharePoint
Server 2007 12
 - Microsoft Project 7
 - Microsoft Solutions
Framework 6
 - Microsoft.TeamFounda-
tion.WorkItemTracking.
Client assembly 247
 - Microsoft.TeamFounda-
tion.WorkItemTrack-
ing.Controls assembly 247
 - Microsoft.TeamFounda-
tion.WorkItemTrack-
ing.Controls.IWorkItem-
Control interface 248
 - Microsoft.VersionNumber target
 - inserting 215
 - inspecting 211–214
 - minor version 207
 - mirroring 244
 - modification time,
standardizing 221
 - MOSS
 - and workflow 269
 - moving site 242
 - viewing KPIs with 261–264
 - moving team projects 239–241
 - MSBuild 28
 - and WDP 225
 - building databases 75
 - command line parameters 28
 - executing build project
files 199
 - MSBuild Project File Creation
Wizard 24
 - MSBuild response file 170
 - MSBuild schema 165
 - MSBuild task 186
 - MSBuildProjectDirectory
properties 172
 - MSF Agile 236, 271
 - MSF CMMI 236
 - and workflow 271
 - MSMQ 191
 - handling emails 302
-
- N**
-
- ***NO_CI*** 27
 - NoCICheckInComment 27
 - Nodes 39
 - notifying users about
changes 154–159
 - NTLM 19
 - numbering assemblies with
Team Build 209–221
-
- O**
-
- Object Explorer 53
 - object model 33
 - objects
 - PolicyFailure 128
 - TestResultData 286
 - offline 43, 47
 - database editing 54
 - mode 18, 43
 - enabling 43
 - view 49
 - OLAP 7, 14
 - OnBuildBreak target 171
 - OnGenerateNextValues
method 80
 - OnInitialize method 80
 - organizing
team projects 233–238
work items 233
 - OutDir property 172
 - Outlook workflow 270
 - Output attribute 80
 - overriding
 - AfterDropBuild target 221
 - AssemblyInfo task 216
 - BuildNumberOverride
target 217–219
 - Overwrite 43
-
- P**
-
- pAddPoliciesToList method 129
 - parallel
 - building 192
 - builds 17, 29
 - development 90
 - and branching 100, 107
 - parallel development 90
 - parameters, Project 235
 - path space branching 100
 - pending edits in annotations 45
 - performance 241–244
 - and WF 273
 - and workflow 273
 - permissions
 - Check-In 122
 - Check-out 122
 - Lock 123
 - persistence workflow 303–307
 - perspectives 14
 - pGetCheckedInItems
method 156
 - pGetMailingList method 156
 - policies 6
 - access control
policies 120–124
 - and branching 120
 - check-in policies 120
 - custom 125–140
 - Custom Path policy 124
 - PolicyBase class 127
 - PolicyFailure objects 128
 - PolicyOverrideComment
property 195
 - ports 200
 - 8080 200
 - 9191 200
 - postdeployment script 75
 - Power Tool Web Access 4
 - Power Tools 8
 - pRaiseMailReceivedEvent
method 298
 - prebuild checks,
running 195–196
 - predeployment script 75
 - primary key 59, 64
 - primary project
 - downloading source files 284
 - failed download 284–286
 - successful download 286–292
 - private keys
 - delay signing approach 208
 - sharing 208
 - sn.exe tool 208
 - private methods
 - pGetCheckedInItems 156
 - pGetMailingList 156
 - process template 8, 13
editor 8
 - Process Template Manager 247

- product support 90
- production database 50
 - deploying to 61
- Project
 - element 199
 - parameter 235
 - workflow 270
- project file, modifying 215–221
- project portal 5, 12, 14, 235
- project references 29
- Project Server, lack of support in TFS 239
- projects
 - primary project 284–292
 - reference project 279–281
- promoting code 92
- propagating changes 95
- properties
 - AdditionalReferencePath 278
 - ApplicationVersion 185
 - BinariesRoot 172
 - BuildBreak 171
 - BuildDirectoryPath 172
 - BuildNumberOverrideTarget
 - DependsOn 217
 - BuildNumberPrefix 217
 - custom 170
 - DropLocation 173
 - MaxAssemblyVersion 185
 - OutDir 172
 - PolicyOverrideComment 195
 - SkipClean 278
 - SkipGet 176, 278
 - SkipInitialize 278
 - SkipLabel 177
 - SkipPostBuild 175, 177
 - SolutionRoot 172
 - UpdateAssociatedWorkItems 174
 - WorkItemDatasource 248
 - WorkItemType 175
- property,
 - MSBuildProjectDirectory 172
- proxy server 91
 - configuring 91
- proxy servers 164, 200
- Publish Web Site 222

Q

- quality gates 90
- Query Editor 53, 63
- QueryBuildAgents 35
- QueryBuilds 38

- QueryPendingSets method 156
- QueueBuild 36
- QueueCount 35
- Queued 31
- queued 17

R

- Rational Unified Process 6
- read-only files 219
- refactor database 55
- reference project 279–281
 - failed download 281
 - successful download 282–284
- referential integrity 59
- Regular Expression data
 - generator 57
- related work items,
 - associating 174–175
- release candidates, testing 90
- releases, servicing 90
- remote team check-ins 91
- rename refactoring 55
- reporting 4, 14
- Reporting Services 7
- reports 12, 235
- Requested By 31
- requests, processing 191–192
- Retention Policy 25
- RetrieveExpiredTimerIds stored
 - procedure 305
- reverse integration 94
- revision 207
- rollbacks 150–151
 - merge with multiple changesets 150
- rolling build 11, 17, 27
- Rosario 47
- Runtime layer 274

S

- SASS, KPIs and 253
- scalability 14
- schedule 27
- scheduled 32
- scheduled build 11, 17, 22
- schema 51, 54
 - comparing 63–64
 - creating 52
 - deploying 79
 - importing 52
- Schema Compare, filtering
 - objects 63

- SCM. *See* software configuration management (SCM)
- scripts, executing 286–292
- Scrum 6
 - security 14
 - team projects 236–238
- Select Item 41
- SendMail activity 293
- server version 41–42
 - overwriting local version 43
- ServerItem 112
- Service Accounts group 237
- services, DocumentService 248
- SetBuildBreakProperties
 - target 171
- SetSite method 248
- shared documents 12
- shared folder, disadvantages 89
- SharePoint 7, 12
- SharePoint Designer 13
- sharing code 108–110
 - at source code level 108
 - decoupling 109
 - subscribing to
 - components 108
- ShelveSet class 195
- shelvesets
 - creating 189
 - downloading 193–195
- Shelve-Source Files dialog
 - box 190
- Sidekicks, History Sidekick 144
- signing, delay signing
 - approach 208
- SkipGet property 176, 278
- SkipInitialize property 278
- SkipLabel property 177
- SkipPostBuild property 175
- .sln 76
- small companies
 - and Team Build 162
 - configuring TFS 232
 - workflow 270
- SMTP event sink 303
- SmtClient class 298
- SmtMailServices class 298–299
- sn.exe tool 208
- software configuration
 - management (SCM) 48
- Solution Explorer 43
 - database schema 53
- solution files 224
 - branching 92
- SolutionRoot property 172
- solutions 24

- SolutionToBuild 112
 - SolutionToBuild item 172
 - SolutionToPublish element 185
 - source code, submission
 - service 189–199
 - source control 7
 - Source Control Explorer 41
 - compare folders 44
 - comparing folders 146
 - Source Control Merge Wizard 151
 - Source Control UI, merging 92
 - source files
 - creating builds from 176–182
 - downloading
 - 192, 279–281, 284
 - source schema 62
 - Sources 21
 - SQL Server 53, 76
 - clustering 244
 - column limit 239
 - mirroring 244
 - SQL Server Reporting Services 13
 - SqlBuildTask 65, 75
 - SqlDeployTask 65, 75
 - SqlTrackingQuery class 310
 - SqlTrackingService class 308
 - SqlWorkflowPersistenceService class 304
 - connectionString parameter 304
 - instanceOwnershipDuration parameter 305
 - loadingInterval parameter 305
 - unloadOnIdle parameter 304
 - staircase model.
 - See* branch-by-release model
 - standby machine 243
 - status 17
 - Status Sidekick 115
 - stored procedures 59
 - InsertInstanceState 304
 - RetrieveExpiredTimerIds 305
 - strong names 206
 - SubscribeEventWithClassification method 156
 - successful download
 - primary project 286–292
 - reference project 282–284
 - synchronize 54
- T**
-
- table 53
 - target database, specifying 78
 - target execution order 165–170
 - in TFS 2005 166, 169
 - in TFS 2008 167–169
 - target schema 62
 - TargetConnectionString 75, 78
 - TargetDatabase 65, 75, 78
 - targets
 - AfterCompile 171, 202
 - AfterDropBuild 188, 202
 - AfterTest 171
 - BeforeCompile 202
 - BeforeGet 202
 - BuildNumberOverrideTarget 217–219
 - CopyAssemblyInfoFile 220
 - CoreDropBuild 173
 - CoreGet 176
 - CoreLabel 113, 217
 - CoreTest 171
 - CreateWorkItem 175
 - customizing 170
 - DesktopBuild 199
 - EndToEndIteration 165
 - execution order 165–170
 - GetChangeSetsAndUpdateWorkItems 174
 - GetChangeSetsOnBuildBreak 174
 - invoking 166
 - Microsoft.VersionNumber 211–215
 - OnBuildBreak 171
 - overriding 170
 - SetBuildBreakProperties 171
 - targets file 165
 - UpdateAssemblyInfoFiles 214, 216–217, 220
 - targets file, database projects 65
 - Task_Actual_vs_Estimated_Ratio 257, 259
 - tasks
 - AssemblyInfo 185, 216
 - AssemblyInfoTask 210
 - CreateWorkspaceTask 202
 - custom ClickOnce task 186–188
 - DeleteWorkspaceTask 202
 - GenerateApplicationManifest 189
 - GenerateAssemblyInfo, and 228
 - GenerateBootStrapper 189
 - GenerateDeploymentManifest 189
 - MSBuild 186
 - Touch 221
 - UpdateClickOnceLaunchPage 186
 - workflow, and 272
 - Team Build 10, 16, 18, 28, 164–175
 - application tier 165
 - architecture 164
 - associating
 - changesets 174–175
 - associating related work items 174–175
 - branching, and 111
 - build databases 49–50
 - build directories 171–173
 - build issues 162–164
 - build project file 165
 - build script 170
 - build verification tests 10
 - configuring 162–164
 - coupling 173
 - creating projects 192
 - customizing targets 170
 - data tier 165
 - database configuration 78
 - database projects 65, 76
 - deploying schema changes 79
 - detecting build failures 171
 - executing scripts 286–292
 - extending with
 - ClickOnce 185–186
 - for large companies 163
 - for small companies 162
 - modifying project file 215–221
 - modifying team project file 227–228
 - MSBuild 10–11
 - MSBuild schema 165
 - numbering
 - assemblies 209–221
 - object model 17, 35
 - overview 164–175
 - programming against 33
 - project files 165
 - properties 11
 - security 18
 - Service 17
 - target execution order 165–170
 - targets file 165

- Team Build (*continued*)
 - tasks and ClickOnce 188
 - Team Explorer 165
 - TfsBuild 165
 - topology 18
 - windows service 18
 - with distributed TFS 163
- team build 5
- Team Build System Account 32
- Team Explorer 14, 91, 165
- Team Foundation Administrators group 237
- Team Foundation Server 4
 - future plans 47
 - object model 7
- Team Foundation Server Power Tools 88
- Team Foundation Server Workgroup Edition 232
- Team Foundation
 - Sidekicks 115–116
 - History Sidekick 115
 - Status Sidekick 115
- Team Foundation Valid Users group 237–238
- Team Foundation version
 - control 17, 88
 - and rollbacks 150
 - History pane 143
 - improvements 40
 - Sidekicks 115
- Team Project dimension 235
- team projects 12–13, 28–29
 - and labels 100
 - branching across 108
 - considerations 238–241
 - creating build agents for 20
 - decoupling 109
 - deleting 241
 - file, modifying 227–228
 - limitations 238–241
 - moving 239–241
 - MSF Agile 236
 - MSF CMMI 236
 - organizing 233–238
 - process model 236
 - Process Template Manager 247
 - project portals 235
 - recommendations 238
 - reports 235
 - security 236–238
 - sharing code 108–110
 - SQL Server column limit 239
 - system limitations 238–239
 - transferring to new instance 240
 - version control 234
 - work item tracking metadata cache 239
 - work items 233
- Team System cube 165
- Team Project dimension 235
- Team Test, using with DB Pro 49
- TeamFoundationServer 34
- temporary table 55
- Terminate activity 281
- Test Conditions 60
 - custom 61
- test data, generating 50, 56
- test-driven development 50
- tester, role 4
- testing and merging 95
- TestResultData objects 286
- tf
 - CheckIn 122
 - destroy command 241
 - history 103
 - labels 103
 - lock 116
 - merge command 147–148, 152
 - baseless merges 152
 - merges 143
 - PendChange 122
 - permission 120
 - resolve command 148
 - rollback command 150
 - workspace 116
- tftp
 - annotate command 145–146
 - history command 144
 - power tool 43
 - annotate 45
 - offline command 43
- TFS 14
 - 64-bit processor support 243
 - Architecture
 - application tier 7
 - client tier 7
 - data tier 7
 - logical tiers 6
 - central builds 276–278
 - configuring 232–233
 - copying databases 240
 - coupling with build machines 173
 - creating custom controls 245–253
 - custom controls 244–253
 - databases, copying 240
 - DB Pro integration 49
 - disaster recovery 243–244
 - distributed 233
 - distributed builds, and 200–203
 - dual-server configuration 232
 - event engine 154–156
 - high availability 241, 243–244
 - instance ID 240
 - KPIs, and 253–264
 - lack of support for Project Server 239
 - load balancing 241
 - MSF Agile 236
 - MSF CMMI 236
 - out-of-band issues 271
 - performance 241–244
 - ports 200
 - Proxy 91
 - reducing load 242–243
 - WF, and 271–272
 - with central build machine 201–202
 - with distributed 163
 - with distributed build machines 202–203
 - work item forms 244–253
 - workflow 271–272
- TFS 2005 16
 - differences from TFS 2008 111, 124, 165, 171–173, 175, 218, 241
 - TFSDelProject command 241
- TFS 2008 16
 - differences from TFS 2005 111, 124, 165, 171–173, 175, 218
- TFS Power Tools 88
 - annotation viewer 145
 - check-in policies 124
 - viewing merge history 143
- TFS servers
 - and VPN 91
 - downloading to remote server 91
 - geographically distributed 90
 - in multiple locations 90
 - remote 91
- TFS Workgroup Edition 232
- TfsAdminUtil ActivateAT command 244
- TfsBuild utility 165

TFSSBuild.proj 21, 24, 33
 restricting access 29
 TFSSBuild.rsp 21, 28
 TFSSBuildService.exe 19
 TFSSBuildService.exe.config 19
 TfsBuildService.exe.config 30
 TFSSDeleteProject
 command 241
 TFSSSecurity tool 123
 TFVC 54, 88, 234
 access control policies.
 See access control policies
 History pane 143
 read-only files 219
 shelving code 96
 Sidekicks 115
 using with DB Pro 51, 76
 working with ranges 103
 tool ID, VersionControl 154
 tools
 aspnet_merge.exe 228
 InstanceInfo.exe 240
 sn.exe tool 208
 TFSSecurity 123
 Touch task 221
 tree merge 148
 trigger 53
 triggers 59
 T-SQL 52
 ALTER command 65
 CREATE command 65
 testing 59

U

unit test
 database 49–50, 59
 unloadOnIdle parameter 304
 unlocking files 116
 unmerged changesets 147
 update action, skipping 64
 update script 51
 UpdateAssemblyInfoFiles
 target 214, 216–217, 220
 error 220
 forcing execution 220
 UpdateAssociatedWorkItems
 property 174
 UpdateClickOnceLaunchPage
 task 186
 UserControl interface 245
 utilities
 witexport 247
 witimport 247

V

variables, environment 170
 version conflict 42
 Version control 9
 version control 5, 14, 234
 atomic checkin 9
 benefits 89
 branching 10
 check-in policies 9
 cherry pick merge 10
 database 50
 merge conflicts 10
 merging 10
 shelve sets 10
 Version Control cache 242
 versus shared folder 89
 working offline 43
 Version Control cache 242
 version control merge
 candidates 10
 version number
 AssemblyInfo.cs 209
 build project file 209
 local builds 208
 VersionControl tool ID 154
 VersionControlServer.Get-
 EffectivePermissions 121
 versioning
 assemblies 206–207
 assembly version number
 206, 209
 build number 207
 build project file 209
 file version number 206
 labels, and 100
 major version 207
 minor version 207
 revision 207
 strong names 206
 web applications 222–228
 Windows
 applications 208–209
 with WDP 225
 viewing
 annotations with TFS Power
 Tools 145
 changes 144–145
 detailed merge history 142
 KPIs 259–264
 with Excel 260–261
 with MOSS 261–264
 merge history 142–144

Visual Studio 51
 and WF 275
 and workflow 275
 Visual Studio 2005, building web
 sites 222–224
 Visual Studio IDE
 annotate 45
 compare folders 44
 setting offline 43
 Visual Studio Report
 Designer 13
 Visual Studio Team System
 2008 3
 Visual Studio Team System 2008
 Database Edition 47, 49
 Visual Studio Team System 2008
 Team Suite 4
 Visual Studio Web Deployment
 Projects. *See* WDP
 VPN and TFS servers 91
 VSTS 49

W

WDP. *See* Web Deployment
 Projects (WDP)
 web applications
 autoincrementing build
 numbers 226
 versioning 222–228
 Web Deployment Projects
 (WDP) 224–226
 configuring 226
 web services 7
 implementing 156–159
 web sites
 building with Visual Studio
 2005 222–224
 building with WDP 224–226
 web.config file, customizing 224
 WF. *See* Windows Workflow
 Foundation (WF)
 wfc.exe program 276
 While activity 279, 284
 Windows applications,
 versioning 208–209
 Windows Communication
 Foundation 18
 Windows Forms application
 workflow designer 275
 Windows SharePoint Services
 2.0 12
 Windows SharePoint Services
 3.0 12

- Windows Workflow Foundation (WF) 272–276
 - architecture 273–275
 - BVTs, and 278
 - central builds 276–278
 - creating applications 275–276
 - distributed build
 - process 278–303
 - fault tolerance 303
 - for large companies 270
 - for small companies 270
 - handling emails 292–303
 - Hosting layer 274
 - IIS SMTP, and 293
 - in Windows Forms
 - application 275
 - layers 273–275
 - performance 273
 - persistence 303–307
 - Runtime layer 274
 - support 276
 - TFS, and 271–272
 - Visual Studio, and 275
 - Workflow model layer 274
 - workflow tracking 308–310
 - witexport utility 247
 - witimport utility 247
 - work item 8, 37
 - field definitions 8
 - form layout 8
 - query language 8
 - state transition rules 8
 - type definition 8
 - work item forms, custom
 - controls 244–253
 - work item tracking 4, 7–8, 14
 - work items 233
 - associating with
 - changesets 112
 - deleting 272
 - junk entries 272
 - modifying type 247
 - out-of-band issues 271
 - types 8
 - work item tracking metadata
 - cache 239
 - workflow
 - BVTs, and 278
 - central builds 276–278
 - for large companies 270
 - for small companies 270
 - MOSS, and 269
 - MSF Agile, and 271
 - MSF CMMI, and 271
 - Outlook 270
 - performance 273
 - persistence 303–307
 - Project 270
 - recording 308
 - sequential 273
 - state-machine-based 273
 - storing in external
 - database 303
 - tasks, and 272
 - TFS, and 271–272
 - tracking 308–310
 - Visual Studio, and 275
 - Workflow model layer 274
 - workflow persistence 303–307
 - workflow tracking 308–310
 - workflows 6
 - WorkItemChangedEvent
 - event 272
 - WorkItemDatasource
 - property 248
 - WorkItemId 39
 - WorkItemStore class 234
 - WorkItemType property 175
 - workspace 40, 43
 - copying existing 24
 - offline 43
 - Workspace class 198
 - workspace version 42
 - overwriting 43
 - WorkspaceMapping.xml 112
 - Workstation class 129
 - WssTasks.xml 13
- X**
-
- XAML 276