

index

Symbols

@ExecutionTime 436
@ReportName 436

A

Accept HTTP header 349
access control list 322, 539
access options
 evaluating 383
ACL. *See* access control list 539
ACT 506, 512
ACTUser account 516
ad hoc 59, 217
Add New Report 30
ad-hoc reporting 218
 developer tools 220
Ad-Hoc reports
 introduced 8
ADO.NET
 custom dataset extension 460
 dataset reporting 73, 84
 reporting approaches 460
advanced technique 150
Advanced Textbox Properties 162
Adventure Works Cycles 25, 43,
 187, 345
Adventure Works Reporter 26
AdventureWorks 26
AdventureWorks2000 441
aggregate functions 168–169,
 171
aggregate scope 169–170

aggregate values 167
Allow null value option 96
Analog analyzer 546
Analog log analyzer 509
Analysis Services
 defined 7
analyzing report execution 305
anonymous access 313, 383, 482
AppDomain CAS policy 533
AppDomain policy level. *See* code
 access security 533
AppDomain.SetAppDomainPol-
 icy 534
Application Center Test 499,
 506, 512, 523
 advantages 512
 New Test Wizard 513
 Overview report 516
 Performance Counters report
 519
 Requests Summary report 517
application pool 317
argument Scope 169
ASP.NET
 Forms Authentication 492
 menu sample 359
 worker process 317
asserting permissions 541
asynchronous report delivery
 with subscriptions 422
Authentication 482
 and data sources 70
 defined 312
 vs. data source authentication
 315
authorization
 creating policies 327
 creating roles 326
 defined 312
 policies 322
 policy inheritance 322
 policy management 323
 roles 320
 tasks 319
Authorization Manager 337, 484
auto-refreshing reports 182
availability 505
available values
 data-driven 98
 non-queried 97
Avg function 85
AW2000 Shared DS data source
 442
AWC. *See* Adventure Works
 Cycles
AWCModel project 223
AWC.RS.Extensions assembly
 459
AWC.RS.Library 158
AWC.RS.Library assembly 190
AWReporter 28
AwRsLibrary 196

B

BackgroundImage Source property 116
BackgroundRepeat property 116
bands. *See* report sections 105
Base64-encoding 479
based reporting applications and latency 499
Basic authentication 313
batching 295
BIDS. *See* Business Intelligence Development Studio
binding data regions 110
BindingSource object 405
BizTalk 23, 208
blogging 209
BookmarkID command 350
BorderStyle property 332
breakpoint 158
Browser role 264, 320–322, 327, 487
built-in functions 151
Business Intelligence 6, 44, 205
Business Intelligence Development Studio 44, 220, 399
Business Intelligence Project 28
business intelligence projects 47
Business Object Data Source 403
business-to-business 208

C

caching 167
and effect on report execution 284
report sessions 275
calculated fields 83, 147
Campaigner Web service 379
capacity planning
determining requirements 504
overview 498
process 503
cascading parameters 101
case sensitivity and datasets 83
Caspol utility 533
Catalog Explorer sample application 291

Catalog table 269, 273, 330, 433
Ceiling() function 112
centralized report management 10
Chartchart report
defined 4
charts 145
data fields section 130
data region 129
Data tab 130
designing reports 128
image identifiers 372
legend 130
nesting reports 132
point labels 130
region 133
reports 110
types 129
CheckAccess 493
ChunkData table 279
class-level members 187
ClearSession command 351
Click Once application 216
client-side reporting 358
dynamic hyperlinks 361
hyperlinks 360
server-side generated hyperlinks 363
static hyperlinks 360
Client-to-Report Server 314, 379
CLR. *See* Common Language Runtime 311
code access policy 473
code access security 199, 531, 547
and custom delivery extensions 480
bypassing 535
code groups 535
configuration files 537
custom assembly 191
custom permission sets 538
dealing with unmanaged resources 540
default RS settings 536
elevating 539
managing 538
overriding 534
permission sets 535
policies 479, 532–533

code editor 188
code groups 535
creating 538
Code member 186
code profilers 500, 520
code sample
Access Options 514
Adventure Works Web Reporter 359
AW Campaigner 379
Campaigner 447
Campaigner Web service 382
RDL deployment 292
Report Picker 364, 462
RS Console 296
standard e-mail subscription 434
triggering subscription 447
Using rs.exe 301
Web Behavior 377
code-based security 12
CodeDom 479
CodeGroup 199
collections 152
column groups 137
Common Language Runtime 190
Computer Management console 326
Compuware Application Expert 500, 546
Compuware DevPartner 508
concurrent users 501
conditional formatting 160–161
configuration files 459
Configuration Manager 51
configuration tool
Database Setup 304
defined 302
Email Settings 304–305
Encryption Keys 304
Execution Account 305
Initialization 304
Report Manager Virtual Directory 303
Report Server Virtual Directory 303
server status 302

- configuration tool (*continued*)
 - Web Service Identity 304
 - Windows Service Identity 304
 - ConfigurationInfo table 74, 263, 277, 351
 - connection
 - database connection 65
 - Connection Manager 224
 - connection pooling 315
 - Connection Properties 29, 68
 - connection string 74
 - Content Manager role 264, 321–322, 327
 - Converting report files 411–413, 415
 - cookie management
 - and custom security 490
 - cookie-less report sessions 351
 - cookies, for report session management 351
 - CPU utilization 503, 507
 - Credentials Stored Securely in the Report Server 315
 - Credentials tab 464
 - Crosstab reports 45, 134, 201
 - defined 4
 - designing 133
 - dynamic groups 136
 - static groups 137
 - subtotals 138
 - CSV 183
 - CurrentPrincipal 312
 - custom application security 337
 - custom applications
 - integrating reports 342
 - custom assemblies 167
 - deploying 191
 - custom authentication
 - implementing 491
 - custom authorization
 - implementing 493
 - custom code 47, 186, 453
 - custom code security 50
 - custom data extensions
 - debugging 473
 - custom dataset data extension
 - and typed datasets 463
 - download location 545
 - implementing 469
 - testing 468
 - custom delivery extension 24, 424, 473
 - debugging 480
 - implementing 476
 - custom .NET code 11
 - custom parameters
 - validation 354
 - Custom Report Item 12
 - custom security 313
 - GenericPrincipal 495
 - group assignments 494
 - IPrincipal.IsInRole 495
 - limitations 484
 - vs. anonymous access 314
 - custom security extension 482
 - debugging 495
 - implementing 488
 - custom XSL transformations 208
- D**
- data differentials 175
 - Data element
 - RSReportDesigner.config 69
 - RSReportServer.config 69
 - data extension 20, 460
 - defined 68
 - supported 68
 - data hiding 337
 - data model 220
 - Data Output tab 208
 - data processing extensions 11
 - data reader 363
 - data regions 105, 176
 - advantages 111
 - and multi-section reports 111
 - binding 111
 - chart 110
 - defined 110
 - list 110
 - matrix 110
 - overview 110
 - placing side by side 111
 - table 110
 - using in place of subreports 109
 - Data relations 462
 - data source 29, 64–65
 - authentication options 70
 - defined 65
 - deploying 78
 - properties 68
 - report specific 66
 - shared 66
 - data source authentication
 - best practices 76
 - credentials stored securely in the report 72
 - credentials supplied by the user running report 72
 - no credentials 73
 - Windows NT Integrated Security 73
 - Data Source Configuration Wizard 404
 - Data Source Designer 226
 - Data Source dialog 80
 - Data Source Instance 415
 - Data Source tab
 - Report Manager 70
 - data source view 227
 - adding relationships 231
 - adding tables 230
 - exploring data 233
 - Replace Table 233
 - data source view diagram 230
 - Data Source View wizard 227
 - Data Source Wizard 223
 - Data Sources Explorer 404
 - Data Sources page 275
 - Data tab 46, 64, 81, 93
 - data type casting 95
 - database authentication
 - and Client-to-Report Server model 315
 - database connection pooling 72, 74–75, 543
 - monitoring 75
 - prerequisites 74
 - Database Engine 7
 - database functions 144
 - Database server utilization 503
 - Database.dbp 441
 - DataBinder 363

- data-bound controls 110
 - data-driven subscription 424, 428, 441
 - defined 427
 - example 440
 - recipient query 429
 - scenarios 428
 - dataset 110
 - accessing bound reports 468
 - creating 80
 - creating a schema 463
 - creating queries 85
 - definition 78–79
 - fields 82
 - filters 84
 - Dataset dialog 82, 93
 - dataset-bound reports 462
 - DataSetName property 110–111, 119
 - DataSource parameter
 - and custom dataset extension 465
 - DataSource table
 - ReportServer database 72
 - DataSources element 66
 - DatePart function 115
 - DateTime structure 95
 - db_datareader role 77
 - DbgView
 - utility 539
 - Debug menu 495
 - debugging 159
 - debugging custom code 51, 204
 - debugging embedded code 204
 - DebugView 515
 - DebugView tool 204, 308
 - DefaultTraceSwitch setting 262, 308
 - delivery extensions 11, 24, 424
 - configuring 430
 - deploy 35
 - deploying custom assemblies 199
 - deploying reports 53
 - programmatically 292
 - deployment configurations 54
 - deployment features 12
 - deployment guide 523
 - Design the Table screen 32
 - Details Grouping button 115
 - developer edition 523
 - device settings
 - overview 349
 - Direction property 138
 - disconnected mode 48
 - DocMapID 350
 - document maps 178–180
 - drill down 45
 - drilldown report
 - defined 4
 - drillthrough report
 - defined 4
 - drillthrough reports 177
 - Dundas Software 129, 543
 - dynamic columns 137
 - dynamic connection strings 68
 - dynamic hyperlinks 360–361
 - Dynamic Web Service invocation 479
 - Dynamic XML Web Services Invocation sample 546
 - DynWSLib 479
- E**
- Edit Details Group button 123
 - Edit Item Security 327
 - e-mail data-driven extension
 - configuring 442
 - e-mail delivery 24
 - e-mail delivery extension 430
 - configuring 431
 - embedded code 163, 186–187, 195
 - embedded functions 188
 - expression-based queries 89
 - Employee Performance Summary chart 145
 - Employee Sales Freeform 152
 - EnableExternalImages 415
 - EnableReportDesignClientDownload 254
 - encryption key 304
 - EnforceConstraints 415
 - enterprise application integration 23
 - Enterprise CAS policy 533
 - enterprise edition 523
 - Entities listbox 244
 - Entity object 237
 - DefaultDetailAttributes 237
 - errors, dealing with for SOAP access 370
 - event
 - subscriber-publisher design pattern 422
 - event methods 407
 - Event table 424, 447, 482
 - EventData 447
 - EventProcessing 447
 - evidence 532
 - Excel 182
 - Exchange Server
 - using as mail server 431
 - ExecuteReader 471
 - execution caching 276, 279–280, 521
 - example 280
 - how is affected by parameters 281
 - invalidating 281
 - prerequisites 279
 - execution log 305
 - defined 305
 - Execution Log DTS package 509
 - execution order 154
 - Execution page 265, 275, 280
 - Execution permission set 535–536
 - execution stage 20, 275
 - Execution tab 438
 - ExecutionLog Business Intelligence project 510
 - ExecutionLog DTS package 306
 - ExecutionLog table 305, 509, 512
 - ExecutionTime 166
 - exploded pie chart type 130
 - export formats 20, 36, 181
 - exporting
 - using HTML Viewer 353
 - exporting reports 181–182
 - Expression Editor 152
 - expression errors 156
 - expression execution order 154
 - expression scope 154

expression syntax 153
expression-based queries 88, 98
expressions 151, 153–154, 157,
231
 using for calculated fields 83
extensibility
 defined 453
Extensible architecture 36
Extensible Stylesheet Language
 Transformations 48
Extension object 357
external assemblies 189–190
external functions 167–168
external .NET assemblies 189

F

field expressions 151
Fields 152
Fields collection 151, 163, 165
Fields tab 82
Fields toolbox 47, 89
Fields window 119
file share delivery 24
File Share delivery option 438
 configuring extension 430,
 432
 example 437
FileSystemObject 378
filtering data 84
Filters tab 84
finding text
 using HTML Viewer 352
First() function 85
folder namespace 346
 defined 269
 logical partitioning 272
 organizing 324
 overview 269
folder Properties page 270
folders
 requesting by URL 345
Forecasted Months parameters 407
forecasting 193
foreign keys 229
Format command 349
Format function 137
format property 33

Forms Authentication 317, 483,
487, 491, 546
FQDN 431
freeform reports 110
 defined 4
 designing 123
 grouping data 125
 with nested regions 123
 with side-by-side data regions
 127
FullTrust 199
FullTrust permission 50, 535,
537–538
functions
 CountDistinct() 171
 CountRows() 164, 171
 First() 171
 Iif 161, 169
 IsMissing 164
 IsNothing() 164
 RowNumber() 169
 RunningValue() 172
 Sum() 169, 171
 Switch 162

G

Generate events
 task 447
generating RDL 59, 62
Generic Query Designer 87, 465
 expression-based queries 88
GetChildRows method 462
GetDataSourceContents com-
 mand 347
Global Assembly Cache 417
global object collections 157
Globals 152
Globals collection 159, 166
Globals.PageNumber 57
Graphical Query Designer 85, 93
 and parameters 92
 Diagram pane 86
 Grid pane 86
 limitations 87
 Results pane 86
 SQL pane 86
 stored procedures 99

Group dialog 120
group on expressions 126
group-based security policy
 custom security 487
grouping
 nested group visibility 122
Grouping and Sorting Properties
 dialog 113, 125–126
groups
 creating 113
Groups tab, table region 120
GroupsBeforeRowHeaders prop-
 erty 138

H

hide fields 165
History tab 283–284
History table 283
Home folder 269–270, 323–324,
327
horizontal data filtering 485
horizontal security 333
HTML
 and subscriptions 431
HTML Viewer 384, 386–387
 commands 353
 features 352
 limitations 354
 overview 351
HTMLFragment device setting
 349, 371
HTMLToolbar
 hiding the toolbar 397
HTTP. *See* Hypertext Transfer
 Protocol
HTTP 1.1 514
HTTP Handler 495
HTTP Pipelines 546
HTTP-GET 13, 22, 158, 469
 requests 343
HTTP-POST 13, 364, 385, 462,
469
 advantages for requesting re-
 ports 364
 Also see web reporting
hyperlinks 176–177
Hypertext Transfer Protocol 13

I

- IAuthentication interface
 - LogonUser 492
- IAuthenticationExtension interface 489, 491
 - GetUserInfo 491
 - IsValidPrincipalName 492
 - SetConfiguration 491
- IAuthorizationExtension interface 489
 - CheckAccess 489
 - SetConfiguration 493
- IDataParameter interface 470
- IDataParameterCollection interface 470
- IDataReader interface 470–472
 - GetValue 471
 - implementing 472
- IDataReader interfaceGetOrdinal 471
- IDbCommand interface 470, 472
 - CreateParameter 470
 - ExecuteReader 472
- IDbCommandAnalysis interface 470
- IDbConnection interface 470–471
- IDbConnectionExtension interface 471
- IDbTransaction interface 470
- IDelivery interface 457
- IDeliveryExtension interface
 - Deliver 478
 - ValidateUserData 477
- IdentifyingAttributes 237
- IExtension interface 458
 - SetConfiguration 476–477
- IExtension.LocalizedName 476
- IF. *See* intermediate format
- IIdentity interface 312, 491
- Iif() operator 89
- IIS logs 512
- Image (exporting) 183
- image files 271
 - used as background 115
- image report item 107
 - used to display logos 118
- Image Wizard 118
- images
 - and web applications 373
 - approaches for handling with SOAP 371
 - database 108
 - embedded 107
 - external 107
 - rendering external images 371
 - rendering via RenderStream 371
 - rendering with SOAP 370
- impersonate element 317
- impersonating the authenticated user
 - and data sources 72
- impersonating the user 317, 383
 - disadvantages for data source authentication 73
- implementing interfaces 457
- Include Group Header 114
- independent software vendors 8
- Infinite Drillthrough reporting 247
- InScope() 177–178
- instance methods 192
- instance variable 192
- InstanceSelection 238
- integrated security 315
- Integrated Windows authentication 313
- integration approach
 - choosing 386
- Integration Services
 - defined 7
- Intellisense 152
- interactive features 121, 133, 180–181, 384
- interactive reports 277
 - defined 4
- interactive sort 142–143
- interface
 - achieving standardization 457
 - casting 458
 - definition 456
 - inheritance 459
 - multiple inheritance 458
 - type discovery 457
- interface-based programming 454
 - benefits 457
 - overview 454
 - the need of 454
- intermediate format 17, 20, 275
- internal functions 173
 - CountRows() 189
 - InScope 173
 - Level 173–174
 - Previous 173, 175
- Internet-oriented applications and latency 499
- Internet-oriented reporting and security 482
- intranet applications and Client-to-Report Server model 314
- intranet reporting
 - custom security 486
- IntraVNews 421
- IPrincipal interface 312
- IsInRole 335
- IsNewExecution property 374
- Isolation 227
- ISubscriptionBaseUIUserControl interface 476
 - UserData 477
- ISV. *See* independent software vendors
- Item-level role assignments 252
- item-level roles 320
- item-level tasks 319

J

- Java 196
- JavaScript 361
 - generate the report's hyperlink 362
- Jump to report 178

K

- KeepForFiles setting 308
- Kerberos 261, 313, 315, 317, 544

L

latency

- application 499
- defined 499
- getting a breakdown of 500
- network 499
- total latency time 499
- what-if analysis 501

Layout tab 33, 46, 93

- report properties 141

LinkActiveColor 392

LinkActiveHoverColor 392

linked reports 274, 286

- defined 286

linked servers 65

list region example 123

list report region 146

ListChidren command 345

ListExtension method 357

load-balanced 16

local report file 411

locks database 82

log files 305

logos 107

M

Machine CAS policy 533

machineKey 418, 509

maintaining state 187

Manage all subscriptions

- task 429

Manage individual subscriptions

- task 433–434

Manage Jobs 267

Manage Shared Schedules task

- 266

managed report 10, 53

management API 288

Management Tools

- defined 7

management with Web service 288

managing content 268

managing folders 271

managing jobs 267

managing reports 273

margins settings 106

matrix region

- advantages 133
- interactive features 134
- rotating data 133

matrix report region 110

- columns section 137
- rendering 139
- Rows section 136
- subtotals 138
- virtual columns 133

matrix report. *See* crosstab report

MaxActiveReqForOneUser setting 262

Maximum number of connections 227

memory capacity recommendations 522

Memory utilization 503

menu control for ASP.NET 545

method batching 295

MHTML 182, 370, 431, 436, 478, 502

- advantages for e-mail delivery 431

Microsoft Access 45, 55, 157

- importing from 55

Microsoft Graph 129

Microsoft Messenger 421

Microsoft Network Monitor 500

Microsoft Office

- defined 7

Microsoft Outlook 421

Microsoft SOAP toolkit 367

Microsoft SQL Server platform 6

Microsoft WebBrowser control 356

Microsoft WebService behavior 377

Microsoft XML Parser 381

Microsoft XML Parser SDK 544

Microsoft.ReportingServices.DataExtensions 68

Microsoft.ReportingServices.Interfaces 459

Microsoft.ReportingServices.ProcessingCore.dll 16

Microsoft.ReportingServices.

- ProcessingObject 159

Microsoft.ReportingServices.

- ProcessingObjectModel 158

Microsoft.Reporting.WinForms 410

Microsoft.ReportViewer.Common 417

Microsoft.ReportViewer.ProcessingObjectModel 417

Microsoft.ReportViewer.WebForms 417

Microsoft.ReportViewer.WinForms 417

Microsoft.VisualBasic 168

missing data 189

missing fields 164

missing parameter value

- URL access 348

mixed-security mode 484

mixed-security model 486

model designer

- limitations 219

MsgBox 168, 204

MSReportServer_ConfigurationSetting 298

MSSoapT 514

multicolumn report 167

multiple columns 140

multiple datasets 84

- limitations 85

- when to use 84

multiple SQL statements

- executing 87

multi-stream exporting formats 370

multi-stream rendering formats 478, 509

multithreading locking issues 192

My Reports 262, 264

My Reports folder 269

My Reports role 264, 321

My Subscriptions 433

MyComputer zone 535

N

Named Calculations 231
named instance 30, 262
named parameters 91
NamedPermissionSet class 536
naming convention
 for report items 113
nested groups 125
nesting regions 126
.NET assemblies 168
.NET Configuration console 533
.NET Framework integration 36
.net generics 402
.NET SqlClient provider 74
network capture 501
network delays and latency 499
New Data-driven Subscription
 button 430
New Subscription button 430
newsreaders 213
NoRows property 111
notification object 424, 474, 478
 UserData property 478
Notification Services
 defined 7
Notification.Render 482
Notifications table 424
NULL rendering extension 357
NULL session 315
NULL values 188
null values 164

O

Object Browser 336
object-oriented 13
object-oriented programming
 454
observer design patter 422
ODBC provider 68
ODBC-compliant databases 65
OfficeWriter 546
OLAP 65
OLE DB-compliant databases 65
OLTP. *See* online transaction processing
On-demand 36

on-demand delivery 11, 22, 420
 overview 342
On-Demand Report Delivery 35
online transaction processing 26,
 65
OpenForecast 196
opt-in subscription 24
Oracle data extension 91
OutputFormat
 device setting 349
OverwriteDataSources
 setting 78

P

page body 106
Page Break property 112
page breaks 112, 125, 182
Page Footer 106
 menu 105
 section 105
Page Header 106
 menu 105
 section 105
page size property 106
PageBreakAtEnd property 112
PageNumber 166–167
pages per second 502
paging
 explicit 112
parameter
 Multi-value 117
parameter default values
 URL access 348
parameter lookup values 117
parameter placeholders 49, 352
parameter settings 101
parameter type validation 101
parameter validation 411
 URL access 348
parameter-driven queries 91
parameter-driven reports 90
 and subscriptions 436
parameterized reports
 and multiple datasets 84
parameters 152
 advanced validation 406
 and snapshots 439

 and subscriptions 425
 data type 95
 date 117
 handing with HTTP-POST
 365
 Multi-value 96, 102
 Multi-value with stored procedure 117
 Multi-valued 144
 Multi-valued with stored procedures 144
 non-queried available values 97
 prompt 94
 query-based available values
 100
Parameters collection 166
Parameters command 354
Parameters page 274
parameters section
 creating a custom section 407
Parameters tab 83, 92, 100
ParameterValue object 369, 379,
 425
PDF 20, 183
 URL access 349
performance
 bottlenecks, identifying and
 eliminating 503, 507
 defined 498
 scalability white paper 521
Performance Console 74
performance counter 503
 ASP.NET Applications/
 Requests Queued 507
 memory\
 available bytes 507
 network interface\
 Bytes Total/sec 507
 Process(aspnet_wp)\%
 Processor Time 503
 Process(sqlservr)\% Processor
 Time 503, 507
 Processor(_Total)\% Processor
 Time 503
 Processor\
 % Processor Time/Total 507
performance counters 503
performance metrics 511

- performance testing 515
- permission set 319
 - creating 538
 - defined 535
- persisted to files datasets 461
- personalizing subscriptions 428, 440
- pivot reports 133
- PivotTable
 - vs. matrix region 134
- Policies table 318–319
- policy inheritance 323, 328
- PollingInterval setting 424
- polymorphism 458
- POP3 545
- POP3 service 431
- predefined styles 45
- Preview tab 33, 46, 49, 98, 156
- Preview window 536
 - and CAS 537
- principal 312
- PrintOnFirstPage
 - property 106
- PrintOnLastPage property 106
- Private Assemblies folder 191
- processModel
 - model 317
- Process.Start
 - method 358, 369
- Product Catalog report 179
- Product Category crosstab report 203
- Product.cs 401
- profile store 485
- Properties dialog
 - code tab 188
- Property Collection 255
- pseudo events 332
- publisher 422
- Publisher role 264, 321
- pushing reports 421
- Put() WMI method 299

Q

- QA testing 44
- query hints, using to prevent locks 381

- query parameters and custom
 - dataset extension 465
- Query tab 80
- query timeout 81, 227

R

- RDL schema 58, 60
- RDL XSD 58
- .rdlc
 - adding to a project 414
 - .rdlc extension 398, 419
 - .rdlc file 398, 411–412, 414, 416, 419
 - .rds extension 48
- read-only parameters 95
- recipient data store 441
- rectangle report item 109, 125, 133
 - used to enclose fields 125
 - using to enclose other items 109
- recursive hierarchy report 174
- reference settings 192
- Refresh Report button 351
- refreshing fields 82
- Render command 348
- rendering extensions 20, 181
- rendering page 275
- rendering stage 20
- Replication Services
 - defined 7
- report authoring 44
- Report Builder 10, 36, 59
 - advanced filtering 249
 - defined 216
 - disabling 254
 - downloading 243
 - filtering 245, 247
 - formatting fields 246
 - introduced 8, 10
 - launching 217, 219, 242–243, 260
 - quick tour 217
 - roles 252
 - saving reports 220
 - security 252
- report caching 275, 507
 - using to minimize RS latencies 500
- report catalog 10, 14, 24
- report consumer 15
- report definition 274
- report definition file 16, 48
- Report Definition Language 20, 36, 48, 57
 - defined 8
 - introduced 8
- Report Definition Language
 - schema 412
- report definition schema 57
- Report delivery 35
- Report Delivery Options screen 428
- report design 43
- Report Designer 33, 46, 104, 106, 110–111, 119, 127, 142, 148, 537
 - configuration file 50
 - introducing 8
- Report Designer folder 158
- report executing time 283
- report execution log 500, 505, 508–510, 512
 - analyzing 509
 - determining the number of report requests 508
 - finding out the most popular reports 512
- report execution SOAP endpoint 58
- report execution statistics 305
- Report Execution timeout setting 263
- report exporting commands 349
- report expressions 156
- Report History tab 284
- Report item dropdown
 - using for visible on-demand groups 123
- Report Items 47, 163
- Report Items toolbar 105
- report lifecycle 24–25, 27
- Report management 17, 35

- Report Manager 14, 18, 35, 220, 242
 - and Client-to-Server model 314
 - and impersonating the user 317
 - and subscriptions 423
 - configuring 261
 - deployment 261
 - described 17
 - hide folders 269
 - how it works 260
 - implementation 260
 - introduced 10
 - main tasks 260
 - modify folder names 269
 - move content 269
 - overview 260
 - session state 262
 - upload content 269
 - url 35
 - using for report delivery 263
- Report Manager portal 219
- Report menu 93
- report mode
 - defined 219
- report model
 - attributes 234, 238
 - auto generate 241
 - building 221, 233
 - data source 223
 - deploying 219, 241
 - deployment properties 242
 - entities 234–235
 - folders 240
 - generation rules 234
 - project 222
 - roles 239, 253
- Report model Items 253
- report model layers 234
 - Data Source Views 222
 - Data Sources 222
 - Report Models 222
- report model wizard 234
- Report Object Model 157–159
- report parameters 166, 406
 - creating 93
 - data-driven subscriptions 443
 - role of 90
- Report Parameters submenu 93
- Report Processing binaries 49
- Report Processor 15
 - Also see* Report Server
- Report Properties dialog 112, 142, 188
 - references tab 190
- Report rendering 23, 181
- report repository. *See* report catalog
- report request 15
 - explained 502
 - vs. page requests 502
- report sample
 - Corporate Hierarchy 324, 436
 - Customer Orders 446
 - Customer Orders Custom Auth 487
 - Employee Sales by Territory with Summary 127
 - Employee Sales by Territory with Summary Chart 130
 - Employee Sales Freeform 123, 291, 333, 336, 361
 - Employee Sales Freeform Secured 334
 - Employee Sales Freeform with Chart 132, 434
 - Employee Sales Tabular Interactive 121, 350
 - My Orders 488
 - Report Picker 377
 - ReportsExecutedByDay 306
 - ReportsExecutedByHour 510
 - Sales by Product Category 533
 - Sales by Territory 79, 105, 113, 343, 361
 - Sales by Territory Crosstab 375
 - Sales by Territory Interactive 113
 - Sales by Territory with Chart 361
 - Sales Order Details 363
 - Sales Orders 365
 - Sales Promotion 271, 379
- Show Security Policy 319, 329, 336
- Territory Sales by Quarter 280, 283, 286, 437–438
- Territory Sales Crosstab 134, 362
- Territory Sales Drillthrough 361
- TestDS 462
- The Employee Sales Tabular 116
- Report Selector 106
- Report Server 14, 16
 - binary folder 459
 - configuring for e-mail delivery 431
 - engine 15
 - url 29, 53
- Report Server APIs 16
- Report Server binary folder 158, 191
- Report Server Configuration Database 48, 286
 - Also see* report catalog
- Report Server database 16
- Report Server Email element 431
- report server file 411
- Report Server Temporary Database 350
- Report Server Windows Service 24, 480–481
- report session caching 350, 374, 514
 - and matrix regions 139
 - clearing the session 351
 - effect on database connections 74
- report session state 277
- report sessions 371
 - and images 370
 - and SOAP 373
 - correlating with SOAP 375
 - definition 276
- report specific data source
 - advantages of 66
 - creating 66
- report toolbar 97, 123, 348
- Report Type screen 32

- Report Viewer Controls
 - introduced 23
- Report Wizard 25, 30, 45, 104–105, 110
- report-authoring
 - analysis 43
 - construction 43
- report-authoring deployment 44
- report-authoring process 42
- report-authoring stage 24
- report-authoring Testing 44
- report-authoring tools 24
- ReportFolder 166
- reporting challenges 25
- Reporting Services 36
 - architecture 13
 - choosing an edition 4
 - cost 36
 - defined 2, 7
 - editions 5
 - evaluating 36
 - extensibility 454
 - installation requirements 4
 - management features 10
 - top ten list 36
- Reporting Services Configuration Tool 15
- Reporting Services Windows Service 24
 - running scheduled tasks 267
- ReportingService object 255
- .Reporting.WinForms 411
- ReportItem class 160
- ReportItems collection 159–160, 163, 166
- report-level parameter 93, 470
 - and custom dataset extension 466
 - creating manually 93
 - orphaned 94
 - removing 94
 - using for passing data 93
- ReportMagic 509, 546
- report-management stage 24
- ReportName 166–167
- ReportParameter objects 409, 411
- ReportParameters property 106
- reports 105
 - access 25
 - advanced sorting 143
 - anatomy 105
 - archiving 421
 - authoring 24, 27
 - bookmarks 176
 - building 53
 - caching 15–16
 - catalog 260
 - creating programmatically 57
 - data sources 10
 - defined 2
 - definition 66, 271
 - delivery 11, 22, 24, 27, 260
 - deployment 55
 - elements 105
 - execution 20, 275, 279
 - execution caching and its effect on performance 520
 - extensibility 11
 - extensions 15
 - folders 18, 25
 - footer 106
 - header 106, 118
 - images 10, 107
 - interactive features and SOAP 375
 - interactive sort 142
 - intermediate format 75, 521
 - lifecycle 259
 - line 107
 - management 24, 27, 259–260
 - metadata 10, 16, 19
 - multiple columned 140–142
 - navigation features 175
 - overview 107
 - paging 50, 112
 - previewing 48
 - printing 50
 - processing 10, 19
 - properties 106
 - publishing 10, 53
 - rectangle 107
 - rendering 20
 - rendering commands 348, 350
 - request 19
 - requested over the internet 337
 - requesting 18
 - response times 509
 - scheduling 15
 - sections 105–106
 - selecting 127
 - session management 15
 - snapshots 15
 - subreport 107
 - subscribed delivery 15
 - subscription 24
 - table 512
 - testing 53
 - textbox 107
 - toolbar 18, 49
 - type of reports 3
 - URL syntax 344
 - zooming 50
- Reports folder 48
- Reports menu 105
- ReportServer 16
- ReportServerTempDB 16, 286
- ReportServerTempDB database 277
- ReportServerUrl 167, 436
 - setting 289
- ReportServerUrl setting 262, 491
- ReportService.asmx 293, 366, 369
- ReportServiceHttpHandler 343
- ReportViewer controls
 - choosing data connection 398
 - choosing process mode 391
 - configuring 394
 - creating local reports 398
 - custom validation 406–410
 - customizing 397
 - data set 399
 - data sources tab 398
 - deploying 416
 - disabling functionality 397
 - introduction 389
 - Load event 405
 - local data sources 391
 - local mode 397–404
 - object data source 403–404
 - previewing reports 401
 - processing modes 391
 - properties 392

- ReportViewer controls (*continued*)
 - redistributing 416
 - refreshing 409
 - remote mode 394
 - remote mode vs. local mode 392
 - Server Report 395
 - setting the Url and Report Path 396
 - toolbar 406
 - visibility property 411
 - webfarms 418
 - Windows vs. Web 390
 - ReportViewer controls remote mode 391
 - ReportViewer Deployment
 - Web applications 418
 - Windows applications 417
 - ReportViewer object as data source 401
 - ReportViewer redistributable file 416, 418
 - ReportViewer.exe 416, 418
 - ReportViewerLocal.cs 398
 - request distribution 510
 - requesting reports by SOAP 368
 - requesting reports by URL 347
 - requests per second 502, 505
 - resources
 - and the report catalog 271
 - response time 505
 - Revert to Parent Security button 328
 - role
 - and custom security 486
 - defined 320
 - role-based authorization
 - overview 318
 - role-based security 312
 - and the Web service 329
 - defined 322
 - managing with Report Manager 324
 - overview 312
 - purpose 312
 - Roles table 318–320
 - row groups 137
 - RowNumber 151
 - RowNumber() function 112
 - RPS 516
 - RS Catalog Explorer 291, 385
 - RS landscape 8
 - RS Windows Service
 - subscribed report delivery 424
 - rs.exe 301
 - RSExecutionLog database 509
 - rskeymgmt utility
 - purpose 304
 - rsmgrpolicy.config 537
 - rspreviewpolicy.config 50–51, 199, 207, 537
 - RSReportServer.config 181, 431, 447
 - SMTP 432
 - RSS 210–212, 379, 421
 - RSS feed 209
 - rssrvpolicy.config 51, 199, 537
 - running jobs 267
 - cancelling 268
 - types of 267
 - running totals 171
 - RunningJobs table 267
 - RunningRequestsDbCycle setting 268
 - runtime errors 157
- S**
- Sales by Product Category 193
 - Sales by Territory 35, 46
 - Sales By Territory Interactive report 395
 - Sales By Territory report 26, 412
 - Sales Promotion 209
 - sample reports
 - Employee Sales by Territory with Summary Advanced 160
 - Employee Sales by Territory with Summary report 160
 - Sales by Territory Interactive 91, 93
 - sample, RS management console 297
 - scalability 12, 36, 498
 - defined 498
 - scalability linear
 - achieving by scaling out 522
 - scaling out 522
 - scaling up 521
 - Schedule page 266
 - schedules
 - overview 265
 - report-specific 265
 - shared 265
 - script host 300
 - scripting 301
 - securable items 321
 - securable resources 329
 - secure data transfer 337
 - SecureConnectionLevel setting 337–338
 - securing reports 333
 - filtering data 334
 - hiding data 337
 - with dynamic queries 335
 - security
 - enforcing restricted access 337
 - evaluating requirements 333
 - overriding policy 328
 - security configuration files 199
 - security extension 313
 - defined 313
 - security features 12
 - security policy 195
 - SecurityException 532
 - SecurityManager.PolicyLevel-FromFile 534
 - securityPolicy element 534, 539
 - semantic layer 234
 - Semantic Model Definition Language 234
 - SendEmailToUserAlias setting 427, 434
 - Server name 30
 - server-side generated 360
 - hyperlinks 363
 - server-side report generation 358
 - ServerXMLHTTP 344
 - component 344
 - service-oriented 13
 - service-oriented architecture 13, 90
 - benefits for integrating 90

- session caching 276–277
 - configuring 277
 - how it works 276
 - overview 276
 - using cookies 277
- session cookie and custom security 483–484, 490
- session identifier 278
- SessionData table 374
- SessionHeader proxy class 374
- SessionHeaderValue proxy class 278
- SessionId member 374
- SessionID property 278
- SessionTimeout setting 74, 277
- SetParameters() 411
- setting
 - PollingInterval 267
 - UseSessionCookies 278
- Settings object 477
- setup logs 305
- SETUSER system function 73
- shared connection 66
- shared data source 29, 47, 65, 271, 274
 - advantages of 66
 - creating 67
 - definition 347
 - folder path 346
 - requesting by URL 346
- shared methods 186, 191
- shared queries 80
- shared schedules
 - advantages 265
 - using for subscriptions 438
- SharePoint Portal Server
 - defined 7
- Show Details button 274
- Show/hide Document Map 352
- ShowContextMenu 392
- ShowHideToggle command 350
- ShowToolBar 392
- side-by-side data regions 111, 127
- Simple Object Access Protocol 13
- site settings 263, 319
- Site Settings menu 326
- Site Settings page 263
- smart tag 401, 404, 415
 - ReportViewer controls 395
- .smdl file extension 234
- SMDL. *See* Semantic Model Definition Language
- SMTP 545
- SMTP service 431
- SMTP service setting 432
- snapshot caching 276, 281, 349
 - advantages 282
 - limitations 283
 - options 274
 - vs. execution caching 282
- Snapshot command 349–350
- snapshot history 265, 283, 349
- Snapshot refreshes 424
- snapshot reports 285, 424
 - and subscriptions 437
- SnapshotData table 282
- snapshots 265
- SnapshotUpdated status 440
- SOAP 158
 - overhead 500, 517
 - role of 367
 - Also see* Simple Object Access Protocol
- SOAP API
 - calling from client-side script 376
 - CancelBatch() 295
 - CancelJob() 268
 - CreateDataDrivenSubscription() 425, 427
 - CreateReport() 295, 301
 - CreateSubscription() 423, 425, 427
 - ExecuteBatch() 295
 - FireEvent() 267, 447
 - FlushCache() 281
 - GetDataDrivenSubscriptionProperties() 449
 - GetPermissions() 294, 319, 330
 - GetPolicies() 329, 331, 336
 - GetReportParameters() 365
 - GetSubscriptionProperties() 449
 - ListChildren() 289, 324
 - ListExtensions() 356, 475
 - ListSubscription() 449
 - LogonUser() 484, 488, 491–492
 - Render() 369, 378
 - RenderStream() 371–372, 374
 - UpdateReportExecutionSnapshot() 282
- SOAP exceptions
 - dealing with when using ACT 514
- SOAP requests 514
- SOAP Toolkit 289, 544
- SOAP Trace 289, 294, 353
- SOAP-based requests 23
- SoapException 370
- SoapException.Detail property 370
- Solution Explorer 28, 47, 147, 223
- SortAttributes 237
- source control 55
- Source property
 - image report item 107
- SQL Agent, subscribed report delivery 424
- SQL Data Adapter 463
- SQL Injection attacks 89, 98
- SQL Management Studio
 - managing Reporting Services 299
- SQL Server 2005 samples 26, 291
- SQL Server Agent 23, 422
 - used for scheduled tasks 267
- SQL Server Authentication 30
- SQL Server Integration Services 220
- SQL Server Management Studio 15, 220–221
 - Security folder 300
- SQL Server Query Analyzer 500
- SQL Server Reporting Services service 401
- SqlClient, Current # pooled connections counter 76
- SqlDataReader 403
- SSAS 69

- SSL 338, 485
 - SSL connection 337, 491
 - standard database authentication 72
 - standard e-mail subscription example 435
 - standard subscriptions 427
 - StartItem setting 473
 - static drillthrough reports 249
 - static groups 137
 - static hyperlinks 360–361
 - stem.Convert 168
 - stored credentials 425
 - stored data source credentials 424
 - stored procedures 165
 - advantages 98
 - calling web services from 381
 - creating 99
 - used for data sources 98
 - using for queries 98
 - StreamIds argument 372
 - StreamRoot device setting 371, 373
 - StyleTemplates.xml 46
 - subreport item 109
 - subreport report item
 - Properties dialog 148
 - subreports
 - configuring 147
 - defined 145
 - designing 139
 - synchronizing with master 148
 - when to use 145
 - subscribed delivery 11, 23, 182
 - and shared schedules 265
 - triggering programatically 446
 - subscribed report delivery 36
 - and Internet applications 440
 - configuring 425
 - events 424
 - how it works 422
 - overview 421
 - restrictions 424
 - scenarios 421
 - subscriber 422
 - subscriber-publisher design pattern 422
 - Subscription Wizard 429, 442
 - subscriptions 423
 - creating 425
 - creating with Report Manager 426
 - deactivated 425
 - managing with Report Manager 432–433
 - Subscriptions tab 427
 - Subscriptions table 433
 - Subtotal menu 138
 - Sum() function 85
 - System Administrator role 320
 - system jobs 267
 - system role assignment 252
 - System User role 320
 - System.Data.Odbc 69
 - System.Data.OleDb 69
 - System.Data.SqlClient 69
 - System.Diagnostics.Trace 204
 - system-level roles 320
 - system-level tasks 319
 - System.Math 168
- T**
- Table Footer property 115
 - table region 119
 - creating groups 120
 - limitations 123
 - table region groups
 - creating 113
 - creating totals 114
 - details grouping 115
 - table region selector 120
 - table triggers
 - used to call web services 379
 - TableAdapter 413
 - tabular reports 45, 110
 - defined 4
 - designing 112
 - parameterized 116
 - with interactive features 121
 - TargetFolder 28, 35, 53
 - TargetFolder setting 270
 - TargetServerURL 29, 53
 - Task table 319
 - tcpTrace 289, 294, 353, 514, 544
 - templates 28, 46
 - temporary drillthrough reports 248
 - Territory Sales Crosstab report 187
 - test scripts 506
 - creating 512
 - test use cases 506, 512
 - testing environment
 - for performance testing 506, 511
 - the Ad Hoc Reporter 60
 - the Generic Query Designer
 - executing multiple statements 87
 - Third-party vendors 7
 - throughput 501, 505–506
 - and virtual users 502
 - concurrent users 501
 - establishing benchmark 505
 - establishing benchmark empirically 505
 - establishing benchmark theoretically 505
 - finding the peak 501
 - requests per second 502
 - tight coupling 90
 - time to last byte 499, 517
 - Time-based events, 424
 - TimeDataRetrieval time 509
 - TimeProcessing time 509
 - TimeRendering time 509
 - Toolbar command 353
 - tooltip 177
 - TotalPages 167, 436
 - trace log files
 - analyzing 307
 - managing 308
 - trace logs 305
 - tracing 204
 - DebugView 308
 - utilities 289
 - web methods 289
 - transactions 81
 - triggering subscriptions 482
 - trusted subsystem 317, 383
 - TTLB 499

typed datasets
 and custom dataset extension
 461
TypeOf operator 457

U

unattended report processing 108
UNC 432
Uniform Naming Convention
 definition 438
UnionCodeGroup 535
unit testing 44
unit-test 48
uploading reports 25
uploading resources 270
URL access 22, 342
 and custom security extensions
 483
 and security 376
 commands 348
 cons 385–386
 disabling 343
 evaluating 384
 integration techniques 344
 overview 343
 passing parameters 347
 performance advantages 385
 programming techniques 343
 pros 384–386
 report session management
 350
 requesting images 345
 rs argument 348
 shelling out to the browser 358
 syntax 344
 url encoding 345
 using LinkLabel 344
URL length limitations 385
URL munging 278
Use single transaction option 81
User CAS policy 533
User collection 159, 167, 425
user identity 312
user job 267
 definition 267
user-defined aggregate functions
 172

UserID property 279
Users Folders 265
Users table 318–319, 433
User-Schema Separation 227
User.UserID 167, 334
UseSessionCookies setting
 277–278, 351
utilization 503, 506

V

validate begin and end dates 406
validating parameter controls
 408
View Code command 79
View Data Sources task 347
ViewReport button 473
virtual users 506
visible-on-demand groups 121
Visual Studio 2005
 defined 7
Visual Studio Report Designer 24,
 33
Visual Studio Team System 55

W

Watch window 159
web access 386
Web applications
 integrating reports 390
Web Browser control 343, 345,
 355–356, 358
 referencing 356
web farm 522
Web Method
 CreateDataSource 288
 CreateFolder 288
 CreateReportHistorySnapshot
 288
 CreateRole 288
 CreateSchedule 288
 FireEvent 267
 GetReportParameters 288
 ListSchedules 288
 ListSubscriptions 288
 LogonUser 483
 Render 368

web reporting
 using HTTP POST 364
web server logs 508
Web service 22, 36
 creating a reference to 367
 delivering reports to 479
 evaluating 385
 referencing 293
Web service access 342
 integration scenarios 366
 integration techniques 367
 overview 366
 report session management
 373
Web service API 60
Web service proxy 292, 367
 and report sessions 374
 setting 292
Web service report delivery 473
Web Services Enhancements 545
WebBrowser control
 documentation 544
 Navigate method 358
WebRequest object 344
WebService Behavior
 download location 545
webservice.htc 377
web-style paging 178
Windows
 authentication 262, 279, 312,
 382
 event logs 305
 group membership
 determining 335
 Management Instrumentation
 defined 296
 NT Integrated Security option
 effect on connection pooling
 76
Windows applications
 integrating reports 390
Windows Authentication 30
Windows Service 15
WindowsPrincipal.IsInRole 335
WMI provider 296
 advantages for management
 296
WSE 545

X

XML 69

Also see Extensible Markup Language

XML (exporting) 183

XML attribute 208

XML Document Object Model
58

XML DOM 382

XML element 208

XML output 211–212

XML rendering extension 208

XML schema 212, 463
and custom dataset extension
461

XML-based reports 207

XMLHTTP 381
component 344

XSD. *See* XML schema 463

XSL transformation 208, 212

XSLT 213, 271

Also see Extensible Stylesheet
Language Transformations

Z

Zero deployment 36

Zoom command 354

zooming 352