WMI System Schema / October 1999

This schema is intended to provide an idea of the kind of information supplied by WMI about computer systems.
It only represents a small sample (less than 20%) of the properties, classes and associations available.
It especially illustrates the associations that represent the structure of the system (in the form of the various aggregation relationships) and the way that configuration information about the system is represented (in the form of the Setting class and its subclasses—of which there are many more).

KEY: Inheritance | Association | Aggregation | Class with No Properties and Methods | Class with Properties | Class with Properties and Methods | Each A can have many B's, Each B can have 1 A (A 1 — B)

Win32_SystemOperatingSystem
Win32_SystemProcesses
Win32_SystemServices
Win32_SystemPartitions
Win32_SystemDevices
Win32_SystemSetting

Win32_OperatingSystem
BootDevice:STRING
BuildNumber:STRING
BuildType:STRING
Caption:STRING
CodeSet:STRING
CountryCode:STRING
CreationClassName:STRING
CSCreationClassName:STRING
CSDVersion:STRING
CSName:STRING
CurrentTimeZone:SINT16
Debug:BOOLEAN
Description:STRING
Distributed:BOOLEAN
ForegroundApplicationBoost:UINT8
FreePhysicalMemory:UINT64
FreeSpaceInPagingFiles:UINT64
FreeVirtualMemory:UINT64
InstallDate:DATETIME
LastBootUpTime:DATETIME
LocalDateTime:DATETIME
Locale:STRING
Manufacturer:STRING
MaxNumberOfProcesses:UINT32
MaxProcessMemorySize:UINT64
Name:STRING
NumberOfLicensedUsers:UINT32
NumberOfProcesses:UINT32
NumberOfUsers:UINT32
Organization:STRING
OSLanguage:UINT32
OSProductSuite:UINT32
OSType:UINT16
OtherTypeDescription:STRING
PlusProductID:STRING
PlusVersionNumber:STRING
Primary:BOOLEAN
QuantumLength:UINT8
QuantumType:UINT8
RegisteredUser:STRING
SerialNumber:STRING
ServicePackMajorVersion:UINT16
ServicePackMinorVersion:UINT16
SizeStoredInPagingFiles:UINT64
Status:STRING
SystemDevice:STRING
SystemDirectory:STRING
TotalSwapSpaceSize:UINT64
TotalVirtualMemorySize:UINT64
TotalVisibleMemorySize:UINT64
Version:STRING
WindowsDirectory:STRING

Reboot()UINT32
Shutdown()UINT32
Win32Shutdown(Flags:SINT32, Reserved:SINT32)UINT32

Win32_Process
Caption:STRING
CreationClassName:STRING
CreationDate:DATETIME
CSCreationClassName:STRING
CSName:STRING
Description:STRING
ExecutablePath:STRING
ExecutionState:UINT16
Handle:STRING
HandleCount:UINT32
InstallDate:DATETIME
KernelModeTime:UINT64
MaximumWorkingSetSize:UINT32
MinimumWorkingSetSize:UINT32
Name:STRING
OSCreationClassName:STRING
OSName:STRING
OtherOperationCount:UINT64
OtherTransferCount:UINT64
PageFaults:UINT32
PageFileUsage:UINT32
ParentProcessId:UINT32
PeakPageFileUsage:UINT32
PeakVirtualSize:UINT64
PeakWorkingSetSize:UINT32
Priority:UINT32
PrivatePageCount:UINT64
ProcessId:UINT32
QuotaNonPagedPoolUsage:UINT32
QuotaPagedPoolUsage:UINT32
QuotaPeakNonPagedPoolUsage:UINT32
QuotaPeakPagedPoolUsage:UINT32
ReadOperationCount:UINT64
ReadTransferCount:UINT64
SessionId:UINT32
Status:STRING
TerminationDate:DATETIME
ThreadCount:UINT32
UserModeTime:UINT64
VirtualSize:UINT64
WindowsVersion:STRING
WorkingSetSize:UINT64
WriteOperationCount:UINT64
WriteTransferCount:UINT64

Create(CommandLine:STRING, CurrentDirectory:STRING, ProcessStartupInformation:OBJECT, ProcessId:UINT32)UINT32
Terminate(Reason:UINT32)UINT32
GetOwner(Domain:STRING, User:STRING)UINT32
GetOwnerSid(Sid:STRING)UINT32

Win32_Service
AcceptPause:BOOLEAN
AcceptStop:BOOLEAN
Caption:STRING
CheckPoint:UINT32
CreationClassName:STRING
Description:STRING
DesktopInteract:BOOLEAN
DisplayName:STRING
ErrorControl:STRING
ExitCode:UINT32
InstallDate:DATETIME
Name:STRING
PathName:STRING
ProcessId:UINT32
ServiceSpecificExitCode:UINT32
ServiceType:STRING
Started:BOOLEAN
StartMode:STRING
StartName:STRING
State:STRING
Status:STRING
SystemCreationClassName:STRING
SystemName:STRING
TagId:UINT32
WaitHint:UINT32

StartService()UINT32
StopService()UINT32
PauseService()UINT32
ResumeService()UINT32
InterrogateService()UINT32
UserControlService(ControlCode:UINT8)UINT32
Create(DesktopInteract:BOOLEAN, DisplayName:STRING, ErrorControl:UINT8, LoadOrderGroup:STRING, LoadOrderGroupDependencies:STRING, Name:STRING, PathName:STRING, ServiceDependencies:STRING, ServiceType:UINT8, StartMode:STRING, StartName:STRING, StartPassword:STRING)UINT32
Change(DesktopInteract:BOOLEAN, DisplayName:STRING, ErrorControl:UINT8, LoadOrderGroup:STRING, LoadOrderGroupDependencies:STRING, PathName:STRING, ServiceDependencies:STRING, ServiceType:UINT8, StartMode:STRING, StartName:STRING, StartPassword:STRING)UINT32
ChangeStartMode(StartMode:STRING)UINT32
Delete()UINT32

Win32_DeviceSettings

CIM_LogicalDevice
Availability:UINT16
Caption:STRING
ConfigManagerErrorCode:UINT32
ConfigManagerUserConfig:BOOLEAN
CreationClassName:STRING
Description:STRING
DeviceID:STRING
ErrorCleared:BOOLEAN
ErrorDescription:STRING
InstallDate:DATETIME
LastErrorCode:UINT32
Name:STRING
PNPDeviceID:STRING
PowerManagementCapabilities:UINT16
PowerManagementSupported:BOOLEAN
Status:STRING
StatusInfo:UINT16
SystemCreationClassName:STRING
SystemName:STRING

SetPowerState(PowerState:UINT16, Time:DATETIME)UINT32
Reset()UINT32

Win32_ComputerSystem
AdminPasswordStatus:UINT16
AutomaticResetBootOption:BOOLEAN
AutomaticResetCapability:BOOLEAN
BootOptionOnLimit:UINT16
BootOptionOnWatchDog:UINT16
BootROMSupported:BOOLEAN
BootupState:STRING
Caption:STRING
ChassisBootupState:UINT16
CreationClassName:STRING
CurrentTimeZone:SINT16
DaylightInEffect:BOOLEAN
Description:STRING
Domain:STRING
DomainRole:UINT16
FrontPanelResetStatus:UINT16
InfraredSupported:BOOLEAN
InitialLoadInfo:STRING
InstallDate:DATETIME
KeyboardPasswordStatus:UINT16
LastLoadInfo:STRING
Manufacturer:STRING
Model:STRING
Name:STRING
NameFormat:STRING
NetworkServerModeEnabled:BOOLEAN
NumberOfProcessors:UINT32
OEMLogoBitmap:UINT8
OEMStringArray:STRING
PauseAfterReset:SINT64
PowerManagementCapabilities:UINT16
PowerManagementSupported:BOOLEAN
PowerOnPasswordStatus:UINT16
PowerState:UINT16
PowerSupplyState:UINT16
PrimaryOwnerContact:STRING
PrimaryOwnerName:STRING
ResetCapability:UINT16
ResetCount:SINT16
ResetLimit:SINT16
Roles:STRING
Status:STRING
SupportContactDescription:STRING
SystemStartupDelay:UINT16
SystemStartupOptions:STRING
SystemStartupSetting:UINT8
SystemType:STRING
ThermalState:UINT16
TotalPhysicalMemory:UINT64
UserName:STRING
WakeUpType:UINT16

SetPowerState(PowerState:UINT16, Time:DATETIME)UINT32

CIM_Setting
Caption:STRING
Description:STRING
SettingID:STRING

Win32_SystemBootConfiguration

Win32_StartupCommand
Command:STRING
Location:STRING
Name:STRING
User:STRING

Win32_BootConfiguration
BootDirectory:STRING
ConfigurationPath:STRING
LastDrive:STRING
Name:STRING
ScratchDirectory:STRING
TempDirectory:STRING

Win32_OSRecoveryConfiguration
AutoReboot:BOOLEAN
DebugFilePath:STRING
KernelDumpOnly:BOOLEAN
Name:STRING
OverwriteExistingDebugFile:BOOLEAN
SendAdminAlert:BOOLEAN
WriteDebugInfo:BOOLEAN
WriteToSystemLog:BOOLEAN

CIM_DeviceConnection

CIM_LogicalFile
AccessMask:UINT32
Archive:BOOLEAN
Caption:STRING
Compressed:BOOLEAN
CompressionMethod:STRING
CreationClassName:STRING
CreationDate:DATETIME
CSCreationClassName:STRING
CSName:STRING
Description:STRING
Drive:STRING
EightDotThreeFileName:STRING
Encrypted:BOOLEAN
EncryptionMethod:STRING
Extension:STRING
FileName:STRING
FileSize:UINT64
FileType:STRING
FSCreationClassName:STRING
FSName:STRING
Hidden:BOOLEAN
InstallDate:DATETIME
InUseCount:UINT64
LastAccessed:DATETIME
LastModified:DATETIME
Name:STRING
Path:STRING
Readable:BOOLEAN
Status:STRING
System:BOOLEAN
Writeable:BOOLEAN

TakeOwnerShip()UINT32
ChangeSecurityPermissions(Option:UINT32 SecurityDescriptor:OBJECT)UINT32
Copy(FileName:STRING)UINT32
Rename(FileName:STRING)UINT32
Delete()UINT32
Compress()UINT32
Uncompress()UINT32
TakeOwnerShipEx(Recursive:BOOLEAN, StartFileName:STRING, StopFileName:STRING)UINT32
ChangeSecurityPermissionsEx(Option:UINT32, Recursive:BOOLEAN, SecurityDescriptor:OBJECT, StartFileName:STRING, StopFileName:STRING)UINT32
CopyEx(FileName:STRING, Recursive:BOOLEAN, StartFileName:STRING StopFileName:STRING)UINT32
DeleteEx(StartFileName:STRING, StopFileName:STRING)UINT32
CompressEx(Recursive:BOOLEAN, StartFileName:STRING, StopFileName:STRING)UINT32
UncompressEx(Recursive:BOOLEAN, StartFileName:STRING, StopFileName:STRING)UINT32

CIM_ControlledBy
Win32_SCSIControllerDevice
Win32_PNPAllocatedResource
Win32_PnPDevice

CIM_MediaAccessDevice
Capabilities:UINT16
CapabilityDescriptions:STRING
CompressionMethod:STRING
DefaultBlockSize:UINT64
ErrorMethodology:STRING
MaxBlockSize:UINT64
MaxMediaSize:UINT64
MinBlockSize:UINT64
NeedsCleaning:BOOLEAN
NumberOfMediaSupported:UINT32a

Win32_NetworkProtocal
Caption:STRING
ConnectionlessService:BOOLEAN
Description:STRING
GuaranteesDelivery:BOOLEAN
GuaranteesSequencing:BOOLEAN
InstallDate:DATETIME
MaximumAddressSize:UINT32
MaximumMessageSize:UINT32
MessageOriented:BOOLEAN
MinimumAddressSize:UINT32
Name:STRING
PseudoStreamOriented:BOOLEAN
Status:STRING
SupportsBroadcasting:BOOLEAN
SupportsConnectData:BOOLEAN
SupportsDisconnectData:BOOLEAN
SupportsEncryption:BOOLEAN
SupportsExpeditedData:BOOLEAN
SupportsFragmentation:BOOLEAN
SupportsGracefulClosing:BOOLEAN
SupportsGuaranteedBandwidth:BOOLEAN
SupportsMulticasting:BOOLEAN
SupportsQualityofService:BOOLEAN

CIM_SystemResource
Caption:STRING
Description:STRING
InstallDate:DATETIME
Name:STRING
Status:STRING

Win32_AllocatedResource

Win32_PnPEntity
ClassGuid:STRING
Manufacturer:STRING
Service:STRING

CIM_Controller
MaxNumberControlled:UINT32
ProtocolSupported:UINT16
TimeOfLastReset:DATETIMEa

Win32_SCSIController
ControllerTimeouts:UINT32
DeviceMap:STRING
DriverName:STRING
HardwareVersion:STRING
Index:UINT32
Manufacturer:STRING
MaxDataWidth:UINT32
MaxTransferRate:UINT64
ProtectionManagement:UINT16

Win32_USBController
Manufacturer:STRING

Win32_DiskDrive
BytesPerSector:UINT32
Index:UINT32
InterfaceType:STRING
Manufacturer:STRING
MediaLoaded:BOOLEAN
MediaType:STRING
Model:STRING
Partitions:UINT32
SCSIBus:UINT32
SCSILogicalUnit:UINT16
SCSIPort:UINT16
SCSITargetId:UINT16
SectorsPerTrack:UINT32
Size:UINT64
TotalCylinders:UINT64
TotalHeads:UINT32
TotalSectors:UINT64
TotalTracks:UINT64
TracksPerCylinder:UINT32

Win32_NetworAdapter
AdapterType:STRING
AutoSense:BOOLEAN
Index:UINT32
Installed:BOOLEAN
MACAddress:STRING
Manufacturer:STRING
MaxNumberControlled:UINT32
MaxSpeed:UINT64
NetworkAddresses:STRING
PermanentAddress:STRING
ProductName:STRING
ServiceName:STRING
Speed:UINT64
TimeOfLastReset:DATETIME

Win32_DiskPartition
Access:UINT16
BlockSize:UINT64
Bootable:BOOLEAN
BootPartition:BOOLEAN
DiskIndex:UINT32
ErrorMethodology:STRING
HiddenSectors:UINT32
Index:UINT32
NumberOfBlocks:UINT64
PrimaryPartition:BOOLEAN
Purpose:STRING
RewritePartition:BOOLEAN
Size:UINT64
StartingOffset:UINT64
Type:STRING

Win32_LogicalDisk
Access:UINT16
BlockSize:UINT64
Compressed:BOOLEAN
DriveType:UINT32
ErrorMethodology:STRING
FileSystem:STRING
FreeSpace:UINT64
MaximumComponentLength:UINT32
MediaType:UINT32
NumberOfBlocks:UINT64
ProviderName:STRING
Purpose:STRING
Size:UINT64
SupportsFileBasedCompression:BOOLEAN
VolumeName:STRING
VolumeSerialNumber:STRING

Win32_CIMLogicalDeviceCIMDataFile
CIM_DirectoryContainsFile

Win32_Directory

CIM_DataFile
Manufacturer:STRING
Version:STRING

Win32_SubDirectory
Win32_ProtocolBinding
Win32_DiskDriveToDiskPartition
Win32_LogicalDiskToPartition
Win32_LogicalDiskRootDirectory