IEEE P802.11  
Wireless LANs

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| MIB Attributes Analysis | | | | | |
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Abstract

This document is a work-in-progress, of evaluating MIB attributes that might fit the “\*Implemented” or “\*Activated” usage patterns. The intent is build a list of such patterns of use, as a foundation for creating a Design Pattern for such attributes.

***MIB attributes of type “TruthValue”, with a start at analysis:***

* dot11CFPollable – Definitely an “Implemented/Activated” type of thing, but not spelled like one. Only by implication though (never stated) for CF-Pollable STAs.
* dot11PrivacyOptionImplemented
* dot11MultiDomainCapabilityImplemented
* dot11MultiDomainCapabilityActivated
* dot11SpectrumManagementImplemented
* dot11SpectrumManagementRequired - Definitely an “Implemented/Activated” type of thing, but not spelled like one
* dot11RSNAOptionImplemented
* dot11RSNAPreauthenticationImplemented
* dot11OperatingClassesImplemented
* dot11OperatingClassesRequired
* dot11QosOptionImplemented
* dot11ImmediateBlockAckOptionImplemented
* dot11DelayedBlockAckOptionImplemented
* dot11DirectOptionImplemented
* dot11APSDOptionImplemented
* dot11QAckOptionImplemented
* dot11QBSSLoadImplemented
* dot11QueueRequestOptionImplemented
* dot11TXOPRequestOptionImplemented
* dot11MoreDataAckOptionImplemented
* dot11AssociateInNQBSS - Definitely an “Implemented/Activated” type of thing, but not spelled like one. Never used outside the MIB.
* dot11DLSAllowedInQBSS - Definitely an “Implemented/Activated” type of thing, but not spelled like one. Usage (and relation to QoS) is pretty confusing.
* dot11DLSAllowed - Definitely an “Implemented/Activated” type of thing, but not spelled like one.
* dot11RadioMeasurementImplemented
* dot11RadioMeasurementActivated
* dot11RMLinkMeasurementActivated
* dot11RMNeighborReportActivated
* dot11RMParallelMeasurementsActivated
* dot11RMRepeatedMeasurementsActivated
* dot11RMBeaconPassiveMeasurementActivated
* dot11RMBeaconActiveMeasurementActivated
* dot11RMBeaconTableMeasurementActivated
* dot11RMBeaconMeasurementReportingConditionsActivated
* dot11RMFrameMeasurementActivated
* dot11RMChannelLoadMeasurementActivated
* dot11RMNoiseHistogramMeasurementActivated
* dot11RMStatisticsMeasurementActivated
* dot11RMLCIMeasurementActivated
* dot11RMLCIAzimuthActivated
* dot11RMTransmitStreamCategoryMeasurementActivated
* dot11RMTriggeredTransmitStreamCategoryMeasurementActivated
* dot11RMAPChannelReportActivated
* dot11RMMIBActivated
* dot11RMMeasurementPilotTransmissionInformationActivated
* dot11RMNeighborReportTSFOffsetActivated
* dot11RMRCPIMeasurementActivated
* dot11RMRSNIMeasurementActivated
* dot11RMBSSAverageAccessDelayActivated
* dot11RMBSSAvailableAdmissionCapacityActivated
* dot11RMAntennaInformationActivated
* dot11FastBSSTransitionImplemented
* dot11GASPauseForServerResponse – Does affect protocol behavior, in a sense similar to an “\*Implemented”, but not spelled like one.
* dot11TxAntennaImplemented – Never used except in DSSS and ERP PHY characteristics.

***MIB attributes of the form “\*Implemented” that are not of type TruthValue and some notes on them. They may reflect more information, such as “how much/many of X is implemented?”***

* dot11RSNAConfigPairwiseCipherImplemented OCTET STRING
* dot11RSNAConfigPairwiseCipherSizeImplemented Unsigned32
  + Above used in dot11RSNAConfigPairwiseCiphersTable, which is never referenced. The MIB claims this is used by an external management entity: “The pairwise cipher suite list in the RSNE is formed using the information in this table.” How this is accomplished appears to be missing.
* dot11TVHTMUMaxUsersImplemented – Never used except in the MIB
* dot11WEPKeyMappingLengthImplemented – OK, this is an implementation imposed limit and discussed in text, but doesn’t affect over-the-air signaling.
* dot11NumberSupportedPowerLevelsImplemented – Never used except in the DSSS, HR and HT PHY characteristics

***MIB attributes of type “TruthValue” still to be checked into:***

* dot11LCIDSEImplemented
* dot11LCIDSERequired
* dot11DSERequired
* dot11ExtendedChannelSwitchActivated
* dot11RSNAProtectedManagementFramesActivated
* dot11RSNAUnprotectedManagementFramesAllowed
* dot11HighThroughputOptionImplemented
* dot11RSNAPBACRequired
* dot11PSMPOptionImplemented
* dot11TunneledDirectLinkSetupImplemented
* dot11TDLSPeerUAPSDBufferSTAActivated
* dot11TDLSPeerPSMActivated
* dot11TDLSChannelSwitchingActivated
* dot11OCBActivated
* dot11WirelessManagementImplemented
* dot11RMCivicMeasurementActivated
* dot11RMIdentifierMeasurementActivated
* dot11RM3rdPartyMeasurementActivated
* dot11InterworkingServiceImplemented
* dot11InterworkingServiceActivated
* dot11QosMapImplemented
* dot11QosMapActivated
* dot11EBRImplemented
* dot11EBRActivated
* dot11ESNetwork
* dot11SSPNInterfaceImplemented
* dot11SSPNInterfaceActivated
* dot11EASImplemented
* dot11EASActivated
* dot11MSGCFImplemented
* dot11MSGCFActivated
* dot11MeshActivated
* dot11RejectUnadmittedTraffic
* dot11QMFActivated
* dot11QMFReconfigurationActivated
* dot11RobustAVStreamingImplemented
* dot11MultibandImplemented
* dot11DynamicEIFSActivated
* dot11VHTOptionImplemented
* dot11OperatingModeNotificationImplemented
* dot11TVHTOptionImplemented
* dot11ChannelScheduleManagementActivated
* dot11ContactVerificationSignalActivated
* dot11NetworkChannelControlActivated
* dot11RLSSActivated
* dot11WhiteSpaceMapActivated
* dot11GeolocationCapabilityActivated
* dot11GDDActivated
* dot11AuthenticationAlgorithmsActivated
* dot11WEPKeyMappingWEPOn
* dot11PrivacyInvoked
* dot11ExcludeUnencrypted
* dot11RSNAActivated
* dot11RSNAPreauthenticationActivated
* dot11RSNAConfigGroupRekeyStrict
* dot11RSNAConfigPairwiseCipherActivated
* dot11RSNAConfigAuthenticationSuiteActivated
* dot11FastBSSTransitionActivated
* dot11FTOverDSActivated
* dot11FTResourceRequestSupported
* dot11RegLocAgreement
* dot11RegLocDSE
* dot11DependentSTA
* dot11NDelayedBlockAckOptionImplemented
* dot11STBCControlFrameOptionImplemented
* dot11LsigTxopProtectionOptionImplemented
* dot11PCOOptionImplemented
* dot11HTControlFieldSupported
* dot11RDResponderOptionImplemented
* dot11SPPAMSDUCapable
* dot11SPPAMSDURequired
* dot11FortyMHzOptionImplemented
* dot11LocationActivated
* dot11FMSImplemented
* dot11FMSActivated
* dot11EventsActivated
* dot11DiagnosticsActivated
* dot11MultiBSSIDImplemented
* dot11MultiBSSIDActivated
* dot11TFSImplemented
* dot11TFSActivated
* dot11WNMSleepModeImplemented
* dot11WNMSleepModeActivated
* dot11TIMBroadcastImplemented
* dot11TIMBroadcastActivated
* dot11ProxyARPImplemented
* dot11ProxyARPActivated
* dot11BSSTransitionImplemented
* dot11BSSTransitionActivated
* dot11QoSTrafficCapabilityImplemented
* dot11QoSTrafficCapabilityActivated
* dot11ACStationCountImplemented
* dot11ACStationCountActivated
* dot11CoLocIntfReportingImplemented
* dot11CoLocIntfReportingActivated
* dot11MotionDetectionImplemented
* dot11MotionDetectionActivated
* dot11TODImplemented
* dot11TODActivated
* dot11TimingMsmtImplemented
* dot11TimingMsmtActivated
* dot11ChannelUsageImplemented
* dot11ChannelUsageActivated
* dot11TriggerSTAStatisticsActivated
* dot11SSIDListImplemented
* dot11SSIDListActivated
* dot11MulticastDiagnosticsActivated
* dot11LocationTrackingImplemented
* dot11LocationTrackingActivated
* dot11DMSImplemented
* dot11DMSActivated
* dot11UAPSDCoexistenceImplemented
* dot11UAPSDCoexistenceActivated
* dot11WNMNotificationImplemented
* dot11WNMNotificationActivated
* dot11UTCTSFOffsetImplemented
* dot11UTCTSFOffsetActivated
* dot11FineTimingMsmtImplemented
* dot11FineTimingRespActivated
* dot11FineTimingInitActivated
* dot11LciCivicInNeighborReport
* dot11RMFineTimingMsmtRangeRepImplemented
* dot11RMFineTimingMsmtRangeRepActivated
* dot11RMRqstParallel
* dot11RMRqstEnable
* dot11RMRqstRequest
* dot11RMRqstReport
* dot11RMRqstDurationMandatory
* dot11RMRqstTrigdQoSAverageCondition
* dot11RMRqstTrigdQoSConsecutiveCondition
* dot11RMRqstTrigdQoSDelayCondition
* dot11RMNeighborReportSecurity
* dot11RMNeighborReportCapSpectrumMgmt
* dot11RMNeighborReportCapQoS
* dot11RMNeighborReportCapAPSD
* dot11RMNeighborReportCapRM
* dot11RMNeighborReportCapDelayBlockAck
* dot11RMNeighborReportCapImmediateBlockAck
* dot11RMNeighborReportKeyScope
* dot11RMNeighborReportMobilityDomain
* dot11RMNeighborReportCapHT
* dot11RMNeighborReportHTLDPCCodingCap
* dot11RMNeighborReportHTSupportedChannelWidthSet
* dot11RMNeighborReportHTGreenfield
* dot11RMNeighborReportHTShortGIfor20MHz
* dot11RMNeighborReportHTShortGIfor40MHz
* dot11RMNeighborReportHTTxSTBC
* dot11RMNeighborReportHTDelayedBlockAck
* dot11RMNeighborReportHTMaxAMSDULength
* dot11RMNeighborReportHTDSSCCKModein40MHz
* dot11RMNeighborReportHTFortyMHzIntolerant
* dot11RMNeighborReportHTLSIGTXOPProtectionSupport
* dot11RMNeighborReportHTTxMCSSetDefined
* dot11RMNeighborReportHTTxRxMCSSetNotEqual
* dot11RMNeighborReportHTTxUnequalModulationSupported
* dot11RMNeighborReportHTPCO
* dot11RMNeighborReportHTCSupport
* dot11RMNeighborReportHTRDResponder
* dot11RMNeighborReportHTImplictTransmitBeamformingReceivingCap
* dot11RMNeighborReportHTReceiveStaggeredSoundingCap
* dot11RMNeighborReportHTTransmitStaggeredSoundingCap
* dot11RMNeighborReportHTReceiveNDPCap
* dot11RMNeighborReportHTTransmitNDPCap
* dot11RMNeighborReportHTImplicitTransmitBeamformingCap
* dot11RMNeighborReportHTExplicitCSITransmitBeamformingCap
* dot11RMNeighborReportHTExplicitNonCompressedSteeringCap
* dot11RMNeighborReportHTExplicitCompressedSteeringCap
* dot11RMNeighborReportHTAntSelectionCap
* dot11RMNeighborReportHTExplicitCSIFeedbackBasedTxASELCap
* dot11RMNeighborReportHTAntIndicesFeedbackBasedTxASELCap
* dot11RMNeighborReportHTExplicitCSIFeedbackBasedCap
* dot11RMNeighborReportHTAntIndicesFeedbackCap
* dot11RMNeighborReportHTRxASELCap
* dot11RMNeighborReportHTTxSoundingPPDUsCap
* dot11RMNeighborReportHTInfoSTAChannelWidth
* dot11RMNeighborReportHTInfoRIFSMode
* dot11RMNeighborReportHTInfoNonGreenfieldHTSTAsPresent
* dot11RMNeighborReportHTInfoOBSSNonHTSTAsPresent
* dot11RMNeighborReportHTInfoDualBeacon
* dot11RMNeighborReportHTInfoDualCTSProtection
* dot11RMNeighborReportHTInfoSTBCBeacon
* dot11RMNeighborReportHTInfoLSIGTXOPProtectionSup
* dot11RMNeighborReportHTInfoPCOActive
* dot11RMNeighborReportHTInfoPCOPhase
* dot11RMNeighborReportExtCapPSMPSupport
* dot11RMNeighborReportExtCapSPSMPSup
* dot11WNMRqstColocInterfAutoEnable
* dot11MeshAcceptingAdditionalPeerings
* dot11MeshConnectedToMeshGate
* dot11MeshSecurityActivated
* dot11MeshForwarding
* dot11MeshGateAnnouncements
* dot11MBCAActivated
* dot11MCCAImplemented
* dot11MCCAActivated
* dot11DMGOptionImplemented
* dot11RelayActivated
* dot11REDSActivated
* dot11RDSActivated
* dot11MultipleMACActivated
* dot11ClusteringActivated
* dot11GCRActivated
* dot11AdvancedGCRImplemented
* dot11AdvancedGCRActivated
* dot11SCSImplemented
* dot11SCSActivated
* dot11QLoadReportActivated
* dot11AlternateEDCAActivated
* dot11GCRGroupMembershipAnnouncementActivated
* dot11PublicHCCATXOPNegotiationImplemented
* dot11PublicHCCATXOPNegotiationActivated
* dot11ProtectedHCCATXOPNegotiationImplemented
* dot11ProtectedHCCATXOPNegotiationActivated
* dot11ProtectedQLoadReportImplemented
* dot11ProtectedQLoadReportActivated
* dot11MeshGCRImplemented
* dot11MeshGCRActivated
* dot11VHTControlFieldOptionImplemented
* dot11VHTTXOPPowerSaveOptionImplemented
* dot11RIFSMode
* dot11PSMPControlledAccess
* dot11DualCTSProtection
* dot11LSIGTXOPFullProtectionActivated
* dot11NonGFEntitiesPresent
* dot11PCOActivated
* dot11FortyMHzIntolerant
* dot112040BSSCoexistenceManagementSupport
* dot11EDCATableMandatory
* dot11QAPEDCATableMandatory
* dot11AntennaSelectionOptionImplemented
* dot11TransmitExplicitCSIFeedbackASOptionImplemented
* dot11TransmitIndicesFeedbackASOptionImplemented
* dot11ExplicitCSIFeedbackASOptionImplemented
* dot11TransmitIndicesComputationASOptionImplemented
* dot11ReceiveAntennaSelectionOptionImplemented
* dot11TransmitSoundingPPDUOptionImplemented
* dot11AntennaSelectionOptionImplemented
* dot11TransmitExplicitCSIFeedbackASOptionImplemented
* dot11TransmitIndicesFeedbackASOptionImplemented
* dot11ExplicitCSIFeedbackASOptionImplemented
* dot11TransmitIndicesComputationASOptionImplemented
* dot11ReceiveAntennaSelectionOptionImplemented
* dot11TransmitSoundingPPDUOptionImplemented
* dot11TxAntennaImplemented
* dot11RxAntennaImplemented
* dot11DiversitySelectionRxImplemented
* dot11FiveMHzOperationImplemented
* dot11TenMHzOperationImplemented
* dot11TwentyMHzOperationImplemented
* dot11OFDMCCAEDImplemented
* dot11OFDMCCAEDRequired
* dot11ShortPreambleOptionImplemented
* dot11ShortSlotTimeOptionImplemented
* dot11ShortSlotTimeOptionActivated
* dot11FortyMHzOperationImplemented
* dot11FortyMHzOperationActivated
* dot11HTGreenfieldOptionImplemented
* dot11HTGreenfieldOptionActivated
* dot11ShortGIOptionInTwentyImplemented
* dot11ShortGIOptionInTwentyActivated
* dot11ShortGIOptionInFortyImplemented
* dot11ShortGIOptionInFortyActivated
* dot11LDPCCodingOptionImplemented
* dot11LDPCCodingOptionActivated
* dot11TxSTBCOptionImplemented
* dot11TxSTBCOptionActivated
* dot11RxSTBCOptionImplemented
* dot11RxSTBCOptionActivated
* dot11BeamFormingOptionImplemented
* dot11BeamFormingOptionActivated
* dot11TxMCSSetDefined
* dot11TxRxMCSSetNotEqual
* dot11TxUnequalModulationSupported
* dot11ReceiveStaggerSoundingOptionImplemented
* dot11TransmitStaggerSoundingOptionImplemented
* dot11ReceiveNDPOptionImplemented
* dot11TransmitNDPOptionImplemented
* dot11ImplicitTransmitBeamformingOptionImplemented
* dot11ExplicitCSITransmitBeamformingOptionImplemented
* dot11ExplicitNonCompressedBeamformingMatrixOptionImplemented
* dot11LowPowerSCPHYImplemented
* dot11LowPowerSCPHYActivated
* dot11VHTShortGIOptionIn80Implemented
* dot11VHTShortGIOptionIn80Activated
* dot11VHTShortGIOptionIn160and80p80Implemented
* dot11VHTShortGIOptionIn160and80p80Activated
* dot11VHTLDPCCodingOptionImplemented
* dot11VHTLDPCCodingOptionActivated
* dot11VHTTxSTBCOptionImplemented
* dot11VHTTxSTBCOptionActivated
* dot11VHTRxSTBCOptionImplemented
* dot11VHTRxSTBCOptionActivated
* dot11VHTSUBeamformeeOptionImplemented
* dot11VHTSUBeamformerOptionImplemented
* dot11VHTMUBeamformeeOptionImplemented
* dot11VHTMUBeamformerOptionImplemented
* dot11TVHTShortGIOptionIn4WImplemented
* dot11TVHTShortGIOptionIn4WActivated
* dot11TVHTLDPCCodingOptionImplemented
* dot11TVHTLDPCCodingOptionActivated
* dot11TVHTTxSTBCOptionImplemented
* dot11TVHTTxSTBCOptionActivated
* dot11TVHTRxSTBCOptionImplemented
* dot11TVHTRxSTBCOptionActivated
* dot11TVHTSUBeamformeeOptionImplemented
* dot11TVHTSUBeamformerOptionImplemented
* dot11TVHTMUBeamformeeOptionImplemented
* dot11TVHTMUBeamformerOptionImplemented
* dot11NonAPStationAuthHCCAHEMM
* dot11NonAPStationAuthSourceMulticast
* dot11NonAPStationAuthDls