TIBCO Staffware Process Objects (SPO) COM Object Model

Table of Contents

1 Object Keys and Class IDs

2 Enterprise
- SWEnterprise
- SWEntUser
- SWLog
- SWNodeInfo

3 Node Statistics
- SWNodeInfoEx
- SWClientInfo
- SWActiveUser
- SWConfigInfo
- SWSALInfo
- SWQSessionInfo
- SWThreadInfo

4 Node
- SWNode
- SWAttribute
- SWExtWorkItem
- SWGroup
- SWListValidation
- SWOSUser
- SWRole
- SWTable
- SWTableField
- SWProcGroup

5 User
- SWUser
- SWAutoFwd

6 Work Queue
- SWWorkQ
- SWWorkItem
- SWCaseDataQParamDef
- SWCaseDataQParam
- SWFwdItem

7 Case 1
- SWCase
- SWEAIStep
- SWEventStep
- SWExtProcess
- SWSubProcStep
- SWDynamicSubProcStep
- SWOutstandingItem
- SWGraftStep
- SWTransControlStep

8 Case 2
- SWCase
- SWAuditStep
- SWField

9 Procedure
- SWProc
- SWAccessUserRef
- SWProcAudit

10 Step
- SWStep
- SWAccessUserRef
- SWAddressUserRef
- SWAction
- SWCommand
- SWConditional
- SWDeadline
- SWDeadlineValue
- SWMarking
- SWPermission
- SWPriority
- SWPublicField

11 Form
- SWForm
- SWFConditional
- SWFMarking
- SWFRow
- SWFont
- SWLabel

12 Admin
- SWAdmin
- SWAWorkQ
- SWParticipation
- SWRedirection

13 Prediction
- SWPredictedItem
- SWCasePredictQParam
- SWDuration
- SWDurationValue

14 Templates
- SWList
- SWLocList
- SWView
- SWXList
- SWSortField

15 XList Criteria
- SWCriteriaC
- SWCriteriaWI
- SWCriteriaP
- SWSortField

16 Stateless
- SWNode

17 Error Codes 1

18 Error Codes 2

19 Index

Object Keys

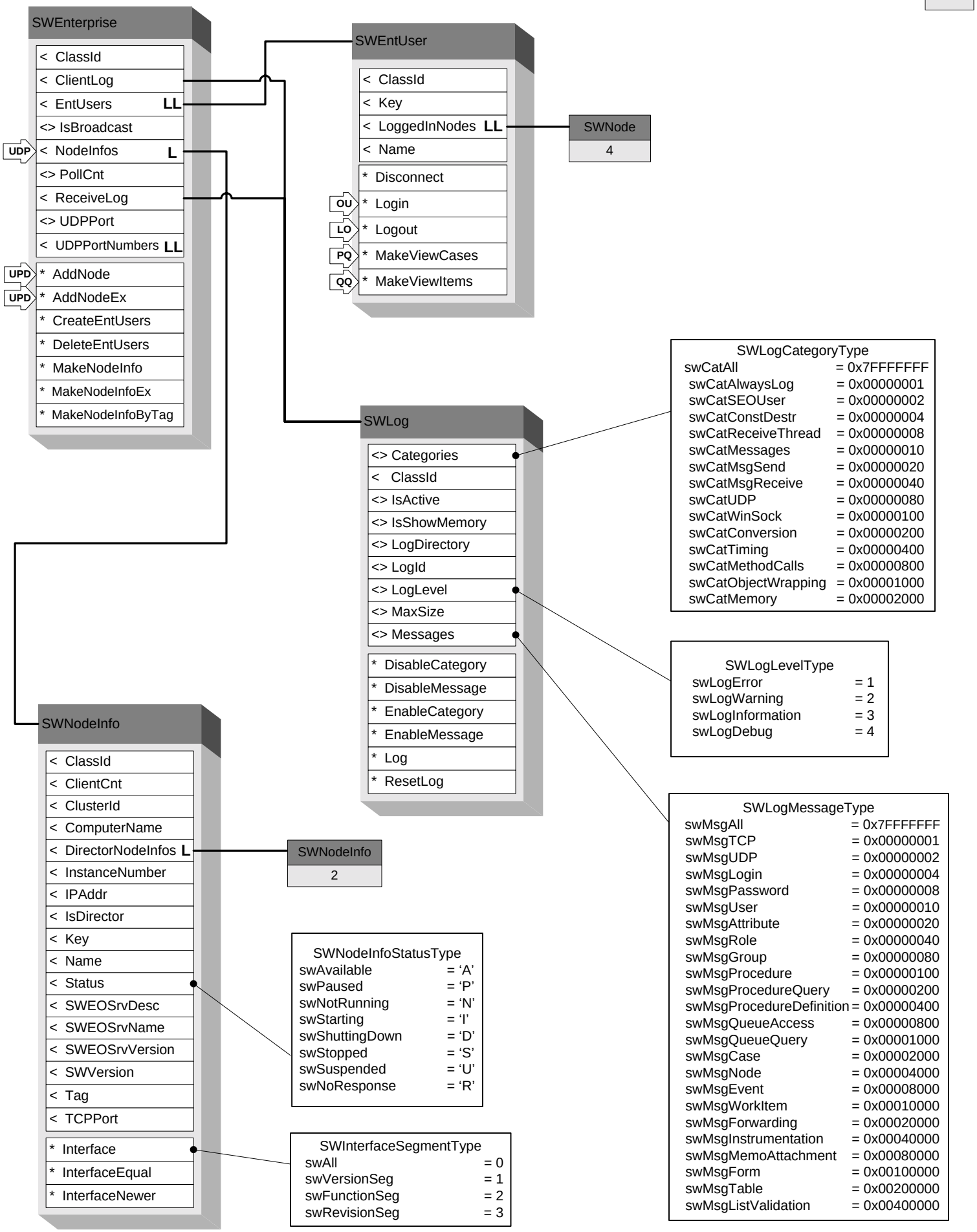
Class:	Key:
SWAction	StepName|Type
SWActiveUser	Name
SWAttribute	Name
SWAuditStep	Name|(ListIndex: 1 to n)
SWAutoFwd	HostingNode|ProcName|StepName
SWAWorkQ	Name@HostingNode
SWCase	ComputerName|ProcNode|CaseReference
SWCaseDataQParam	FieldName
SWCaseDataQParamDef	FieldName
SWCasePredictQParam	FieldName
SWClientInfo	Name
SWConditional	StepName|Condition
SWConfigInfo	Name
SWDeadlineValue	(Expressed in text: Minutes, Hours, Days, Weeks, Months, Years, Date, Time)
SWDurationValue	(Expressed in text: MicroSeconds, Seconds, Minutes, Hours, Days, Weeks, Months, Years)
SWDynamicSubProcStep	ProcName|StepName|CaseNumber
SWEAIStep	ProcName|StepName|CaseNumber
SWEntUser	Name
SWEventStep	ProcName|StepName|CaseNumber
SWExtProcess	ExtProcessName
SWFConditional	IfRow
SWField	Name
SWFMarking	Name|Row|Column
SWFRow	RowNumber
SWFwdItem	QName@HostingNode|QueueType (QueueType: T=Test or R=Release)
SWGraftStep	ProcName|StepName|CaseNumber
SWGroup	Name
SWLabel	Row|Column
SWListValidation	Name
SWMarking	Name
SWNode	ComputerName|NodeName|IsDirector|InstanceNumber
SWNodeInfo	ComputerName|NodeName|IsDirector|InstanceNumber
SWOSUser	Name
SWOutstandingItem	WorkQName|MailID
SWParticipation	"Participation"<Index + 1>
SWPredictedItem	ProcName|StepName|AddrToName
SWProc	HostingNode|Name|ProcMajorVer|ProcMinorVer
SWProcAudit	Integer [ListIndex: 1 to n]
SWProcGroup	HostingNode|Name
SWPublicField	Name
SWQSessionInfo	ClientName
SWRole	Name
SWSALInfo	UserName
SWSortField	FieldName
SWStep	Name
SWSubProcStep	StepName|SubCaseNumber
SWTable	Name
SWTableField	Name
SWThreadInfo	ID
SWTransControlStep	ProcName|StepName|CaseNumber
SWUser	Name
SWWorkItem	AddrToName|MailID
SWWorkQ	Name@HostingNode|Mode (Mode: T=Test or R=Release)

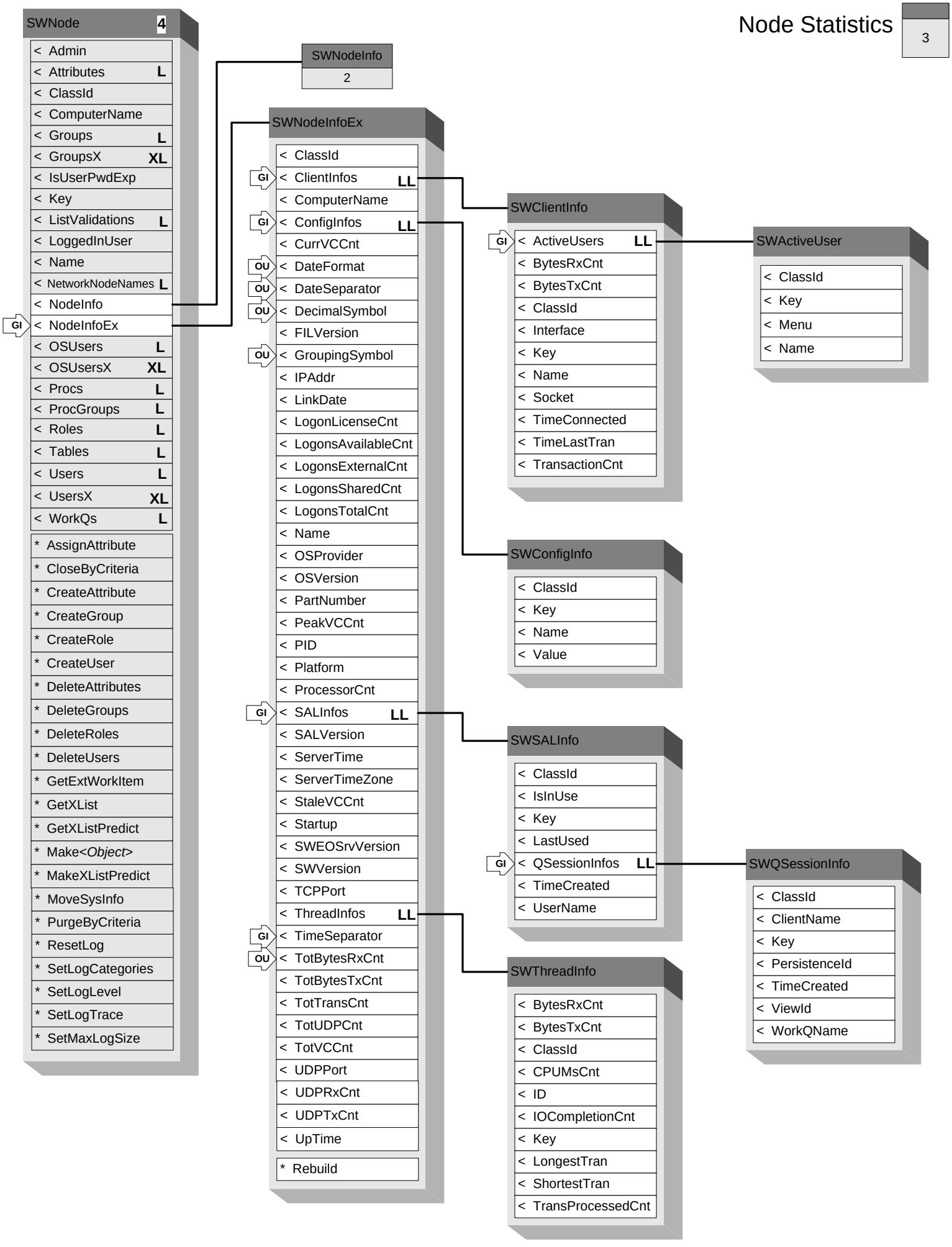
Class ID's

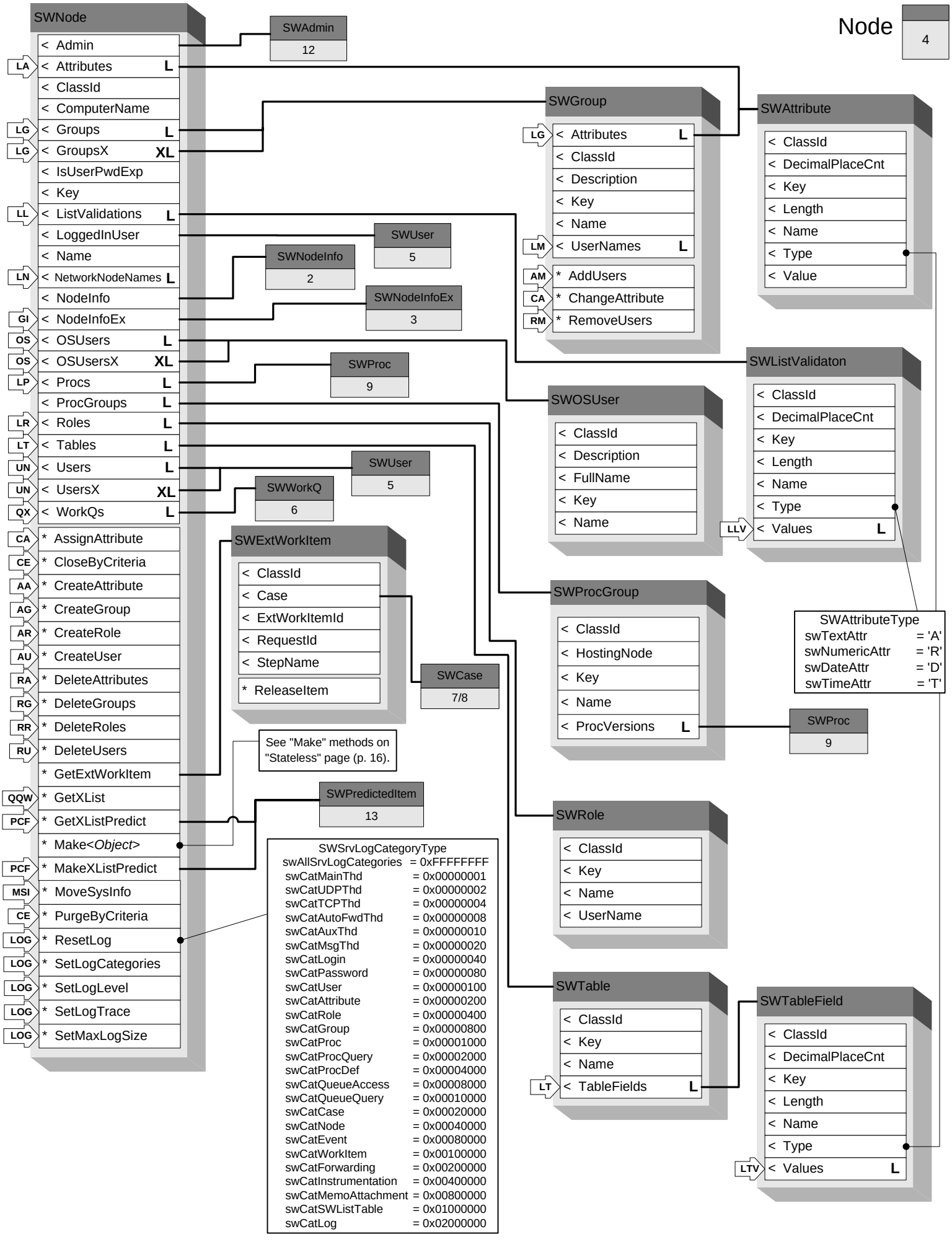
swNodeInfoID	= 1	swAddressUserRefID	= 40
swUserID	= 2	swLogID	= 41
swRoleID	= 3	swJavaExcptID	= 42
swProcID	= 4	swFMarkingID	= 43
swAttributeID	= 5	swFConditionalID	= 44
swGroupID	= 6	swFRowID	= 45
swWorkQID	= 7	swLabelID	= 46
swBstrID	= 8	swFontID	= 47
swAutoFwdID	= 9	swListValidationID	= 48
swFwdItemID	= 10	swTableID	= 49
swFieldID	= 11	swTableFieldID	= 50
swStepID	= 12	swDateValueID	= 51
swAuditStepID	= 13	swTimeValueID	= 52
swOSUserID	= 14	swNumericValueID	= 53
swNodeID	= 15	swFormID	= 54
swConfigInfoID	= 16	swXListID	= 55
swSALInfoID	= 17	swCriteriaWIID	= 56
swClientInfoID	= 18	swCriteriaCID	= 57
swThreadInfoID	= 19	swAdminID	= 59
swQSessionInfoID	= 20	swAWorkQID	= 60
swActiveUserID	= 21	swParticipationID	= 61
swSortFieldID	= 22	swRedirectionID	= 62
swMarkingID	= 23	swCaseDataQParamDefID	= 64
swEntUserID	= 24	swCaseDataQParamID	= 65
swActionID	= 25	swPublicFieldID	= 66
swConditionalID	= 26	swOutstandingItemID	= 67
swDeadlineValueID	= 27	swSubProcStepID	= 68
swCaseID	= 28	swPredictedItemID	= 69
swWorkItemID	= 29	swCasePredictQParamID	= 70
swEnterpriseID	= 30	swDurationID	= 71
swNodeInfoExID	= 31	swDurationValueID	= 72
swViewID	= 32	swCriteriaPID	= 73
swListID	= 33	swExtWorkItemID	= 74
swLocListID	= 34	swProcAuditID	= 76
swDeadlineID	= 35	swProcGroupID	= 77
swCommandID	= 36	swGraftStepID	= 78
swPermissionID	= 37	swEAIStepID	= 79
swPriorityID	= 38	swEventStepID	= 80
swAccessUserRefID	= 39	swDynamicSubProcStepID	= 81
		swExtProcessID	= 82
		swTransControlStepID	= 83

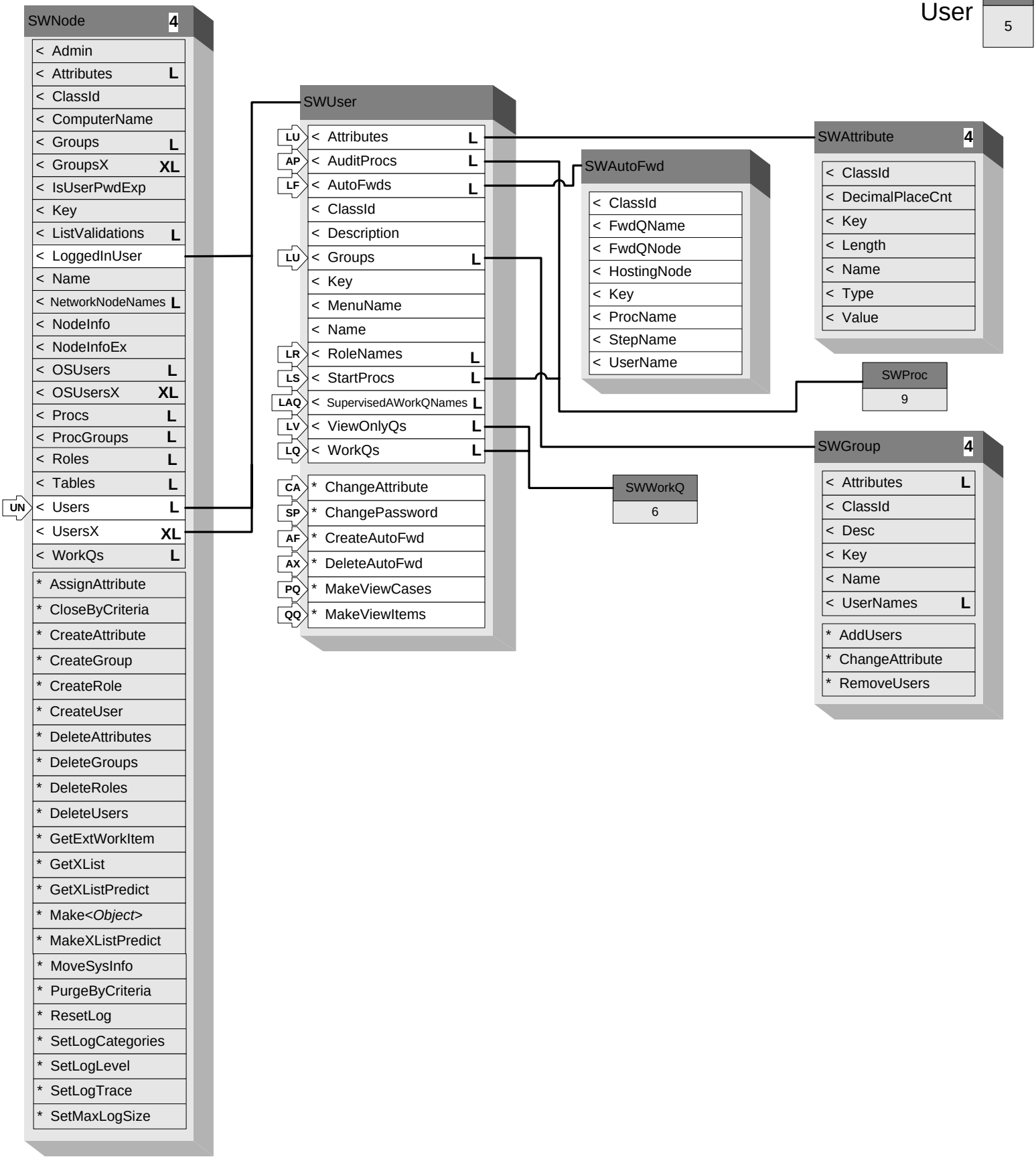
Legend

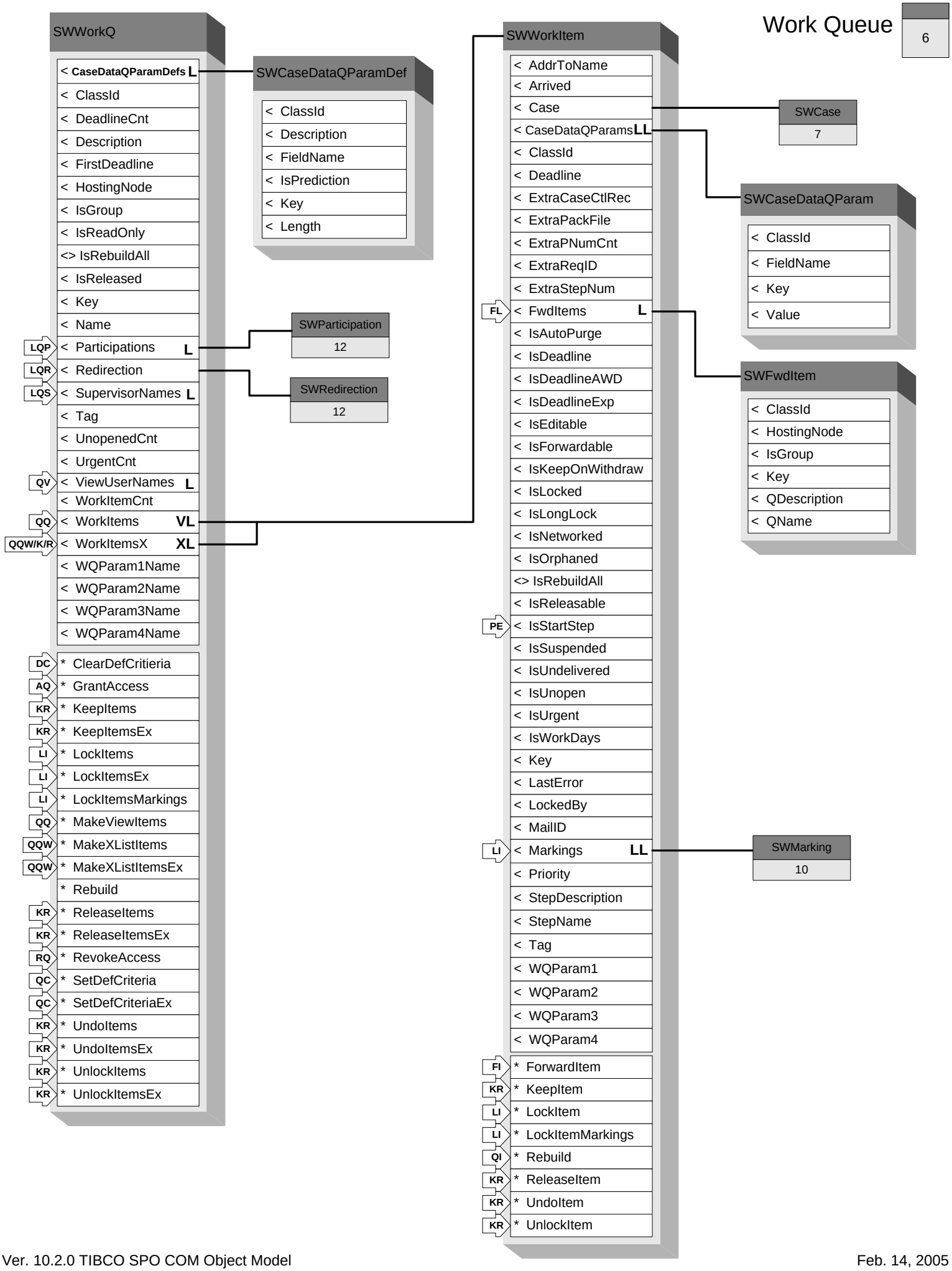
<	Read-only property	L	List	SWStep	Object Reference
<>	Read\write property	LL	Local List	8	Page No.
*	Method	VL	View List		
		XL	XList		

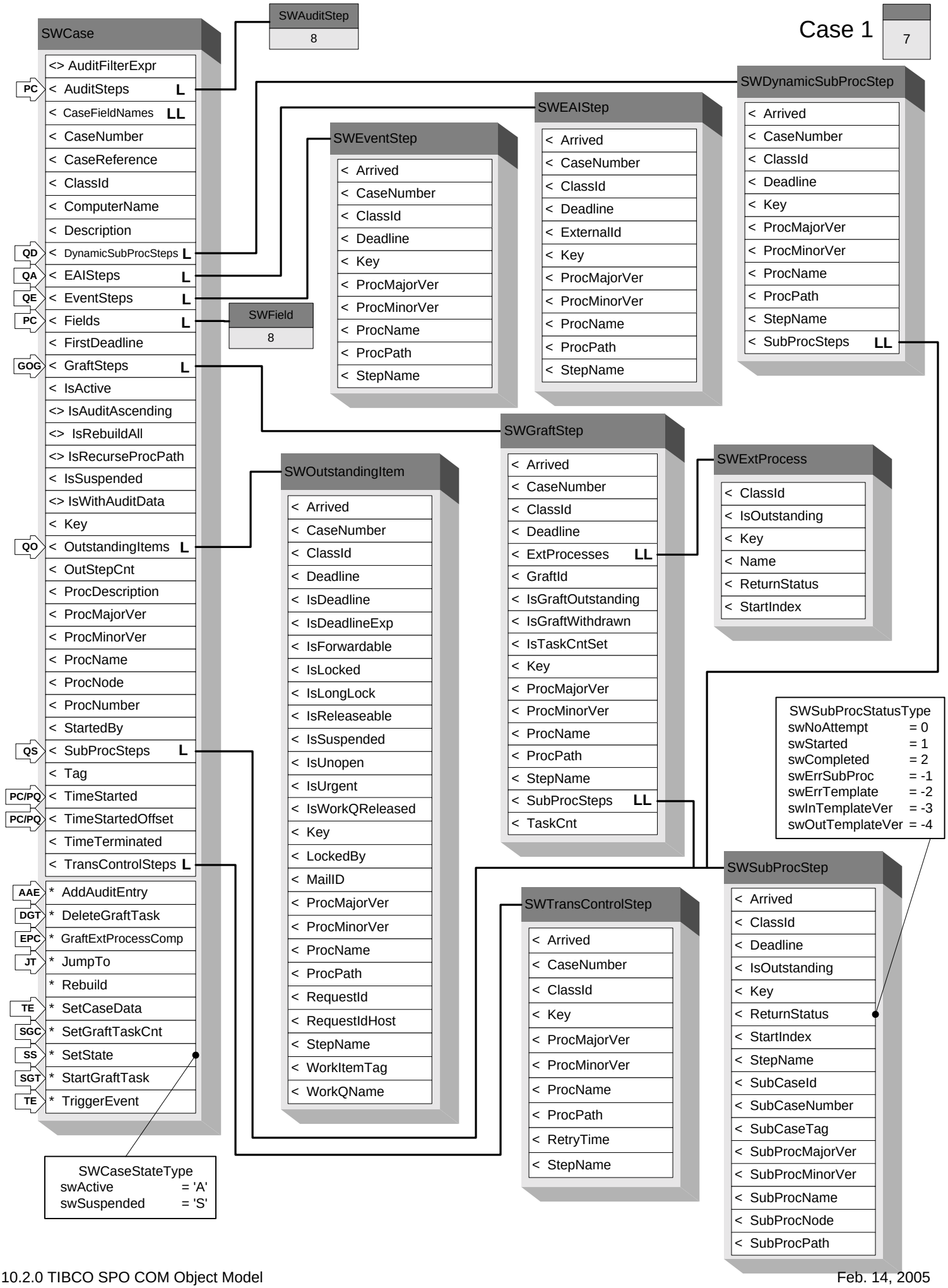

SWEnterprise
< ClassId
< ClientLog
< EntUsers LL
<> IsBroadcast
UDP < NodeInfos L
<> PollCnt
< ReceiveLog
<> UDPPort
< UDPPortNumbers LL
UPD * AddNode
UPD * AddNodeEx
* CreateEntUsers
* DeleteEntUsers
* MakeNodeInfo
* MakeNodeInfoEx
* MakeNodeInfoByTag
SWEntUser
< ClassId
< Key
< LoggedInNodes LL
< Name
* Disconnect
OU * Login
LO * Logout
PQ * MakeViewCases
QQ * MakeViewItems
SWNode
4
SWLog
<> Categories
< ClassId
<> IsActive
<> IsShowMemory
<> LogDirectory
<> LogId
<> LogLevel
<> MaxSize
<> Messages
* DisableCategory
* DisableMessage
* EnableCategory
* EnableMessage
* Log
* ResetLog
SWLogCategoryType
swCatAll = 0x7FFFFFFF
swCatAlwaysLog = 0x00000001
swCatSEOUser = 0x00000002
swCatConstDestr = 0x00000004
swCatReceiveThread = 0x00000008
swCatMessages = 0x00000010
swCatMsgSend = 0x00000020
swCatMsgReceive = 0x00000040
swCatUDP = 0x00000080
swCatWinSock = 0x00000100
swCatConversion = 0x00000200
swCatTiming = 0x00000400
swCatMethodCalls = 0x00000800
swCatObjectWrapping = 0x00001000
swCatMemory = 0x00002000
SWLogLevelType
swLogError = 1
swLogWarning = 2
swLogInformation = 3
swLogDebug = 4
SWLogMessageType
swMsgAll = 0x7FFFFFFF
swMsgTCP = 0x00000001
swMsgUDP = 0x00000002
swMsgLogin = 0x00000004
swMsgPassword = 0x00000008
swMsgUser = 0x00000010
swMsgAttribute = 0x00000020
swMsgRole = 0x00000040
swMsgGroup = 0x00000080
swMsgProcedure = 0x00000100
swMsgProcedureQuery = 0x00000200
swMsgProcedureDefinition = 0x00000400
swMsgQueueAccess = 0x00000800
swMsgQueueQuery = 0x00001000
swMsgCase = 0x00002000
swMsgNode = 0x00004000
swMsgEvent = 0x00008000
swMsgWorkItem = 0x00010000
swMsgForwarding = 0x00020000
swMsgInstrumentation = 0x00040000
swMsgMemoAttachment = 0x00080000
swMsgForm = 0x00100000
swMsgTable = 0x00200000
swMsgListValidation = 0x00400000
SWNodeInfo
< ClassId
< ClientCnt
< ClusterId
< ComputerName
< DirectorNodeInfos L
< InstanceNumber
< IPAddr
< IsDirector
< Key
< Name
< Status
< SWEOSrvDesc
< SWEOSrvName
< SWEOSrvVersion
< SWVersion
< Tag
< TCPPort
* Interface
* InterfaceEqual
* InterfaceNewer
SWNodeInfo
2
SWNodeInfoStatusType
swAvailable = 'A'
swPaused = 'P'
swNotRunning = 'N'
swStarting = 'I'
swShuttingDown = 'D'
swStopped = 'S'
swSuspended = 'U'
swNoResponse = 'R'
SWInterfaceSegmentType
swAll = 0
swVersionSeg = 1
swFunctionSeg = 2
swRevisionSeg = 3

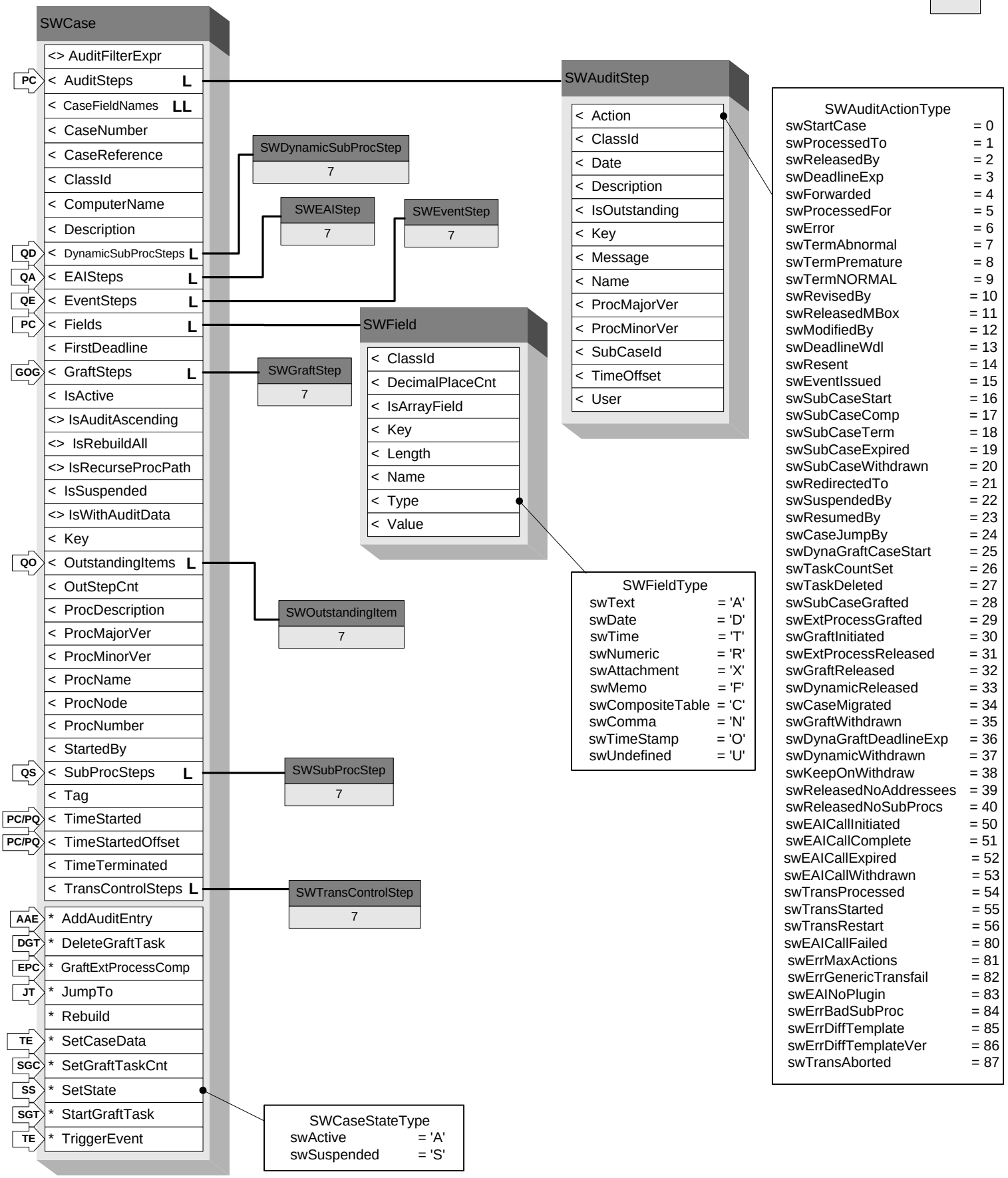

SWNode 4
< Admin
< Attributes L
< ClassId
< ComputerName
< Groups L
< GroupsX XL
< IsUserPwdExp
< Key
< ListValidations L
< LoggedInUser
< Name
< NetworkNodeNames L
< NodeInfo
GI < NodeInfoEx
< OSUsers L
< OSUsersX XL
< Procs L
< ProcGroups L
< Roles L
< Tables L
< Users L
< UsersX XL
< WorkQs L
* AssignAttribute
* CloseByCriteria
* CreateAttribute
* CreateGroup
* CreateRole
* CreateUser
* DeleteAttributes
* DeleteGroups
* DeleteRoles
* DeleteUsers
* GetExtWorkItem
* GetXList
* GetXListPredict
* Make<Object>
* MakeXListPredict
* MoveSysInfo
* PurgeByCriteria
* ResetLog
* SetLogCategories
* SetLogLevel
* SetLogTrace
* SetMaxLogSize
SWNodeInfo 2
SWNodeInfoEx
< ClassId
GI < ClientInfos LL
< ComputerName
GI < ConfigInfos LL
< CurrVCCnt
OU < DateFormat
OU < DateSeparator
OU < DecimalSymbol
< FILVersion
OU < GroupingSymbol
< IPAddr
< LinkDate
< LogonLicenseCnt
< LogonsAvailableCnt
< LogonsExternalCnt
< LogonsSharedCnt
< LogonsTotalCnt
< Name
< OSProvider
< OSVersion
< PartNumber
< PeakVCCnt
< PID
< Platform
< ProcessorCnt
GI < SALInfos LL
< SALVersion
< ServerTime
< ServerTimeZone
< StaleVCCnt
< Startup
< SWEOSrvVersion
< SWVersion
< TCPPort
< ThreadInfos LL
GI < TimeSeparator
OU < TotBytesRxCnt
< TotBytesTxCnt
< TotTransCnt
< TotUDPCnt
< TotVCCnt
< UDPPort
< UDPRxCnt
< UDPTxCnt
< UpTime
* Rebuild
SWClientInfo
GI < ActiveUsers LL
< BytesRxCnt
< BytesTxCnt
< ClassId
< Interface
< Key
< Name
< Socket
< TimeConnected
< TimeLastTran
< TransactionCnt
SWActiveUser
< ClassId
< Key
< Menu
< Name
SWConfigInfo
< ClassId
< Key
< Name
< Value
SWSALInfo
< ClassId
< IsInUse
< Key
< LastUsed
GI < QSessionInfos LL
< TimeCreated
< UserName
SWQSessionInfo
< ClassId
< ClientName
< Key
< PersistenceId
< TimeCreated
< ViewId
< WorkQName
SWThreadInfo
< BytesRxCnt
< BytesTxCnt
< ClassId
< CPUMsCnt
< ID
< IOCompletionCnt
< Key
< LongestTran
< ShortestTran
< TransProcessedCnt

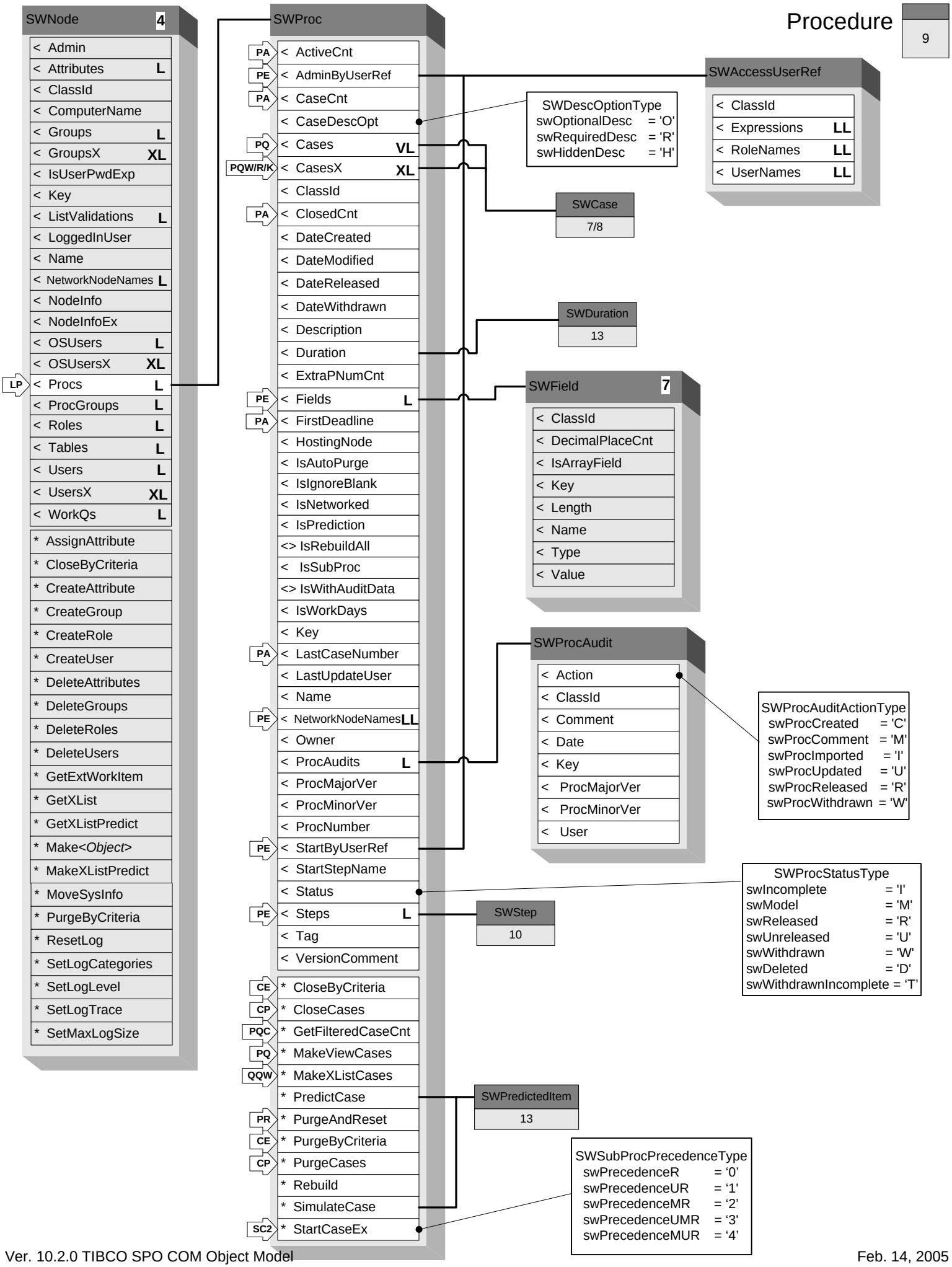

Node
4
SWNode
< Admin
LA < Attributes L
< ClassId
< ComputerName
LG < Groups L
LG < GroupsX XL
< IsUserPwdExp
< Key
LL < ListValidations L
< LoggedInUser
< Name
LN < NetworkNodeNames L
< NodeInfo
GI < NodeInfoEx
OS < OSUsers L
OS < OSUsersX XL
LP < Procs L
< ProcGroups L
LR < Roles L
LT < Tables L
UN < Users L
UN < UsersX XL
QX < WorkQs L
CA * AssignAttribute
CE * CloseByCriteria
AA * CreateAttribute
AG * CreateGroup
AR * CreateRole
AU * CreateUser
RA * DeleteAttributes
RG * DeleteGroups
RR * DeleteRoles
RU * DeleteUsers
* GetExtWorkItem
QQW * GetXList
PCF * GetXListPredict
* Make<Object>
PCF * MakeXListPredict
MSI * MoveSysInfo
CE * PurgeByCriteria
LOG * ResetLog
LOG * SetLogCategories
LOG * SetLogLevel
LOG * SetLogTrace
LOG * SetMaxLogSize
SWAdmin
12
SWUser
5
SWNodeInfo
2
SWNodeInfoEx
3
SWProc
9
SWUser
5
SWWorkQ
6
SWExtWorkItem
< ClassId
< Case
< ExtWorkItemId
< RequestId
< StepName
* ReleaseItem
SWCase
7/8
See "Make" methods on "Stateless" page (p. 16).
SWPredictedItem
13
SWSrvLogCategoryType
swAllSrvLogCategories = 0xFFFFFFFF
swCatMainThd = 0x00000001
swCatUDPThd = 0x00000002
swCatTCPThd = 0x00000004
swCatAutoFwdThd = 0x00000008
swCatAuxThd = 0x00000010
swCatMsgThd = 0x00000020
swCatLogin = 0x00000040
swCatPassword = 0x00000080
swCatUser = 0x00000100
swCatAttribute = 0x00000200
swCatRole = 0x00000400
swCatGroup = 0x00000800
swCatProc = 0x00001000
swCatProcQuery = 0x00002000
swCatProcDef = 0x00004000
swCatQueueAccess = 0x00008000
swCatQueueQuery = 0x00010000
swCatCase = 0x00020000
swCatNode = 0x00040000
swCatEvent = 0x00080000
swCatWorkItem = 0x00100000
swCatForwarding = 0x00200000
swCatInstrumentation = 0x00400000
swCatMemoAttachment = 0x00800000
swCatSWListTable = 0x01000000
swCatLog = 0x02000000
SWGroup
LG < Attributes L
< ClassId
< Description
< Key
< Name
LM < UserNames L
AM * AddUsers
CA * ChangeAttribute
RM * RemoveUsers
SWAttribute
< ClassId
< DecimalPlaceCnt
< Key
< Length
< Name
< Type
< Value
SWListValidaton
< ClassId
< DecimalPlaceCnt
< Key
< Length
< Name
< Type
LLV < Values L
SWOSUser
< ClassId
< Description
< FullName
< Key
< Name
SWProcGroup
< ClassId
< HostingNode
< Key
< Name
< ProcVersions L
SWProc
9
SWAttributeType
swTextAttr = 'A'
swNumericAttr = 'R'
swDateAttr = 'D'
swTimeAttr = 'T'
SWRole
< ClassId
< Key
< Name
< UserName
SWTable
< ClassId
< Key
< Name
LT < TableFields L
SWTableField
< ClassId
< DecimalPlaceCnt
< Key
< Length
< Name
< Type
LTV < Values L

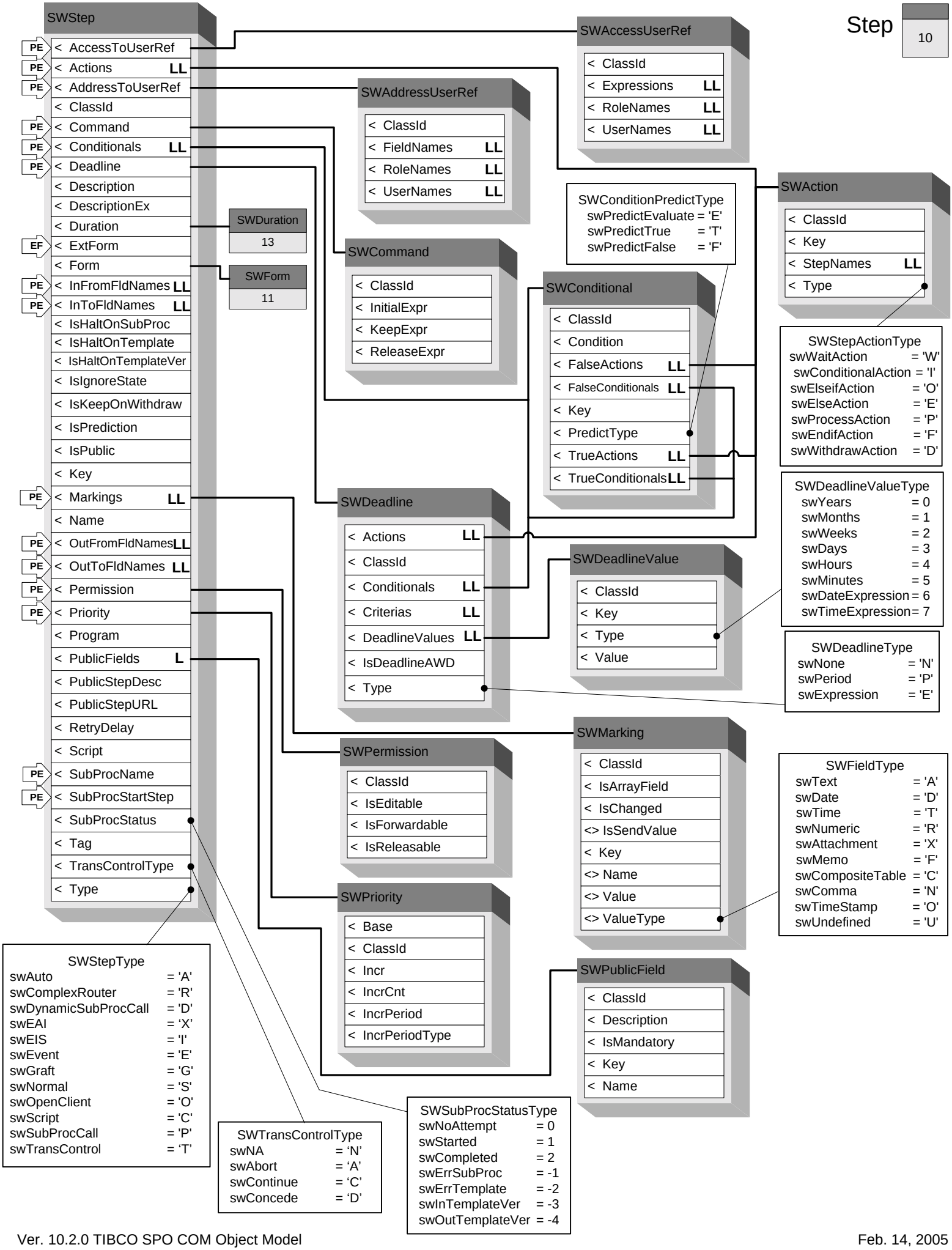

SWNode 4
< Admin
< Attributes L
< ClassId
< ComputerName
< Groups L
< GroupsX XL
< IsUserPwdExp
< Key
< ListValidations L
< LoggedInUser
< Name
< NetworkNodeNames L
< NodeInfo
< NodeInfoEx
< OSUsers L
< OSUsersX XL
< Procs L
< ProcGroups L
< Roles L
< Tables L
UN < Users L
< UsersX XL
< WorkQs L
* AssignAttribute
* CloseByCriteria
* CreateAttribute
* CreateGroup
* CreateRole
* CreateUser
* DeleteAttributes
* DeleteGroups
* DeleteRoles
* DeleteUsers
* GetExtWorkItem
* GetXList
* GetXListPredict
* Make<Object>
* MakeXListPredict
* MoveSysInfo
* PurgeByCriteria
* ResetLog
* SetLogCategories
* SetLogLevel
* SetLogTrace
* SetMaxLogSize
SWUser
LU < Attributes L
AP < AuditProcs L
LF < AutoFwds L
< ClassId
< Description
LU < Groups L
< Key
< MenuName
< Name
LR < RoleNames L
LS < StartProcs L
LAQ < SupervisedAWorkQNames L
LV < ViewOnlyQs L
LQ < WorkQs L
CA * ChangeAttribute
SP * ChangePassword
AF * CreateAutoFwd
AX * DeleteAutoFwd
PQ * MakeViewCases
QQ * MakeViewItems
SWAutoFwd
< ClassId
< FwdQName
< FwdQNode
< HostingNode
< Key
< ProcName
< StepName
< UserName
SWAttribute 4
< ClassId
< DecimalPlaceCnt
< Key
< Length
< Name
< Type
< Value
SWProc
9
SWWorkQ
6
SWGroup 4
< Attributes L
< ClassId
< Desc
< Key
< Name
< UserNames L
* AddUsers
* ChangeAttribute
* RemoveUsers

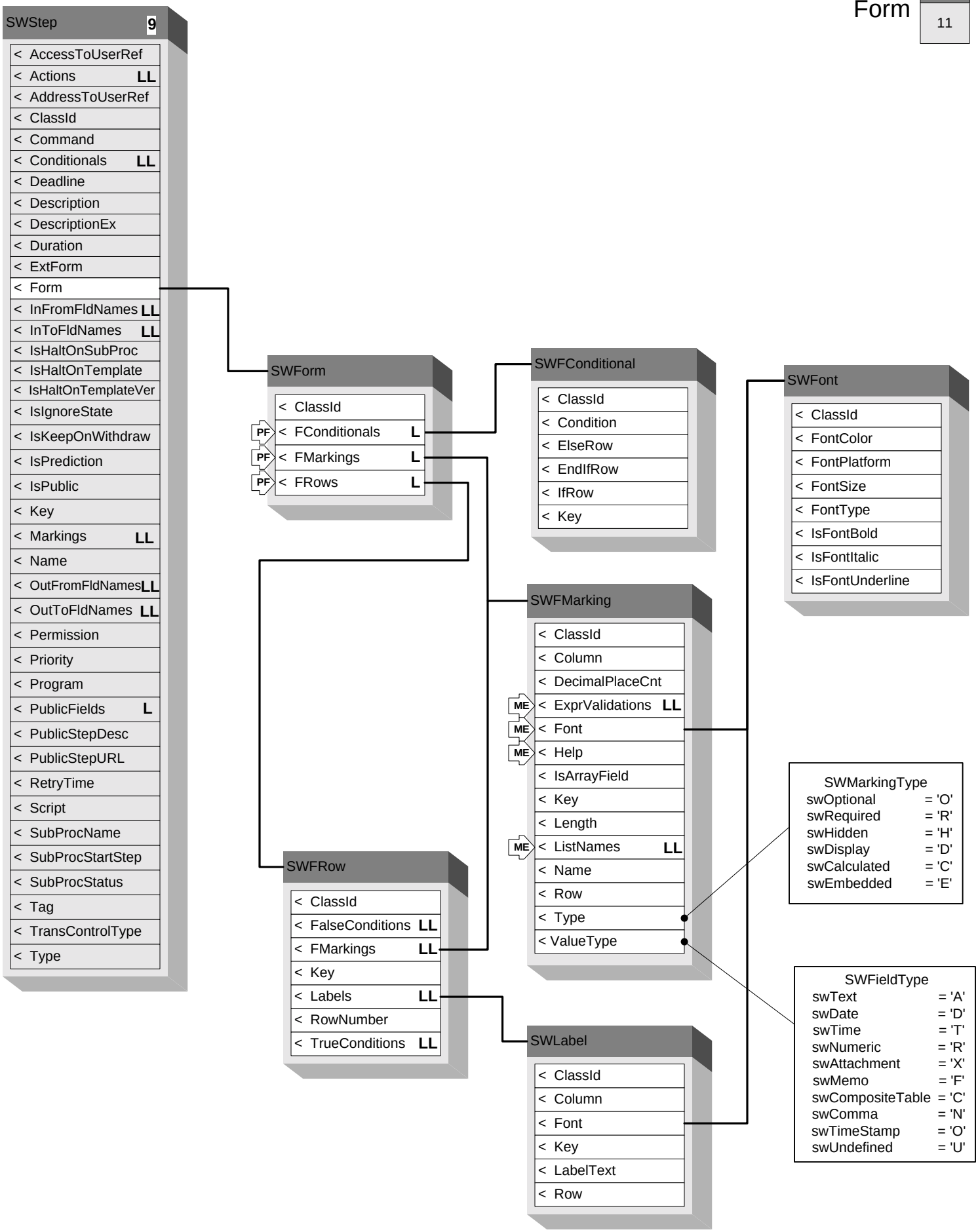

SWWorkQ
< CaseDataQParamDefs L
< ClassId
< DeadlineCnt
< Description
< FirstDeadline
< HostingNode
< IsGroup
< IsReadOnly
<> IsRebuildAll
< IsReleased
< Key
< Name
LQP < Participations L
LQR < Redirection
LQS < SupervisorNames L
< Tag
< UnopenedCnt
< UrgentCnt
QV < ViewUserNames L
< WorkItemCnt
QQ < WorkItems VL
QQW/K/R < WorkItemsX XL
< WQParam1Name
< WQParam2Name
< WQParam3Name
< WQParam4Name
DC * ClearDefCritieria
AQ * GrantAccess
KR * KeepItems
KR * KeepItemsEx
LI * LockItems
LI * LockItemsEx
LI * LockItemsMarkings
QQ * MakeViewItems
QQW * MakeXListItems
QQW * MakeXListItemsEx
* Rebuild
KR * ReleaseItems
KR * ReleaseItemsEx
RQ * RevokeAccess
QC * SetDefCriteria
QC * SetDefCriteriaEx
KR * UndoItems
KR * UndoItemsEx
KR * UnlockItems
KR * UnlockItemsEx
SWCaseDataQParamDef
< ClassId
< Description
< FieldName
< IsPrediction
< Key
< Length
SWParticipation
12
SWRedirection
12
SWWorkItem
< AddrToName
< Arrived
< Case
< CaseDataQParams LL
< ClassId
< Deadline
< ExtraCaseCtlRec
< ExtraPackFile
< ExtraPNumCnt
< ExtraReqID
< ExtraStepNum
FL < FwdItems L
< IsAutoPurge
< IsDeadline
< IsDeadlineAWD
< IsDeadlineExp
< IsEditable
< IsForwardable
< IsKeepOnWithdraw
< IsLocked
< IsLongLock
< IsNetworked
< IsOrphaned
<> IsRebuildAll
< IsReleasable
PE < IsStartStep
< IsSuspended
< IsUndelivered
< IsUnopen
< IsUrgent
< IsWorkDays
< Key
< LastError
< LockedBy
< MailID
LI < Markings LL
< Priority
< StepDescription
< StepName
< Tag
< WQParam1
< WQParam2
< WQParam3
< WQParam4
FI * ForwardItem
KR * KeepItem
LI * LockItem
LI * LockItemMarkings
QI * Rebuild
KR * ReleaseItem
KR * UndoItem
KR * UnlockItem
SWCase
7
SWCaseDataQParam
< ClassId
< FieldName
< Key
< Value
SWFwdItem
< ClassId
< HostingNode
< IsGroup
< Key
< QDescription
< QName
SWMarking
10

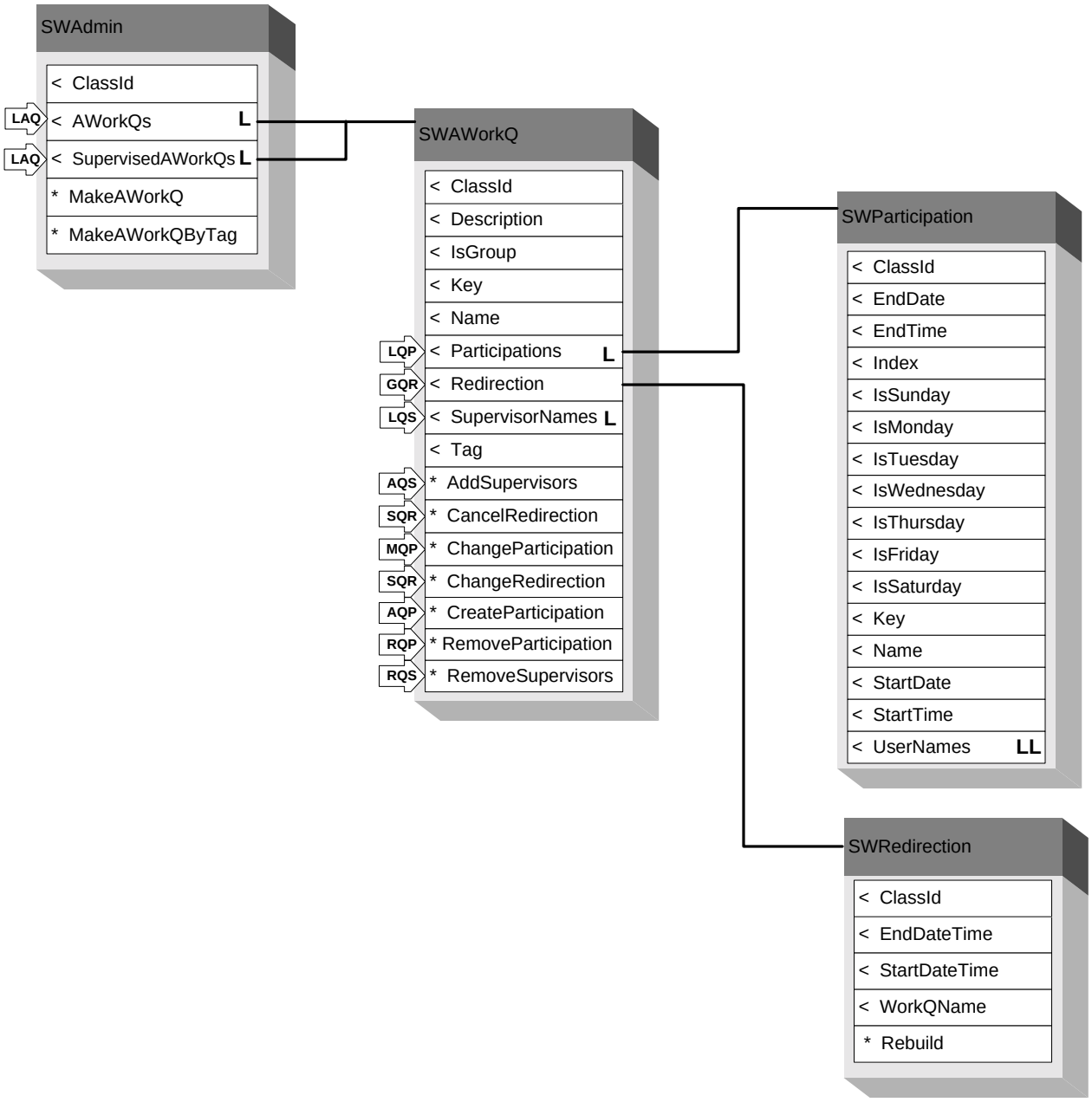

Case 1
7
SWCase
<> AuditFilterExpr
PC < AuditSteps L
< CaseFieldNames LL
< CaseNumber
< CaseReference
< ClassId
< ComputerName
< Description
QD < DynamicSubProcSteps L
QA < EAISteps L
QE < EventSteps L
PC < Fields L
< FirstDeadline
GOG < GraftSteps L
< IsActive
<> IsAuditAscending
<> IsRebuildAll
<> IsRecurseProcPath
< IsSuspended
<> IsWithAuditData
< Key
QO < OutstandingItems L
< OutStepCnt
< ProcDescription
< ProcMajorVer
< ProcMinorVer
< ProcName
< ProcNode
< ProcNumber
< StartedBy
QS < SubProcSteps L
< Tag
PC/PQ < TimeStarted
PC/PQ < TimeStartedOffset
< TimeTerminated
< TransControlSteps L
AAE * AddAuditEntry
DGT * DeleteGraftTask
EPC * GraftExtProcessComp
JT * JumpTo
* Rebuild
TE * SetCaseData
SGC * SetGraftTaskCnt
SS * SetState
SGT * StartGraftTask
TE * TriggerEvent
SWAuditStep
8
SWField
8
SWEventStep
< Arrived
< CaseNumber
< ClassId
< Deadline
< Key
< ProcMajorVer
< ProcMinorVer
< ProcName
< ProcPath
< StepName
SWEAIStep
< Arrived
< CaseNumber
< ClassId
< Deadline
< ExternalId
< Key
< ProcMajorVer
< ProcMinorVer
< ProcName
< ProcPath
< StepName
SWDynamicSubProcStep
< Arrived
< CaseNumber
< ClassId
< Deadline
< Key
< ProcMajorVer
< ProcMinorVer
< ProcName
< ProcPath
< StepName
< SubProcSteps LL
SWOutstandingItem
< Arrived
< CaseNumber
< ClassId
< Deadline
< IsDeadline
< IsDeadlineExp
< IsForwardable
< IsLocked
< IsLongLock
< IsReleaseable
< IsSuspended
< IsUnopen
< IsUrgent
< IsWorkQReleased
< Key
< LockedBy
< MailID
< ProcMajorVer
< ProcMinorVer
< ProcName
< ProcPath
< RequestId
< RequestIdHost
< StepName
< WorkItemTag
< WorkQName
SWGraftStep
< Arrived
< CaseNumber
< ClassId
< Deadline
< ExtProcesses LL
< GraftId
< IsGraftOutstanding
< IsGraftWithdrawn
< IsTaskCntSet
< Key
< ProcMajorVer
< ProcMinorVer
< ProcName
< ProcPath
< StepName
< SubProcSteps LL
< TaskCnt
SWExtProcess
< ClassId
< IsOutstanding
< Key
< Name
< ReturnStatus
< StartIndex
SWTransControlStep
< Arrived
< CaseNumber
< ClassId
< Key
< ProcMajorVer
< ProcMinorVer
< ProcName
< ProcPath
< RetryTime
< StepName
SWSubProcStep
< Arrived
< ClassId
< Deadline
< IsOutstanding
< Key
< ReturnStatus
< StartIndex
< StepName
< SubCaseId
< SubCaseNumber
< SubCaseTag
< SubProcMajorVer
< SubProcMinorVer
< SubProcName
< SubProcNode
< SubProcPath
SWSubProcStatusType
swNoAttempt = 0
swStarted = 1
swCompleted = 2
swErrSubProc = -1
swErrTemplate = -2
swInTemplateVer = -3
swOutTemplateVer = -4
SWCaseStateType
swActive = 'A'
swSuspended = 'S'

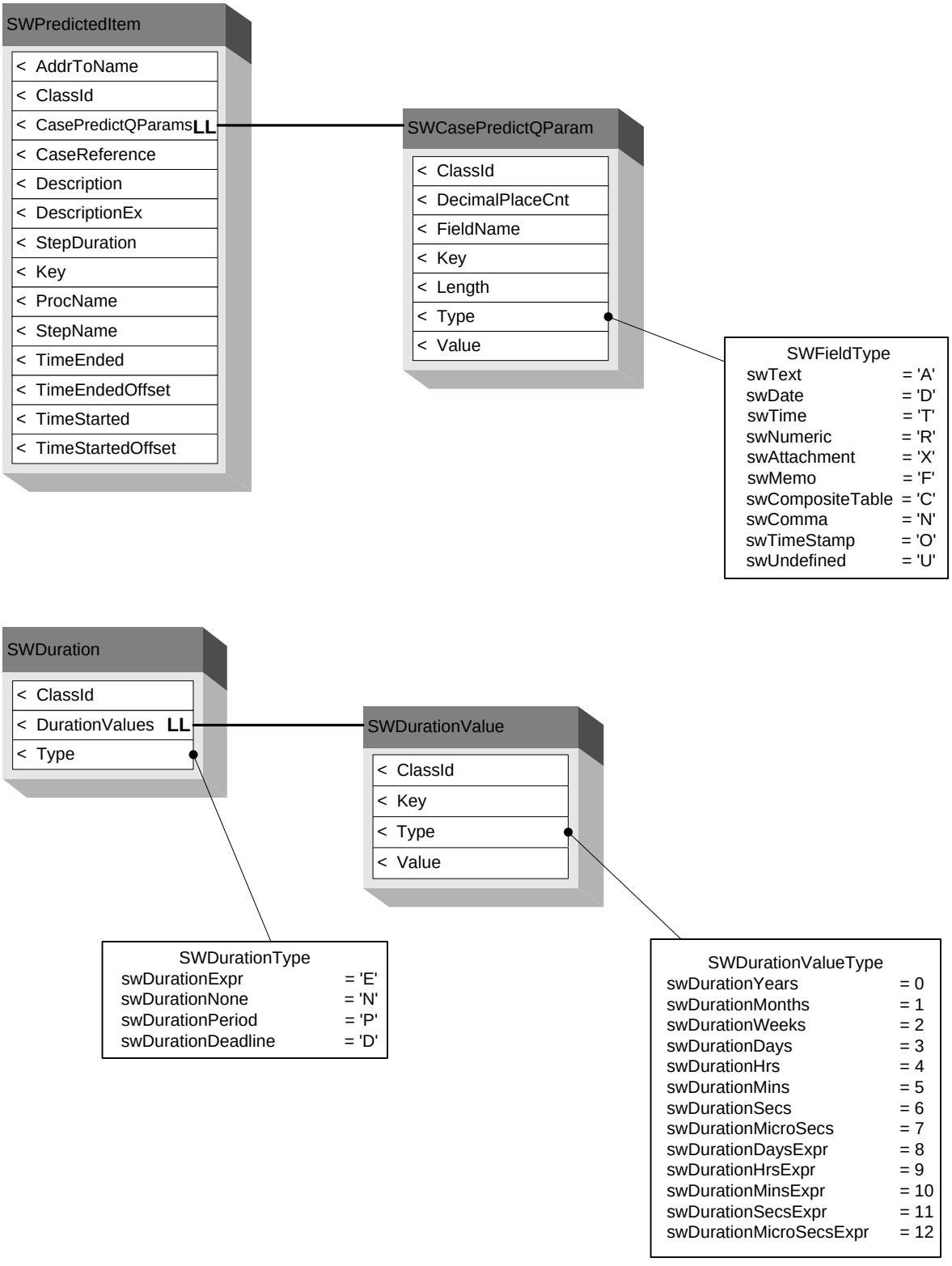

SWCase
<> AuditFilterExpr
PC < AuditSteps L
< CaseFieldNames LL
< CaseNumber
< CaseReference
< ClassId
< ComputerName
< Description
QD < DynamicSubProcSteps L
QA < EAISteps L
QE < EventSteps L
PC < Fields L
< FirstDeadline
GOG < GraftSteps L
< IsActive
<> IsAuditAscending
<> IsRebuildAll
<> IsRecurseProcPath
< IsSuspended
<> IsWithAuditData
< Key
QO < OutstandingItems L
< OutStepCnt
< ProcDescription
< ProcMajorVer
< ProcMinorVer
< ProcName
< ProcNode
< ProcNumber
< StartedBy
QS < SubProcSteps L
< Tag
PC/PQ < TimeStarted
PC/PQ < TimeStartedOffset
< TimeTerminated
< TransControlSteps L
AAE * AddAuditEntry
DGT * DeleteGraftTask
EPC * GraftExtProcessComp
JT * JumpTo
* Rebuild
TE * SetCaseData
SGC * SetGraftTaskCnt
SS * SetState
SGT * StartGraftTask
TE * TriggerEvent
SWDynamicSubProcStep
7
SWEAIStep
7
SWEventStep
7
SWGraftStep
7
SWOutstandingItem
7
SWSubProcStep
7
SWTransControlStep
7
SWAuditStep
< Action
< ClassId
< Date
< Description
< IsOutstanding
< Key
< Message
< Name
< ProcMajorVer
< ProcMinorVer
< SubCaseId
< TimeOffset
< User
SWField
< ClassId
< DecimalPlaceCnt
< IsArrayField
< Key
< Length
< Name
< Type
< Value
SWFieldType
swText = 'A'
swDate = 'D'
swTime = 'T'
swNumeric = 'R'
swAttachment = 'X'
swMemo = 'F'
swCompositeTable = 'C'
swComma = 'N'
swTimeStamp = 'O'
swUndefined = 'U'
SWCaseStateType
swActive = 'A'
swSuspended = 'S'
SWAuditActionType
swStartCase = 0
swProcessedTo = 1
swReleasedBy = 2
swDeadlineExp = 3
swForwarded = 4
swProcessedFor = 5
swError = 6
swTermAbnormal = 7
swTermPremature = 8
swTermNORMAL = 9
swRevisedBy = 10
swReleasedMBox = 11
swModifiedBy = 12
swDeadlineWdl = 13
swResent = 14
swEventIssued = 15
swSubCaseStart = 16
swSubCaseComp = 17
swSubCaseTerm = 18
swSubCaseExpired = 19
swSubCaseWithdrawn = 20
swRedirectedTo = 21
swSuspendedBy = 22
swResumedBy = 23
swCaseJumpBy = 24
swDynaGraftCaseStart = 25
swTaskCountSet = 26
swTaskDeleted = 27
swSubCaseGrafted = 28
swExtProcessGrafted = 29
swGraftInitiated = 30
swExtProcessReleased = 31
swGraftReleased = 32
swDynamicReleased = 33
swCaseMigrated = 34
swGraftWithdrawn = 35
swDynaGraftDeadlineExp = 36
swDynamicWithdrawn = 37
swKeepOnWithdraw = 38
swReleasedNoAddressees = 39
swReleasedNoSubProcs = 40
swEAICallInitiated = 50
swEAICallComplete = 51
swEAICallExpired = 52
swEAICallWithdrawn = 53
swTransProcessed = 54
swTransStarted = 55
swTransRestart = 56
swEAICallFailed = 80
swErrMaxActions = 81
swErrGenericTransfail = 82
swEAINoPlugin = 83
swErrBadSubProc = 84
swErrDiffTemplate = 85
swErrDiffTemplateVer = 86
swTransAborted = 87


Procedure
9
SWNode
4
< Admin
< Attributes L
< ClassId
< ComputerName
< Groups L
< GroupsX XL
< IsUserPwdExp
< Key
< ListValidations L
< LoggedInUser
< Name
< NetworkNodeNames L
< NodeInfo
< NodeInfoEx
< OSUsers L
< OSUsersX XL
LP < Procs L
< ProcGroups L
< Roles L
< Tables L
< Users L
< UsersX XL
< WorkQs L
* AssignAttribute
* CloseByCriteria
* CreateAttribute
* CreateGroup
* CreateRole
* CreateUser
* DeleteAttributes
* DeleteGroups
* DeleteRoles
* DeleteUsers
* GetExtWorkItem
* GetXList
* GetXListPredict
* Make<Object>
* MakeXListPredict
* MoveSysInfo
* PurgeByCriteria
* ResetLog
* SetLogCategories
* SetLogLevel
* SetLogTrace
* SetMaxLogSize
SWProc
PA < ActiveCnt
PE < AdminByUserRef
PA < CaseCnt
< CaseDescOpt
PQ < Cases VL
PQW/R/K < CasesX XL
< ClassId
PA < ClosedCnt
< DateCreated
< DateModified
< DateReleased
< DateWithdrawn
< Description
< Duration
< ExtraPNumCnt
PE < Fields L
PA < FirstDeadline
< HostingNode
< IsAutoPurge
< IsIgnoreBlank
< IsNetworked
< IsPrediction
<> IsRebuildAll
< IsSubProc
<> IsWithAuditData
< IsWorkDays
< Key
PA < LastCaseNumber
< LastUpdateUser
< Name
PE < NetworkNodeNames LL
< Owner
< ProcAudits L
< ProcMajorVer
< ProcMinorVer
< ProcNumber
PE < StartByUserRef
< StartStepName
< Status
PE < Steps L
< Tag
< VersionComment
CE * CloseByCriteria
CP * CloseCases
PQC * GetFilteredCaseCnt
PQ * MakeViewCases
QQW * MakeXListCases
* PredictCase
PR * PurgeAndReset
CE * PurgeByCriteria
CP * PurgeCases
* Rebuild
* SimulateCase
SC2 * StartCaseEx
SWAccessUserRef
< ClassId
< Expressions LL
< RoleNames LL
< UserNames LL
SWDescOptionType
swOptionalDesc = 'O'
swRequiredDesc = 'R'
swHiddenDesc = 'H'
SWCase
7/8
SWDuration
13
SWField
7
< ClassId
< DecimalPlaceCnt
< IsArrayField
< Key
< Length
< Name
< Type
< Value
SWProcAudit
< Action
< ClassId
< Comment
< Date
< Key
< ProcMajorVer
< ProcMinorVer
< User
SWProcAuditActionType
swProcCreated = 'C'
swProcComment = 'M'
swProcImported = 'I'
swProcUpdated = 'U'
swProcReleased = 'R'
swProcWithdrawn = 'W'
SWProcStatusType
swIncomplete = 'I'
swModel = 'M'
swReleased = 'R'
swUnreleased = 'U'
swWithdrawn = 'W'
swDeleted = 'D'
swWithdrawnIncomplete = 'T'
SWStep
10
SWPredictedItem
13
SWSubProcPrecedenceType
swPrecedenceR = '0'
swPrecedenceUR = '1'
swPrecedenceMR = '2'
swPrecedenceUMR = '3'
swPrecedenceMUR = '4'


SWStep
PE < AccessToUserRef
PE < Actions LL
PE < AddressToUserRef
< ClassId
PE < Command
PE < Conditionals LL
PE < Deadline
< Description
< DescriptionEx
< Duration
EF < ExtForm
< Form
PE < InFromFldNames LL
PE < InToFldNames LL
< IsHaltOnSubProc
< IsHaltOnTemplate
< IsHaltOnTemplateVer
< IsIgnoreState
< IsKeepOnWithdraw
< IsPrediction
< IsPublic
< Key
PE < Markings LL
< Name
PE < OutFromFldNames LL
PE < OutToFldNames LL
PE < Permission
PE < Priority
< Program
< PublicFields L
< PublicStepDesc
< PublicStepURL
< RetryDelay
< Script
PE < SubProcName
PE < SubProcStartStep
< SubProcStatus
< Tag
< TransControlType
< Type
SWAccessUserRef
< ClassId
< Expressions LL
< RoleNames LL
< UserNames LL
SWAddressUserRef
< ClassId
< FieldNames LL
< RoleNames LL
< UserNames LL
SWDuration
13
SWForm
11
SWCommand
< ClassId
< InitialExpr
< KeepExpr
< ReleaseExpr
SWConditionPredictType
swPredictEvaluate = 'E'
swPredictTrue = 'T'
swPredictFalse = 'F'
SWConditional
< ClassId
< Condition
< FalseActions LL
< FalseConditionals LL
< Key
< PredictType
< TrueActions LL
< TrueConditionals LL
SWAction
< ClassId
< Key
< StepNames LL
< Type
SWStepActionType
swWaitAction = 'W'
swConditionalAction = 'I'
swElseifAction = 'O'
swElseAction = 'E'
swProcessAction = 'P'
swEndifAction = 'F'
swWithdrawAction = 'D'
SWDeadline
< Actions LL
< ClassId
< Conditionals LL
< Criterias LL
< DeadlineValues LL
< IsDeadlineAWD
< Type
SWDeadlineValue
< ClassId
< Key
< Type
< Value
SWDeadlineValueType
swYears = 0
swMonths = 1
swWeeks = 2
swDays = 3
swHours = 4
swMinutes = 5
swDateExpression = 6
swTimeExpression = 7
SWDeadlineType
swNone = 'N'
swPeriod = 'P'
swExpression = 'E'
SWMarking
< ClassId
< IsArrayField
< IsChanged
<> IsSendValue
< Key
<> Name
<> Value
<> ValueType
SWFieldType
swText = 'A'
swDate = 'D'
swTime = 'T'
swNumeric = 'R'
swAttachment = 'X'
swMemo = 'F'
swCompositeTable = 'C'
swComma = 'N'
swTimeStamp = 'O'
swUndefined = 'U'
SWPermission
< ClassId
< IsEditable
< IsForwardable
< IsReleasable
SWPriority
< Base
< ClassId
< Incr
< IncrCnt
< IncrPeriod
< IncrPeriodType
SWPublicField
< ClassId
< Description
< IsMandatory
< Key
< Name
SWStepType
swAuto = 'A'
swComplexRouter = 'R'
swDynamicSubProcCall = 'D'
swEAI = 'X'
swEIS = 'I'
swEvent = 'E'
swGraft = 'G'
swNormal = 'S'
swOpenClient = 'O'
swScript = 'C'
swSubProcCall = 'P'
swTransControl = 'T'
SWTransControlType
swNA = 'N'
swAbort = 'A'
swContinue = 'C'
swConcede = 'D'
SWSubProcStatusType
swNoAttempt = 0
swStarted = 1
swCompleted = 2
swErrSubProc = -1
swErrTemplate = -2
swInTemplateVer = -3
swOutTemplateVer = -4


SWStep 9
< AccessToUserRef
< Actions LL
< AddressToUserRef
< ClassId
< Command
< Conditionals LL
< Deadline
< Description
< DescriptionEx
< Duration
< ExtForm
< Form
< InFromFldNames LL
< InToFldNames LL
< IsHaltOnSubProc
< IsHaltOnTemplate
< IsHaltOnTemplateVer
< IsIgnoreState
< IsKeepOnWithdraw
< IsPrediction
< IsPublic
< Key
< Markings LL
< Name
< OutFromFldNames LL
< OutToFldNames LL
< Permission
< Priority
< Program
< PublicFields L
< PublicStepDesc
< PublicStepURL
< RetryTime
< Script
< SubProcName
< SubProcStartStep
< SubProcStatus
< Tag
< TransControlType
< Type
SWForm
< ClassId
PF < FConditionals L
PF < FMarkings L
PF < FRows L
SWFConditional
< ClassId
< Condition
< ElseRow
< EndIfRow
< IfRow
< Key
SWFont
< ClassId
< FontColor
< FontPlatform
< FontSize
< FontType
< IsFontBold
< IsFontItalic
< IsFontUnderline
SWFMarking
< ClassId
< Column
< DecimalPlaceCnt
ME < ExprValidations LL
ME < Font
ME < Help
< IsArrayField
< Key
< Length
ME < ListNames LL
< Name
< Row
< Type
< ValueType
SWMarkingType
swOptional = 'O'
swRequired = 'R'
swHidden = 'H'
swDisplay = 'D'
swCalculated = 'C'
swEmbedded = 'E'
SWFieldType
swText = 'A'
swDate = 'D'
swTime = 'T'
swNumeric = 'R'
swAttachment = 'X'
swMemo = 'F'
swCompositeTable = 'C'
swComma = 'N'
swTimeStamp = 'O'
swUndefined = 'U'
SWFRow
< ClassId
< FalseConditions LL
< FMarkings LL
< Key
< Labels LL
< RowNumber
< TrueConditions LL
SWLabel
< ClassId
< Column
< Font
< Key
< LabelText
< Row


SWAdmin
< ClassId
LAQ < AWorkQs L
LAQ < SupervisedAWorkQs L
* MakeAWorkQ
* MakeAWorkQByTag
SWAWorkQ
< ClassId
< Description
< IsGroup
< Key
< Name
LQP < Participations L
GQR < Redirection
LQS < SupervisorNames L
< Tag
AQS * AddSupervisors
SQR * CancelRedirection
MQP * ChangeParticipation
SQR * ChangeRedirection
AQP * CreateParticipation
RQP * RemoveParticipation
RQS * RemoveSupervisors
SWParticipation
< ClassId
< EndDate
< EndTime
< Index
< IsSunday
< IsMonday
< IsTuesday
< IsWednesday
< IsThursday
< IsFriday
< IsSaturday
< Key
< Name
< StartDate
< StartTime
< UserNames LL
SWRedirection
< ClassId
< EndDateTime
< StartDateTime
< WorkQName
* Rebuild


SWPredictedItem
< AddrToName
< ClassId
< CasePredictQParams LL
< CaseReference
< Description
< DescriptionEx
< StepDuration
< Key
< ProcName
< StepName
< TimeEnded
< TimeEndedOffset
< TimeStarted
< TimeStartedOffset
SWCasePredictQParam
< ClassId
< DecimalPlaceCnt
< FieldName
< Key
< Length
< Type
< Value
SWFieldType
swText = 'A'
swDate = 'D'
swTime = 'T'
swNumeric = 'R'
swAttachment = 'X'
swMemo = 'F'
swCompositeTable = 'C'
swComma = 'N'
swTimeStamp = 'O'
swUndefined = 'U'
SWDuration
< ClassId
< DurationValues LL
< Type
SWDurationValue
< ClassId
< Key
< Type
< Value
SWDurationType
swDurationExpr = 'E'
swDurationNone = 'N'
swDurationPeriod = 'P'
swDurationDeadline = 'D'
SWDurationValueType
swDurationYears = 0
swDurationMonths = 1
swDurationWeeks = 2
swDurationDays = 3
swDurationHrs = 4
swDurationMins = 5
swDurationSecs = 6
swDurationMicroSecs = 7
swDurationDaysExpr = 8
swDurationHrsExpr = 9
swDurationMinsExpr = 10
swDurationSecsExpr = 11
swDurationMicroSecsExpr = 12

The following enumerations are returned in the Type property to identify the type of objects in the list, local list, or view.

Object ClassId:

Objects on SWLists

swNodeInfoID	= 1	swDateValueID	= 51
swUserID	= 2	swTimeValueID	= 52
swRoleID	= 3	swNumericValueID	= 53
swProcID	= 4	swAWorkQID	= 60
swAttributeID	= 5	swParticipationID	= 61
swGroupID	= 6	swCaseDataQParamDefID	= 64
swWorkQID	= 7	swPublicFieldID	= 66
swBstrID	= 8	swOutstandingItemID	= 67
swAutoFwdID	= 9	swSubProcStepID	= 68
swFwdItemID	= 10	swPredictedItemID	= 69
swFieldID	= 11	swProcAuditID	= 76
swStepID	= 12	swProcGroupID	= 77
swAuditStepID	= 13	swGraftStepID	= 78
swOSUserID	= 14	swEAIStepID	= 79
swFMarkingID	= 43	swEventStepID	= 80
swFConditionalID	= 44	swDynamicSubProcStepID	= 81
swFRowID	= 45	swTransControlStepID	= 83
swListValidationID	= 48		
swTableID	= 49		
swTableFieldID	= 50		

Objects on SWLocLists

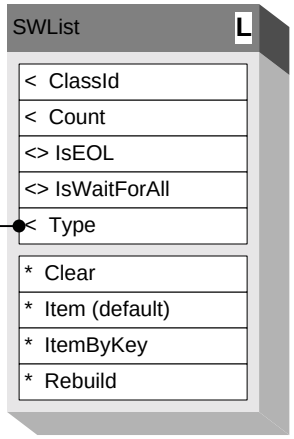
swBstrID	= 8	swActionID	= 25
swNodeID	=15	swConditionalID	= 26
swConfigInfoID	=16	swDeadlineValueID	= 27
swSALInfoID	= 17	swFMarkingID	= 43
swClientInfoID	= 18	swLabelID	= 46
swThreadInfoID	= 19	swCaseDataQParamID	= 65
swQSessionInfoID	= 20	swSubProcStepID	= 68
swActiveUserID	= 21	swCasePredictQParamID	= 70
swSortFieldID	= 22	swExtProcessID	= 82
swMarkingID	= 23		
swEntUserID	= 24		

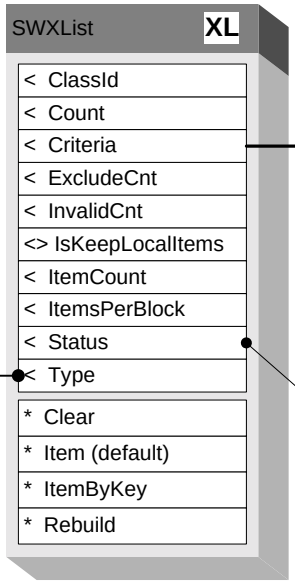
Objects on SWViews

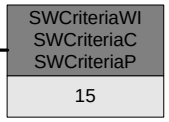
swCaseID	= 28
swWorkItemID	= 29

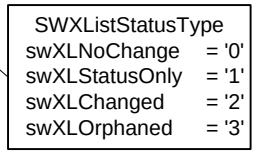
Objects on SWXLists

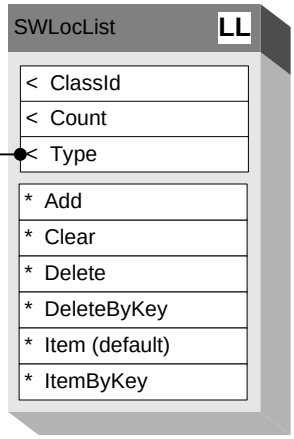
swUserID	= 2
swGroupID	= 6
swOSUserID	= 14
swCaseID	= 28
swWorkItemID	= 29
swPredictedItemID	= 69

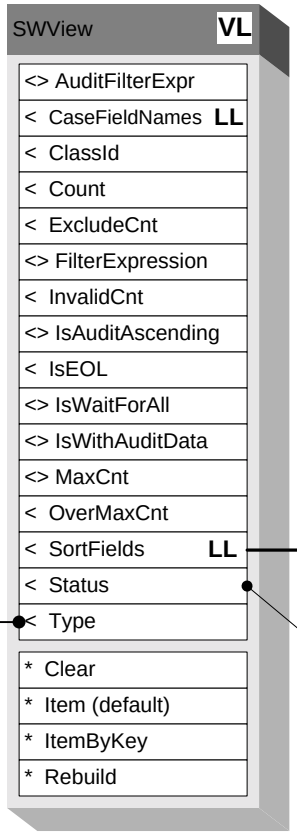


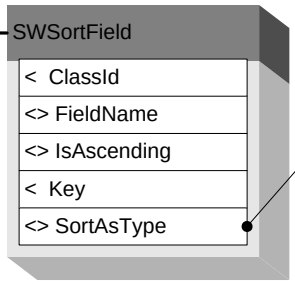


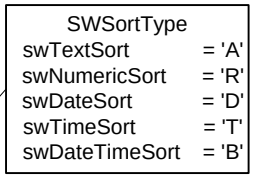


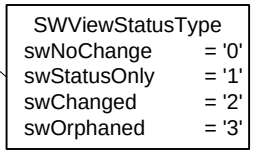


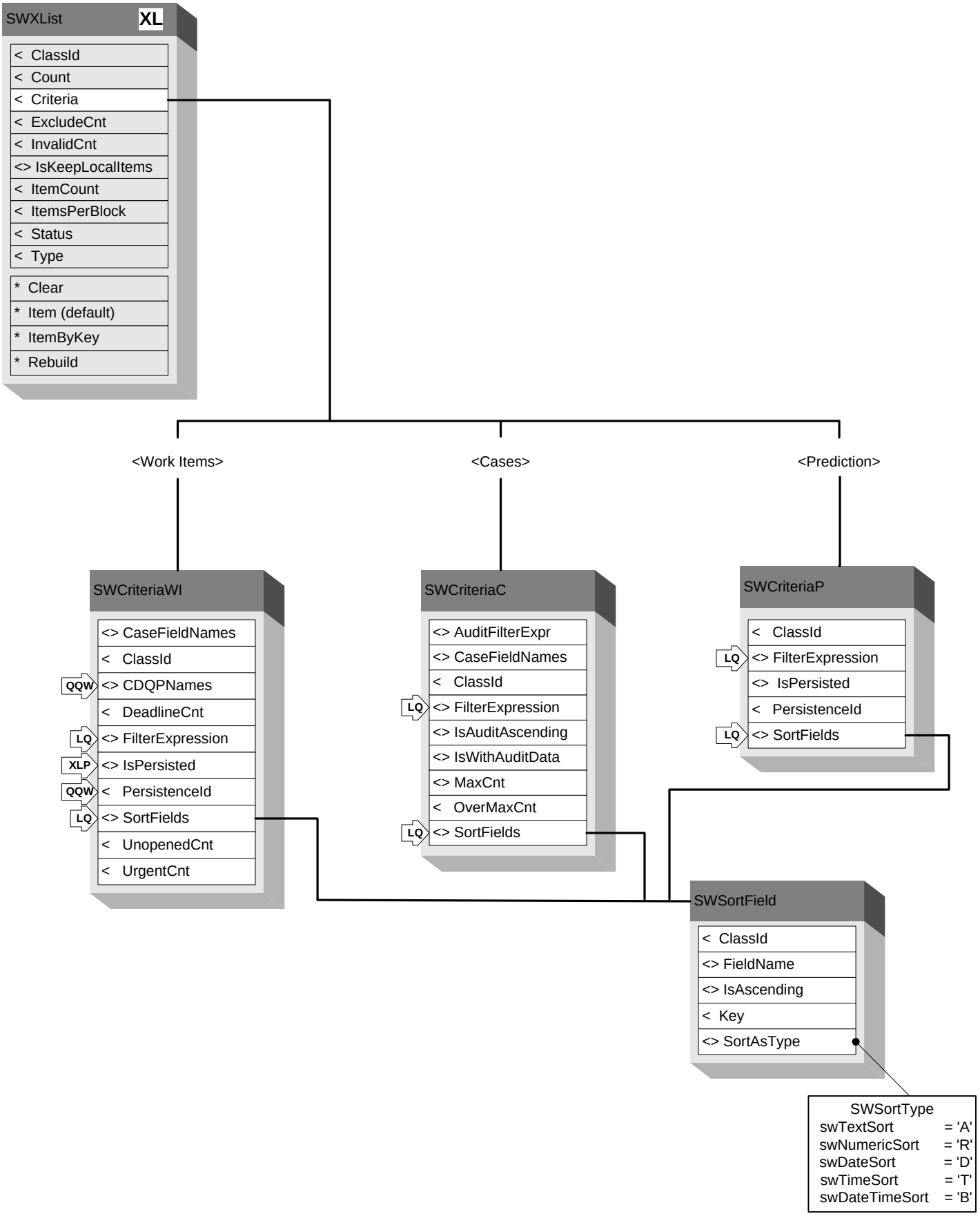


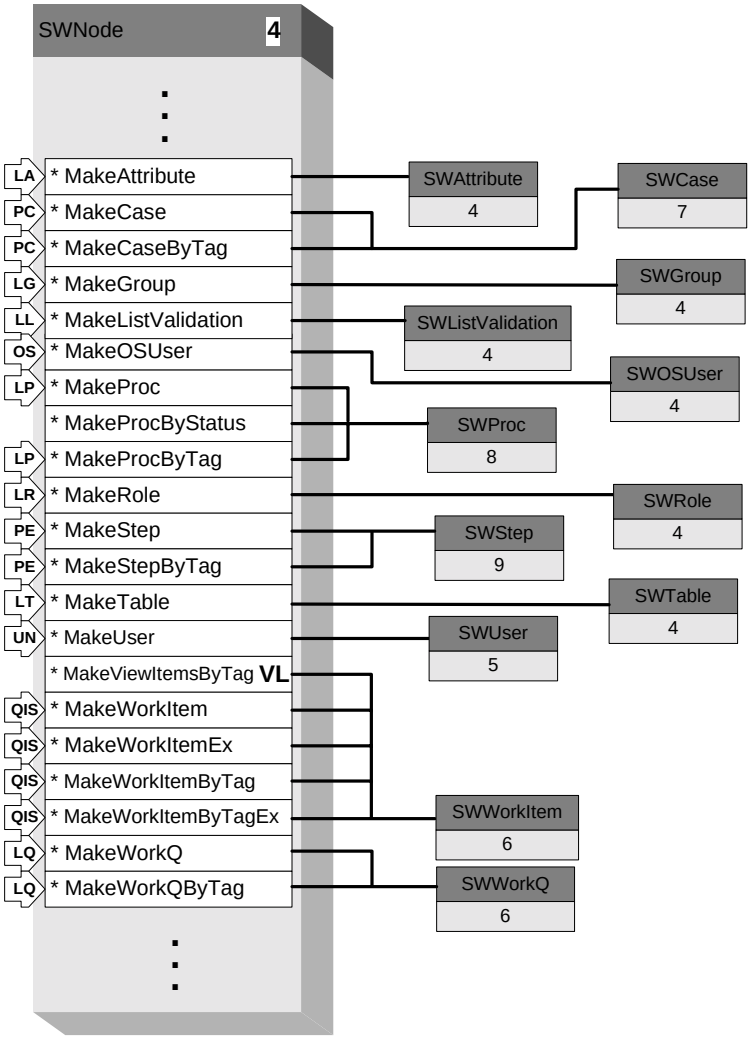









SWXList
XL
< ClassId
< Count
< Criteria
< ExcludeCnt
< InvalidCnt
<> IsKeepLocalItems
< ItemCount
< ItemsPerBlock
< Status
< Type
* Clear
* Item (default)
* ItemByKey
* Rebuild
<Work Items>
<Cases>
<Prediction>
SWCriteriaWI
<> CaseFieldNames
< ClassId
QQW <> CDQPNames
< DeadlineCnt
LQ <> FilterExpression
XLP <> IsPersisted
QQW < PersistenceId
LQ <> SortFields
< UnopenedCnt
< UrgentCnt
SWCriteriaC
<> AuditFilterExpr
<> CaseFieldNames
< ClassId
LQ <> FilterExpression
<> IsAuditAscending
<> IsWithAuditData
<> MaxCnt
< OverMaxCnt
LQ <> SortFields
SWCriteriaP
< ClassId
LQ <> FilterExpression
<> IsPersisted
< PersistenceId
LQ <> SortFields
SWSortField
< ClassId
<> FieldName
<> IsAscending
< Key
<> SortAsType
SWSortType
swTextSort = 'A'
swNumericSort = 'R'
swDateSort = 'D'
swTimeSort = 'T'
swDateTimeSort = 'B'



This illustration shows only the "Make" methods used in stateless processing. See page 4 for the entire SWNode object.

SPO Server Error Constants

Dec	Hex	Constant	Description
0	0x0000	swSUCCESS	Success
1	0x0001	swSAL_Err	General Staffwae error
2	0x0002	swSAL_SystemErr	SAL system error
3	0x0003	swSAL_HandleErr	Bad SAL/FIL session handle
4	0x0004	swSAL_ParamErr	Bad SAL/FIL function parameter.
5	0x0005	swSAL_FlockedErr	SAL internal locking error
6	0x0006	swSAL_RLockedErr	Error locking work queue item
7	0x0007	swSAL_TooBigErr	Internal SAL data too big or truncated
8	0x0008	swSAL_DuplicateErr	Duplicate data
9	0x0009	swSAL_DemoErr	More then 20 cases started with demo license.
10	0x000A	swSAL_MallocErr	SAL internal memory allocation failure
11	0x000B	swSAL_NotFoundErr	Item not found
12	0x000C	swSAL_SequenceErr	Internal sequencing error in SAL.
13	0x000D	swSAL_DateInitErr	Date/time format error
14	0x000E	swSAL_AppNotFoundErr	Application not found
15	0x000F	swSAL_InvalidPlatformErr	Staffware function is not supported on this platform
16	0x0010	swSAL_OSTypeErr	MACINTOSH : Invalid OSType
17	0x0011	swSAL_NoAppleEventsErr	Apple Events are not Supported on this platform
18	0x0012	swSAL_ShutdownErr	Work queue shutdown
19	0x0013	swSAL_FileIOErr	Internal SAL file I/O error
20	0x0014	swSAL_FilePermsErr	Internal SAL file permissions error
21	0x0015	swSAL_QDisabledErr	User no longer has administration access to queue
22	0x0016	swSAL_RPCErr	RPC Failure
23	0x0017	swSAL_RegistryErr	Data in registry incorrect
24	0x0018	swSAL_UnknownErr	Unknown SAL error
25	0x0019	swSAL_RedirectErr	Queue has been redirected and item is unavailable
26	0x001A	swSAL_NotSupportedErr	Function not supported
27	0x001B	swSAL_ExistsErr	Attempt to add data that already exists.
28	0x001C	swSAL_MBSetErr	Failed while initializing MBOX set session
29	0x001D	swSAL_FormatErr	Error in processing format of the package
30	0x001E	swSAL_MoreDataErr	Error in processing format of the package
31	0x001F	swSAL_TimedOutErr	Generic timeout error
32	0x0020	swSAL_SuspendedErr	Request denied - WorkItem is suspended
33	0x0021	swSAL_InvDataErr	Pack data has been updated while keeping/releasing item
34	0x0022	swSAL_InvValueErr	Invalid process attribute value
35	0x0023	swSAL_InvFiltertErr	Invalid filter
36	0x0024	swSAL_XactAbortErr	Global transaction has been aborted
37	0x0025	swSAL_ComplexErr	Filter is too complex
50	0x0032	swSAL_SecDisabledErr	Password checking is disabled
51	0x0033	swSAL_SecBadUserErr	Username is invalid
52	0x0034	swSAL_UserDisabledErr	User account is disabled or expired
53	0x0035	swSAL_SecExpiredErr	Password is expired
54	0x0036	swSAL_SecBadSeedErr	Not used
55	0x0037	swSAL_SecBadPswdErr	Unknown username or bad password
56	0x0038	swSAL_SecBadNewPswdErr	New password is invalid (too short or history conflict)
57	0x0039	swSAL_SecMaxChangesErr	Too many failed attempts to change password
58	0x003A	swSAL_SecPwdInvalidErr	Not used
59	0x003B	swSAL_SecBadWkstnErr	User not allowed to log on to this workstation.
60	0x003C	swSAL_SecBadHoursErr	User account logon time restriction violation
61	0x003D	swSAL_SecBadPermsErr	User account does not have proper privilege
62	0x003E	swSAL_SecLockOutErr	User account locked out due to max bad pwd change attempts
63	0x003F	swSAL_SecBadMatchErr	Not used
64	0x0040	swSAL_SecUnknownErr	Unknown security error
65	0x0041	swSAL_SecCantChngErr	Can't change user password (too recent, account restrictions, etc.)
66	0x0042	swMSB_NoneErr	No future workitems found or no deadline info found
67	0x0043	swMSB_SubProcErr	Sub-proc step type found.
68	0x0044	swMSB_Err	General error.
69	0x0045	swMSB_NoServerErr	Staffware server unavailable.
70	0x0046	swMSB_BadAuthErr	User has no access to start proc.
71	0x0047	swMSB_BadPwdErr	Username or password is incorrect.
72	0x0048	swMSB_InvalidStepErr	Invalid Step.
73	0x0049	swMSB_InvalidProcErr	Invalid Procedure.
74	0x004A	swMSB_InvalidFormErr	Invalid form.
75	0x004B	swMSB_NoProcErr	Couldn't find procedure.
76	0x004C	swMSB_NoFieldErr	Couldn't locate named field.
77	0x004D	swMSB_ExternalErr	Error from External elink call.
78	0x004E	swMSB_InvalidSessErr	Invalid session handle.
79	0x004F	swMSB_NoParamErr	Invalid parameter.
80	0x0050	swMSB_ProcNotOpenErr	Procedure is not open.
81	0x0051	swMSB_OutOfRangeErr	Request is out of range.
82	0x0052	swMSB_LockFailErr	Failed to lock session.
83	0x0053	swMSB_SessFailErr	Failed to allocate session.
84	0x0054	swMSB_WaitingErr	Waiting on other steps to execute.
85	0x0055	swMSB_MaxLoopsErr	Maximum prediction loop count exceeded.
86	0x0056	swMSB_LoggedInErr	Prediction service failed to login user.
87	0x0057	swMSB_NoTextErr	Undefined prediction error.
88	0x0058	swMSB_OverflowErr	The text string was longer than the passed in buffer size.
90	0x005A	swMSB_EOLErr	Beyond list or invalid index.
92	0x005C	swMSB_QErr	Invalid query string passed to find future workitems.
93	0x005D	swMSB_SortErr	Invalid sort parameter.
94	0x005E	swMSB_SubProcDepthErr	Sub procedure depth exceeded.
95	0x005F	swMSB_NoSALErr	No SAL session handle.
96	0x0060	swMSB_NoCaseRefErr	No case reference passed for a live case.
97	0x0061	swMSB_NoStepErr	Outstanding step passed in isn't in procedure.
98	0x0062	swMSB_StepNotFoundErr	Cannot find step in procedure in cc_exec_proc.
99	0x0063	swMSB_NotMainErr	Sub-procedure name invalid for simulate case.
100	0x0064	swUserNameErr	Invalid username.
101	0x0065	swDirErr	No/invalid SWDIR install directory
102	0x0066	swQInitErr	Error establishing queue session
103	0x0067	swQRefreshErr	Error performing queues update
104	0x0068	swNodeNameErr	Node name invalid or not found
105	0x0069	swProcNameErr	Procedure name invalid or not found
106	0x006A	swProcPathErr	Unable to create procedure definition path.
107	0x006B	swFileOpenErr	File open failed
108	0x006C	swFileCloseErr	File close failed
109	0x006D	swFldTypeErr	Invalid data for field type
110	0x006E	swNoFieldErr	Field name not found
111	0x006F	swCaseReqdErr	Case description required.
112	0x0070	swSyntaxErr	Error in expression syntax
113	0x0071	swQueueNameErr	Queue name not found
114	0x0072	swMemRealLocErr	Error in reallocating system memory
115	0x0073	swNoUserErr	Username not found.
116	0x0074	swUserExistsErr	Username already exists
117	0x0075	swNoAttrErr	Attribute not found
118	0x0076	swAttrExistsErr	Attribute already exists
119	0x0077	swInvAttrTypeErr	Invalid attribute type specified
120	0x0078	swGrpExistsErr	Group already exists
121	0x0079	swNoGrpErr	Group not found
122	0x007A	swNoEventErr	Event not found in procedure
123	0x007B	swNoCaseErr	Case number not found
124	0x007C	swDateConvErr	Error in SAL date conversion
125	0x007D	swTimeConvErr	Error in SAL time conversion
126	0x007E	swActionErr	Invalid action code (keep/release/undo/ close/purge)
127	0x007F	swMarkInfoErr	Error in sal_form_markinfo call
128	0x0080	swMarkCountErr	Error in sal_form_markcount call
129	0x0081	swNoMarkErr	Fieldname not found as a form marking.
130	0x0082	swPutDataErr	Error in sal_frm_putdata call.
131	0x0083	swFrmKeepErr	Error keeping form data
132	0x0084	swFrmReleaseErr	Error releasing form data
133	0x0085	swMandMarkErr	Mandatory marking not specified
134	0x0086	swBadOriginErr	Marking has incorrect origin
135	0x0087	swProcNumErr	Error in proc_num call
136	0x0088	swNoProcErr	Procedure name not found
137	0x0089	swAuthenFailErr	Authentication request failed
138	0x008A	swNotAuthErr	User not authorized to perform request
139	0x008B	swNoRoleErr	Role not found
140	0x008C	swStartCaseErr	Error starting case
141	0x008D	swBadValueErr	Bad value specified
142	0x008E	swEntOjbEOFErr	No more session handles
143	0x008F	swFlagInitErr	Error in flag_init lock.
144	0x0090	swNoDelimeterErr	No delimiter in input buffer
145	0x0091	swDBSErr	Error converting DBS name.
146	0x0092	swBuffFluchErr	Error writing data to client
147	0x0093	swTriggerPrivErr	User does not have event trigger privilege
148	0x0094	swBadOldPassErr	Bad old password
149	0x0095	swBadNewPassErr	Bad new password
150	0x0096	swCantChngPassErr	Can't change password
151	0x0097	swSecUnkErr	Unknown security error
152	0x0098	swBadISTestErr	Bad queue is test (released/unreleased flag)
153	0x0099	swCriteriaSaveErr	Error persisting queue access criteria
154	0x009A	swCriteriaLoadErr	Error loading queue access criteria
155	0x009B	swNullValueErr	Parameter was empty
156	0x009C	swRegBadDFAErr	Bad regular expression DFA
157	0x009D	swLicenseErr	Cannot log user in - exceeds license
158	0x009E	swAcquireErr	Error acquiring a user's mutex and SAL session
159	0x009F	swOpenSemErr	Error opening semaphore
160	0x00A0	swSemWaitErr	Error waiting for semaphore
161	0x00A1	swSemTimeOutErr	Timed-out waiting for semaphore
162	0x00A2	swSemReleaseErr	Error releasing semaphore

SPO Server Error Constants (Cont.)

Dec	Hex	Constant	Description
163	0x00A3	swSemCloseErr	Error closing semaphore
164	0x00A4	swAuditFlagErr	Invalid audit flag
165	0x00A5	swDBRegErr	Error getting clsid for SWEntObjDB
166	0x00A6	swDBCocreateErr	Error creating instance of SWEntObjDB
167	0x00A7	swOpenDBErr	Error opening autofwd/qview database
168	0x00A8	swNotAblesErr	No tables in autofwd/qview database
169	0x00A9	swCreateDSNErr	Error creating data source name
170	0x00AA	swAddRecordErr	Error adding record to autofwd/qview database
171	0x00AB	swDupRecordErr	Duplicate record in autofwd/qview database
172	0x00AC	swUPDRecordErr	Error updating record in autofwd/qview database
173	0x00AD	swNORecordErr	Record not found in autofwd/qview db
174	0x00AE	swListRecordErr	Error listing records in autofwd/qview db
175	0x00AF	swUnknDBErr	Unknown exception from SWEntObjDB.
176	0x00B0	swNoQueueErr	Queue not found
177	0x00B1	swNoMemberErr	No member in group queue
178	0x00B2	swNoChangeErr	Queue has not changed
179	0x00B3	swNoItemErr	Queue item not found
180	0x00B4	swDemoExceededErr	Attempted to open > 20 cases on demo system
181	0x00B5	swSALGetDataErr	Error getting SAL form data
182	0x00B6	swFrmTermErr	Error in newsal_frm_term
183	0x00B7	swNotLockedErr	Work item is not locked by user
184	0x00B8	swCSPrivErr	User does not have privilege to start case.
185	0x00B9	swNotFwdableErr	Item is not forwardable
186	0x00BA	swUsrFwdPrivErr	User does not have forward privilege for this work item
187	0x00BB	swPrevLockedErr	Work item already locked by someone else.
188	0x00BC	swTCPMaxClientErr	Connection refused - TCPMaxClients exceeded
189	0x00BD	swLIDaemonErr	Error communicating with Staffware login daemon.
190	0x00BE	swQueueInfoErr	Error in sal_queues_getqueue_info function.
191	0x00BF	swStatusOnlyErr	Internal error for status only
192	0x00C0	swMultiAuthenErr	User already logged in on another client
193	0x00C1	swQOpenErr	Error in salq_list_open when accessing a work queue
194	0x00C2	swSALExceptErr	SAL/FIL threw an exception; see SPO server log file
195	0x00C3	swNot_SupportedErr	Message code or option not supported in this version of the server
196	0x00C4	swListIndexErr	Internal list indexing error
197	0x00C5	swTruncatedErr	Value was truncated
198	0x00C6	swIndiExceptErr	IndiForm threw an exception
199	0x00C7	swNoSWListErr	Staffware list not found.
200	0x00C8	swNoSWTableErr	Staffware tables not found.
201	0x00C9	swNo_PersistedIdErr	Unable to find work queue session for given persistence ID.
202	0x00CA	swStepNameNotFoundErr	Step name not found.
203	0x00CB	swQPartSessionErr	Unable to find work queue participation session.
204	0x00CC	swNotSupervisorOfQErr	User is not a Queue Supervisor of this queue.
205	0x00CD	swNoPartRecordErr	This Participation Record has been modified or removed by another Supervisor.
206	0x00CE	swExcdMaxSupvsrLstErr	The Supervisor List you have specified exceeds 255 characters.
207	0x00CF	swStartEndTimePairErr	A StartTime and EndTime must be specified.
208	0x00D0	swNoCDQPDefErr	Unable to obtain Case Data Queue Parameter definitions for work queue.
209	0x00D1	swNoServersErr	No SPO Servers are currently available
210	0x00D2	swUpdateMemoErr	Error updating memo field value.
211	0x00D3	swInvalidPIDErr	Unable to find prediction session for given persistence ID.
212	0x00D4	swInvalidNodeProcErr	Invalid Node and/or Procedure name.
213	0x00D5	swSimSubProcErr	Unable to Simulate a Sub Procedure, a Main Procedure must be used.
214	0x00D6	swInvalidExtIDErr	Invalid Unique ID for External WorkItem.
215	0x00D7	swNoExtItemErr	Unable to find outstanding work item for the given External WorkItem ID.
216	0x00D8	swGetMemoErr	Unable to get memo value.
217	0x00D9	swInvalidConnErr	Invalid Connection ID.
218	0x00DA	swUserNotAuthErr	Unable to perform Login as User has not been authenticated.
219	0x00DB	swNotTokenUserErr	User for authenticated token does not match login user.
220	0x00DC	swInvalidGraftIdErr	Invalid Graft Id.
221	0x00DD	swExtProcessNameErr	External Process name exceeds 30 characters.
222	0x00DE	swProcCaseErr	The SAL returned ER_PROC. There is a problem with the procedure or the case may be invalid.
223	0x00DF	swBuffOverrunErr	Internal SPO buffer too small.
224	0x00E0	swNoCDQPErr	CDQP not defined for work queue.
500	0x01F4	swLI_NoDemonErr	Login daemon on server not responding
501	0x01F5	swLI_LoggedInErr	Someone else is logged in with that name
502	0x01F6	swLI_MaxUsrErr	Max number of concurrent users reached
503	0x01F7	swLI_LcnExpiredErr	Staffware license has expired
504	0x01F8	swLI_DisabledErr	Logins are currently disabled
505	0x01F9	swLI_NoBGErr	Background shutting / already shutdown.
506	0x01FA	swLI_DoingBkpErr	Staffware backup in progress
507	0x01FB	swLI_DoingRstErr	Staffware Restore in progress
508	0x01FC	swLI_DoingUPDErr	Staffware data upd (del node) in progress
509	0x01FD	swLI_BadPasswdErr	Password Required, given passwd invalid
510	0x01FE	swLI_BadBGCreateErr	Can't create perms chk file in BG
511	0x01FF	swLI_BadFGCreateErr	Can't create perms chk file in FG
512	0x0200	swLI_BadBGPermsErr	User creating with bad perms in BG

SPO Server Error Constants (Cont.)

Dec	Hex	Constant	Description
513	0x0201	swLI_BadFGPermsErr	User creating with bad perms in FG
514	0x0202	swLI_OracleErr	Oracle Initialization failed.
515	0x0203	swLI_InformixErr	Informix initialization failed
516	0x0204	swLI_NotWndUserErr	User is not registered for S4W
517	0x0205	swLI_BadNodeErr	Node name has been changed
518	0x0206	swLI_OnGoPasswdErr	OnGo passwd different to Staffware
519	0x0207	swLI_NoToolHelpErr	Unable to load TOOLHELP.DLL
520	0x0208	swLI_Client_Too_OldErr	Client is too old for the server
521	0x0209	swLI_Server_Too_OldErr	Server is too old for client

SPO Client Error Constants

Dec	Hex	Constant	Description
2048	0x800	swWin32Err	Win32 Error
2049	0x801	swInvalMethodErr	Invalid method for this list.
2050	0x802	swSrvDisconnectErr	SPO Server disconnected.
2051	0x803	swWINSOCKErr	Winsock problem, see Client log.
2052	0x804	swInvalidParamErr	Invalid Parameter
2053	0x805	swNotFoundErr	Item not found.
2054	0x806	swNoMemoryErr	Memory Allocation Error.
2055	0x807	swLoginFailErr	Logins failed on.
2056	0x808	swDelEntUserFailErr	Must be logged out of all nodes (see LoggedInNodes).
2057	0x809	swNoNodeInfoErr	NodeInfo not found in SWEnterprise.NodeInfos.
2058	0x80A	swViewErr	View Errors Occurred.
2059	0x80B	swBadKeyErr	Invalid key in array.
2060	0x80C	swBadNodeErr	Node key not found.
2061	0x80D	swPasswdLengthErr	Password too long.
2062	0x80E	swLLDupErr	Item already exists in the list.
2063	0x80F	swTimeoutErr	Timeout - No response from SPO server.
2064	0x810	swItemErrErr	One of the items in the array returned an error.
2065	0x811	swSegNotFoundErr	Message segment not found
2066	0x812	swNotSupportedErr	This functionality is not supported.
2067	0x813	swNotOnThisStepErr	Property not supported on this step type.
2069	0x815	swUnRecoverableErr	Unrecoverable system error, see SPO Client log.
2070	0x816	swInvalidSubProcMethodErr	Invalid method for Sub-procedure.
2075	0x81B	swErrorDetectedErr	Unrecoverable error detected - Call Staffware -
2077	0x81D	swInvalidKeyErr	Key is invalid.
2078	0x81E	swNotDirectorErr	Not a Director node.

TIBCO SPO COM Object Model
Index

Object	Page #
SWAccessUserRef	(9),10
SWAction	(10)
SWActiveUser	(3)
SWAdmin	4,(12)
SWAddressUserRef	(10)
SWAttribute	(4),5
SWAuditStep	(8)
SWAutoFwd	(5)
SWAWorkQ	(12)
SWCase	4,(7),(8),9
SWCaseDataQParam	(6)
SWCaseDataQParamDef	(6)
SWCasePredictQParam	(13)
SWClientInfo	(3)
SWCommand	(10)
SWConditional	(10)
SWConfigInfo	(3)
SWCriteriaC	14,(15)
SWCriteriaP	(13)
SWCriteriaWI	14,(15)
SWDeadline	(10)
SWDeadlineValue	(10)
SWDuration	9, (13)
SWDurationValue	(13)
SWDynamicSubProcStep	(7)
SWEAIStep	(7)
SWEnterprise	(2)
SWEntUser	(2)
SWEventStep	(7)
SWExtProcess	(7)
SWExtWorkItem	(4)
SWFConditional	(11)
SWField	(8),9
SWFont	(11)
SWForm	9,(11)
SWFMarking	(11)
SWFRow	(11)

Object	Page #
SWFwdItem	(6)
SWGraftStep	(7)
SWGroup	(4),5
SWLabel	(11)
SWList	(14)
SWListValidation	(4)
SWLocList	(14)
SWLog	(2)
SWMarking	6,(10)
SWNode	2,3,(4),5,9
SWNodeInfo	(2),3,4
SWNodeInfoEx	(3),4
SWOSUser	(4)
SWOutstandingItem	(7)
SWParticipation	6,(12)
SWPermission	(10)
SWPredictedItem	4,9,(13)
SWPriority	(10)
SWProc	4,5,(9)
SWProcAudit	(9)
SWProcGroup	(4)
SWPublicField	(10)
SWQSessionInfo	(3)
SWRedirection	6,(12)
SWRole	(4)
SWSALInfo	(3)
SWSortField	(14),15
SWStep	9,(10),11
SWSubProcStep	(7)
SWTable	(4)
SWTableField	(4)
SWThreadInfo	(3)
SWTransControlStep	(7)
SWUser	4,(5)
SWView	(14)
SWWorkItem	(6)
SWWorkQ	4,5,(6)
SWXList	(14),15

Note - The page number in parentheses indicates the primary reference.