***NMSv2-Integration-API***

[1 Master Data Details: 2](#_Toc63468676)

[1.1 Category Details 2](#_Toc63468677)

[1.2 Hardware Type 2](#_Toc63468678)

[1.3 Integration Methodology 3](#_Toc63468679)

[1.4 Switch Traping Type 3](#_Toc63468680)

[2 Device List API 3](#_Toc63468681)

[3 Get Device list from Other Source 4](#_Toc63468682)

[4 API for Hardware Status 5](#_Toc63468683)

[5 API for Switch Port Mapping 5](#_Toc63468684)

[6 Switch Utilization Status 6](#_Toc63468685)

[6.1 Port Utilization Details 6](#_Toc63468686)

[7 Switch Traping Status 7](#_Toc63468687)

[8 Third Party Status Recived 7](#_Toc63468688)

# Master Data Details:

Master Data Details are as below that data used for make the master configuration for NMS.

## Category Details

|  |  |  |  |
| --- | --- | --- | --- |
| |  | | --- | | **ID** | | |  | | --- | | **Value** | |
| 1 | **Field Equipment** |
| 2 | **Control Room Equipment** |
| 3 | **Network Infrastructure Equipment** |
| 4 | **Power Equipment** |

## Hardware Type

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| |  | | --- | | **ID** | | |  | | --- | | **Value** | | |  | | --- | | **Category** | |
| 1 | **CCTV** | 1 |
| 2 | **ECB** | 1 |
| 3 | **ATCC** | 1 |
| 4 | **ANPR** | 1 |
| 5 | **RADAR** | 1 |
| 6 | **VIDS** | 1 |
| 7 | **VMS** | 1 |
| 8 | **MET** | 1 |
| 9 | **DATA CENTER SOFTWARE** | 3 |
| 10 | **SERVER** | 2 |
| 11 | **SWITCH** | 3 |
| 12 | **VIDEO WALL** | 2 |
| 13 | **DATA STORAGE** | 2 |
| 14 | **JOY STICK** | 2 |
| 15 | **UPS** | 4 |
| 16 | **BOOM BARRIER** | 1 |
| 17 | **POS MACHINES** | 1 |
| 18 | **INDICATORS** | 1 |
| 19 | **MULTILINE LED DISPLAYS** | 1 |
| 20 | **FIELD SOFTWARE** | 1 |

## Integration Methodology

|  |  |  |  |
| --- | --- | --- | --- |
| |  | | --- | | **ID** | | |  | | --- | | **Value** | |
| 0 | **PING** |
| 1 | **FRAME** |
| 2 | **SNMP** |
| 3 | **TELNET** |
| 4 | **OTHER** |
| 5 | **TCP** |

## Switch Traping Type

|  |  |  |  |
| --- | --- | --- | --- |
| |  | | --- | | **ID** | | |  | | --- | | **Value** | |
| 1 | **Authentication Failed** |
| 2 | **Link Up** |
| 3 | **Link Down** |
| 4 | **Overheat** |
| 5 | **Cooling Start** |
| 6 | **Configuration Changed Unsaved** |
| 7 | **Configuration Changed Saved** |

# Device List API

Http URL :

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| |  | | --- | | **Field** | | |  | | --- | | **Value** | | |  | | --- | | **Remark** | |
| Method | **HTTP GET** |  |
| Port | **6086** |  |
| Format | **JSON** |  |
| Base Path | **http://<ip\_address>:port/** |  |
| API Path | **VaaaN/NMSv2/DeviceListbyLocation?LocationId=** |  |

Output JSON Format:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| |  | | --- | | **Field** | | |  | | --- | | **Value** | | |  | | --- | | Remark | |
| DeviceId | Int32 |  |
| DeviceName | String |  |
| HardwareTypeId | Int16 | Refer Point 1.2 |
| IntegrationMethodologyId | Int16 | Refer Point 1.3 |
| DeviceLoginId | String |  |
| DevicePassword | String |  |
| LocalIpAddress | String |  |
| LocalPort | Int16 |  |
| PublicIpAddress | String | Default is blank, if any public Ip Configure |
| PublicPort | Int16 | Default is 0, If any public Ip Configure |

# Get Device list from Other Source

Http URL:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| |  | | --- | | **Field** | | |  | | --- | | **Value** | | |  | | --- | | **Remark** | |
| Method | **HTTP POST** |  |
| Port | **6086** |  |
| Format | **JSON** |  |
| Base Path | **http://<ip\_address>:port/** |  |
| API Path | **VaaaN/NMSv2-Events/ReceivedDevices** |  |

Input JSON Format:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| |  | | --- | | **Field** | | |  | | --- | | **Value** | | |  | | --- | | Remark | |
| LocationId | Int32 |  |
| HardwareTypeId | Int32 | Refer Point 1.2 |
| DeviceName | String |  |
| Direction | Int16 | 0-None,1-UP,2-Down |
| IpAddress | String |  |
| Port | Int16 |  |
| DeviceLoginId | String |  |
| DevicePassword | String |  |
| Latitude | String |  |
| Longitude | String |  |

# API for Hardware Status

Http URL:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| |  | | --- | | **Field** | | |  | | --- | | **Value** | | |  | | --- | | **Remark** | |
| Method | **HTTP POST** |  |
| Port | **6086** |  |
| Format | **JSON** |  |
| Base Path | **http://<ip\_address>:port/** |  |
| API Path | **VaaaN/NMSv2-Events/ReceivedStatus** |  |

Input JSON Format:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| |  | | --- | | **Field** | | |  | | --- | | **Value** | | |  | | --- | | Remark | |
| EntryId | Int32 | Internal Use (Sequence Number) |
| DeviceId | Int32 | Refer Point 2 |
| NetworkStatus | Int16 | 0-DOWN,1-UP |
| NetworkType | Int16 | 1-Local,2-Public |
| NetworkLatency | Int16 | -1 if unable to fetch |
| StatusTimeStamp | String | Format for: [dd-MM-yyyy HH:mm:ss] |
| ReceivedTimeStamp | DateTime | Internal Use (Conversion of [StatusTimeStamp]) |
| StoredTimeStamp | DateTime | Internal Use (Server Date time) |

# API for Switch Port Mapping

Http URL:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| |  | | --- | | **Field** | | |  | | --- | | **Value** | | |  | | --- | | **Remark** | |
| Method | **HTTP POST** |  |
| Port | **6086** |  |
| Format | **JSON** |  |
| Base Path | **http://<ip\_address>:port/** |  |
| API Path | **VaaaN/NMSv2-Events/SwitchMappingAutoInsert** |  |

Input JSON Format:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| |  | | --- | | **Field** | | |  | | --- | | **Value** | | |  | | --- | | Remark | |
| DeviceId | Int32 |  |
| DevicePortName | String |  |

# Switch Utilization Status

Http URL:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| |  | | --- | | **Field** | | |  | | --- | | **Value** | | |  | | --- | | **Remark** | |
| Method | **HTTP POST** |  |
| Port | **6086** |  |
| Format | **JSON** |  |
| Base Path | **http://<ip\_address>:port/** |  |
| API Path | **VaaaN/NMSv2-Events/** **ReceivedSwitchUtilization** |  |

Input JSON Format:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| |  | | --- | | **Field** | | |  | | --- | | **Value** | | |  | | --- | | Remark | |
| EntryId | Int64 | Internal Use (Sequence Number) |
| DeviceId | Int32 | Refer Point 2 |
| StatusTimeStamp | String | Format for: [dd-MM-yyyy HH:mm:ss] |
| ReceivedTimeStamp | DateTime | Internal Use (Conversion of [StatusTimeStamp]) |
| StoredTimeStamp | DateTime | Internal Use (Server Date time) |
| AverageUtilization | Double | Up to 4 Place Decimal |
| PortUtilization | List | Collection of all ports of switch Refer point 6.1 |
| Model | String | Switch Model Number |
| UpTime | Int32 |  |
| TotalInterface | Int16 |  |
| UpInterface | Int16 |  |
| DownInterface | Int16 |  |
| LastChanged | Int32 |  |
| DropedPacket | Int32 |  |
| ErrorPacket | Int32 |  |

## Port Utilization Details

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| |  | | --- | | **Field** | | |  | | --- | | **Value** | | |  | | --- | | Remark | |
| PortName | String |  |
| Utilization | Double |  |

# Switch Traping Status

Http URL:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| |  | | --- | | **Field** | | |  | | --- | | **Value** | | |  | | --- | | **Remark** | |
| Method | **HTTP POST** |  |
| Port | **6086** |  |
| Format | **JSON** |  |
| Base Path | **http://<ip\_address>:port/** |  |
| API Path | **VaaaN/NMSv2-Events/ReceivedTrapingStatus** |  |

Input JSON Format:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| |  | | --- | | **Field** | | |  | | --- | | **Value** | | |  | | --- | | Remark | |
| EntryId | Int32 | Internal Use (Sequence Number) |
| DeviceId | Int32 | Refer Point 2 |
| TrapedId | Int16 | Refer Point 1.4 |
| StatusTimeStamp | String | Format for: [dd-MM-yyyy HH:mm:ss] |
| ReceivedTimeStamp | DateTime | Internal Use (Conversion of [StatusTimeStamp]) |
| StoredTimeStamp | DateTime | Internal Use (Server Date time) |

# Third Party Status Recived

Http URL:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| |  | | --- | | **Field** | | |  | | --- | | **Value** | | |  | | --- | | **Remark** | |
| Method | **HTTP POST** |  |
| Port | **6087** |  |
| Format | **JSON** |  |
| Base Path | **http://<ip\_address>:port/** |  |
| API Path | **status/** |  |

Input JSON Format:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| |  | | --- | | **Field** | | |  | | --- | | **Value** | | |  | | --- | | Remark | |
| DeviceIp | String |  |
| DevicePort | Int16 |  |
| DeviceStatus | Int16 | 0 for Down and 1 for UP |
| StatusTimeStamp | String | Format for: [dd-MM-yyyy HH:mm:ss] |

**Note: All POST API Success Code is 200 and rest used for Failed.**