mPower R.6.3.0 – API Changes

Change Log Summary

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Description

This document lists all the changes that are implemented in mPower R.6.3.0 API compare to release 6.0.0.

All the changes are marked in RED.

Commands

API supports a set of special actions using the Command URL (**api/command**). Execute a command using a POST request call method. A RESTful GET request returns an array of all available commands.

New commands:

- database_version_check
- curl_passwd
- setup_radiobridge_console

The FOTA functionality is obsolete and was removed from the code, as a result, these commands are removed:

- telit_check_fota_updates
- telit_fota_upgrade

Command	Type	Description
bootloader_console	ACTION	Controls bootloader access and silent mode configuration status
bootloader_lock	ACTION	Controls password authentication to access the device bootloader
call_home_disable	ACTION	Disables call home feature with DeviceHQ
call_home_enable	ACTION	Enables call home feature with DeviceHQ
checkin_to_devicehq	ACTION	Triggers a check-in to DeviceHQ
clean_oem	ACTION	Clears user-defined default configurations from memory and returns the device to factory default
continuous_ping_start	ACTION	Starts continuous ping
continuous_ping_stop	ACTION	Stops continuous ping and shows the ping results
curl_passwd	ACTION	
database_version_check	ACTION	Uploads config file to device and compares the version number
ddns_update	ACTION	Pushes DDNS information to the configured DDNS server

Command	Type	Description
download_config	ACTION	Downloads the current configuration
firmware_check	ACTION	Uploads firmware file to device and checks it (POST mtr upgrade bin file)
firmware_pre_upgrade	ACTION	Prepares system for firmware upgrade (i.e. shuts down Node-RED, frees space for the upgrade package)
firmware_upgrade	ACTION	Upgrades device firmware
legacy_sync	ACTION	Synchronizes legacy configurations
loglvl_debug	ACTION	Sets the systems logging level to DEBUG
loglvl_info	ACTION	Sets the systems logging level to INFO
loglvl_trace	ACTION	Sets the systems logging level to TRACE
loglvl_warning	ACTION	Sets the systems logging level to WARNING
node_red_status	ACTION	Operational status of the Node-RED server
passwd	ACTION	Changes or resets user login information including username, ID, and password
ping	ACTION	Send a set of ICMP pings to an address or FQDN, interface can be ANY, LAN, WIFI, WIFI-AP, CELLULAR, or ETHERNET (POST 'ip' and 'interface' in JSON)
ppp_start	ACTION	Start PPPD
ppp_stop	ACTION	Stop PPPD
ppp_toggle	ACTION	Toggle PPPD
radio	OBJECT	The API supports a set of special actions using the Command Radio URL (api/command/radio). Execute a command using a POST request call method. A RESTful Get request returns an array of all available commands.
check_sim_status	ACTION	Checks SIM card status (DEPRECATED)
cmd	ACTION	Sends a string directly to the cellular radio, timeout must be in milliseconds
firmware_check	ACTION	Uploads radio firmware file to device and checks it (POST radio firmware upgrade bin file)
firmware_pre_upgrade	ACTION	Prepares system for radio firmware upgrade (i.e. shuts down Node-RED, Lora Network Server, frees space for the upgrade package)
firmware_upgrade	ACTION	Initiates radio firmware upgrade
set_mdn	ACTION	Sets the mobile directory number

Command	Type	Description
supported_cellular_modes	ACTION	Gets a list of cellular modes that are supported on the modem.
unlock_sim_card	ACTION	Unlocks SIM card
upgrade_firmware	ACTION	Upgrades radio modem firmware. LEGACY
vzw_reset_class3_apn	ACTION	Reset the current APN value and obtain APN from the Verizon network.
radio-cmd	ACTION	Sends a string directly to the cellular radio, timeout must be in milliseconds
radio_activate	ACTION	Attempts to activate the on-board cellular radio (CDMA)
radio_cmd	ACTION	Sends a string directly to the cellular radio, timeout must be in milliseconds
remove_icon	ACTION	Deletes user-supplied icon
remove_image	ACTION	Deletes user-supplied image
remove_logo	ACTION	Deletes user-supplied logo
reset_bluetooth	ACTION	Resets the Bluetooth hardware
reset_modem	ACTION	Resets the cellular radio hardware
reset_wifi	ACTION	Resets the WiFi hardware
restart	ACTION	Restarts device
restart_node_red	ACTION	Restarts Node-RED server
restore_defaults	ACTION	Resets the device with user-defined defaults if set, otherwise factory
restore_factory	ACTION	Resets the device with factory defaults
revert	ACTION	Reverts all changes since the last save
save	ACTION	Saves the current configuration
save_apply	ACTION	Saves the current configuration and applies the changes immediately, use "allowRestart=true" option to apply the changes that require device reboot
save_oem	ACTION	Saves current configuration as factory/OEM default
save_restart	ACTION	Saves the current configuration and restarts the device
setup_radiobridge_console	ACTION	
sms_send	ACTION	Send a text to a specified recipient

Command	Type	Description
~~telit_check_fota_updates~~	~~ACTION~~	~~Get information on Telit Radio Firmware Upgrade~~ **Note: the functionality is removed from the code**
~~telit_fota_upgrade~~	~~ACTION~~	~~Initiates Telit radio firmware upgrade from external site~~ **Note: the functionality is removed from the code**
telit_upgrade	ACTION	Initiates Telit radio firmware upgrade (POST Telit upgrade bin). LEGACY
upload_config	ACTION	Uploads and sets new configuration (POST configuration file)
upload_icon	ACTION	Uploads and sets new icon (POST icon file)
upload_image	ACTION	Uploads and sets new image (POST image file)
upload_logo	ACTION	Uploads and sets new logo (POST logo file)

Collections

Collections are groups of related elements used to configure a service or capability. There are four main actions that can be performed on a collection: get, edit, add, and delete. These actions align with RESTful calls: GET, PUT, POST, and DELETE.

The following collections **were NOT modified** in mPower R.6.3.0 compare to mPower R.6.0.0:

- alert
- appStore
- apps
- autoDialout
- autoReboot
- backOffTimers
- battery
- bluetooth
- bluetoothLowEnergy
- bootloader
- brand
- btDevices
- cacertificates
- callHome
- certificate
- customApps
- customAppsConfig
- databaseInfo

- ddns
- dhcp
- dns
- docker
- eventlog
- filters
- firewall
- gps
- greTunnels
- ipPipes
- ipsecTunnels
- lan
- legacyDefaults
- nat
- ni
- nodeRed
- notificationEventGroup
- ovpnTunnels
- packages
- policy
- ppp
- radius
- remoteAccess
- remoteManagement
- resetButton
- routes
- secureProtocols
- selfDiagnostic
- serial
- serialModemPassthrough
- smtp
- snmp
- sntp
- syslog
- trustedIp
- users
- waninfo
- wanmngr
- wifi

The following collections **were modified:**

- loraNetwork
- mqttBroker
- passwordComplexityRules
- sms
- stats
- system

The following collections **were added:**

- cellTimeSync
- customRoles
- lldp
- saveAndRestore
- scada

The following collections **were removed:**

- devices
- gccp
- powerManagement
- telnet
- telnetServer

Collection	Type	Description
alert	OBJECT	The alerts array contains predefined number of elements; each defines settings for particular type of alert. A set of settings applicable for different alert types is different
appStore	OBJECT	Defines settings for Application Store
apps	ARRAY	Contains information on installed Node-RED applications
autoDialout	OBJECT	Allows the use of the cellular modem directly from the serial port
autoReboot	OBJECT	Causes the device to reboot automatically
backOffTimers	OBJECT	Stores carrier-defined backoff timers for PPP connections, SMS retries, and modem resets
battery	OBJECT	Contains the backup battery configuration parameters
bluetooth	OBJECT	Allows a device to connect via Bluetooths
bluetoothLowEnergy	OBJECT	Allows connecting devices via BLE
bootloader	OBJECT	Bootloader configuration parameters

Collection	Type	Description
brand	OBJECT	Customizes icons, images, and support information for a rebranded device
btDevices	ARRAY	List of available Bluetooth devices
cacertificates	OBJECT	Management of CA (Certifying Authority) certificates
callHome	OBJECT	Enables the device to call home for configuration files, firmware updates and adds your DeviceHQ account key to the device so it is associated with your DeviceHQ account
cellTimeSync	OBJECT	Defines the clock synchronization settings using a cellular radio
certificate	OBJECT	Contains secure public key certificate configurations
customApps	OBJECT	Manages installed custom applications
customAppsConfig	OBJECT	Manages device configuration and custom application support
customRoles		
databaseInfo		
ddns	OBJECT	Updates the dynamic domain name server when the IP address changes
dhcp	OBJECT	Stores DHCP settings
dns	OBJECT	DNS forwarding configuration
docker	OBJECT	Docker service configuration
eventlog	OBJECT	Defines eventlog settings
filters	ARRAY	Stores a list of firewall filters
firewall	OBJECT	Stores firewall settings
gps	OBJECT	Stores the GPS service settings
greTunnels	ARRAY	Stores a list of GRE tunnels
ipPipes	ARRAY	Stores a list of configured IP pipes
ipsecTunnels	ARRAY	Stores a list of IPsec tunnels
lan	OBJECT	Defines the LAN interface settings for PPP-IP PASSTHROUGH and SERIAL-MODEM PASSTHROUGH modes only
legacyDefaults		
lldp	OBJECT	Defines the Link Layer Discovery Protocol configuration settings
loraNetwork	OBJECT	lora network interface settings
mqttBroker	OBJECT	Allows to configure the Mosquitto broker (server) to work as an MQTT bridge

Collection	Type	Description
nat	ARRAY	Stores a list of NAT rules for advanced firewall settings
ni	OBJECT	Settings for network interfaces
nodeRed	OBJECT	Node-RED configuration
notificationEventGroup		
ovpnTunnels	ARRAY	List of configured OpenVPN tunnels
packages	OBJECT	Perform package management operations
passwordComplexityRules	OBJECT	Defines password complexity rules for local user accounts
policy	OBJECT	Contains usage policy settings
ppp	OBJECT	Defines the PPP settings
radius	OBJECT	Configures Radius settings
remoteAccess	OBJECT	Defines settings for remote access of the device
remoteManagement	OBJECT	Defines the remote management settings
resetButton	OBJECT	Reset button behavior configuration
routes	ARRAY	Stores a list of static routes
saveAndRestore	OBJECT	Save and Restore configuration options
scada	OBJECT	Supervisory control and data acquisition settings
secureProtocols	ARRAY	Cipher suites and advanced security options
selfDiagnostic	OBJECT	Self-diagnostic settings
serial	OBJECT	Defines the serial port settings
serialModemPassthrough	OBJECT	Defines serial modem mode settings
sms	OBJECT	Defines the SMS settings
smtp	OBJECT	Defines the SMTP settings
snmp	OBJECT	Defines the SNMP settings
sntp	OBJECT	Defines the clock synchronization settings with a remote SNTP server
stats	OBJECT	Statistics on services and interfaces
syslog	OBJECT	Defines the syslog support settings

Collection	Type	Description
system	OBJECT	Defines the system attributes
trustedIp	OBJECT	Filter incoming packets depending on the white or black IP addresses list
users	ARRAY	Stores a list of users for authentication purposes
waninfo	OBJECT	Stores information on WAN interfaces
wanmngr	OBJECT	Defines the WAN management settings
wifi	OBJECT	Defines the Wi-Fi services settings

loraNetwork

Modified collection.

Description: lora network interface settings

loraNetwork	Type	Description
__v	UINT	version of model [20] (automatic)
addressRange	OBJECT	address range settings
end	STRING	end of range for assigned addresses, four groups of two hexadecimal digits, separated by colons
start	STRING	start of range for assigned addresses, four groups of two hexadecimal digits, separated by colons
backupInterval		
basicStation		
cert		
cert2		
conf		
conf2		
credentials		
credentials2		
key		
key2		
trust		
trust2		
uri		
uri2		
sign		
sign2		
db		
defaultApp		
enabled		

loraNetwork	Type	Description
eui		
module		
options		
apikey		
check_hostname		
client_cert		
password		
server_cert		
username		
clean_session		
cloudService		
downlinkTopic		
overrideTopicsForAllApps		
uplinkTopic		
url		
backhaulDetect		
enabled		
payload		
port		
timeout		
encodeHex		
requestOptions		
api		
log		
lora		
log	OBJECT	log settings
console	BOOL	console
level	UINT	log level
path	STRING	path
syslog	BOOL	syslog
lora	OBJECT	lora settings
ADRStep	UINT	Step in cB between SNR based datarate assignment for ADR
aesKey		
antennaGain	INT	Gain of external antenna in dBi
basicStationMode		
beaconFreqHop		
beaconFrequency		
beaconInfoDesc		
beaconInterval		

loraNetwork	Type	Description
beaconLatitude		
beaconLongitude		
beaconPower		
calAD9361		
calTempRoom		
channelMask		
channelPlan		
classCAckTimeout		
deviceQueueSize	UINT	device queue size for pending downlink packets
diversity		
dspStatInterval		
dutyCyclePeriod	UINT	Length of duty-cycle sliding window in minutes
dwelltimeDown	UINT	max dwelltime for downlink packets default: 0 - no limit, 1 - 400 ms
dwelltimeUp	UINT	max dwelltime for uplink packets, default: 0 - no limit, 1 - 400 ms
enableStrictCounterValidation		
enabled	BOOL	check to enable lora network support
fineTimestampEnable		
fineTimestampMode		
frequencyAS	UINT	center freq for extra AS channels (Hz)
frequencyAS2		
frequencyBand	UINT	frequency band
frequencyBand2		
frequencyEU	UINT	center freq for extra EU channels (Hz)
frequencyEU2		
frequencyIN		
frequencyIN2		
frequencyISM2400		
frequencyISM2400_2		
frequencyISM2400_2_1		
frequencyISM2400_2_2		
frequencyISM2400_2_3		
frequencyISM2400_3		
frequencyKR	UINT	center freq for extra KR channels (Hz)
frequencyKR2		
frequencyRU		
frequencyRU2		
frequencySubBand	UINT	frequency sub-band
frequencySubBand2		
fskSYNC		

loraNetwork	Type	Description
ftsMatchCRCError		
ftsVersion		
gpsReceiver		
joinDelay	UINT	Rx1 delay in seconds between end of tx and opening of first rx window for join accept message
lbtEnabled		
maxDatarate	UINT	Max datarate for ADR
maxEIRP	UINT	AS923 max device TX power
maxRx2PacketSize		
maxTxPower	UINT	maximum tx power
minDatarate	UINT	Min datarate for ADR
nbDSP		
netID	STRING	LoraWAN network ID : 3 bytes HEX
networkLeadTime		
packetForwarderConfig	STRING	contents to be used for global_conf.json file
packetForwarderConfig2		
packetForwarderMode	BOOL	enable packet forwarder mode
pingSlotDatarate		
pingSlotFreqHop		
pingSlotFrequency		
reducedPacketUpdates		
rx1DatarateOffset	UINT	offset used for datarate on first RX window
rx1Delay	UINT	Rx1 delay in seconds between end of tx and opening of first rx window
rx2Datarate	UINT	datarate to be used in second RX window
skipPacketForwarderFieldCheck		
spi_device		
spi_device1261		
adrNBTrans		
enableAdr		
locked		
locking		
mqtt	OBJECT	mqtt settings
enabled	BOOL	check to enable MQTT protocol
host	STRING	hostname
password		
port	UINT	port
username		
network	OBJECT	network settings
baseKey	STRING	Key used for zero touch provisioning : 16 bytes HEX
defaultProfile		

loraNetwork	Type	Description
eui	STRING	extended unique identifier
joinServer		
key	STRING	key : 16 bytes HEX
leasetime	UINT	lease time
lensCheckinInterval		
lensDeviceHQ		
lensEnabled		
lensGatewayStats		
lensLocalJoinMetadata		
lensNetworkStats		
lensPacketMetadata		
lensPacketPayloadData		
lensServer		
localJoinServerEnabled		
name	STRING	name
passphrase	STRING	passphrase
public	UINT	set network mode 0:Private MTS, 1:Public LoRaWAN, 2:Private LoRaWAN
salt	STRING	Salt used for zero touch provisioning
joinServerAppEUI		
joinServerCert		
joinServerCertFile		
joinServerCertUseFile		
joinServerCheck		
joinServerClientCert		
joinServerClientKey		
packetForwarder		
aesKey		
antennaGain		
autoquitThreshold		
beaconFreqHop		
beaconFrequency		
beaconInfoDesc		
beaconInterval		
beaconLatitude		
beaconLongitude		
beaconPower		
calAD9361		
calTempRoom		
channelPlan		
diversity		

loraNetwork	Type	Description
downstreamPort		
dspStatInterval		
frequencyAS		
frequencyAS2		
frequencyEU		
frequencyEU2		
frequencyIN		
frequencyIN2		
frequencyISM2400		
frequencyISM2400_2		
frequencyISM2400_2_1		
frequencyISM2400_2_2		
frequencyISM2400_2_3		
frequencyISM2400_3		
frequencyKR		
frequencyKR2		
frequencyRU		
frequencyRU2		
frequencySubBand		
frequencySubBand2		
fskSYNC		
ftsMatchCRCError		
ftsVersion		
fwdCrcDisabled		
fwdCrcError		
fwdCrcValid		
gpsReceiver		
gwID		
gwID2		
gwSource		
keepAliveInterval		
lbtDefaultChannels		
lbtEnabled		
lbtFrequency0		
lbtFrequency1		
lbtFrequency2		
lbtFrequency3		
lbtFrequency4		
lbtFrequency5		
lbtFrequency6		

loraNetwork	Type	Description
lbtFrequency7		
lbtRssiOffset		
lbtRssiTarget		
lbtScanTime		
manualMode		
nbDSP		
path		
pathGeo		
public		
pushTimeout		
serverAddress		
statInterval		
upstreamPort		
downstreamPort2		
locked		
locking		
maxTxPower		
serverAddress2		
upstreamPort2		
redundancy		
defaultInterval		
enabled		
failoverInterval		
primaryAddress		
role		
secondaryAddress		
spectralScan		
bandwidth		
duration		
enabled		
floor		
imme		
interval		
limit		
offset		
ranges		
start		
stop		
samples		
startAt		

loraNetwork	Type	Description
step		
stopCriteria		
test		
disableDutyCycle	BOOL	disable duty cycle. FOR TESTING PURPOSES ONLY!!!
disableGPS		
disableRxJoin1	BOOL	disable join downlink packet in first Rx window
disableRxJoin2	BOOL	disable join downlink packet in second Rx window
disableRxWindow1	BOOL	disable downlink packet in first Rx window
disableRxWindow2	BOOL	disable downlink packet in second Rx window
trimInterval		
trimRows		
udp	OBJECT	udp settings
allowPublic		
appPortDown	UINT	application port down
appPortUp	UINT	application port up
downstreamPort	UINT	downstream port
upstreamPort	UINT	upstream port
whitelist	OBJECT	white list settings
devices	ARRAY	local unique appkey store
appeui	STRING	application id attached to received packets : 8 bytes HEX
appkey	STRING	device key used to authenticate join request and generate session keys : 16 bytes HEX
class	STRING	operating class of end-device : A, B or C
deveui	STRING	device id : 8 bytes HEX
enabled	BOOL	check to provide an access to the devices from the White List only
chirpstack		
configs		
backend		
basicStation		
bind		
caCert		
concentrators		
fsk		
frequency		
lora_std		
bandwidth		

loraNetwork	Type	Description
frequency		
spreading_factor		
multi_sf		
frequencies		
frequencyAS		
frequencyEU		
frequencyIN		
frequencyKR		
frequencyMax		
frequencyMin		
frequencyRU		
frequencySubBand		
pingInterval		
readTimeout		
region		
statInterval		
timesyncInternal		
tlsCert		
tlsKey		
writeTimeout		
semtechUdp		
fakeRxTime		
skipCrcCheck		
udpBind		
type		
filters		
joinEuis		
netIds		
general		
logLevel		
logToSyslog		
integration		
marshaler		

loraNetwork	Type	Description
mqtt		
auth		
azureIotHub		
deviceConnectionString		
deviceId		
hostname		
sasTokenExpiration		
tlsCert		
tlsKey		
generic		
caCert		
cleanSession		
clientId		
password		
qos		
servers		
tlsCert		
tlsKey		
username		
type		
commandTopicTemplate		
eventTopicTemplate		
keepAlive		
maxReconnectInterval		

loraNetwork	Type	Description
stateRetained		
stateTopicTemplate		
terminateOnConnectError		
enabled		
mode		
radiobridgeConsole		
enabled		
name		
region		
token		
validated		
trafficManager		
dev_eui_filters		
enabled		
join_eui_filters		

mqttBroker

Modified collection.

Description: Allows to configure the Mosquitto broker (server) to work as an MQTT bridge

mqttBroker	Type	Description
__v	UINT	Version of model [2]
bridge	OBJECT	A MQTT bridge lets you connect two MQTT brokers together. They are generally used for sharing messages between systems. A common usage is to connect edge MQTT brokers to a central or remote MQTT network. The Mosquitto broker (server) can be configured to work as an MQTT bridge
authMethod	STRING	Authentication method for the MQTT bridge to authenticate with the remote broker
certificate	STRING	The certificate that the local endpoint will use during authentication
cleanSession	BOOL	When disabled, all subscriptions on the remote broker are kept in case of the network connection dropping. If enabled, all subscriptions and messages on the remote broker will be cleaned up if the connection drops. Note that setting to true may cause a large amount of retained messages to be sent each time the bridge reconnects (default:false)
clientId	STRING	Unique identifier that the broker uses to identify the client
enabled	BOOL	Check to enable MQTT broker to act as a bridge and communicate with a remote broker (default:false)
identity	STRING	PSK identity for requested pre-shared key
notifications	BOOL	When enabled, publish notification messages to the local and remote brokers

mqttBroker	Type	Description
		giving information about the state of the bridge connection. Retained messages are published to the topic $SYS/broker/connection/<remote_clientid>/state unless otherwise set with notification_topics. If the message is 1 then the connection is active, or 0 if the connection has failed (default:true)
password	STRING	User password
privateKey	STRING	The private key that the local endpoint will use during authentication
protocolVersion	STRING	The version of the MQTT protocol to use with for this bridge, bridge_protocol_version setting. Possible options: mqttv31, mqttv311. (default:mqttv31)
psk	STRING	Pre-Shared key (PSK)
secondaryAddress	STRING	Backup remote broker IP address or domain name
secondaryPort	UINT	Backup remote broker port (default:1883)
serverAddress	STRING	Primary remote broker address IP address or domain name
serverPort	UINT	Primary remote broker port (default:1883)
tlsEnabled	BOOL	Enable to allow SSL/TLS support (bridge_capath option) (default:false)
topics		
direction	STRING	The direction that the messages will be shared in; it is possible to import messages from a remote broker using in, export messages to a remote broker using out or share messages in both directions (in, out, both) (default:out)
localPrefix	STRING	Remote prefix is used to remap subtrees of topics. The topic entered in the topic field will be prepended with the remote prefix before the subscriptions is done
pattern	STRING	Define a topic pattern to be shared between the two brokers. Any topics matching the pattern are shared
qosLevel	UINT	Quality of Service level defines the publish/subscribe QoS level used for this topic. Values are: 0 (At Most Once), 1 (At Least Once), 2 (Exactly once)(default:0)
remotePrefix	STRING	Local prefix is used to remap subtrees of topics. The topic entered in the topic field will be prepended with the local prefix before the subscriptions is done
tryPrivate	BOOL	When enabled, the bridge will attempt to indicate to the remote broker that it is a bridge not an ordinary client. If successful, this means that loop detection will be more effective and that retained messages will be propagated correctly. Not all brokers support this feature so it may be necessary to set try_private to false if your bridge does not connect properly (default:true)
username	STRING	User ID
verifyHostname	BOOL	When enabled, the bridge will attempt to verify the hostname provided in the remote certificate matches the host/address being connected to (bridge_insecure option) (default:false)
tlsVersion	STRING	The minimum version of the TLS protocol to be used for the MQTT Bridge. Possible values are tlsv1.3, tlsv1.2 and tlsv1.1 (default:tlsv1.2)

passwordComplexityRules

Modified collection.

Description: Defines password complexity rules for local user accounts

passwordComplexityRules	Type	Description
creditMode	BOOL	Enables or disables credit mode for password complexity (default:false)
lowerCaseExtraCreditCap	UINT	Specifies amount of lower case characters that give additional credit in the credit mode (default:0)
maxPasswordAge	UINT	Specifies amount of days after which a password has to be changed (default:0)
maxPasswordLength	UINT	Specifies the maximum length of a password (default:64)
minCharClasses	UINT	Specifies the minimum amount of different character classes that should be used in a password in the credit mode (default:3)
minLowerCaseChars	UINT	Specifies the minimum amount of lower case characters that should be used in a password (default:0)
minNumeralChars	UINT	Specifies the minimum amount of numeric characters that should be used in a password (default:0)
minOtherChars	UINT	Specifies the minimum amount of non-alphanumeric characters that should be used in a password (default:0)
minPasswordAge	UINT	Specifies amount of days after which a password can be changed (default:0)
minPasswordLength	UINT	Specifies the minimum length of a password (default:8)
minUpperCaseChars	UINT	Specifies the minimum amount of upper case characters that should be used in a password (default:0)
numeralExtraCreditCap	UINT	Specifies amount of numeric characters that give additional credit in the credit mode (default:0)
otherExtraCreditCap	UINT	Specifies amount of non-alphanumeric characters that give additional credit in the credit mode (default:0)
passwordHistoryLength	UINT	Specifies amount of password that are stored in the system - new password will be compared with them (default:0)
upperCaseExtraCreditCap	UINT	Specifies amount of upper case characters that give additional credit in the credit mode (default:0)
~~validCharsetRegex~~		**Obsolete, was removed from the collection**
charactersNotPermitted	STRING	"Specifies the list of not permitted characters (default:'')

sms

Modified collection.

Description: Defines SMS settings

sms	Type	Description
enabled	BOOL	Enables or disables SMS service on the device (default:false)
inbox		Contains a list of received SMS messages: ARRAY
outbox		Contains a list of sent SMS messages: ARRAY
receivedLimit	UINT	Specifies the number of received SMS to keep. Set this element to 0 if you do not

sms	Type	Description
		want to keep SMS messages. (0-1000, default:1000)
resendLimit	UINT	Specifies the number of times the modem retries sending a failed SMS message. Set this element to 0 if you do not want to resend failed SMS messages. (0-10, default:0)
sentLimit	UINT	Specifies the number of sent SMS messages to keep. Set this element to 0 if you do not want to keep SMS messages. (0-1000, default:1000)
smsCommands	OBJECT	Available SMS commands
apnEnabled	BOOL	Enable or disable control of getting of APN value using SMS service (default:false)
cellularStatusEnabled	BOOL	Enable or disable control of getting of cellular status using SMS service (default:false)
checkinEnabled	BOOL	Enable or disable control of checkin process using SMS service (default:false)
enabled	BOOL	Enable or disable SMS commands functionality (default:false)
ethernetEnabled	BOOL	Enable or disable control of getting of ethernet status using SMS service (default:false)
geopositionEnabled	BOOL	Enable or disable control of getting the device coordinates obtained from GPS using SMS service (default:false)
lnsRestartEnabled	BOOL	Enable or disable control of restart of LoRa Services using SMS service (default:false)
password	OBJECT	Settings for SMS commands password
customText	STRING	Custom password text (default:'')
enabled	BOOL	Enable or disable password usage in SMS commands (default:true)
text	STRING	Custom password
useCustomPassword	BOOL	Enable or disable custom password usage in SMS commands (default:true)
pingEnabled	BOOL	Enable or disable control of ping command using SMS service (default:false)
radioEnabled	BOOL	Enable or disable control of getting of radio status using SMS service (default:false)
rebootEnabled	BOOL	Enable or disable control of reboot of device using SMS service (default:false)
rmEnabled	BOOL	Enable or disable control of remote management using SMS service (default:false)
serialEnabled	BOOL	Enable or disable control of getting of serial port status using SMS service (default:false)
setCellularEnabled	BOOL	Enable or disable control of cellular connection using SMS service (default:false)
wanStatusEnabled	BOOL	Enable or disable control of getting of WAN status using SMS service (default:false)
whitelist	OBJECT	Defines settings for SMS commands whitelist
enabled	BOOL	Enable or disable whitelist usage in SMS commands (default:true)
numbers	ARRAY	A list of phone numbers in the whitelist
wifiEnabled	BOOL	Enable or disable control of getting the Wi-Fi status using SMS service (default:false)
wanIpsEnabled	BOOL	Enable or disable getting of WAN interface IPs using SMS service (default:false)

stats

Modified collection.

Description: Statistics on services and interfaces

stats	Type	Description
battery	OBJECT	Current backup battery status
charging	BOOL	When true, the battery is charging
cycleCount	STRING	The total number of charge/discharge cycles this battery has experienced
discharging	BOOL	When true, the battery is discharging
millivolts	STRING	The battery voltage in millivolts
minutesToEmpty	STRING	The current estimated time until the battery is empty. Note: 65535 indicates infinite
minutesToFull	STRING	The current estimated time until the battery is fully charged. Note: 65535 indicates infinite
percentCharged	STRING	The current precentage the battery is charged
timestamp	STRING	The Unix Epoch Timestamp (in seconds since 1/1/1970) of the battery reading
valid	BOOL	When true, this data is valid and was taken from the battery
batteryHistory	ARRAY	Backup battery historical records
continuousPing	OBJECT	Indicates whether or not the continuous ping is in progress
isRunning	BOOL	Indicates whether the continuous ping is in progress
dns	ARRAY	Current DNS server IP addresses
servers	ARRAY	A list of DNS servers available for domain name resolution
eth0	OBJECT	Current statistics on Ethernet interface
flags	OBJECT	Various network interface flags
all_multi	BOOL	Receives all multicast packets
broadcast	BOOL	Broadcast address valid
dynamic	BOOL	The addresses are lost when the interface goes down
loopback	BOOL	The interface is a loopback net
lower_up	BOOL	Driver signals L1 up
multicast	BOOL	Supports multicast.
no_arp	BOOL	No address resolution protocol
point_to_point	BOOL	Interface is point-to-point link
promisc	BOOL	Interface is in promiscuous mode
up	BOOL	The interface is up
ip	STRING	Specifies the IP address assigned to this interface
mask	STRING	Specifies the mask assigned to this interface
mtu	STRING	Specifies maximum transmission unit in bytes
rx	OBJECT	Contains statistics on received bytes
bytes	STRING	Specifies the number of received bytes
dropped	STRING	Specifies the number of received byte drops
errors	STRING	Specifies the number of received byte errors

stats	Type	Description
frame	STRING	Specifies the number of received frames
overruns	STRING	Specifies the number of received overruns
packets	STRING	Specifies the number of received packets
tx	OBJECT	Contains statistics on transmitted bytes
bytes	STRING	Specifies the number of transmitted bytes
carrier	STRING	Specifies the number of transmitted carriers
collisions	STRING	Specifies the number of transmitted collisions
dropped	STRING	Specifies the number of transmitted drops
errors	STRING	Specifies the number of transmitted errors
overruns	STRING	Specifies the number of transmitted overruns
packets	STRING	Specifies the number of transmitted packets
queueLength	STRING	Specifies the number of packets that can be queued for transmission
eth0History	ARRAY	Specifies daily statistics on Ethernet interface traffic
date	UINT	Specifies the date in format MM/DD/YYYY
rx	UINT	Specifies the number of received bytes for the day
tx	UINT	Specifies the number of transmitted bytes for the day
eth0Total	OBJECT	Total and today's statistics on Ethernet interface traffic
todayRx	UINT	Specifies the number of bytes received during the pre-determined period
todayTx	UINT	Specifies the number of bytes transmitted during the pre-determined period
totalRx	UINT	Specifies the number of bytes received today
totalTx	UINT	Specifies the number of bytes transmitted today
eth1	OBJECT	Current statistics on Ethernet interface
flags	OBJECT	Various network interface flags
all_multi	BOOL	Receives all multicast packets
broadcast	BOOL	Broadcast address valid
dynamic	BOOL	The addresses are lost when the interface goes down
loopback	BOOL	The interface is a loopback net
lower_up	BOOL	Driver signals L1 up
multicast	BOOL	Supports multicast.
no_arp	BOOL	No address resolution protocol
point_to_point	BOOL	Interface is point-to-point link
promisc	BOOL	Interface is in promiscuous mode
up	BOOL	The interface is up
ip	STRING	Specifies the IP address assigned to this interface
mask	STRING	Specifies the mask assigned to this interface
mtu	STRING	Specifies maximum transmission unit in bytes
rx	OBJECT	Contains statistics on received bytes
bytes	STRING	Specifies the number of received bytes
dropped	STRING	Specifies the number of received byte drops
errors	STRING	Specifies the number of received byte errors

stats	Type	Description
frame	STRING	Specifies the number of received frames
overruns	STRING	Specifies the number of received overruns
packets	STRING	Specifies the number of received packets
tx	OBJECT	Contains statistics on transmitted bytes
bytes	STRING	Specifies the number of transmitted bytes
carrier	STRING	Specifies the number of transmitted carriers
collisions	STRING	Specifies the number of transmitted collisions
dropped	STRING	Specifies the number of transmitted drops
errors	STRING	Specifies the number of transmitted errors
overruns	STRING	Specifies the number of transmitted overruns
packets	STRING	Specifies the number of transmitted packets
queueLength	STRING	Specifies the number of packets that can be queued for transmission
eth1History	ARRAY	Specifies daily statistics on Ethernet interface traffic
date	UINT	Specifies the date in format MM/DD/YYYY
rx	UINT	Specifies the number of received bytes for the day
tx	UINT	Specifies the number of transmitted bytes for the day
eth1Total	OBJECT	Total and today's statistics on Ethernet interface traffic
todayRx	UINT	Specifies the number of bytes received during the pre-determined period
todayTx	UINT	Specifies the number of bytes transmitted during the pre-determined period
totalRx	UINT	Specifies the number of bytes received today
totalTx	UINT	Specifies the number of bytes transmitted today
eth2	OBJECT	Current statistics on Ethernet interface
flags	OBJECT	Various network interface flags
all_multi	BOOL	Receives all multicast packets
broadcast	BOOL	Broadcast address valid
dynamic	BOOL	The addresses are lost when the interface goes down
loopback	BOOL	The interface is a loopback net
lower_up	BOOL	Driver signals L1 up
multicast	BOOL	Supports multicast.
no_arp	BOOL	No address resolution protocol
point_to_point	BOOL	Interface is point-to-point link
promisc	BOOL	Interface is in promiscuous mode
up	BOOL	The interface is up
ip	STRING	Specifies the IP address assigned to this interface
mask	STRING	Specifies the mask assigned to this interface
mtu	STRING	Specifies maximum transmission unit in bytes
rx	OBJECT	Contains statistics on received bytes
bytes	STRING	Specifies the number of received bytes
dropped	STRING	Specifies the number of received byte drops
errors	STRING	Specifies the number of received byte errors

stats	Type	Description
frame	STRING	Specifies the number of received frames
overruns	STRING	Specifies the number of received overruns
packets	STRING	Specifies the number of received packets
tx	OBJECT	Contains statistics on transmitted bytes
bytes	STRING	Specifies the number of transmitted bytes
carrier	STRING	Specifies the number of transmitted carriers
collisions	STRING	Specifies the number of transmitted collisions
dropped	STRING	Specifies the number of transmitted drops
errors	STRING	Specifies the number of transmitted errors
overruns	STRING	Specifies the number of transmitted overruns
packets	STRING	Specifies the number of transmitted packets
queueLength	STRING	Specifies the number of packets that can be queued for transmission
eth2History	ARRAY	Specifies daily statistics on Ethernet interface traffic
date	UINT	Specifies the date in format MM/DD/YYYY
rx	UINT	Specifies the number of received bytes for the day
tx	UINT	Specifies the number of transmitted bytes for the day
eth2Total	OBJECT	Total and today's statistics on Ethernet interface traffic
todayRx	UINT	Specifies the number of bytes received during the pre-determined period
todayTx	UINT	Specifies the number of bytes transmitted during the pre-determined period
totalRx	UINT	Specifies the number of bytes received today
totalTx	UINT	Specifies the number of bytes transmitted today
gps	OBJECT	Contains positional information of gps device
alt	STRING	Specifies altitude
fix	INT	Fix quality (0=No fix, 1=Have fix without DGPS, 2 = have fix with DGPS)
lat	DOUBLE	Specifies latitude coordinate
lng	DOUBLE	Specifies longitude coordinate
sats	INT	Number of satellites used in solution
time	DOUBLE	Time of update
gre	OBJECT	Contains statistics on gre tunnels (keys are tunnel names)
tunnel	OBJECT	Statistics on ipsec LAN interface transmitted bytes
localIp	STRING	Specifies the IP address assigned to this interface
mode	STRING	Specifies tunnel mode
remoteIp	STRING	Specifies the IP address of the remote end of this tunnel
rx	OBJECT	Summarizes receiver statistics
Mcasts	UINT	Specifies the total number of multicast packets received on a broadcast GRE tunnel
bytes	UINT	Specifies the total number of bytes received on the interface
csumErrors	UINT	Specifies the total number of packets dropped because of checksum failures for a GRE tunnel with checksumming enabled.
errors	UINT	Specifies the total number of receiver errors
outOfSequence	UINT	Specifies the total number of packets dropped because they arrived out of

stats	Type	Description
		sequence for a GRE tunnel with serialization enabled
packets	UINT	Specifies the total number of packets received on the interface
ttl	STRING	Specifies time to live set on the interface
tx	OBJECT	Summarizes transmitter statistics
bytes	UINT	Specifies the total number of bytes transmitted on the interface
deadLoop	UINT	Specifies the total number of packets which were not transmitted because the tunnel is looped back to itself
errors	UINT	Specifies the total number of transmitter errors
noBuffs	UINT	Specifies the total number of packets which were not transmitted because the kernel failed to allocate a buffer
noRoute	UINT	Specifies the total number of packets which were not transmitted because there is no IP route to the remote endpoint
packets	UINT	Specifies the total number of packets transmitted on the interface
ipsec	ARRAY	Statistics on IPSec tunnels
name	STRING	Specifies an IPSec tunnel name
rxBytes	UINT	Specifies the number of received bytes
rxPackets	UINT	Specifies the number of received packets
tunnelName	STRING	Specifies IPSec endpoints in ###.###.###.### - ###.###.###.### format
txBytes	UINT	Specifies the number of transmitted bytes
txPackets	UINT	Specifies the number of transmitted packets
lan0	OBJECT	Current statistics on the bridge interface
flags	OBJECT	Various network interface flags
all_multi	BOOL	Receives all multicast packets
broadcast	BOOL	Broadcast address valid
dynamic	BOOL	The addresses are lost when the interface goes down
loopback	BOOL	The interface is a loopback net
lower_up	BOOL	Driver signals L1 up
multicast	BOOL	Supports multicast.
no_arp	BOOL	No address resolution protocol
point_to_point	BOOL	Interface is point-to-point link
promisc	BOOL	Interface is in promiscuous mode
up	BOOL	The interface is up
ip	STRING	Specifies the IP address assigned to this interface
mask	STRING	Specifies the mask assigned to this interface
mtu	STRING	Specifies maximum transmission unit in bytes
rx	OBJECT	Contains statistics on received bytes
bytes	STRING	Specifies the number of received bytes
dropped	STRING	Specifies the number of received byte drops
errors	STRING	Specifies the number of received byte errors
frame	STRING	Specifies the number of received frames
overruns	STRING	Specifies the number of received overruns

stats	Type	Description
packets	STRING	Specifies the number of received packets
tx	OBJECT	Contains statistics on transmitted bytes
bytes	STRING	Specifies the number of transmitted bytes
carrier	STRING	Specifies the number of transmitted carriers
collisions	STRING	Specifies the number of transmitted collisions
dropped	STRING	Specifies the number of transmitted drops
errors	STRING	Specifies the number of transmitted errors
overruns	STRING	Specifies the number of transmitted overruns
packets	STRING	Specifies the number of transmitted packets
queueLength	STRING	Specifies the number of packets that can be queued for transmission
modbus	ARRAY	Statistics on modbus passthrough pipe
id	UINT	Specifies the ID of the device on the bus
rx	UINT	Reports the number of bytes received by the device
status	STRING	Reports the status of the device
time	UINT	Reports the number of seconds since the last activity
tx	UINT	Reports the number of bytes transmitted by the device
ovpn	ARRAY	Statistics on OpenVPN tunnels
connected	BOOL	Indicates whether the tunnel is established
dev	STRING	Indicates the type of virtual networking interface (tun or tap)
name	STRING	Indicates the name of the tunnel
proto	STRING	Indicates the protocol to use when connecting with the remote (tcp or udp)
statistics	OBJECT	Contains statistics on received/transmitted bytes
rx	UINT	Specifies the number of received bytes
tx		Specifies the number of transmitted bytes: UINT
type	STRING	Indicates whether the tunnel is configured as a client or as a server
use_static	BOOL	Specifies whether a static key is used for authorization
packages	ARRAY	Lists the packages installed by the user
name	STRING	The package name
size	UINT	The package size in bytes
version	STRING	The package version
ping	OBJECT	Indicates whether or not the ping is in progress
isRunning	BOOL	Indicates whether the ping is in progress
ppp	OBJECT	Contains statistics for the PPP interface
areaCode	STRING	Reports localization area code
cellularMode	STRING	Specifies the cellular mode that is currently used by the modem [2g, 3g, 4g]
dnsServers	ARRAY	A list of strings representing IP addresses of DNS servers
flags	OBJECT	Various network interface flags
all_multi	BOOL	Receives all multicast packets
broadcast	BOOL	Broadcast address valid
dynamic	BOOL	The addresses are lost when the interface goes down

stats	Type	Description
loopback	BOOL	The interface is a loopback net
lower_up	BOOL	Driver signals L1 up
multicast	BOOL	Supports multicast.
no_arp	BOOL	No address resolution protocol
point_to_point	BOOL	Interface is point-to-point link
promisc	BOOL	Interface is in promiscuous mode
up	BOOL	The interface is up
ip	STRING	Reports the IP address assigned to this interface
link	STRING	Reports status of the link
localIp	STRING	Reports the IP address assigned to this interface
localIp6	STRING	Reports the IPv6 address assigned to this interface
mtu	STRING	Reports maximum transmission unit in bytes
number	STRING	Reports cellular module's phone number
remoteIp	STRING	Reports the externally facing IP address of this interface
remoteIp6	STRING	Reports the externally facing IPv6 address of this interface
roaming	BOOL	Indicates whether or not this connection is considered roaming
rssi	STRING	Reports Received Signal Strength Indication value [0-31]
rssiDbm	STRING	Specifies the received signal strength indication in dBm
rx	OBJECT	Contains statistics on received bytes
bytes	STRING	Specifies the number of received bytes
dropped	STRING	Specifies the number of received byte drops
errors	STRING	Specifies the number of received byte errors
frame	STRING	Specifies the number of received frames
overruns	STRING	Specifies the number of received overruns
packets	STRING	Specifies the number of received packets
tower	STRING	Reports cellular tower ID
tx	OBJECT	Contains statistics on transmitted bytes
bytes	STRING	Specifies the number of transmitted bytes
carrier	STRING	Specifies the number of transmitted carriers
collisions	STRING	Specifies the number of transmitted collisions
dropped	STRING	Specifies the number of transmitted drops
errors	STRING	Specifies the number of transmitted errors
overruns	STRING	Specifies the number of transmitted overruns
packets	STRING	Specifies the number of transmitted packets
queueLength	STRING	Specifies the number of packets that can be queued for transmission
uptime	UINT	Reports number of minutes connection has been established
pppHistory	ARRAY	Specifies daily statistics on PPP interface traffic
date	UINT	Specifies the date in format MM/DD/YYYY
rx	UINT	Specifies the number of received bytes for the day
tx	UINT	Specifies the number of transmitted bytes for the day

stats	Type	Description
pppTotal	OBJECT	Total and today's statistics on PPP interface traffic
todayRx	UINT	Specifies the number of bytes received during the pre-determined period
todayTx	UINT	Specifies the number of bytes transmitted during the pre-determined period
totalRx	UINT	Specifies the number of bytes received today
totalTx	UINT	Specifies the number of bytes transmitted today
radio	OBJECT	Reports statistics and information about the cellular radio
abnd	STRING	Reports the current active band
carrier	STRING	Designates the cellular service provider (home network)
channel	STRING	Specifies the ARFCN or UARFCN Assigned Radio Channel
cid	STRING	Specifies the cellular ID in hexadecimal
code	STRING	Specifies the MTS short model code: (H5, H6, or G3)
debug	OBJECT	Contains detailed information about the radio's current status (information may vary between radio types)
bler	STRING	Reports the block error rate (percentage)
drx	STRING	Reports the discontinuous reception cycle length in milliseconds
ecio	STRING	Indicates the signal-to-noise ratio, the ratio of the received energy to the interference energy in dB
mm	STRING	Reports the mobility management state
nom	STRING	Reports the current network operator mode
psc	STRING	Reports the primary synchronization code
rr	STRING	Reports the radio resource state
rscp	STRING	Reports the active RSCP (Received Signal Code Power in dBm)
rsrp	STRING	Reference Signals Received Power, a measurement of the received power level in an LTE cell network, it is the power of the LTE Reference Signals spread over the full bandwidth and narrowband in dBm
rsrq	STRING	Reference Signal Received Quality, indicates the quality of the received reference signal (similar to EC/IO) in dB
sd	STRING	Reports the service domain
txpwr	STRING	Reports the transmit power
firmware	STRING	Reports the radio firmware version
firmwarebuild	STRING	Reports the radio firmware build number
hardware	STRING	Reports the radio hardware revision
iccid	STRING	Reports the integrated circuit card identifier (Not available for CMDA)
imsi	STRING	Reports the radio IMEI number
lac	STRING	Reports the location area code in hexadecimal
manufacturer	STRING	Reports the radio manufacturer
mcc	STRING	Reports the mobile country code
mdn	STRING	Reports the mobile directory number (CDMA Only)
meid	STRING	Reports the mobile equipment identifier (CDMA Only)
mipProfile	OBJECT	Specifies the mobile IP configuration (CDMA Only)
enabled	BOOL	Indicates if profile is active or not

stats	Type	Description
homeAddress	STRING	Specifies the home address
id	UINT	Specifies the MIP profile ID
mnAaaSpi	STRING	Specifies the mobile node authentication, authorization, and accounting server security parameter index
mnAaaSs		Indicates whether the mobile node authentication, authorization, and accounting server shared secret is set: BOOL
mnHaSpi	STRING	Specifies the mobile node home agent security server parameter index
mnHaSs	BOOL	Indicates whether the mobile node home agent security server shared secret is set
nai	STRING	Specifies the network access identifier
primaryHa	STRING	Specifies the primary home agent
revTun	BOOL	Indicates whether reverse tunneling is enabled
secondaryHa	STRING	Specifies the secondary home agent
mnc	STRING	Specifies the mobile network (operator) code
model	STRING	Specifies the radio model [HE910-D, HE910-EUD, GE910, DE910, CE910, ...]
msid	STRING	Specifies the mobile station ID (also known as MIN or MSIN)
network	STRING	Reports the current cellular service provider (Not available for CDMA)
provisioned	BOOL	Reports whether or not the radio has been activated with a data account (CDMA only)
rac	STRING	Reports the routing area code in hexadecimal
roaming	BOOL	Indicates whether or not the radio is using the home network
rssi	UINT	Specifies the received signal strength indication
rssidBm	STRING	Specifies the received signal strength indication in dBm
service	STRING	Specifies the service connection type [GPRS, EGPRS, WCDMA, HSDPA]
simCarrierCode	STRING	Specifies the unique carrier identifier based on the SIM card information [vz, att, ..., Unknown]
simMcc	STRING	Specifies MCC of the cellular service provider (home network) based on the SIM card information [310, 311, 312, ..., Unknown]
simMnc	STRING	Specifies MNC of the cellular service provider (home network) based on the SIM card information [03, 012, 410, ..., Unknown]
supportedCellularModes	STRING	Specifies the list of cellular modes that are supported by the modem. Example: [2g,3g,4g]
type	STRING	Specifies the radio technology category [GSM, CDMA, LTE]
radioFwuStatus	OBJECT	Displays the status of the radio firmware upgrade procedure
lastResult	STRING	Result of the last firmware upgrade attempt (UNKNOWN, SUCCESS, FAILED)
state	STRING	Current operation status (IDLE, STARTED, PRE_UPGRADE, UPGRADING, FINISHED, REBOOT)
radioSimStatus	OBJECT	Displays the SIM card status
attemptsPin	UINT	The number of attempts left to unlock the SIM card using PIN code
attemptsPuk	UINT	The number of attempts left to unlock the SIM card using PUK code
isSimInserted	BOOL	SIM card insertion indicator. True when a SIM card is inserted
isSimLocked	BOOL	SIM card lock status indicator. True when a SIM card is locked by PIN / PUK / other code

stats	Type	Description
lockStatus	STRING	SIM card lock status string. Either READY, SIM PIN, SIM PUK or other state
serial	OBJECT	Reports statistics and information about the serial interface
dcd	STRING	Reports status of data carrier detect line
rx	UINT	Reports number of bytes received on serial interface
tx	UINT	Reports number of bytes transmitted on serial interface
service	OBJECT	Various service status
ddns	OBJECT	Displays the status of DDNS services
enabled	BOOL	Indicates whether the DDNS service is on
status	STRING	Displays the status of DDNS
dialOnDemand	OBJECT	Displays the status of the dial-on-demand services
enabled	BOOL	Indicates whether the dial-on-demand service is on
status	STRING	Displays the status of dial-on-demand
failover	OBJECT	Displays the status of WAN failover services
enabled	BOOL	Indicates whether the WAN failover service is on
status	STRING	Displays the status of WAN failover
keepAlive	OBJECT	Displays the status of the keep-alive services
enabled	BOOL	Indicates whether the keep-alive service is on
status	STRING	Displays the status of keep-alive
sms	OBJECT	Displays the status of the SMS service
enabled	BOOL	Indicates whether the SMS service is on
status	STRING	Displays the status of SMS service
smtp	OBJECT	Displays the status of the SMTP service
enabled	BOOL	Indicates whether the SMTP service is on
status	STRING	Displays the status of SMTP service
sntp	OBJECT	Displays the status of the SNTP services
enabled	BOOL	Indicates whether the SNTP service is on
status	STRING	Displays the status of SNTP service
status	ARRAY	Contains a list of important system events
guid	STRING	Specifies unique traceable identifier of the event source
msg	STRING	Specifies the message describing the event
timestamp	STRING	Specifies the time when the event occurred (UTC)
type	STRING	Specifies the event classification [INFO, WARNING, ERROR]
wlan0	OBJECT	Current statistics on Wi-Fi as WAN interface
channels	ARRAY	Reports a list of available channels
countryCode	STRING	Specifies the two-character operating country code
flags	OBJECT	Various network interface flags
all_multi	BOOL	Receives all multicast packets
broadcast	BOOL	Broadcast address valid
dynamic	BOOL	The addresses are lost when the interface goes down
loopback	BOOL	The interface is a loopback net

stats	Type	Description
lower_up	BOOL	Driver signals L1 up
multicast	BOOL	Supports multicast.
no_arp	BOOL	No address resolution protocol
point_to_point	BOOL	Interface is point-to-point link
promisc	BOOL	Interface is in promiscuous mode
up	BOOL	The interface is up
ip	STRING	Specifies the IP address assigned to this interface
link	OBJECT	Reports status of the current Wi-Fi connection
RX	STRING	Reports the number of received bytes
SSID	STRING	Reports the SSID of connected network
TX	STRING	Reports status of the current Wi-Fi connection
freq	STRING	Reports the operating frequency
mac	STRING	Reports network MAC address of the Access Point
signal	STRING	Specifies the received signal strength indication in dBm
tx_bitrate	STRING	Reports the speed at which bits are transmitted over the medium
mask	STRING	Specifies the mask assigned to this interface
mtu	STRING	Specifies maximum transmission unit in byte
rx	OBJECT	Contains statistics on received bytes
bytes	STRING	Specifies the number of received bytes
dropped	STRING	Specifies the number of received byte drops
errors	STRING	Specifies the number of received byte errors
frame	STRING	Specifies the number of received frames
overruns	STRING	Specifies the number of received overruns
packets	STRING	Specifies the number of received packets
status	STRING	Reports the state of the network interface
tx	OBJECT	Contains statistics on transmitted bytes
bytes	STRING	Specifies the number of transmitted bytes
carrier	STRING	Specifies the number of transmitted carriers
collisions	STRING	Specifies the number of transmitted collisions
dropped	STRING	Specifies the number of transmitted drops
errors	STRING	Specifies the number of transmitted errors
overruns	STRING	Specifies the number of transmitted overruns
packets	STRING	Specifies the number of transmitted packets
queueLength	STRING	Specifies the number of packets that can be queued for transmission
wlan0History	ARRAY	Specifies daily statistics on Wi-Fi as WAN interface traffic
date	UINT	Specifies the date in format MM/DD/YYYY
rx	UINT	Specifies the number of received bytes for the day
tx	UINT	Specifies the number of transmitted bytes for the day
wlan0Total	OBJECT	Total and today's statistics on the Wi-Fi as WAN interface traffic
todayRx	UINT	Specifies the number of bytes received during the pre-determined period

stats	Type	Description
todayTx	UINT	Specifies the number of bytes transmitted during the pre-determined period
totalRx	UINT	Specifies the number of bytes received today
totalTx	UINT	Specifies the number of bytes transmitted today
wlan1	OBJECT	Current statistics on Wi-Fi AP interface
channels	ARRAY	Reports a list of available channels
countryCode	STRING	Specifies the two-character operating country code
flags	OBJECT	Various network interface flags
all_multi	BOOL	Receives all multicast packets
broadcast	BOOL	Broadcast address valid
dynamic	BOOL	The addresses are lost when the interface goes down
loopback	BOOL	The interface is a loopback net
lower_up	BOOL	Driver signals L1 up
multicast	BOOL	Supports multicast.
no_arp	BOOL	No address resolution protocol
point_to_point	BOOL	Interface is point-to-point link
promisc	BOOL	Interface is in promiscuous mode
up	BOOL	The interface is up
ip	STRING	Specifies the IP address assigned to this interface
mask	STRING	Specifies the mask assigned to this interface
mtu	STRING	Specifies maximum transmission unit in bytes
rx	OBJECT	Contains statistics on received bytes
bytes	STRING	Specifies the number of received bytes
dropped	STRING	Specifies the number of received byte drops
errors	STRING	Specifies the number of received byte errors
frame	STRING	Specifies the number of received frames
overruns	STRING	Specifies the number of received overruns
packets	STRING	Specifies the number of received packets
tx	OBJECT	Contains statistics on transmitted bytes
bytes	STRING	Specifies the number of transmitted bytes
carrier	STRING	Specifies the number of transmitted carriers
collisions	STRING	Specifies the number of transmitted collisions
dropped	STRING	Specifies the number of transmitted drops
errors	STRING	Specifies the number of transmitted errors
overruns	STRING	Specifies the number of transmitted overruns
packets	STRING	Specifies the number of transmitted packets
queueLength	STRING	Specifies the number of packets that can be queued for transmission
availableWifiChannels		List of regions: ARRAY
2_4GHz		Reports a list of available 2.4 GHz channels for the region: ARRAY
5GHz		Reports a list of available 5 GHz channels for the region: ARRAY
wlan1History	ARRAY	Specifies daily statistics on Wi-Fi AP interface traffic

stats	Type	Description
date	UINT	Specifies the date in format MM/DD/YYYY
rx	UINT	Specifies the number of received bytes for the day
tx	UINT	Specifies the number of transmitted bytes for the day
wlan1Total	OBJECT	Total and today statistics on the Wi-Fi as WAN interface traffic
todayRx	UINT	Specifies the number of bytes received today
todayTx	UINT	Specifies the number of bytes transmitted today
totalRx	UINT	Specifies the number of bytes received during the pre-determined period
totalTx	UINT	Specifies the number of bytes transmitted during the pre-determined period
radioPdpConfStatic	OBJECT	Displays the list of all PDP contexts configured on the radio
%cid%	OBJECT	Displays information on a specific PDP context with context ID %cid%. The %cid% value is [1-16]
apn	STRING	Displays the current APN configured for this context
ipMode	STRING	Displays the current IP Mode configured for this context (IP, PPP, IPV6 or IPV4V6)

system

Modified collection.

Description: Defines the system attributes

system	Type	Description
accessoryCards	ARRAY	Specifies the list of installed accessory cards
apiVersion	STRING	Specifies the API version
capabilities	OBJECT	Reports hardware capabilities
adc	BOOL	Specifies whether the device supports analog inputs
battery	BOOL	Specifies whether the device supports backup battery
bluetooth	BOOL	Specifies whether the device supports Bluetooth
cell	BOOL	Specifies whether the device supports Cellular
cellWwan	BOOL	Specifies whether the cellular radio supports QMI WWAN interface
din	BOOL	Specifies whether the device supports digital inputs
docker		
dout	BOOL	Specifies whether the device supports digital outputs
ethSwitch		
externalSerialPort	BOOL	Specifies whether the device supports an external serial port
flexibleSerialPort	BOOL	Specifies whether the device supports a flexible serial port
gpio	BOOL	Specifies whether the device supports GPIO
gps	BOOL	Specifies whether the device supports GPS
lora	BOOL	Specifies whether the device supports LoRa
loraNetworkServer	BOOL	Specifies whether the LoRa Network Server is installed
nodeRed	BOOL	Specifies whether the if Node-RED server is installed false
rs232	BOOL	Specifies whether the device supports RS-232 interface
rs422	BOOL	Specifies whether the device supports RS-422 interface

system	Type	Description
rs485	BOOL	Specifies whether the device supports RS-485 interface
serial	BOOL	Specifies whether the device supports external serial port
tpm		
wifi	BOOL	Specifies whether the device supports Wi-Fi
cellPpp	BOOL	Specifies whether the cellular radio supports the PPP data connecton protocol
cmdtty	STRING	Specifies the TTY device that issues AT commands to the device
date	STRING	Specifies the current system date
datetime	STRING	Specifies the current system date and time
dbDirty	BOOL	Specifies whether the database is in a dirty state
defaultDeviceName	STRING	Specifies the default name of the device
deviceHostname	STRING	Device hostname
deviceId	STRING	Specifies the device ID
deviceName	STRING	Specifies the configured name of the device
ethSwitch		
firmware	STRING	Specifies the firmware version
firmwareDate	STRING	Specifies the date the firmware was built
firmwareImageId	STRING	Specifies the firmware Image ID value
firmwareRelease		
firstTimeSetup	BOOL	Specifies whether the device is set to default values
hardwareVersion	STRING	Specifies the hardware version of the device
imei	STRING	Specifies the international mobile station equipment identity
imsi	STRING	Specifies the international mobile subscriber identity
loraEui	STRING	EUI of the build-in LoRa card
loraFpgaVersion	UINT	FPGA firmware version of the build-in LoRa card
loraHwVersion	STRING	Hardware Version of the build-in LoRa card
loraProductId	STRING	Product ID of the build-in LoRa card
macAddress	STRING	Specifies the MAC address of the device's Ethernet port
macAddress1		
macBluetooth	STRING	Specifies the MAC address of the device's Bluetooth module
macWifi	STRING	Specifies the MAC address of the device's Wi-Fi module
memory	OBJECT	Contains a list of the current memory statistics
mode	STRING	Specifies the system level mode of the device (default:ROUTER)
oemId	STRING	Specifies configurable device id
oemString1		
oemString2		
permission	STRING	Specifies the authorization level of the active user
platform		
ppptty	STRING	Specifies the TTY device that PPP uses to make connections
productId	STRING	Specifies the product ID
radio	OBJECT	Specifies the radio's model number and type

system	Type	Description
carrier	STRING	Specifies the carrier currently providing cellular connectivity
code	STRING	Specifies the radio model's code number: H5, H6, EV3, C2, G3, LAT1, VW2 or LEU1
firmware	STRING	Specifies radio firmware version
type	STRING	Specifies the type of radio, GSM, CMDA or LTE
restartNeeded	BOOL	Specifies whether settings have been changed and a restart is require to reflect those changes in services
signedFirmwareValidation	BOOL	Enable to require a signed firmware and perform a signature validation before the firmware upgrade (default:true)
time	STRING	Specifies the current system time of the device
uptime	STRING	Specifies how long the device has been running
user	STRING	Specifies the user currently logged in
uuid	STRING	uuid
vendorId	STRING	Specifies the vendor of the device
webTitle	STRING	Specifies the title configured to display in a browser

cellTimeSync

New collection

Description: Defines the clock synchronization settings using a cellular radio

cellTimeSync	Type	Description
enabled	BOOL	Enable or disable feature (default:false)
pollingTime	UINT	Frequency in minutes to poll current time (default:120) [5-1440]

lldp

New collection

Description: Defines The Link Layer Discovery Protocol configuration settings

Element	Type	Description
enabled	BOOL	Enables or disables LLDP service (default:false)
sysDescr	STRING	Overrides advertised system description with the provided description (default : empty)
sysName	empty): STRING	Overrides advertised system name with the provided name (default
txHold	UINT	Specifies multiplier on the transmit interval to assign to TTL (default : 4)
txInterval	UINT	Specifies the interval at which frames are transmitted (default : 30 seconds)

saveAndRestore

New collection

Description: Save and Restore configuration options

Element	Type	Description
exportPayloadManagement	BOOL	Include Payload Management files into the configuration archive (default:true)

scada

New collection

Description: Supervisory control and data acquisition settings

scada	Type	Description
bacnetOut	OBJECT	Contains BACnet transmitter settings
apduRetries	UINT	Specifies the number of times a request message will be resent due to timeout on a request (default: 3)
apduTimeout	UINT	Specifies the request message timeout, the time spent waiting for a reply to a message (default: 3000)
datalink	OBJECT	BACnet underlying messaging transport settings
ip	OBJECT	Contains BACnet/IP data link settings
enabled	BOOL	Enables or disables BACnet/IP functionality (default:false)
interface	STRING	Specifies the network interface that the BACnet device is bound to (default : eth0)
port	UINT	Specifies UDP port number for both directed messages and broadcasts (default : 47808)
description	STRING	Specifies optional BACnet device description
location	STRING	Specifies the physical location of the BACnet device
modelName	STRING	Specifies the name assigned by the vendor to represent the model of the BACnet device
objectIdentifier	UINT	Specifies a numeric code that is used to identify the BACnet device. The object identifier shall be unique internetwork-wide
objectName	STRING	Specifies a name for the BACnet device that is unique internetwork-wide
vendorIdentifier	UINT	Specifies is a unique vendor identification code, assigned by ASHRAE
vendorName	STRING	Specifies the manufacturer of the BACnet device
sensors	OBJECT	Sensors settings
defaultTtl	UINT	Default Time To Live in seconds for sensors readings (default: 86400)

Change History

Version	Description	Author	Date (YYYY/MM/DD)
1.0	New document	Anastasiia Logvinova	2023/05/16