

Index

Symbols

(Compound) Transition execution 2-126
(Strict) Inheritance 2-130

Numerics

2-d Symbols 3-6

A

Action 2-74, 2-87
Action state 3-126
action state 3-126
action, special 3-108
action-clause 3-114
Action-Object Flow Relationships 3-130
ActionSequence 2-75
ActionState 2-134, 2-137, 2-138
Activation 3-87
activation 3-87
Active object 3-99
active object 3-99
Activity Diagram 3-124
Activity Models 2-131
ActivityModel 2-133, 2-136, 2-138
ActivityState 2-134
Actor 2-99, 2-101, 2-102, 3-79
aggregation 3-56
AggregationKind 2-67
Argument 2-75
Argument list 3-103
Artifacts 1-2
 development project 1-2
 UML-defining Artifacts 1-2
artifacts
 UML-defining 1-2
Association 2-14, 2-28, 2-42, 3-52
association class 3-53
Association End 3-55
association name 3-52
AssociationClass 2-15, 2-28, 2-43
AssociationEnd 2-15, 2-29

AssociationEndRole 2-89, 2-92
AssociationRole 2-90, 2-93
Attribute 2-17, 2-29, 3-32
AttributeLink 2-75, 2-81
Auxiliary Elements Foundation Package 2-46

B

Background Information 3-8
Bag B-34
Basic Values and Types B-6
BehavioralFeature 2-18, 2-29
bind 3-74
Binding 2-48, 2-53
Boolean 2-67, B-29
BooleanExpression 2-67
Bound Element 3-43

C

call event 3-112
CallAction 2-76, 2-82
CallEvent 2-108
changeability 3-57
ChangeableKind 2-67
ChangeEvent 2-109
Class 2-19, 2-30, 2-39
Class Diagram 3-25
Class Pathnames 3-46
Classical statecharts 2-131
Classifier 2-20, 2-31
classifier 3-26
ClassifierInState 2-135
ClassifierRole 2-90, 2-93
Collaboration 2-91, 2-93, 2-95, 3-90
collaboration 3-94
Collaboration Contents 3-94
Collaboration Diagram 3-91
collaboration diagram 3-91
Collaboration Roles 3-96
Collaborations Package 2-88

Index

Collect Operation B-20
Collection B-30
Collection Operations B-18
Collection Type Hierarchy and Type Conformance Rules B-17
Collection-Related Typed B-30
Collections B-15
Collections of Collections B-17
Combining Properties B-12
Comment 2-49, 2-53, B-9
comment 3-18
Common Behavior Package 2-71
communicates 3-80
Completion transitions and completion events 2-120
complex transition 3-116
Complex Transitions 3-116
Component 2-49, 2-53
component 3-139
Component Diagram 3-135
component diagram 3-135
Components 3-139
Composite Object 3-51
composite state 3-107
Composite States 3-109
CompositeState 2-109, 2-115, 2-122
concurrent substate 3-110
Conflicts 2-120
Constraint 2-20, 2-33, 2-59, 2-62
constraint 3-18
Constraints A-8
context 3-92
Control flow type 3-101
Control Icons 3-132
CORBA
 contributors xxx
Core Foundation Package 2-11
CreateAction 2-76
creation (of an object) 3-105
Creation destruction markers 3-105

D
Data Types Foundation Package 2-65
DataType 2-21, 2-33
DataValue 2-77, 2-82
decision 3-127
Decisions 3-127
deferred event 3-133
Deferred events 2-122, 3-133
Dependency 2-21, 2-33, 2-53, 3-74
Dependency (from Core) 2-49
deployment diagram 3-136
Deployment Diagrams 3-136
Derived Element 3-76
design pattern 3-93
destination state 3-116
DestroyAction 2-76, 2-82
destruction (of an object) 3-105
development project 1-2
discriminator 3-70
disjoint substate 3-110
do 3-108
Drawing Paths 3-7

E
Element 2-21, 2-33
Element Properties 3-20
ElementOwnership 2-21, 2-33
ElementReference 2-140, 2-142
Enabled (compound) transitions 2-125
Entering a composite state 2-123
Entering a concurrent composite state 2-123
entry action 3-108
Enumeration 2-67, B-30
Enumeration Types B-7
EnumerationLiteral 2-67
Event 2-110
event 3-111
Events 3-111
Example 3-9, 3-10
 Modeling Class Behavior 2-127
 State machine refinement 2-128
Exception 2-77
Exists Operation B-22
exit action 3-108
Exiting a composite state 2-123
Exiting a concurrent state 2-123
Exiting non-concurrent state 2-123
Expression 2-67, 3-11
extends (a use case) 3-80
extensibility mechanism 3-20, 3-22
Extension Mechanisms Foundation Package 2-56
extension point 3-79

F
Facility Implementation Requirements 5-9
Feature 2-22, 2-33
Features on Types Themselves B-15
final state 3-110
ForAll Operation B-21

G
General Extension Mechanisms 3-18
General Refinement 2-130
GeneralizableElement 2-22, 2-33
Generalization 2-23
generalization constraints 3-71
General-purpose Repository 5-3
Geometry 2-67
Goals 1-4
Grammar for OCL B-38
GraphicMarker 2-67
Guard 2-110, 2-115
guard-condition 3-114

H
High-level ("interrupt") transitions 2-125
history state 3-117

I
Icons 3-6
IDL Modules 5-10
Importing a Package 3-47
Industry Trends 1-3
Inheritance 2-37
initial state 3-110

- Instance 2-77, 2-82
 Instantiation 2-38
 Integer 2-68, B-27
 Interaction 2-92, 2-94, 2-97
 interaction 3-96
 interaction diagram 3-81
 Interactions 3-96
 Interface 2-24, 2-41
 interface specifier 3-56
 Interfaces 3-39
 internal activity 3-108
 internal transition 3-123
 Internal Transitions 3-123
 Invariants B-4
 Invisible Hyperlinks and the Role of Tools 3-7
 Iterate Operation B-22
- K**
 Kinds of Interaction Diagrams 3-81
- L**
 Label 3-10
 LCA, main source, and main target 2-126
 Legal state configuration 2-122
 Link 2-78, 2-83, 2-86
 LinkEnd 2-78, 2-84
 LinkObject 2-78, 2-84
 List Compartment 3-29
 LocalInvocation 2-79, 2-115
 Location of Components and Objects within Objects 3-141
 location of object 3-141
- M**
 Mapping 2-68, 3-9
 Mapping from MOF to IDL 5-9
 Mapping of Interface Model into MOF 5-7
 Mapping of UML Semantics to Facility Interfaces 5-4
 Message 2-92, 2-94, 3-87
 message (in a sequence diagram) 3-87
 message flow 3-101
 Message flows 3-101
 Message label 3-101
 MessageDirectionKind 2-68
 MessageInstance 2-79, 2-84
 Message-name 3-103
 Metaclass 3-45
 Method 2-24
 Miscellaneous 2-44
 Missing Rolenames B-11
 Model 2-141, 2-143
 Model Access 5-3
 Model Management 2-139, 3-15
 Model Transfer 5-3
 ModelElement 2-25, 2-53, 2-63
 ModelElement (as extended) 2-60
 ModelElement (from Core) 2-50
 Multi-object 3-98
 multiobject 3-98
 Multiplicity 2-68
 multiplicity 3-55
 MultiplicityRange 2-68
- N**
 Name 2-68, 3-9
 Name Compartment 3-28
 Namespace 2-26
 navigability 3-56
 Navigation from Association Classes B-13
 Navigation over Associations with Multiplicity Zero or One B-11
 Navigation through Qualified Associations B-13
 Navigation to Association Types B-13
 nested state machine 3-108
 Node 2-51, 2-54
 node 3-138
 Nodes 3-138
 Notation 3-8
 Note 3-13
- O**
 Object 2-79, 2-84, 3-48
 object 3-96
 Object and DataValue 2-85
 Object Constraint Language B-1
 Object Diagram 3-26
 Object flow 3-130
 object flow 3-130
 Object in state 3-130
 Object Lifeline 3-86
 Object Management Group xxiv
 address of xxiv
 Object responsible for an action 3-130
 object state 3-130
 ObjectFlowState 2-135, 2-137, 2-138
 Objects and Properties B-9
 ObjectSetExpression 2-68
 OCL - Legend B-3
 OCL Grammar B-38
 OCL Uses B-2
 OclAny B-24
 OclExpression B-25
 OclType B-24
 Operation 2-26, 3-35
 OperationDirectionKind 2-68
 or-association 3-53
 ordering 3-55
- P**
 Package 2-141, 2-143
 Packages and Model Organization 3-15
 Parameter 2-27, 2-36
 ParameterDirectionKind 2-69
 Parameterized Class (Template) 3-41
 participates (in a use case) 3-80
 Partition 2-136
 Pathnames for Packages and Properties B-14
 Paths 3-6
 pattern 3-93
 Pattern Structure 3-93
 Pre and Postconditions B-5
 Precedence Rules B-8
 Predecessor 3-102
 Predefined Features on All Objects B-15
 Predefined OCL Types B-23

Index

Presentation 2-51, 2-54
Presentation Options 3-8, 3-9, 3-57
Previous Values in Postconditions B-17
Primitive 2-69
Priorities 2-121
ProcedureExpression 2-69
Process 1-8
Programming Languages 1-7
Properties B-9
 Association Ends and Navigation B-10
 Attributes B-10
 Operations B-10
PseudoState 2-111, 2-115, 2-136, 2-137
Pseudostate 2-123
PseudostateKind 2-69

Q

qualifier 3-56

R

Real B-26
Reception 2-79, 2-84
Refinement 2-51, 2-54
refinement 3-74
Request 2-80, 2-84
Request, Signal, Exception and Message Instance 2-86
ReturnAction 2-80
Return-value 3-103
Re-typing or Casing B-8
rolename 3-56
Run-to-completion processing 2-119

S

Scope 1-6
ScopeKind 2-69
Select and Reject Operations B-19
Selecting transitions 2-121
Self B-4
Semantics 2-55, 2-64, 2-146
semantics of state machines 2-118
Semantics Package 2-146
SendAction 2-80, 2-85
send-clause 3-114
sending message
 within state diagram 3-120
Sending Messages 3-120
Sequence B-36
Sequence Diagram 3-82
Sequence expression 3-102
Set B-32
Shorthand for Collect B-21
Signal 2-81, 2-84
signal event 3-112
Signal receipt 3-132
Signal sending 3-132
SignalEvent 2-111
Signature 3-103
Simple Transitions 3-114
SimpleState 2-111
source state 3-116
Standard Elements 2-45, 2-56

State 2-111, 2-122
state
 composite 3-107
State Machines Package 2-107
Statechart Diagram 3-106
StateMachine 2-112, 2-116, 2-119
States 3-107
StateVertex 2-113
Step semantics 2-120
Stereotype 2-61, 2-63
Stereotypes 3-22, A-1, B-1
String 2-69, 3-8, B-28
Strings 3-7
StructuralFeature 2-28, 2-37
Structure 2-69
 stubbed transition 3-118
Style Guidelines 3-58
SubmachineState 2-113, 2-124
substate 3-109
Subsystem 2-142, 2-146, 2-148
Subtyping 2-129
swimlane 3-128
Swimlanes 3-128
synchronization bar 3-116
SynchronousKind 2-69

T

tagged value 3-20
Tagged Values A-7
TaggedValue 2-62, 2-64
Template 2-55
TerminateAction 2-81, 2-85
Time 2-69
time event 3-112
TimeEvent 2-114
TimeExpression 2-70
timing mark 3-89
timing mark (in state diagram) 3-115
Tool Sharing Options 5-3
Tools 1-7
Trace 2-52, 2-54
trace 3-74
Transformation for Association Classes 5-5
Transition 2-114, 2-117
transition 3-114
Transition execution sequence 2-126
Transition selection 2-120
transition time 3-115
Transition Times 3-89
transition to nested state 3-117
Transitions 2-125
Transitions to Nested States 3-117
Transitions vs. compound transitions 2-125
Type Conformance B-7
Type Vs. Implementation Class 3-38
Type-Instance Correspondence 3-14
Types B-6

U

UML - defined 1-1
UML and other modeling languages 1-8

- UML Extension for Business Modeling 4-8
- UML Extension for Objectory Process for Software Engineering 4-2
- UML features 1-9
- Undefined Values B-9
- Uninterpreted 2-70
- UninterpretedAction 2-81
- Usage 2-52, 2-54
- usage dependency 3-74
- Use Case 3-79
- Use Case Diagram 3-77
- Use Case Relationships 3-80
- Use Cases Package 2-98
- UseCase 2-100, 2-101, 2-103
- UseCaseInstance 2-100, 2-102
- uses (a use case) 3-80
- Using Pathnames for Packages and Properties B-14
- Utility 3-45

- V**
- ViewElement 2-52, 2-54, 2-55
- visibility 3-33, 3-57
- VisibilityKind 2-70

- W**
- Well-Formedness Rules 2-53, 2-62, 2-142

Index
