



MWTM Monitor Attributes

The following sections describe the MWTM monitor attributes:

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- [Monitor Network Element Attributes, page E-2](#)
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Attribute Types



Note

- Unless specifically noted, all attribute names are regular attributes with a name and a value. The attribute name is unique for the specified network element type or attribute group. The attribute name will appear once and only once for the specified network element or attribute group.
- If an attribute has the note: “this attribute is an array”, then this attribute name might appear 0, 1, or several times in the specified network element or attribute group.
- If an attribute has the note: “this is an attribute group”, then this refers to an attribute group. A detailed attribute list within the attribute group definition is at the end of this appendix. This attribute group might appear once and only once for the specified network element or attribute group.
- If an attribute has the note: “this is an attribute group”, and also the note: “this attribute is an array”, then this refers to an attribute group. A detailed attribute list within the attribute group definition is at the end of this appendix. This attribute group might appear 0, 1, or several times in the specified network element or attribute group.

Table E-1 **Attribute Types**

Attribute Type	Description	Example(s)
String	String	“abc”, “string with spaces”
Integer	Integer	“100”, “-77”
IPAddress	IP Address	“1.1.1.1”, “255.255.255.0”
PointCode	Point Code	“3.5.7”, “255.255.0”

Table E-1 Attribute Types (continued)

Attribute Type	Description	Example(s)
Timestamp	Formatted as XML schema type: "dateTime"	"2006-12-19T18:22:31.878-05:00"
Period	Formatted as XML schema type: "duration"	"P21DT6H39M38.380S"

Monitor Network Element Attributes

The following tables describe the MWTM 6.1.6 Monitor network element types:

- Network Element: type="APN"
- Network Element: type="AS"
- Network Element: type="ASP"
- Network Element: type="ASPA"
- Network Element: type="Card"
- Network Element: type="Folder"
- Network Element: type="Group"
- Network Element: type="PWE3VirtualCircuit"
- Network Element: type="PWE3Backhaul"
- Network Element: type="Interface", subtype="GSM"
- Network Element: type="Interface", subtype="UMTS"
- Network Element: type="Interface", subtype="E1", "T1", "Serial", "CEM", "Ethernet", "FastEthernet", "GigabitEthernet", "ATM", "Loopback", "Tunnel", "IMA", "VLAN", "SONET", "ATMSubInf", "GigabitEthernetSubInf", "PortChannel", "Multilink", "FastEthernetSubInf", "TenGigabitEthernet", "TenGigabitEthernetSubInf", "Virtual-Template"
- Network Element: type="Link"
- Network Element: type="Linkset"
- Network Element: type="Node", subtype="ITP"
- Network Element: type="Node", subtype="ONS"
- Network Element: type="Node", subtype="RAN_SVC"
- Network Element: type="Node", subtype="CSR"
- Network Element: type="Node", subtype="GGSN", "CSG1", "CSG2", "CDT", "BWG", "HA", "mSEF", "IP-RAN", "MetroE Switch", "Generic", "PDSN", "PDNGW", "SGW", "PCRF", "SPGW"
- Network Element: type="Node", subtype="E1", "T1", "Serial", "CEM", "Ethernet", "FastEthernet", "GigabitEthernet", "ATM", "Loopback", "Tunnel", "IMA", "VLAN", "SONET", "ATMSubInf", "GigabitEthernetSubInf", "PortChannel", "Multilink", "FastEthernetSubInf", "TenGigabitEthernet", "TenGigabitEthernetSubInf", "Virtual_Template"
- Network Element: type="RBH"
- Network Element: type="SGMP"

- Network Element: type="SP"

Table E-2 Network Element: type="APN"

Attribute Name	Type	Context	Description
RDN	String	All	Relative Distinguished Name
AaaServerGroupName	String	Monitor	The AAA Server Group assigned to this APN
AlarmSeverity	String	Monitor	Network Element Alarm State
IPv6IpPoolName	String	Monitor	The IPv6 Pool assigned to this APN
IPv6PrimaryDns	IP Address	Monitor	The IPv6 Primary Dns assigned to this APN
IPv6SecondaryDns	IP Address	Monitor	The IPv6 Secondary Dns assigned to this APN
IgnoreState	Integer	Monitor	Whether to ignore state of this network element for status aggregation
Index	Integer	Monitor	APN Index
IpPoolName	String	Monitor	The IP Pool assigned to this APN
IsAPNInstance	Integer	Monitor	Whether this is an Instance or Top-level APN
PrimaryDns	IP Address	Monitor	The Primary Dns assigned to this APN
SecondaryDns	IP Address	Monitor	The Secondary Dns assigned to this APN
ServiceMode	String	Monitor	The current Service Mode of this APN
State	String	Monitor	Network Element State
StateReason	String	Monitor	Network Element State Reason
StateTimestamp	Timestamp	Monitor	Timestamp when network element state was last changed
VrfName	String	Monitor	The VRF assigned to this APN

Table E-3 Network Element: type="AS"

Attribute Name	Type	Context	Description
RDN	String	All	Relative Distinguished Name
ASPA Number	Integer	Monitor	Number of ASP associations
ActiveASPAs	Integer	Monitor	Number of active ASP associations
AlarmSeverity	String	Monitor	Network element alarm state
IgnoreState	Integer	Monitor	Whether to ignore the state of this network element for status aggregation.
MateState	String	Monitor	Mate state
Protocol	String	Monitor	Protocol
QOS	String	Monitor	QoS value
RoutingKey	String	Monitor	Routing key
State	String	Monitor	Network element state
StateReason	String	Monitor	Network element state reason
StateTimestamp	Timestamp	Monitor	Timestamp when the network element state was last changed.
TrafficMode	String	Monitor	Traffic mode

Table E-4 Network Element: type="ASP"

Attribute Name	Type	Context	Description	Comments
RDN	String	All	Relative Distinguished Name	
AlarmSeverity	String	Monitor	Network element alarm state	
CustomIcon	String	Monitor	Custom icon	
DefaultIcon	String	Monitor	Default icon	
IgnoreState	Integer	Monitor	Whether to ignore the state of this network element for status aggregation.	
LocalAddress	IPAddress	Monitor	A list of local addresses	This attribute is an array.
LocalPort	Integer	Monitor	Local port	
Name	String	Monitor	A list of names	This attribute is an array.
State	String	Monitor	Network element state	
StateReason	String	Monitor	Network element state reason	
StateTimestamp	Timestamp	Monitor	Timestamp when the network element state was last changed.	

Table E-5 Network Element: type="ASPA"

Attribute Name	Type	Context	Description	Comments
RDN	String	All	Relative Distinguished Name	
AlarmSeverity	String	Monitor	Network element alarm state	
ConfigLocalAddress	IPAddress	Monitor	Configured local addresses (SCTP)	This attribute is an array.
ConfigLocalInterface	String	Monitor	Configured local interfaces (SCTP)	This attribute is an array.
ConfigLocalPort	Integer	Monitor	Configured local port (SCTP)	
ConfigRemoteAddress	IPAddress	Monitor	Configured remote addresses (SCTP)	This attribute is an array.
ConfigRemotePort	Integer	Monitor	Configured remote port (SCTP)	
CongestionState	String	Monitor	Congestion state	
EffectiveLocalAddress	IPAddress	Monitor	Effective local address (SCTP)	
EffectiveLocalInterface	String	Monitor	Effective local interface name (SCTP)	
EffectiveRemoteAddress	IPAddress	Monitor	Effective remote address (SCTP)	
IgnoreState	Integer	Monitor	Whether to ignore the state of this network element for status aggregation.	
LocalAddress	IPAddress	Monitor	Local address (SCTP)	This attribute is an array.
LocalAddressState	String	Monitor	Local address states (SCTP)	This attribute is an array.

Table E-5 Network Element: type="ASPA" (continued)

Attribute Name	Type	Context	Description	Comments
LocalPort	Integer	Monitor	Local port (SCTP)	
Offloaded	Integer	Monitor	Whether this association is offloaded	
OffloadedProcessor	Integer	Monitor	Offloaded processor Value	
OffloadedSlot	Integer	Monitor	Offloaded slot Value	
PrimaryRemoteAddress	IPAddress	Monitor	Primary remote address (SCTP)	
Protocol	String	Monitor	Protocol	
QoS	Integer	Monitor	QoS value	
RemoteAddress	IPAddress	Monitor	Remote addresses (SCTP)	This attribute is an array.
RemoteAddressState	String	Monitor	Remote address states (SCTP)	This attribute is an array.
RemotePort	Integer	Monitor	Remote port (SCTP)	
SCTPState	String	Monitor	SCTP state	
State	String	Monitor	Network element state	
StateReason	String	Monitor	Network element state reason	
StateTimestamp	Timestamp	Monitor	Timestamp when the network element state was last changed.	

Table E-6 Network Element: type="Card"

Attribute Name	Type	Context	Description	Comments
RDN	String	All	Relative Distinguished Name	
AlarmSeverity	String	Monitor	Network element alarm state	
CardType	String	Monitor	Card type	
Description	String	Monitor	Description	
EquipStatus	String	Monitor	Equipment status	
FirmwareRevision	String	Monitor	Firmware revision	
HardwareRevision	String	Monitor	Hardware revision	
IgnoreState	Integer	Monitor	Whether to ignore the state of this network element for status aggregation.	
ManufacturerName	String	Monitor	Manufacturer name	
ModelName	String	Monitor	Model name	
ProtectionGroup	Protection	Monitor	Protection information	This attribute is an array and an attribute group.
SerialNumber	String	Monitor	Serial number	
ServiceStatus	String	Monitor	Service status	
SlotNumber	Integer	Monitor	Slot number	

Table E-6 Network Element: type="Card" (continued)

Attribute Name	Type	Context	Description	Comments
SoftwareRevision	String	Monitor	Software revision	
State	String	Monitor	Network element state	
StateReason	String	Monitor	Network element state reason	
StateTimestamp	Timestamp	Monitor	Timestamp when the network element state was last changed.	

Table E-7 Network Element: type="Folder"

Attribute Name	Type	Context	Description	Comments
RDN	String	All	Relative Distinguished Name	
AlarmSeverity	String	Monitor	Network element alarm state	
FolderType	String	Monitor	Folder type	
IgnoreState	Integer	Monitor	Whether to ignore the state of this network element for status aggregation.	
State	String	Monitor	Network element state	
StateReason	String	Monitor	Network element state reason	
StateTimestamp	Timestamp	Monitor	Timestamp when the network element state was last changed.	

Table E-8 Network Element: type="Group"

Attribute Name	Type	Context	Description	Comments
RDN	String	All	Relative Distinguished Name	
AlarmSeverity	String	Monitor	Network element alarm state	
CreateTime	Timestamp	Monitor	Time group was created	
GroupType	String	Monitor	The type of members contained in this group	
IgnoreState	Integer	Monitor	Network Element Alarm State	
LastUpdated	Timestamp	Monitor	Time group was last updated	
LastVerified	Timestamp	Monitor	Time group was last verified	
Members	Object	Monitor	Information about members of this group	This attribute is an array.
State	String	Monitor	Network Element State	
StateReason	String	Monitor	Network Element State Reason	
StateTimestamp	Timestamp	Monitor	Timestamp when the network element state was last changed.	
WhoCreated	String	Monitor	Who created the group	
WhoLastChanged	String	Monitor	Who last changed the group	

Table E-9 Network Element: type="PWE3VirtualCircuit"

Attribute Name	Type	Context	Description	Comments
RDN	String	All	Relative Distinguished Name	
AdminStatus	Integer	Monitor	The administrative status of the PWE3 Virtual Circuit	
AlarmSeverity	String	Monitor	Network element alarm state	
Description	String	Monitor	The description of the PWE3 Virtual Circuit	
IgnoreState	Integer	Monitor	Network Element Alarm State	
InboundOperationalStatus	Integer	Monitor	The inbound operational status of the PWE3 Virtual Circuit	
IsPrimary	Integer	Monitor	Indicator whether circuit is primary (true) or backup (false)	
Operational Status	Integer	Monitor	The operational status of the PWE3 Virtual Circuit	
OutboundOperationalStatus	Integer	Monitor	The outbound operational status of the PWE3 Virtual Circuit	
PSNType	String	Monitor	The type of PSN for this PWE3 Virtual Circuit	
PeerAddress	IPAddress	Monitor	The peer address of the PWE3 Virtual Circuit	
RemoteInterfaceString	String	Monitor	The remote interface string for this PWE3 Virtual Circuit	
State	String	Monitor	Network Element State	
StateReason	String	Monitor	Network Element State Reason	
StateTimestamp	Timestamp	Monitor	Timestamp when the network element state was last changed.	
Type	String	Monitor	The type of PWE3 Virtual Circuit	
VirtualCircuitIdentifier	Long	Monitor	The virtual circuit identifier of the PWE3 Virtual Circuit	
VirtualCircuitIndex	Long	Monitor	The virtual circuit index of the PWE3 Virtual Circuit	

Table E-10 Network Element: type="PWE3Backhaul"

Attribute Name	Type	Context	Description	Comments
RDN	String	All	Relative Distinguished Name	
AcceptableThreshold	Integer	Monitor	Acceptable threshold for this backhaul	
AlarmSeverity	String	Monitor	Network element alarm state	
IgnoreState	Integer	Monitor	Network Element Alarm State	
LocalIPAddress	IPAddress	Monitor	Local IP Address	
OverloadThreshold	Integer	Monitor	Overload threshold for this backhaul	

Table E-10 Network Element: type="PWE3Backhaul" (continued)

Attribute Name	Type	Context	Description	Comments
RemoteIPAddress	IPAddress	Monitor	Remote IP Address	
State	String	Monitor	Network Element State	
StateReason	String	Monitor	Network Element State Reason	
StateTimestamp	Timestamp	Monitor	Timestamp when the network element state was last changed.	
SystemBandwidth	Integer	Monitor	System Bandwidth	
SystemBandwidthReceive	Integer	Monitor	System Receive Bandwidth	
SystemBandwidthSend	Integer	Monitor	System Send Bandwidth	
UserBandwidth	Integer	Monitor	User Bandwidth	
UserBandwidthReceive	Integer	Monitor	User Receive Bandwidth	
UserBandwidthSend	Integer	Monitor	User Send Bandwidth	
WarningThreshold	Integer	Monitor	Warning threshold for this backhaul	

Table E-11 Network Element: type="Interface", subtype="GSM"

Attribute Name	Type	Context	Description	Comments
RDN	String	All	Relative Distinguished Name	
AdminState	String	Monitor	Administrative state	
AlarmSeverity	String	Monitor	Network element alarm state	
Alias	String	Monitor	Interface Alias	
ConnectionState	String	Monitor	RAN-O Peering connection state	
IPAddresses	IpInfo	Monitor	IP addresses	This attribute is an array.
IgnoreState	Integer	Monitor	Whether to ignore the state of this network element for status aggregation.	
IsOptimized	Integer	Monitor	Whether this shorthaul interface is optimized	
LocalAddress	IPAddress	Monitor	RAN Peering local IP Address	
LocalPort	Integer	Monitor	RAN Peering local port	
LocalState	String	Monitor	RAN Peering local state	
MaxPacketSize	Integer	Monitor	Maximum packet size	
OperationState	String	Monitor	Operational state	
PeerSerialNumber	String	Monitor	RAN Peering peer serial number	
PhysicalAddress	String	Monitor	Physical address	
Protocol	String	Monitor	RAN-O Peering protocol type	
RedundancyState	String	Monitor	RAN-O Peering redundancy state	
RemoteAddress	IPAddress	Monitor	RAN-O Peering remote address	
RemotePort	Integer	Monitor	RAN-O Peering remote port	

Table E-11 Network Element: *type="Interface", subtype="GSM" (continued)*

Attribute Name	Type	Context	Description	Comments
RemoteState	String	Monitor	RAN-O Peering remote state	
ShortInterfaceName	String	Monitor	The value to the left of the dash (if present) in the RDN.	
Speed	Long	Monitor	Interface speed	
SpeedReceive	Long	Monitor	Interface receive speed	
SpeedSend	Long	Monitor	Interface send speed	
State	String	Monitor	Network element state	
StateReason	String	Monitor	Network element state reason	
StateTimestamp	Timestamp	Monitor	Timestamp when the network element was last changed.	
Type	String	Monitor	Interface type	

Table E-12 Network Element: *type="Interface", subtype="UMTS"*

Attribute Name	Type	Context	Description	Comments
RDN	String	All	Relative Distinguished Name	
AdminState	String	Monitor	Administrative state	
AlarmSeverity	String	Monitor	Network element alarm state	
Alias	String	Monitor	Interface Alias	
ConnectionState	String	Monitor	RAN Peering connection state	
IPAddresses	IpInfo	Monitor	IP addresses	This attribute is an array.
IgnoreState	Integer	Monitor	Whether to ignore the state of this network element for status aggregation.	
IsOptimized	Integer	Monitor	Whether this shorthaul interface is optimized	
LocalAddress	IPAddress	Monitor	RAN Peering local IP address	
LocalPort	Integer	Monitor	RAN Peering local port	
LocalReceiveAlarmState	String	Monitor	RAN Peering local receive alarm state	
LocalTransmitAlarmState	String	Monitor	RAN Peering local transmit alarm state	
MaxPacketSize	Integer	Monitor	Maximum packet size	
OperationState	String	Monitor	Operational state	
PeerSerialNumber	String	Monitor	RAN Peering peer serial number	
PhysicalAddress	String	Monitor	Physical address	
Protocol	String	Monitor	RAN Peering protocol type	
RedundancyState	String	Monitor	RAN Peering redundancy state	
RemoteAddress	IPAddress	Monitor	RAN Peering remote address	
RemotePort	Integer	Monitor	RAN Peering remote port	

Table E-12 Network Element: type="Interface", subtype="UMTS" (continued)

Attribute Name	Type	Context	Description	Comments
RemoteReceiveAlarmState	String	Monitor	RAN Peering remote receive alarm state	
RemoteTransmitAlarmState	String	Monitor	RAN Peering remote transmit alarm state	
ShortInterfaceName	String	Monitor	The value to the left of the dash (if present) in the RDN.	
Speed	Long	Monitor	Interface speed	
SpeedReceive	Long	Monitor	Interface receive speed	
SpeedSend	Long	Monitor	Interface send speed	
State	String	Monitor	Network element state	
StateReason	String	Monitor	Network element state reason	
StateTimestamp	Timestamp	Monitor	Timestamp when the network element was last changed.	
Type	String	Monitor	Interface type	

Table 0-13 Network Element: type="Interface", subtype="E1", "T1", "Serial", "CEM", "Ethernet", "FastEthernet", "GigabitEthernet", "ATM", "Loopback", "Tunnel", "IMA", "VLAN", "SONET", "ATMSubInf", "GigabitEthernetSubInf", "PortChannel", "Multilink", "FastEthernetSubInf", "TenGigabitEthernet", "TenGigabitEthernetSubInf", "Virtual-Template

Attribute Name	Type	Context	Description	Comments
RDN	String	All	Relative Distinguished Name	
AdminState	String	Monitor	Administrative state	
AlarmSeverity	String	Monitor	Network element alarm state	
Alias	String	Monitor	Interface Alias	
IPAddresses	IpInfo	Monitor	IP addresses	This attribute is an array.
IgnoreState	Integer	Monitor	Whether to ignore the state of this network element for status aggregation.	
MaxPacketSize	Integer	Monitor	Maximum packet size	
OperationState	String	Monitor	Operational state	
PhysicalAddress	String	Monitor	Physical address	
ShortInterfaceName	String	Monitor	The value to the left of the dash (if present) in the RDN.	
Speed	Long	Monitor	Interface speed	
SpeedReceive	Long	Monitor	Interface receive speed	
SpeedSend	Long	Monitor	Interface send speed	
State	String	Monitor	Network element state	
StateReason	String	Monitor	Network element state reason	

Table 0-13 Network Element: type="Interface", subtype="E1", "T1", "Serial", "CEM", "Ethernet", "FastEthernet", "GigabitEthernet", "ATM", "Loopback", "Tunnel", "IMA", "VLAN", "SONET", "ATMSubInf", "GigabitEthernetSubInf", "PortChannel", "Multilink", "FastEthernetSubInf", "TenGigabitEthernet", "TenGigabitEthernetSubInf", "Virtual-Template (continued)

Attribute Name	Type	Context	Description	Comments
StateTimestamp	Timestamp	Monitor	Timestamp when the network element was last changed.	
Type	String	Monitor	Interface type	

Table E-14 Network Element: type="Link"

Attribute Name	Type	Context	Description	Comments
RDN	String	All	Relative Distinguished Name	
AlarmSeverity	String	Monitor	Network element alarm state	
ConfigLocalAddress	IPAddress	Monitor	Configured local addresses (SCTP)	This attribute is an array.
ConfigLocalInterface	String	Monitor	Configured local interfaces (SCTP)	This attribute is an array.
ConfigLocalPort	Integer	Monitor	Configured local port (SCTP)	
ConfigRemoteAddress	IPAddress	Monitor	Configured remote addresses (SCTP)	This attribute is an array.
ConfigRemotePort	Integer	Monitor	Configured remote port (SCTP)	
CongestionState	String	Monitor	Congestion state	
EffectiveLocalAddress	IPAddress	Monitor	Effective local address (SCTP)	
EffectiveLocalInterface	String	Monitor	Effective local interface name (SCTP)	
EffectiveRemoteAddress	IPAddress	Monitor	Effective remote address (SCTP)	
IgnoreState	Integer	Monitor	Whether to ignore the state of this network element for status aggregation.	
InterfaceName	String	Monitor	Interface name (Serial/HSL link)	
LinkType	String	Monitor	Link type	
LocalAddress	IPAddress	Monitor	Local addresses (SCTP)	This attribute is an array.
LocalAddressState	String	Monitor	Local address states (SCTP)	This attribute is an array.
LocalPort	Integer	Monitor	Local port (SCTP)	
Offloaded	Integer	Monitor	Whether this association is offloaded	
OffloadedProcessor	Integer	Monitor	Offloaded processor Value	
OffloadedSlot	Integer	Monitor	Offloaded slot Value	
PrimaryRemoteAddress	IPAddress	Monitor	Primary remote address (SCTP)	
QOS	Integer	Monitor	QoS value	
ReceiveUtilizationState	String	Monitor	Receive utilization state	
RemoteAddress	IPAddress	Monitor	Remote addresses (SCTP)	This attribute is an array.
RemoteAddressState	String	Monitor	Remote address states (SCTP)	This attribute is an array.
RemotePort	Integer	Monitor	Remote port (SCTP)	
SCTPState	String	Monitor	SCTP state	

Table E-14 Network Element: type="Link" (continued)

Attribute Name	Type	Context	Description	Comments
SLC	Integer	Monitor	Link SLC	
SendUtilizationState	String	Monitor	Send utilization state	
State	String	Monitor	Network element state	
StateReason	String	Monitor	Network element state reason	
StateTimestamp	Timestamp	Monitor	Timestamp when the network element state was last changed.	

Table E-15 Network Element: type="Linkset"

Attribute Name	Type	Context	Description
RDN	String	All	Relative Distinguished Name
ActiveLinks	Integer	Monitor	Number of active links
AdjacentPointCode	PointCode	Monitor	Adjacent point code
AlarmSeverity	String	Monitor	Network element alarm state
CongestedLinks	Integer	Monitor	Number of congested links
Description	String	Monitor	Description
IgnoreState	Integer	Monitor	Whether to ignore the state of this network element for status aggregation.
InboundACL	Integer	Monitor	Inbound access list
LinkNumber	Integer	Monitor	Total number of links
LinkType	String	Monitor	Link type
LocalPointCode	PointCode	Monitor	Local point code
OutboundACL	Integer	Monitor	Outbound access list
State	String	Monitor	Network element state
StateReason	String	Monitor	Network element state reason
StateTimestamp	Timestamp	Monitor	Timestamp when the network element state was last changed.

Table E-16 Network Element: type="Node", subtype="ITP"

Attribute Name	Type	Context	Description	Comments
RDN	String	All	Relative Distinguished Name	
AlarmSeverity	String	Monitor	Network element alarm state	
AveragePollTimePeriod	Period	Monitor	Average time for status poll on a node.	
CLLIcode	String	Monitor	CLLI code of ITP	
ConnectAddress	String	Monitor	IP address and port for terminal connection.	
CustomIcon	String	Monitor	Custom icon	
CustomName	String	Monitor	User-specified name	

Table E-16 Network Element: type="Node", subtype="ITP" (continued)

Attribute Name	Type	Context	Description	Comments
DefaultIcon	String	Monitor	Default icon	
DeviceCapabilities	DeviceCapabilities	Monitor	Device capabilities	This is an attribute group.
DeviceType	String	Monitor	Device type	
DiscoveredTimestamp	TimeStamp	Monitor	When this node was initially discovered.	
EnableProcessTraps	Integer	Monitor	Whether to process traps for this node.	
EnableReportPolling	Integer	Monitor	Whether to enable report polling for this node.	
EnableTrapPolling	Integer	Monitor	Whether to enable trap triggered polling for this node.	
IPAddressInfo	IpAddressInfo	Monitor	Information about IP addresses on this node.	This is an attribute group.
IgnoreState	Integer	Monitor	Whether to ignore the state of this network element for status aggregation.	
LastPollTimePeriod	Period	Monitor	How long did the last status poll take.	
LastPollTimestamp	TimeStamp	Monitor	Last Status Poll Timestamp	
Mtp3OffLoad	String	Monitor	Whether MTP3 offload is enabled.	
NSOConfig	String	Monitor	NSO configuration type (75xx and 76xx ITP)	
ParsedVersion	String	Monitor	Device image version parsed from sysdescr	
PrimaryRedundantMember	Integer	Monitor	Whether This is the active member in a standby group	
RFState	String	Monitor	Redundancy State (75xx and 76xx ITP)	
RebootReason	String	Monitor	Reboot Reason	
SerialNumber	String	Monitor	Device Serial number	
State	String	Monitor	Network element state	
StateReason	String	Monitor	Network element state reason	
StateTimeStamp	TimeStamp	Monitor	Timestamp when the network element state was last changed.	
SysContact	String	Monitor	sysContact for Node	
SysDescr	String	Monitor	sysDescr for node	
SysLocation	String	Monitor	sysLocation for Node	
SysName	String	Monitor	sysName for node	
SysUpTime	Period	Monitor	sysUpTime for node	
TrapsProcessedManually	Integer	Monitor	Whether trap processing is manually or automatically enabled by the system.	

Table E-17 Network Element: type="Node", subtype="ONS"

Attribute Name	Type	Context	Description	Comments
RDN	String	All	Relative Distinguished Name	
AlarmSeverity	String	Monitor	Network element alarm state	
AveragePollTimePeriod	Period	Monitor	Average time for status poll on a node.	
ChassisType	String	Monitor	Chassis type	
ConnectAddress	String	Monitor	IP address and port for terminal connection.	
CustomIcon	String	Monitor	Custom icon	
CustomName	String	Monitor	Custom name for node	
DefaultIcon	String	Monitor	Default icon	
DeviceCapabilities	DeviceCapabilities	Monitor	Device capabilities	This is an attribute group.
DeviceType	String	Monitor	Device type	
DiscoveredTimestamp	Timestamp	Monitor	When this node was initially discovered.	
EnableProcessTraps	Integer	Monitor	Whether to process traps for this node.	
EnableReportPolling	Integer	Monitor	Whether to enable report polling for this node.	
EnableTrapPolling	Integer	Monitor	Whether to enable trap triggered polling for this node.	
IPAddressInfo	IpAddressInfo	Monitor	Information about IP addresses on this node.	This is an attribute group.
IgnoreState	Integer	Monitor	Whether to ignore the state of this network element for status aggregation.	
LastPollTimePeriod	Period	Monitor	How long did the last status poll take.	
LastPollTimestamp	Timestamp	Monitor	Last status poll timestamp	
ParsedVersion	String	Monitor	Device image version parsed from sysdescr	
PrimaryRedundantMember	Integer	Monitor	Whether This is the active member in a standby group	
RebootReason	String	Monitor	Reboot reason	
SerialNumber	String	Monitor	Device serial number	
SoftwareRevision	String	Monitor	Software revision	
State	String	Monitor	Network element state	
StateReason	String	Monitor	Network element state reason	
StateTimestamp	Timestamp	Monitor	Timestamp when network element state was last changed.	
SysContact	String	Monitor	sysContact for Node	
SysDescr	String	Monitor	sysDescr for node	
SysLocation	String	Monitor	sysLocation for Node	

Table E-17 Network Element: type="Node", subtype="ONS" (continued)

Attribute Name	Type	Context	Description	Comments
SysName	String	Monitor	sysName for node	
SysUpTime	Period	Monitor	sysUpTime for node	
TrapsProcessedManually	Integer	Monitor	Whether trap processing is manually or automatically enabled by the system.	

Table E-18 Network Element: type="Node", subtype="RAN_SVC"

Attribute Name	Type	Context	Description	Comments
RDN	String	All	Relative Distinguished Name	
AcceptableThreshold	Integer	Monitor	Node level acceptable threshold for backhaul traffic.	
AlarmSeverity	String	Monitor	Network element alarm state	
AveragePollTimePeriod	Period	Monitor	Average time for status poll on a node.	
CardType	String	Monitor	Card type	
ConnectAddress	String	Monitor	IP address and port for terminal connection.	
CustomIcon	String	Monitor	Custom icon	
CustomName	String	Monitor	Custom name for node	
DefaultIcon	String	Monitor	Default icon	
Description	String	Monitor	Description	
DeviceCapabilities	DeviceCapabilities	Monitor	Device capabilities	This is an attribute group.
DeviceType	String	Monitor	Device type	
DiscoveredTimestamp	Timestamp	Monitor	When this node was initially discovered.	
EnableProcessTraps	Integer	Monitor	Whether to process traps for this node.	
EnableReportPolling	Integer	Monitor	Whether to enable report polling for this node.	
EnableTrapPolling	Integer	Monitor	Whether to enable trap triggered polling for this node.	
FirmwareRevision	String	Monitor	Firmware revision	
HardwareRevision	String	Monitor	Hardware revision	
IPAddressInfo	IpAddressInfo	Monitor	Information about IP addresses on this node.	This is an attribute group.
IgnoreState	Integer	Monitor	Whether to ignore state of this network element for status aggregation.	
LastPollTimePeriod	Period	Monitor	How long did the last status poll take.	
LastPollTimestamp	Timestamp	Monitor	Last status poll timestamp	
Location	String	Monitor	Location for this RAN_SVC: AggregationSite or CellSite.	

Table E-18 Network Element: type="Node", subtype="RAN_SVC" (continued)

Attribute Name	Type	Context	Description	Comments
ManufacturerName	String	Monitor	Manufacturer name	
ModelName	String	Monitor	Model name	
OverloadThreshold	Integer	Monitor	Node level overload threshold for backhaul traffic.	
ParsedVersion	String	Monitor	Device image version parsed from sysdescr	
PrimaryRedundantMember	Integer	Monitor	Whether This is the active member in a standby group	
RebootReason	String	Monitor	Reboot reason	
SNMPAccess	String	Monitor	SNMP access method: InBand or OutOfBand.	
SerialNumber	String	Monitor	Device serial number	
Slot	Integer	Monitor	Slot number	
SoftwareRevision	String	Monitor	Software revision	
State	String	Monitor	Network element state	
StateReason	String	Monitor	Network element state reason	
StateTimestamp	Timestamp	Monitor	Timestamp when the network element state was last changed.	
SysContact	String	Monitor	sysContact for Node	
SysDescr	String	Monitor	sysDescr for node	
SysLocation	String	Monitor	sysLocation for Node	
SysName	String	Monitor	sysName for node	
SysUpTime	Period	Monitor	sysUpTime for node	
TrapsProcessedManually	Integer	Monitor	Whether trap processing is manually or automatically enabled by the system.	
WarningThreshold	Integer	Monitor	Node level warning threshold for backhaul traffic.	

Table E-19 Network Element: type="Node", subtype="CSR"

Attribute Name	Type	Context	Description	Comments
RDN	String	All	Relative Distinguished Name	
AcceptableThreshold	Integer	Monitor	Node level acceptable threshold for backhaul traffic.	
AlarmSeverity	String	Monitor	Network element alarm state	
AveragePollTimePeriod	Period	Monitor	Average time for status poll on a node.	
ConnectAddress	String	Monitor	IP address and port for terminal connection.	
CustomIcon	String	Monitor	Custom icon	

Table E-19 Network Element: type="Node", subtype="CSR" (continued)

Attribute Name	Type	Context	Description	Comments
CustomName	String	Monitor	Custom name for node	
DefaultIcon	String	Monitor	Default icon	
DeviceCapabilities	DeviceCapabilities	Monitor	Device capabilities	This is an attribute group.
DeviceType	String	Monitor	Device type	
DiscoveredTimestamp	Timestamp	Monitor	When this node was initially discovered.	
EnableProcessTraps	Integer	Monitor	Whether to process traps for this node.	
EnableReportPolling	Integer	Monitor	Whether to enable report polling for this node.	
EnableTrapPolling	Integer	Monitor	Whether to enable trap triggered polling for this node.	
IPAddressInfo	IpAddressInfo	Monitor	Information about IP addresses on this node.	This is an attribute group.
IgnoreState	Integer	Monitor	Whether to ignore state of this network element for status aggregation.	
LastPollTimePeriod	Period	Monitor	How long did the last status poll take.	
LastPollTimestamp	Timestamp	Monitor	Last status poll timestamp	
Location	String	Monitor	Location for this RAN_SVC: AggregationSite or CellSite.	
OverloadThreshold	Integer	Monitor	Node level overload threshold for backhaul traffic.	
ParsedVersion	String	Monitor	Device image version parsed from sysdescr	
PrimaryRedundantMember	Integer	Monitor	Whether This is the active member in a standby group	
RebootReason	String	Monitor	Reboot reason	
SNMPAccess	String	Monitor	SNMP access method: InBand or OutOfBand.	
SerialNumber	String	Monitor	Device serial number	
State	String	Monitor	Network element state	
StateReason	String	Monitor	Network element state reason	
StateTimestamp	Timestamp	Monitor	Timestamp when the network element state was last changed.	
SysContact	String	Monitor	sysContact for Node	
SysDescr	String	Monitor	sysDescr for node	
SysLocation	String	Monitor	sysLocation for Node	
SysName	String	Monitor	sysName for node	
SysUpTime	Period	Monitor	sysUpTime for node	

Table E-19 Network Element: type="Node", subtype="CSR" (continued)

Attribute Name	Type	Context	Description	Comments
TrapsProcessedManually	Integer	Monitor	Whether trap processing is manually or automatically enabled by the system.	
WarningThreshold	Integer	Monitor	Node level warning threshold for backhaul traffic.	

Table E-20 Network Element: type="Node", subtype="GGSN", "CSG1", "CSG2", "CDT", "BWG", "HA", "mSEF", "IP-RAN", "MetroE Switch", "Generic", "PDSN", "PDNGW", "SGW", "PCRF", "SPGW"

Attribute Name	Type	Context	Description	Comments
RDN	String	All	Relative Distinguished Name	
AlarmSeverity	String	Monitor	Network element alarm state	
AveragePollTimePeriod	Period	Monitor	Average time for status poll on a node.	
ConnectAddress	String	Monitor	IP address and port for terminal connection.	
CustomIcon	String	Monitor	Custom icon	
CustomName	String	Monitor	Custom name for node	
DefaultIcon	String	Monitor	Default icon	
DeviceCapabilities	DeviceCapabilities	Monitor	Device capabilities	This is an attribute group.
DeviceType	String	Monitor	Device type	
DiscoveredTimestamp	Timestamp	Monitor	When this node was initially discovered.	
EnableProcessTraps	Integer	Monitor	Whether to process traps for this node.	
EnableReportPolling	Integer	Monitor	Whether to enable report polling for this node.	
EnableTrapPolling	Integer	Monitor	Whether to enable trap triggered polling for this node.	
IPAddressInfo	IpAddressInfo	Monitor	Information about IP addresses on this node.	This is an attribute group.
IgnoreState	Integer	Monitor	Whether to ignore state of this network element for status aggregation.	
LastPollTimePeriod	Period	Monitor	How long did the last status poll take.	
LastPollTimestamp	Timestamp	Monitor	Last status poll timestamp	
ParsedVersion	String	Monitor	Device image version parsed from sysdescr	
PrimaryRedundantMember	Integer	Monitor	Whether This is the active member in a standby group	
RebootReason	String	Monitor	Reboot reason	
SerialNumber	String	Monitor	Device serial number	
State	String	Monitor	Network element state	

Table E-20 Network Element: type="Node", subtype="GGSN", "CSG1", "CSG2", "CDT", "BWG", "HA", "mSEF", "IP-RAN", "MetroE Switch", "Generic", "PDSN", "PDNGW", "SGW", "PCRF", "SPGW"

Attribute Name	Type	Context	Description	Comments
StateReason	String	Monitor	Network element state reason	
StateTimestamp	Timestamp	Monitor	Timestamp when the network element state was last changed.	
SysContact	String	Monitor	sysContact for Node	
SysDescr	String	Monitor	sysDescr for node	
SysLocation	String	Monitor	sysLocation for node	
SysName	String	Monitor	sysName for node	
SysUpTime	Period	Monitor	sysUpTime for node	
TrapsProcessedManually	Integer	Monitor	Whether trap processing is manually or automatically enabled by the system.	

Table E-21 Network Element: type="Node", subtype="E1", "T1", "Serial", "CEM", "Ethernet", "FastEthernet", "GigabitEthernet", "ATM", "Loopback", "Tunnel", "IMA", "VLAN", "SONET", "ATMSubInf", "GigabitEthernetSubInf", "PortChannel", "Multilink", "FastEthernetSubInf", "TenGigabitEthernet", "TenGigabitEthernetSubInf", "Virtual_Template"

Attribute Name	Type	Context	Description	Comments
RDN	String	All	Relative Distinguished Name	
AdminState	String	Monitor	Administrative state	
AlarmSeverity	String	Monitor	Network element alarm state	
IPAddresses	IPAddress	Monitor	IP addresses	This attribute is an array.
RDN	String	All	Relative Distinguished Name	
AdminState	String	Monitor	Administrative State	
AlarmSeverity	String	Monitor	Network Element Alarm State	
IPAddress	IPInfo	Monitor	IP Address	This attribute is an array and attribute group
IgnoreState	Integer	Monitor	Whether to ignore the state of this network element for status aggregation.	
MaxPacketSize	Integer	Monitor	Maximum packet size	
OperationState	String	Monitor	Operational state	
PhysicalAddress	String	Monitor	Physical address	
ShortInterfaceName	String	Monitor	The value to the left of the dash (if present) in the RDN.	
Speed	Long	Monitor	Interface speed	
SpeedReceive	Long	Monitor	Interface receive speed	
SpeedSend	Long	Monitor	Interface send speed	
State	String	Monitor	Network element state	
StateReason	String	Monitor	Network element state reason	

Table E-21 Network Element: type="Node", subtype="E1", "T1", "Serial", "CEM", "Ethernet", "FastEthernet", "GigabitEthernet", "ATM", "Loopback", "Tunnel", "IMA", "VLAN", "SONET", "ATMSubInf", "GigabitEthernetSubInf", "PortChannel", "Multilink", "FastEthernetSubInf", "TenGigabitEthernet", "TenGigabitEthernetSubInf", "Virtual_Template" (continued)

Attribute Name	Type	Context	Description	Comments
StateTimestamp	Timestamp	Monitor	Timestamp when the network element was last changed.	
Type	String	Monitor	Interface Type	

Table E-22 Network Element: type="RBH"

Attribute Name	Type	Context	Description	Comments
RDN	String	All	Relative Distinguished Name	
AcceptableThreshold	Integer	Monitor	Acceptable threshold for this backhaul.	
AlarmSeverity	String	Monitor	Network element alarm state	
IgnoreState	Integer	Monitor	Whether to ignore the state of this network element for status aggregation.	
IsVirtualBackhaul	Integer	Monitor	Whether this backhaul is a virtual backhaul.	
LocalIPAddress	IPAddress	Monitor	Local IP address	
OverloadThreshold	Integer	Monitor	Overload threshold for this backhaul.	
PeerSerialNumber	String	Monitor	Peer serial number	
RemoteIPAddress	IPAddress	Monitor	Remote IP address	
State	String	Monitor	Network element state	
StateReason	String	Monitor	Network element state reason	
StateTimestamp	Timestamp	Monitor	Timestamp when the network element was last changed.	
SystemBandwidth	Integer	Monitor	System bandwidth	
SystemBandwidthReceive	Integer	Monitor	System receive bandwidth	
SystemBandwidthSend	Integer	Monitor	System send bandwidth	
UserBandwidth	Integer	Monitor	User bandwidth	
UserBandwidthReceive	Integer	Monitor	User receive bandwidth	
UserBandwidthSend	Integer	Monitor	User send bandwidth	
WarningThreshold	Integer	Monitor	Warning threshold for this backhaul.	

Table E-23 Network Element: type="SGMP"

Attribute Name	Type	Context	Description	Comments
RDN	String	All	Relative Distinguished Name	
AlarmSeverity	String	Monitor	Network element alarm state	
ConfigLocalAddress	IPAddress	Monitor	Configured local addresses (SCTP)	This attribute is an array.

Table E-23 Network Element: type="SGMP" (continued)

Attribute Name	Type	Context	Description	Comments
ConfigLocalInterface	String	Monitor	Configured local interfaces (SCTP)	This attribute is an array.
ConfigLocalPort	Integer	Monitor	Configured local port (SCTP)	
ConfigRemoteAddress	IPAddress	Monitor	Configured remote addresses (SCTP)	This attribute is an array.
ConfigRemotePort	Integer	Monitor	Configured remote port (SCTP)	
CongestionState	String	Monitor	Congestion state	
EffectiveLocalAddress	IPAddress	Monitor	Effective local address (SCTP)	
EffectiveLocalInterface	String	Monitor	Effective local interface name (SCTP)	
EffectiveRemoteAddress	IPAddress	Monitor	Effective remote address (SCTP)	
IgnoreState	Integer	Monitor	Whether to ignore the state of this network element for status aggregation.	
LocalAddress	IPAddress	Monitor	Local address (SCTP)	This attribute is an array.
LocalAddressState	String	Monitor	Local address states (SCTP)	This attribute is an array.
LocalPort	Integer	Monitor	Local port (SCTP)	
Offloaded	Integer	Monitor	Whether this association is offloaded	
OffloadedProcessor	Integer	Monitor	Offloaded processor Value	
OffloadedSlot	Integer	Monitor	Offloaded slot Value	
PassiveMode	Integer	Monitor	Whether this SGMP association is passive.	
PrimaryRemoteAddress	IPAddress	Monitor	Primary remote address (SCTP)	
QOS	Integer	Monitor	QoS value	
RemoteAddress	IPAddress	Monitor	Remote addresses (SCTP)	This attribute is an array.
RemoteAddressState	String	Monitor	Remote address states (SCTP)	This attribute is an array.
RemotePort	Integer	Monitor	Remote port (SCTP)	
SCTPState	String	Monitor	SCTP state	
State	String	Monitor	Network element state	
StateReason	String	Monitor	Network element state reason	
StateTimestamp	Timestamp	Monitor	Timestamp when the network element state was last changed.	

Table E-24 Network Element: type="SP"

Attribute Name	Type	Context	Description	Comments
RDN	String	All	Relative Distinguished Name	
AlarmSeverity	String	Monitor	Network element alarm state	
CapabilityPointCode	PointCode	Monitor	Capability point code	This attribute is an array.
CustomIcon	String	Monitor	Custom icon	
CustomName	String	Monitor	Custom name	
DefaultIcon	String	Monitor	Default icon	
Description	String	Monitor	Description	
IgnoreState	Integer	Monitor	Whether to ignore the state of this network element for status aggregation.	
InstanceID	Integer	Monitor	Instance number for this signaling point.	
IsIsolated	Integer	Monitor	Whether the signaling point is isolated.	
NetworkIndicator	String	Monitor	Network indicator	
NetworkName	String	Monitor	Network name	
PointCode	PointCode	Monitor	Point code	This attribute is an array.
QOSConfig	QosEntry	Monitor	QoS configurations for this signaling point.	This attribute is an array and an attribute group.
State	String	Monitor	Network element state	
StateReason	String	Monitor	Network element state reason	
StateTimestamp	Tmestamp	Monitor	Timestamp when the network element state was last changed.	
Variant	String	Monitor	Variant	

Monitor Attribute Groups

The following tables describe the MWTM 6.1.6 Monitor attribute groups:

- [Attribute Group: "DeviceCapabilities"](#)
- [Attribute Group: "IpAddressInfo"](#)
- [Attribute Group: "Protection"](#)
- [Attribute Group: "QosEntry"](#)
- [Attribute Group: "IPInfo"](#)

Table E-25 Attribute Group: "DeviceCapabilities"

Attribute Name	Type	Context	Description	Comments
Capability	Object	Monitor	Device capability	This attribute is an array.

Table E-26 Attribute Group: "IpAddressInfo"

Attribute Name	Type	Context	Description	Comments
Address	IPAddress	Monitor	IP address	This attribute is an array.
LastPolledAddress	IPAddress	Monitor	Last polled IP address	
PollingTimestamp	Timestamp	Monitor	Last polled timestamp for IP address.	This attribute is an array.
PrimaryAddress	IPAddress	Monitor	Primary IP address	
SNMPFlag	Integer	Monitor	SNMP flags for IP address	This attribute is an array.
Status	String	Monitor	IP address status values	This attribute is an array.

Table E-27 Attribute Group: "Protection"

Attribute Name	Type	Context	Description
ConfiguredState	String	Monitor	Configured protection state
CurrentState	String	Monitor	Current protection state
OtherSlotNum	Integer	Monitor	Other slot number
SlotNum	Integer	Monitor	Slot number

Table E-28 Attribute Group: "QosEntry"

Attribute Name	Type	Context	Description
DSCPValue	Integer	Monitor	IP DSCP value
QOS	Integer	Monitor	QoS value for signaling point
QOSType	String	Monitor	QoS type: DSCP or TOS
TOSValue	Integer	Monitor	IP TOS value

Table E-29 Attribute Group: "IPInfo"

Attribute Name	Type	Context	Description
IPAddress	IPAddress	Monitor	IP Address
IPSubnetMask	String	Monitor	IP Mask

