```
RDKB-RG-MIB DEFINITIONS ::= BEGIN
IMPORTS
        MODULE-IDENTITY,
        OBJECT-TYPE,
        enterprises,
        Integer32,
        IpAddress
                FROM SNMPv2-SMI
        ifIndex
                FROM IF-MIB
        RowStatus,
        DisplayString,
        MacAddress,
        PhysAddress,
        TruthValue,
        DateAndTime
                FROM SNMPv2-TC
        InetAddressType,
        InetAddress,
                InetAddressIPv6,
        InetPortNumber
                FROM INET-ADDRESS-MIB
        SnmpAdminString
                FROM SNMP-FRAMEWORK-MIB ;

rdkb           OBJECT IDENTIFIER ::= { enterprises 8072 }
rdkbModules    OBJECT IDENTIFIER ::= { rdkb 31 }

rdkbRg    MODULE-IDENTITY
        LAST-UPDATED    "201408130000Z"
        ORGANIZATION    "TBD"
        CONTACT-INFO    "TBD"
        DESCRIPTION
            "Controls the behavior of router/wireless functions.
             Can be part of CM configuration file."

        ::= { rdkbModules 2 }

RdkbRgUserChangedFlag ::= TEXTUAL-CONVENTION
    STATUS       current
    DESCRIPTION
        "WebWizard Setup user changed flag sections.
        NOTE: Only Bits from 0-21 are supported for legacy web pages"
    SYNTAX BITS {
        lanParameters(0),
        wanMTU(1),
        wirelessBasic(2),
        wirelessAdvanced(3),
        wirelessSecurity(4),
        wirelessAccessControl(5),
        fixedCPE(6),
        ipMacPortFiltering(7),
```

```
        dmzHost(8),
        blockProxy(9),
        blockCookies(10),
        blockJava(11),
        blockActiveX(12),
        blockPopup(13),
        blockFragments(14),
        detectPortScan(15),
        detectFlood(16),
        firewallEvent(17),
        firewallProtection(18),
            ipsecPassthru(19),
            pptpPassthru(20),
            multicastPassthru(21),
        blockAnonymousIpWan(22),
        wanSetup(23),
        remoteMgmt(24),
        l2TP(25)
        }


-- RG Device

rdkbRgDevice   OBJECT IDENTIFIER ::=  { rdkbRg 1 }

rdkbRgDeviceBase   OBJECT IDENTIFIER ::=  { rdkbRgDevice 1 }

rdkbRgDeviceMode OBJECT-TYPE
    SYNTAX INTEGER {
        multiSsid(1),
        cableHome11(2),
                ipv4(3),
                ipv6(4),
                dualstack(5) }
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "Defines the mode of operation for the device.
        This parameter is stored in non-vol and is multiSsid(1) by default.
        Setting this object via SNMP will cause
        the unit to reboot.
                This MIB will be superseded in the config file by TLV202.
                This MIB will read the proper value if set from TLV202.
                This MIB will be superseded by rdkbRgIpMgmtLanMode inbridge(1) or
mixed(4).

                multiSsid(1): Default Value. Value supports IPv4RG with multiple
SSID
                        configuration and bridge mode via rdkbRgIpMgmtLanMode
MIB.
                        Bridge mode is the same as eRouter disabled mode.
                        IPV4RG is the non eRouter behavior that existed before
                        in our router products.
                cableHome11(2): <deprecated>. Mode is not supported for eRouter
devices.
                Ipv4(3): eRouter IPv4 only mode
                Ipv6(4): eRouter IPv6 only mode
                Dualstack(5): eRouter IPv4 and IPv6 dualstack
                Note: cableHome11(2) is deprecated."
    DEFVAL { 1 }
    ::= { rdkbRgDeviceBase 1 }


rdkbRgDeviceResetDefaultEnable OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
```

```
        "This object controls the reset to factory default functionality
         of the gateway. This prevents the local user from using the reset
         switch to gain access to the setup pages using the default user
         name and password. The objective is to prevent theft of service
         from a user who reconfigures the device to add users or change
         wireless settings.
         Enable (object set to true):
          1. Momentary press of the Reset Switch (<5 seconds)
             DOCSIS restart of the modem (reboot, no reset to factory
             default values).
          2. Pressing the reset switch for >5 seconds
             Reboots and resets of all values (modem and router) to
             factory default.
         Disable (object set to false):
          1. Momentary press of the Reset Switch (<5 seconds)
             DOCSIS restart of the modem (reboot, no reset to factory
             default values).
          2. Pressing the reset switch for >5 seconds
             Modem reboots and resets only the cable modem settings to
             factory default values. The router settings should remain and
             should not NOT reset to factory default."
    DEFVAL { true }
    ::= { rdkbRgDeviceBase 2 }

rdkbRgDeviceRemoteWebAccessEnable OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
            "Controls web page access to the WAN IP address on the gateway.
             If DMS is available in the hardware, and rdkbRgDmsBaseWebRedirect
             is set to true, enabling this feature means to enable port
             forwarding for web access to the DMS (to port 80). Note: the
             entry for this does not appear in port forwarding table or on
             the web pages. Example of the rule: WAN_IP:8080->DMS_IP:80.
             This value is stored in non-vol and is false after factory reset.
             This value can be controlled via a setup web page.

             NOTE: This MIB is applicable only for legacy style web pages"
    ::= { rdkbRgDeviceBase 3 }

rdkbRgDeviceRemoteWebAccessPort OBJECT-TYPE
    SYNTAX      InetPortNumber
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
            "Defines what port to use for the WAN IP address of the gateway
             to be able to access RG web pages.
             This value is to be stored in non-vol and will persist across
reboots.
             Only a factory reset would clear it"
    DEFVAL { 8080 }
    ::= { rdkbRgDeviceBase 4 }

rdkbRgDeviceAdminReadOnly OBJECT-TYPE
    SYNTAX INTEGER {
        none(0),
        wan(1)
        }
    MAX-ACCESS    read-write
    STATUS        obsolete
    DESCRIPTION
        "This object can restrict admin right of access to the RG web pages.
         If set to wan(1), admin will be restricted to read-write access
         from the WAN interface."
    DEFVAL { 0 }
    ::= { rdkbRgDeviceBase 5 }
```

```
rdkbRgDeviceLanLanIsolation OBJECT-TYPE
    SYNTAX INTEGER {
        disable(0),
        enable(1)
        }
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "This MIB is only available in D3.0 products.
          This MIB does not take effect if the modem is in VLAN mode i.e if
rdkbRgIpMgmtLanMode.32=vlan(5).
        Lan-Lan Isolation allows you block IP access between CPEs connected to
the Ethernet ports.
        Use this mib in conjunction with rdkbRgDeviceLanWlanIsolation and
rdkbRgDot11BssApIsolation.x for
          complete isolation between CPEs connected to the RG.
        This MIB is written to non-vol and set to disable(0) after a factory
reset.
        disable(0)- No Isolation
        enable(1)- Enable Isolation feature"
    DEFVAL { 0 }
    ::= { rdkbRgDeviceBase 6 }

rdkbRgDeviceLanWlanIsolation OBJECT-TYPE
    SYNTAX INTEGER {
        disable(0),
        enable(1)
        }
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "This MIB is only available in D3.0 products.
        This MIB does not take effect if the modem is in VLAN mode i.e if
rdkbRgIpMgmtLanMode.32=vlan(5).
        Lan-Wlan Isolation allows you block IP access between CPEs connected to
the Ethernet port and
        Wireless SSIDs.
        Use this mib in conjunction with rdkbRgDeviceLanLanIsolation and
rdkbRgDot11BssApIsolation.x for
          complete isolation between CPEs connected to the RG.
        This MIB is written to non-vol and set to disable(0) after a factory
reset.
        disable(0)- No Isolation
        enable(1)- Enable Isolation feature"
    DEFVAL { 0 }
    ::= { rdkbRgDeviceBase 7 }

rdkbRgDeviceIpv6Trans OBJECT-TYPE
    SYNTAX INTEGER {
        disable(0),
        dslite(1)
        }
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "This MIB will control which IPv6 transition technology is enabled on the
device.
        After setting this MIB to disable in the config file, IPv4 traffic will
pass normally
                through the device. When switched to dslite, the DSLite feature
will be enabled.
                If eRouter is in IPv6-only mode, DS Lite will tunnel IPv4 traffic
over IPv6 to the AFTR
                address specified either manually or in the DHCPv6 option-64. See
rdkbRgDslite MIB tree
                for more details.
        If this setting is changed by the config file, the CM will reboot.
        This MIB is written to non-vol and set to disable(0) after a factory
```

```
reset.
        disable(0) - No technology is enabled
        enable(1) - DS lite feature is enabled"
    DEFVAL { 0 }
    ::= { rdkbRgDeviceBase 8 }

rdkbRgDeviceIpv6Passthrough OBJECT-TYPE
     SYNTAX INTEGER {
        disable(0),
        enable(1)
        }
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "This MIB controls IPv6 passthrough on the RG and is applicable in bridge
and router modes.

          When disabled the RG will function without any IPv6 passthrough

          When IPv6 passthrough is enabled in Bridge Mode the RG will drop all
IPv4 traffic

          When IPv6 passthrough is enabled in router mode the RG will operate as
normal for IPv4 traffic, but all IPv6 traffic will passthrough

          This MIB requires CM reboot.

          This MIB is written to non-vol and set to disable(0) after a factory
reset."

    DEFVAL { 0 }
    ::= { rdkbRgDeviceBase 9 }

rdkbRgDeviceFactoryReset        OBJECT-TYPE
    SYNTAX INTEGER {
                false(0),
        routerAndWifi(1),
        routerOnly(2),
        wifi(3)
        }
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
        "Set routerAndWifi(1) to restore default settings of both the router and
wifi.
                Set routerOnly(2) to restore default settings of the router.
                Set wifi(3) to restore default settings of the wifi.
                Return false(0) when read."
        DEFVAL { 0 }
        ::= { rdkbRgDeviceBase 1002 }

rdkbRgDeviceReset       OBJECT-TYPE
    SYNTAX INTEGER {
                false(0),
        routerAndWifi(1),
        routerOnly(2),
        wifi(3)
        }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
                "Set routerAndWifi(1) to reboot the router and WiFi.
                Set routerOnly(2) to reboot the router.
                Set wifi(3) to reboot the WiFi.
                Return false(0) when read."
        DEFVAL { 0 }
        ::= { rdkbRgDeviceBase 1003 }
```

```
-- Node rdkbRgDevice 2,3 removed

rdkbRgDeviceConfiguration   OBJECT IDENTIFIER ::=  { rdkbRgDevice 4 }

rdkbRgDeviceConfigFilename OBJECT-TYPE
    SYNTAX SnmpAdminString
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "Configuration filename from DHCP ACK."
    ::= { rdkbRgDeviceConfiguration 1 }

rdkbRgDeviceConfigStatus OBJECT-TYPE
    SYNTAX INTEGER {
        notSpecified(1),
        inProgress(2),
        success(3),
        errorServer(4),
        errorFileNotFound(5),
        errorBadFile(6),
        download(7)
        }
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Status of configuration file download.
         - notSpecified(1): DHCP ACK did not contain necessary information
         - inProgress(2): Configuration file is being downloaded
         - success(3): configuration file download completed successfully
         - errorServer(4): TFTP server did not respond
         - errorFileNotFound(5): no file on the server
         - errorBadFile(6): the file is not good, cannot be processed
         - download(7): commands the unit to download configuration file."
    ::= { rdkbRgDeviceConfiguration 2 }

rdkbRgDeviceUserChangedFlag OBJECT-TYPE
    SYNTAX RdkbRgUserChangedFlag
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
       "Specifies which user changed flags are set. The value of (1) means
        that user changed flag value is set; the value of (0) means that
        the user changed flag is not set.
        The user changed flags are stored in non-vol.
        Default value after factory reset is 0x00000000
        NOTE: Legacy style web pages only support bits from 0-21
        "
    ::= { rdkbRgDeviceConfiguration 3 }

rdkbRgDeviceConfigSnmpEnable OBJECT-TYPE
    SYNTAX BITS {
        rgWan(0),
        rgDualIp(1),
                rgLanIp(2),
                rgPortForward(3)
    }
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "Controls SNMP manager status on interfaces. If bit set to 0, the SNMP
         access is disabled. If bit set to 1, the SNMP access is enabled.
                 This MIB only applies to IPv4RG mode and is not relevant in
                 eRouter modes. "
    DEFVAL { '00'h }
    ::= { rdkbRgDeviceConfiguration 4 }

rdkbRgDeviceConfigIgnore  OBJECT-TYPE
    SYNTAX INTEGER {
```

```
        require(0),
        notRequire(1),
        notDownload(2)
        }
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This object controls if RG configuration file is to be downloaded.
         require(0): per specification, if DHCP contains parameters for the
                     file dowload, the RG MUST try to download it.
         notRequire(1): when config file download fails after exponential
backoff,
                        RG will not retry DHCP and continue to be operational.
         notDownload(2): RG will not download config file.
         This MIB can be only in CM configuration file."
    DEFVAL { 0 }
    ::= { rdkbRgDeviceConfiguration 5 }

-- removed rdkbRgDevice node 5,6


-- MIBs to poll IANA / PD info for eRouter interface

rdkbRgDeviceIanaContent   OBJECT IDENTIFIER ::=  { rdkbRgDevice 7 }

rdkbRgDeviceIanaIAID OBJECT-TYPE
        SYNTAX Unsigned32
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
                "Returns the IAID value embedded in the IA_NA for the
eRouter's DHCPv6 lease."
        ::= { rdkbRgDeviceIanaContent 1 }

rdkbRgDeviceIanaT1 OBJECT-TYPE
        SYNTAX Integer32
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
                "Returns the T1 value embedded in the IA_NA for the eRouter's
DHCPv6 lease."
        ::= { rdkbRgDeviceIanaContent 2 }

rdkbRgDeviceIanaT2 OBJECT-TYPE
        SYNTAX Integer32
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
                "Returns the T2 value embedded in the IA_NA for the eRouter's
DHCPv6 lease."
        ::= { rdkbRgDeviceIanaContent 3 }

rdkbRgDeviceIanaTable OBJECT-TYPE
        SYNTAX SEQUENCE OF RdkbRgDeviceIanaEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
                "Table of IA Address entries associated with IA_NA for the
eRouter's DHCPv6 lease."
        ::= { rdkbRgDeviceIanaContent 4 }

rdkbRgDeviceIanaEntry OBJECT-TYPE
    SYNTAX      RdkbRgDeviceIanaEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "Table of IA Address entries associated with IA_NA for the
eRouter's DHCPv6 lease."
```

```
    INDEX { rdkbRgDeviceIanaIndex }
    ::= { rdkbRgDeviceIanaTable 1 }

RdkbRgDeviceIanaEntry ::= SEQUENCE {
    rdkbRgDeviceIanaIndex               INTEGER,
    rdkbRgDeviceIanaValue               InetAddress,
    rdkbRgDeviceIanaPreferredLifetime   Integer32,
    rdkbRgDeviceIanaValidLifetime       Integer32
    }

rdkbRgDeviceIanaIndex OBJECT-TYPE
    SYNTAX      INTEGER (1..4)
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "The index"
    ::= { rdkbRgDeviceIanaEntry 1 }

rdkbRgDeviceIanaValue OBJECT-TYPE
    SYNTAX      InetAddress
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "IPv6 address provided to the eRouter WAN interface via DHCPv6."
    ::= { rdkbRgDeviceIanaEntry 2 }

rdkbRgDeviceIanaPreferredLifetime OBJECT-TYPE
    SYNTAX      Integer32
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "Preferred Lifetime setting for an IPv6 address assigned to the
eRouter."
    ::= { rdkbRgDeviceIanaEntry 3 }

rdkbRgDeviceIanaValidLifetime OBJECT-TYPE
    SYNTAX      Integer32
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "Valid Lifetime setting for an IPv6 address assigned to the
eRouter."
    ::= { rdkbRgDeviceIanaEntry 4 }



rdkbRgDeviceIapdContent   OBJECT IDENTIFIER ::=  { rdkbRgDevice 8 }

rdkbRgDeviceIapdIAID OBJECT-TYPE
        SYNTAX Unsigned32
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
                "Returns the IAID value embedded in the IA_PD for the
eRouter's DHCPv6 lease."
        ::= { rdkbRgDeviceIapdContent 1 }

rdkbRgDeviceIapdT1 OBJECT-TYPE
        SYNTAX Integer32
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
                "Returns the T1 value embedded in the IA_PD for the eRouter's
DHCPv6 lease."
        ::= { rdkbRgDeviceIapdContent 2 }

rdkbRgDeviceIapdT2 OBJECT-TYPE
        SYNTAX Integer32
```

```
        MAX-ACCESS read-only
        STATUS current
        DESCRIPTION
                "Returns the T2 value embedded in the IA_PD for the eRouter's
DHCPv6 lease."
        ::= { rdkbRgDeviceIapdContent 3 }

rdkbRgDeviceIapdTable OBJECT-TYPE
        SYNTAX SEQUENCE OF RdkbRgDeviceIapdEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
                "Table of IA Prefix entries associated with IA_PD for the
eRouter's DHCPv6 lease."
        ::= { rdkbRgDeviceIapdContent 4 }

rdkbRgDeviceIapdEntry OBJECT-TYPE
    SYNTAX      RdkbRgDeviceIapdEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "Table of IA Address entries associated with IA_PD for the
eRouter's DHCPv6 lease."
    INDEX { rdkbRgDeviceIapdIndex }
    ::= { rdkbRgDeviceIapdTable 1 }

RdkbRgDeviceIapdEntry ::= SEQUENCE {
    rdkbRgDeviceIapdIndex               INTEGER,
    rdkbRgDeviceIapdPreferredLifetime   Integer32,
    rdkbRgDeviceIapdValidLifetime       Integer32,
    rdkbRgDeviceIapdPrefixLength        INTEGER,
    rdkbRgDeviceIapdPrefixValue         InetAddress
    }

rdkbRgDeviceIapdIndex OBJECT-TYPE
    SYNTAX      INTEGER (1..4)
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "The index"
    ::= { rdkbRgDeviceIapdEntry 1 }

rdkbRgDeviceIapdPreferredLifetime OBJECT-TYPE
    SYNTAX      Integer32
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "Preferred Lifetime setting for an IPv6 address assigned to the
eRouter."
    ::= { rdkbRgDeviceIapdEntry 2 }

rdkbRgDeviceIapdValidLifetime OBJECT-TYPE
    SYNTAX      Integer32
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "Valid Lifetime setting for an IPv6 address assigned to the
eRouter."
    ::= { rdkbRgDeviceIapdEntry 3 }

rdkbRgDeviceIapdPrefixLength OBJECT-TYPE
        SYNTAX          INTEGER
        MAX-ACCESS      read-only
        STATUS          current
        DESCRIPTION
                "Length (in bits) for this prefix."
        ::= { rdkbRgDeviceIapdEntry 4 }
```

```
rdkbRgDeviceIapdPrefixValue OBJECT-TYPE
        SYNTAX          InetAddress
        MAX-ACCESS      read-only
        STATUS          current
        DESCRIPTION
                "Prefix address specified in the IA_PD."
        ::= { rdkbRgDeviceIapdEntry 5 }



-- ******************
-- ***** 802.11 *****
-- ******************

rdkbRgDot11 OBJECT IDENTIFIER ::=  { rdkbRg 2 }



 -- node rdkbRgDot11 1 removed

rdkbRgDot11Bss OBJECT IDENTIFIER ::= { rdkbRgDot11 2 }


rdkbRgDot11BssTable  OBJECT-TYPE
    SYNTAX      SEQUENCE OF RdkbRgDot11BssEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "BSS table"
    ::= { rdkbRgDot11Bss 1 }

rdkbRgDot11BssEntry OBJECT-TYPE
    SYNTAX      RdkbRgDot11BssEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A row in the table which represents parameters for SSID."
    INDEX   { ifIndex }
    ::= { rdkbRgDot11BssTable 1 }

RdkbRgDot11BssEntry ::=
    SEQUENCE {
        rdkbRgDot11BssId            PhysAddress,
        rdkbRgDot11BssEnable        INTEGER,
        rdkbRgDot11BssSsid          OCTET STRING,
        rdkbRgDot11BssSecurityMode  INTEGER,
        rdkbRgDot11BssClosedNetwork TruthValue,
        rdkbRgDot11BssAccessMode    INTEGER,
        rdkbRgDot11BssLanAccess     INTEGER,
        rdkbRgDot11BssDsBwReserve   INTEGER,
        rdkbRgDot11BssDsBwPriority  INTEGER,
        rdkbRgDot11BssMaxNumSta     INTEGER,
        rdkbRgDot11BssCountStaAsCpe TruthValue,
        rdkbRgDot11BssUserStatus    INTEGER,
        rdkbRgDot11BssHotSpot       TruthValue,
        rdkbRgDot11BssApIsolation   INTEGER
        }

rdkbRgDot11BssId OBJECT-TYPE
    SYNTAX      PhysAddress
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Returns the BSSID"
    ::= { rdkbRgDot11BssEntry 1 }

rdkbRgDot11BssEnable OBJECT-TYPE
```

```
    SYNTAX INTEGER {
        enable(1),
        disable(2),
        enableOnline(3)
        }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Controls the BSS state.
         When set to enableOnline(3), the SSID is enabled only
         when the cable modem is online. When the modem changes
         state to offline, the AP will send dissasociation messages
         to the STAs connected to the SSID and then disable.
         The value of primary BSS is stored in non-vol and is enabled(1)
         after factory reset.
         The other BSSs are disabled by default. If other
         BSS's SSID name is not defined, the BSS will not
         be enabled."
    ::= { rdkbRgDot11BssEntry 2 }

rdkbRgDot11BssSsid OBJECT-TYPE
    SYNTAX      OCTET STRING (SIZE(0..32))
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Controls and reflects the service set identifier.
         The value of primary BSS is stored in non-vol and is
         empty after factory reset.
         If other BSS's SSID name is not defined, the BSS
         will not be enabled."
    ::= { rdkbRgDot11BssEntry 3 }

rdkbRgDot11BssSecurityMode OBJECT-TYPE
    SYNTAX INTEGER {
        disabled(0),
        wep(1),
        wpaPsk(2),
        wpa2Psk(3),
        wpaEnterprise(4),
        wpa2Enterprise(5),
        --radiusWep(6)
        wpaWpa2Psk(7),
        wpaWpa2Enterprise(8)
        }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Secrity for BSS.
         Beacause WPA2 is backwords compatible with WPA, setting this
         object to wpaWpa2Psk(7) is allowed and has the same effect as
         setting to wpa2Psk(3). The same is true for wpaWpa2Enterprise(8)
         and wpa2Enterprise(5).
         The value for primary BSS is stored in non-vol and is wpaWpa2Psk(7)
         after factory reset.
         For each other BSS security has to be included in configuration
         file or the BSS will be disabled."
    ::= { rdkbRgDot11BssEntry 4 }

rdkbRgDot11BssClosedNetwork OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Controls whether the device will operate in closed network mode.  If
         set to true(1), then the network mode is closed and the SSID will not
         be broadcast in beacon packets.  If set to false(2), then the network
         mode is open and the SSID will be broadcast in beacon packets.
         The value for primary BSS is stored in non-vol.
```

```
         The default value for other BSSs is false."
    ::= { rdkbRgDot11BssEntry 5 }

rdkbRgDot11BssAccessMode OBJECT-TYPE
    SYNTAX      INTEGER {
                allowAny(0),
                allowList(1),
                denyList(2)
    }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Controls what stations will be given access to the device.  If set to
         allowAny(0), then any station will be allowed to connect.  If set
         to allowList(1), then only stations whose MAC address appears in
         the rdkbRgDot11AccessMacTable will be allowed to connect.
         The value for primary BSS is stored in non-vol.
         The default value for other BSSs is 0."
    ::= { rdkbRgDot11BssEntry 6 }

-- not implemented
rdkbRgDot11BssLanAccess OBJECT-TYPE
    SYNTAX INTEGER {
        lan(1),
        guest(2)
        }
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "If set to lan(1), this service set will be authorized as a member of
         the local area network.  If set to guest(2), this service set will
         have access to the wide area internet, but will have restricted access
         to the local area network.
         Default values are lan(1) for the primary BSS and guest(2) for other
BSSs.
         NOTE: NOT IMPLEMENTED"
    ::= { rdkbRgDot11BssEntry 8 }

rdkbRgDot11BssDsBwReserve OBJECT-TYPE
    SYNTAX INTEGER
    UNITS "Bps"
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Controls the downstream (from AP to client) throughput
         in Bytes per second from AP to client on a BSS.
         This object reserves the throughput for a BSS. The rest of
         leftover bandwidth is assigned based on BSS priority.
         Note: if the reserved bandwidth is not used, it is shared
         with other BSSs based on their priority.
         If set to 0 there is no reservation.

         Example:
         BSS 1, 2 and 3 have reservation of 3Mb/s each. BSS 1 is higher priority
         than 2, which is higher than 3.
         - only BSS 3 transmits full bandwidth traffic: BSS 3 gets full bandwidth
         - BSS 2 starts transmitting at 2 Mb/s: BSS 2 gets 2 Mb/s, BSS 3 gets
           full-2 Mb/s
         - BSS 2 increases to 4 Mb/s: BSS 3 gets full-4 Mb/s, BSS 2 gets 4 Mb/s
         - BSS 2 increases to full: BSS 3 gets 3 Mb/s, BSS 2 gets full-3 Mb/s
         - BSS 1 starts transmitting at 2 Mb/s: BSS 3 gets 3 mbps, BSS 2 gets
           full-5 Mb/s, BSS 1 gets 2 Mb/s
         - BSS 1 increases to full: BSS 3 gets 3 Mb/s, BSS 2 gets 3 Mb/s, BSS 1
           gets full-6 Mb/s
           NOTE: NOT IMPLEMENTED"
    DEFVAL { 0 }
    ::= { rdkbRgDot11BssEntry 9 }
```

```
rdkbRgDot11BssDsBwPriority OBJECT-TYPE
    SYNTAX INTEGER (1..4)
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Sets the priority for non-reserved bandwidth. 1 is the highest priority.
         If BSSs use the same priority, they get bandwidth based on contention.
         NOTE: NOT IMPLEMENTED"
    DEFVAL { 4 }
    ::= { rdkbRgDot11BssEntry 10 }

rdkbRgDot11BssMaxNumSta OBJECT-TYPE
    SYNTAX INTEGER (1..128)
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "This object defines the maximum number of STAs that can connect to
         this SSID. Note that the maximum number of STA accross all SSIDs in
         the AP is 128.
         Default value is 128 for all SSIDs.
         The value for primary BSS is stored in non-vol."
    ::= { rdkbRgDot11BssEntry 11 }

rdkbRgDot11BssCountStaAsCpe OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "STAs in Max-Count of CPEs (Max number of CPE in CM config file),
         default per eDOCSIS spec.
         This setting is used to control counting STAs in Max-Count of CPEs.
         false: Do not count STAs as a CPE
         true: Count STAs as a CPE
         This object applies when the BSS is in bridge mode. In router mode
         the STAs are behind the NAT and do not count towards max-CPE anyway.
         Note: applies only to secondary BSSs."
    DEFVAL { true }
    ::= { rdkbRgDot11BssEntry 12 }

rdkbRgDot11BssUserStatus OBJECT-TYPE
    SYNTAX INTEGER {
        enable(1),
        disable(2)
        }
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Provides the BSS Id Web UI or Wireless ON/OFF (if exist) status that
                 is set by the user. If the user can press the Wireless ON/OFF
(if
                 exist) button and it¿s status can be seen in BSS ID Web UI. If
user
                 changes access point status in Web UI, it will reflect the
status of
                 Wireless ON/OFF LED."
    ::= { rdkbRgDot11BssEntry 13 }

rdkbRgDot11BssHotSpot OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Determines/Sets whether this BSS is a HotSpot BSS.  This allows the MSO
to
                specify which BSS is configured for Hotspot Operation.
         Note: applies only to Guest BSSs (non primary)."
    DEFVAL { false }
    ::= { rdkbRgDot11BssEntry 14 }
```

```
rdkbRgDot11BssApIsolation OBJECT-TYPE
    SYNTAX INTEGER {
        disable(0),
        enable(1)
        }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "This MIB is only available in D3.0 products.
        AP Isolation (Access Point Isolation) allows you to isloate traffic
between CPEs on
        the same Wifi SSID. This allows a measure of security to prevent hackers
from accessing other CPEs in
        a public Wifi environment.
        Ex. When this MIB is enabled you can not ping between CPEs connected to
the same SSID.
        AP Isolation is settable per SSID in either VLAN or non VLAN modes.
        This MIB is written to non-vol and set to disable(0) after a factory
reset.
        disable(0)- No AP Isolation
        enable(1)- Enable AP Isolation feature."
    DEFVAL { 0 }
    ::= { rdkbRgDot11BssEntry 15 }

-- removed node rdkbRgDot11Bss 2

-- removed node rdkbRgDot11Bss 3

-- ******************
-- PRIVACY PARAMETERS
-- ******************

-- rdkbRgDot11MgmtPrivacy contains objects from the 'Privacy' web page

rdkbRgDot11Privacy OBJECT IDENTIFIER ::= { rdkbRgDot11 3 }


-- WPA

rdkbRgDot11WpaTable  OBJECT-TYPE
    SYNTAX      SEQUENCE OF RdkbRgDot11WpaEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "WPA table"
    ::= { rdkbRgDot11Privacy 1 }

rdkbRgDot11WpaEntry OBJECT-TYPE
    SYNTAX      RdkbRgDot11WpaEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A row in the table which represents WPA parameters for BSS."
    INDEX   { ifIndex }
    ::= { rdkbRgDot11WpaTable 1 }

RdkbRgDot11WpaEntry ::=
    SEQUENCE    {
        rdkbRgDot11WpaAlgorithm          INTEGER,
        rdkbRgDot11WpaPreSharedKey       OCTET STRING,
        rdkbRgDot11WpaGroupRekeyInterval INTEGER
    }

rdkbRgDot11WpaAlgorithm OBJECT-TYPE
    SYNTAX INTEGER {
        tkip(0),
```

```
        aes(1),
        tkipPlusAes(2)
        }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "The value of tkip(0) is not allowed when security is WPA2.
         The value for primary BSS is stored in non-vol and tkipPlusAes(2)
         after factory reset.
         The default value for other BSSs is tkip."
    ::= { rdkbRgDot11WpaEntry 1 }

rdkbRgDot11WpaPreSharedKey OBJECT-TYPE
    SYNTAX      OCTET STRING (SIZE(8..64))
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Sets the WPA Pre-Shared Key (PSK).  This value MUST be either a
         64-digit hexadecimal number, OR a 8 to 63 character ASCII string.
         The value for primary BSS is stored in non-vol and is the serial
         number of the device after factory reset.
         The default value for other BSSs is 8 0's.
         This object return an empty string when read."
    ::= { rdkbRgDot11WpaEntry 2 }

rdkbRgDot11WpaGroupRekeyInterval OBJECT-TYPE
    SYNTAX      INTEGER
    UNITS       "seconds"
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Sets the WPA Group Rekey Interval in seconds. Set to zero to disable
         periodic rekeying.
         The value for primary BSS is stored in non-vol and is 3600 after
         factory reset.
         The default value for other BSSs is 3600."
    ::= { rdkbRgDot11WpaEntry 3 }


-- RADIUS

rdkbRgDot11RadiusTable  OBJECT-TYPE
    SYNTAX      SEQUENCE OF RdkbRgDot11RadiusEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "WPA table"
    ::= { rdkbRgDot11Privacy 2 }

rdkbRgDot11RadiusEntry OBJECT-TYPE
    SYNTAX      RdkbRgDot11RadiusEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A row in the table which represents WPA parameters for BSS."
    INDEX   { ifIndex }
    ::= { rdkbRgDot11RadiusTable 1 }

RdkbRgDot11RadiusEntry ::=
    SEQUENCE    {
        rdkbRgDot11RadiusAddressType    InetAddressType,
        rdkbRgDot11RadiusAddress        InetAddress,
        rdkbRgDot11RadiusPort           InetPortNumber,
        rdkbRgDot11RadiusKey            DisplayString,
        rdkbRgDot11RadiusReAuthInterval INTEGER
    }
```

```
rdkbRgDot11RadiusAddressType OBJECT-TYPE
    SYNTAX      InetAddressType
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
            "Type of RADIUS server IP address."
    DEFVAL { ipv4 }
    ::= { rdkbRgDot11RadiusEntry 1 }


rdkbRgDot11RadiusAddress OBJECT-TYPE
    SYNTAX      InetAddress
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Sets RADIUS server IP address.
         The value for primary BSS is stored in non-vol and is 0.0.0.0
         after factory reset.
         The default value for other BSSs is 0.0.0.0."
    ::= { rdkbRgDot11RadiusEntry 2 }

rdkbRgDot11RadiusPort OBJECT-TYPE
    SYNTAX      InetPortNumber
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Sets the UDP port used to communicate with the RADIUS server.
         The value for primary BSS is stored in non-vol and is 1645
         after factory reset.
         The default value for other BSSs is 1645."
    ::= { rdkbRgDot11RadiusEntry 3 }

rdkbRgDot11RadiusKey OBJECT-TYPE
    SYNTAX      DisplayString
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Sets or displays the RADIUS key.
         The value for primary BSS is stored in non-vol and is null
         after factory reset.
         The default value for other BSSs is null.
         This object return an empty string when read."
    ::= { rdkbRgDot11RadiusEntry 4 }

rdkbRgDot11RadiusReAuthInterval OBJECT-TYPE
    SYNTAX      INTEGER
    UNITS       "seconds"
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Sets the RADIUS Rekey Interval in seconds.
         Set to zero to disable periodic rekeying.
         The value for primary BSS is stored in non-vol and is 3600
         after factory reset.
         The default value for other BSSs is 3600."
    ::= { rdkbRgDot11RadiusEntry 5 }


-- WEP

rdkbRgDot11WepTable  OBJECT-TYPE
    SYNTAX      SEQUENCE OF RdkbRgDot11WepEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "WEP table"
    ::= { rdkbRgDot11Privacy 3 }
```

```
rdkbRgDot11WepEntry OBJECT-TYPE
    SYNTAX      RdkbRgDot11WepEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A row in the table which represents WPA parameters for BSS."
    INDEX   { ifIndex }
    ::= { rdkbRgDot11WepTable 1 }

RdkbRgDot11WepEntry ::=
    SEQUENCE {
        rdkbRgDot11WepDefaultKey      INTEGER,
        rdkbRgDot11WepEncryptionMode  INTEGER,
        rdkbRgDot11WepPassPhrase      OCTET STRING
    }

rdkbRgDot11WepDefaultKey OBJECT-TYPE
    SYNTAX      INTEGER (1..4)
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Controls and reflects the default key which will be used when 64 or
         128 bit encryption is enabled.  Indicates the entry from the
         rdkbRgDot1164BitKeyTable if rdkbRgDot11EncryptionMode is set to
wep64(1), or
         the entry from the rdkbRgDot11128BitKeyTable if
rdkbRgDot11EncryptionMode is set
         to wep128(2).
         The value for primary BSS is stored in non-vol and is 1 after factory
reset.
         The default value for other BSSs is 1."
    ::= { rdkbRgDot11WepEntry 1 }

rdkbRgDot11WepEncryptionMode OBJECT-TYPE
    SYNTAX INTEGER {
        wep64(0),
        wep128(1)
        }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
         "The value for primary BSS is stored in non-vol and is wep128(1)
          after factory reset.
          The default value for other BSSs is wep128."
    ::= { rdkbRgDot11WepEntry 2 }

rdkbRgDot11WepPassPhrase OBJECT-TYPE
    SYNTAX      DisplayString (SIZE(0..32))
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Controls and reflects the WEP pass phrase.
         The value for primary BSS is stored in non-vol and is null
         after factory reset.
         The default value for other BSSs is null.
         This object return an empty string when read."
    ::= { rdkbRgDot11WepEntry 3 }



-- WEP 64-bit keys:

rdkbRgDot11Wep64BitKeyTable  OBJECT-TYPE
    SYNTAX      SEQUENCE OF RdkbRgDot11Wep64BitKeyEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A table of 40 bit key values used when rdkbRgDot11WepEncryptionMode
```

```
         is set to wep64(0)."
    ::= { rdkbRgDot11Privacy 4 }

rdkbRgDot11Wep64BitKeyEntry OBJECT-TYPE
    SYNTAX      RdkbRgDot11Wep64BitKeyEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A row in the table which represents a single 64 bit key."
    INDEX   { ifIndex, rdkbRgDot11Wep64BitKeyIndex }
    ::= { rdkbRgDot11Wep64BitKeyTable 1 }

RdkbRgDot11Wep64BitKeyEntry ::=
    SEQUENCE    {
                rdkbRgDot11Wep64BitKeyIndex       Integer32,
                rdkbRgDot11Wep64BitKeyValue       OCTET STRING
    }

rdkbRgDot11Wep64BitKeyIndex OBJECT-TYPE
    SYNTAX      Integer32 (1..4)
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "Identifies the instance of this table row."
    ::= { rdkbRgDot11Wep64BitKeyEntry 1 }

rdkbRgDot11Wep64BitKeyValue OBJECT-TYPE
    SYNTAX      OCTET STRING (SIZE(5))
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "A 40 bit key to be used when rdkbRgDot11WepEncryptionMode is set to
wep64(1).
         The value for primary BSS is stored in non-vol and is all 1's after
factory
         reset.
         The default value for other BSSs is all 0's.
         This object return an empty string when read."
    ::= { rdkbRgDot11Wep64BitKeyEntry 2 }

-- WEP 128-bit keys:

rdkbRgDot11Wep128BitKeyTable  OBJECT-TYPE
    SYNTAX      SEQUENCE OF RdkbRgDot11Wep128BitKeyEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A table of 104 bit key values used when rdkbRgDot11WepEncryptionMode
         is set to wep128(1)."
    ::= { rdkbRgDot11Privacy 5 }

rdkbRgDot11Wep128BitKeyEntry OBJECT-TYPE
    SYNTAX      RdkbRgDot11Wep128BitKeyEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A row in the table which represents a single 128 bit key."
    INDEX   { ifIndex, rdkbRgDot11Wep128BitKeyIndex }
    ::= { rdkbRgDot11Wep128BitKeyTable 1 }

RdkbRgDot11Wep128BitKeyEntry ::=
    SEQUENCE    {
                rdkbRgDot11Wep128BitKeyIndex       Integer32,
                rdkbRgDot11Wep128BitKeyValue       OCTET STRING
    }

rdkbRgDot11Wep128BitKeyIndex OBJECT-TYPE
    SYNTAX      Integer32 (1..4)
```

```
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "Identifies the instance of this table row."
    ::= { rdkbRgDot11Wep128BitKeyEntry 1 }

rdkbRgDot11Wep128BitKeyValue OBJECT-TYPE
    SYNTAX      OCTET STRING (SIZE(13))
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "A 104 bit key to be used when rdkbRgDot11WepEncryptionMode is set to
wep128(2).
         The value for primary BSS is stored in non-vol and is all 1's.
         The default value for other BSSs is all 0's.
         This object return an empty string when read."
    ::= { rdkbRgDot11Wep128BitKeyEntry 2 }


rdkbRgDot11PrivacyWps OBJECT IDENTIFIER ::= { rdkbRgDot11Privacy 6 }

rdkbRgDot11PrivacyWpsPushButtonTime OBJECT-TYPE
    SYNTAX      INTEGER (0..10)
    UNITS       "seconds"
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Specifies how long to press WPS button to start the WPS
         procedure. 0 means disable WPS.
         Stored in non-vol, 1 after factory reset."
    ::= { rdkbRgDot11PrivacyWps 1 }


-- Removed node rdkbRgDot11 4 ,5


------------------------------------------------------------------------
---  rdkbRgDot11ExtMgmt
---  Table to support Multiple Radios
---  Note: Indexes may be set to support specific hardware interfaces.
------------------------------------------------------------------------

rdkbRgDot11ExtMgmt OBJECT IDENTIFIER ::= { rdkbRgDot11 6 }

rdkbRgDot11ExtMgmtTable  OBJECT-TYPE
    SYNTAX      SEQUENCE OF RdkbRgDot11ExtMgmtEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "Multiple Radio Configuration Table"
    ::= { rdkbRgDot11ExtMgmt 1 }

rdkbRgDot11ExtMgmtEntry OBJECT-TYPE
    SYNTAX      RdkbRgDot11ExtMgmtEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A row in the table which represents parameters for a Radio.
                 Index 32 should be set for Radio 0 -- 2.4 GHz if populated.
                 Index 112 should be set for Radio 1"

    INDEX   { ifIndex }
    ::= { rdkbRgDot11ExtMgmtTable 1 }

RdkbRgDot11ExtMgmtEntry ::=
    SEQUENCE {
                rdkbRgDot11ExtOperMode                INTEGER,
                rdkbRgDot11ExtCurrentChannel          Unsigned32,
```

```
                rdkbRgDot11ExtBeaconInterval          Unsigned32,
                rdkbRgDot11ExtDTIMInterval            Unsigned32,
                rdkbRgDot11ExtFragThresh              Unsigned32,
                rdkbRgDot11ExtRTSThresh               Unsigned32,
                rdkbRgDot11ExtSRL                     Unsigned32,
                rdkbRgDot11ExtLRL                     Unsigned32,
                rdkbRgDot11ExtCtsProtectionEnable     TruthValue,
                rdkbRgDot11ExtRate                    INTEGER,
                rdkbRgDot11ExtOutputPower             INTEGER,
                rdkbRgDot11ExtCountry                 INTEGER,
                rdkbRgDot11ExtAntenna                 INTEGER,
                rdkbRgDot11ExtMbssUserControl         INTEGER,
                rdkbRgDot11ExtMbssUseNonvol           TruthValue,
                rdkbRgDot11ExtMbssAdminControl        INTEGER,
                rdkbRgDot11ExtActualChannel           INTEGER,
                rdkbRgDot11ExtOnOffPushButtonTime     INTEGER,
                rdkbRgDot11ExtWmm                     INTEGER,
                rdkbRgDot11ExtWmmNoAck                INTEGER,
                rdkbRgDot11ExtMulticastRate           INTEGER,
                rdkbRgDot11ExtWirelessButtonOperation INTEGER
        }

rdkbRgDot11ExtOperMode OBJECT-TYPE
    SYNTAX      INTEGER {
                notAvailable(0),
                off(1),
                remote(2),
                local(3)
    }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Used to control the 802.11 operational mode. If set to
         notAvailable(0), then the wireless interface will be disabled, with
         the radio off, and no wireless settings web pages will be available to
         the user.
         If set to off(1) then the wireless interface will be disabled, but
         there may be a web page present which indicates that wireless service
         is available and that the MSO should be contacted to enable it.
         If set to remote(2), then the wireless interface will be enabled, but
         the configuration web pages are read-only so that the user may not
         change the settings.
         If set to local(3), then the wireless interface will be enabled, and
         the web pages will be read-write so that the user has full control over
         the settings.
         This parameter is stored in non-vol and set to local(3) after factory
         reset."
    ::= { rdkbRgDot11ExtMgmtEntry 1 }

rdkbRgDot11ExtCurrentChannel OBJECT-TYPE
    SYNTAX      Unsigned32 (0..216)
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Controls and reflects the current channel number.
         The value of 0 means auto channel selection.
         This parameter is stored in non-vol and is 0
         after factory reset.

         For 802.11b/g/n modes in 2.4 GHz, the available channels are 1-14.
         For 802.11a/n modes in 5 GHz, the available channels are 34-216.
         Channel selection is subjected to restrictions based on Wifi
         Country Code"
    ::= { rdkbRgDot11ExtMgmtEntry 3 }

rdkbRgDot11ExtBeaconInterval OBJECT-TYPE
    SYNTAX      Unsigned32  (1..65535)
    UNITS       "milliseconds"
```

```
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Controls and reflects the beacon interval for the device.
         This parameter is stored in non-vol."
    ::= { rdkbRgDot11ExtMgmtEntry 4 }

rdkbRgDot11ExtDTIMInterval OBJECT-TYPE
    SYNTAX      Unsigned32  (1..255)
    UNITS       "milliseconds"
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Controls and reflects the DTIM interval for the device.
         This parameter is stored in non-vol."
    ::= { rdkbRgDot11ExtMgmtEntry 5 }

-- Renamed from rdkbRgDot11FragmentationThreshold to avoid conflict w/ IEEE
802.11 MIB
rdkbRgDot11ExtFragThresh OBJECT-TYPE
    SYNTAX      Unsigned32  (256..2346)
    UNITS       "bytes"
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Controls and reflects the fragmentation threshold for the device.
         This parameter is stored in non-vol."
    ::= { rdkbRgDot11ExtMgmtEntry 6 }

-- Renamed from rdkbRgDot11RTSThreshold to avoid conflict w/ IEEE 802.11 MIB
rdkbRgDot11ExtRTSThresh OBJECT-TYPE
    SYNTAX      Unsigned32  (0..2347)
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Controls and reflects the RTS threshold for the device.
         This parameter is stored in non-vol."
    ::= { rdkbRgDot11ExtMgmtEntry 7 }


-- Renamed from rdkbRgDot11ShortRetryLimit to avoid conflict w/ IEEE 802.11 MIB
rdkbRgDot11ExtSRL OBJECT-TYPE
    SYNTAX      Unsigned32  (1..255)
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Controls and reflects the short retry limit for the device.
         This parameter is stored in non-vol."
    ::= { rdkbRgDot11ExtMgmtEntry 8 }

-- Renamed from rdkbRgDot11LongRetryLimit to avoid conflict w/ IEEE 802.11 MIB
rdkbRgDot11ExtLRL OBJECT-TYPE
    SYNTAX      Unsigned32  (1..255)
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Controls and reflects the long retry limit for the device.
         This parameter is stored in non-vol."
    ::= { rdkbRgDot11ExtMgmtEntry 9 }

rdkbRgDot11ExtCtsProtectionEnable OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Controls and reflects the state of CTS protection.
         If set to true(1), the AP will use RTS/CTS to improve 802.11
         performance in mixed 802.11 networks. Set to false(2) to
```

```
         maximize 802.11 throughput under most conditions.
         This parameter is stored in non-vol."
    ::= { rdkbRgDot11ExtMgmtEntry 10 }

rdkbRgDot11ExtRate OBJECT-TYPE
    SYNTAX      INTEGER {
                auto(0),
                mbits1(1),
                mbits2(2),
                mbits5-5(5),
                mbits6(6),
                mbits9(9),
                mbits11(11),
                mbits12(12),
                mbits18(18),
                mbits24(24),
                mbits36(36),
                mbits48(48),
                mbits54(54)
    }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Forces the transmission rate for the AP to a particular speed.
         Note that the 802.11b rates, including mbits1(1), mbits2(2),
         mbits5-5(5), and mbits11(11), are not available in 5GHz.
         This parameter is stored in non-vol."
    ::= { rdkbRgDot11ExtMgmtEntry 11 }

rdkbRgDot11ExtOutputPower OBJECT-TYPE
    SYNTAX      INTEGER {
                percent25(25),
                percent50(50),
                percent75(75),
                percent100(100)
    }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Sets the output power relative to the hardware's maximum capability.
         This parameter is stored in non-vol."
    ::= { rdkbRgDot11ExtMgmtEntry 12 }

rdkbRgDot11ExtCountry OBJECT-TYPE
    SYNTAX      INTEGER {
                worldWide(0),
                thailand(1),
                israel(2),
                jordan(3),
                china(4),
                japan(5),
                usa(6),
                europe(7),
                allChannels(8)
    }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Restricts the channel set based on country requirements.
         This parameter is stored in non-vol and is worldWide(0)
         (channels 1-11) after factory reset."
    ::= { rdkbRgDot11ExtMgmtEntry 13 }

rdkbRgDot11ExtAntenna OBJECT-TYPE
    SYNTAX  INTEGER {
        disableIntTx(0),
        enableIntTx(1)
        }
```

```
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "This parameter is stored in non-vol and set to
         disableIntTx(0) after factory reset."
    ::= { rdkbRgDot11ExtMgmtEntry 14 }

rdkbRgDot11ExtMbssUserControl OBJECT-TYPE
    SYNTAX INTEGER (1..8|65536..16711680)
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Sets the number of user controlled Wifi networks via web pages.
         1: The user has control over the primary wireless network only.
            No guest network page is displayed.
         2: The user has control over the primary wireless network and
            one guest network. No drop down menu (or only 1 item in the
            menu) for additional guest network configuration.
         3: Same as above with 2 guest networks.
         4: Same as above with 4 guest networks.
         5: Same as above with 4 guest networks.
             6: Same as above with 5 guest networks.
             7: Same as above with 6 guest networks.
         8: Same as above with 7 guest networks.

         Bit Mask Control:
         Bit 16: -- User has control over Primary Wireless Network       :  65536
         Bit 17: -- User has control over Guest Network 1 (interface 33) : 131072
         Bit 18: -- User has control over Guest Network 2 (interface 34) : 262144
         Bit 19: -- User has control over Guest Network 3 (interface 35) : 524288
         Bit 20: -- User has control over Guest Network 4 (interface 36) :1048576
         Bit 21: -- User has control over Guest Network 5 (interface 37) :2097152
         Bit 22: -- User has control over Guest Network 6 (interface 38) :4194304
         Bit 23: -- User has control over Guest Network 7 (interface 39) :8388608

         This object value is stored in non-vol and set to 1
         after factory reset."
    ::= { rdkbRgDot11ExtMgmtEntry 15 }

rdkbRgDot11ExtMbssUseNonvol OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Allows to save additional BSS parameters to non-vol if set to true.
         Primary BSS parameters are ALWAYS stored in non-vol.
         This object value is stored in non-vol and set to false
         after factory reset."
    ::= { rdkbRgDot11ExtMgmtEntry 16 }

rdkbRgDot11ExtMbssAdminControl OBJECT-TYPE
    SYNTAX INTEGER (1..8|65536..16711680)
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Sets the number of admin controlled Wifi networks via web pages.
         1: The admin has control over the primary wireless network only.
            No guest network page is displayed.
         2: The admin has control over the primary wireless network and
            one guest network. No drop down menu (or only 1 item in the
            menu) for additional guest network configuration.
         3: Same as above with 2 guest networks.
         4: Same as above with 3 guest networks.
         5: Same as above with 4 guest networks.
             6: Same as above with 5 guest networks.
             7: Same as above with 6 guest networks.
         8: Same as above with 7 guest networks.
```

```
        Bit 16: -- Admin Has control over Primary Wireless Network       :
65536
        Bit 17: -- Admin Has control over Guest Network 1 (interface 33) :
131072
        Bit 18: -- Admin Has control over Guest Network 2 (interface 34) :
262144
        Bit 19: -- Admin Has control over Guest Network 3 (interface 35) :
524288
        Bit 20: -- Admin Has control over Guest Network 4 (interface 36)
:1048576
        Bit 21: -- Admin Has control over Guest Network 5 (interface 37)
:2097152
        Bit 22: -- Admin Has control over Guest Network 6 (interface 38)
:4194304
        Bit 23: -- Admin Has control over Guest Network 7 (interface 39)
:8388608

        This object value is stored in non-vol and set to 1
        after factory reset."

    ::= { rdkbRgDot11ExtMgmtEntry 17 }

rdkbRgDot11ExtActualChannel OBJECT-TYPE
    SYNTAX      INTEGER
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Reports the current channel number that wireless is on.
        The value of 0 means wireless is disabled."
    ::= { rdkbRgDot11ExtMgmtEntry 18 }

rdkbRgDot11ExtOnOffPushButtonTime OBJECT-TYPE
    SYNTAX      INTEGER (0..11)
    UNITS       "seconds"
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Specifies how long to press WPS button to enable or disable
        the WiFi interface (primary SSID). When set to 11, the feature
        is disabled.
        Note that if the device has multiple radios but a single WPS HW button,
        only the first instance (rdkbRgDot11ExtOnOffPushButtonTime.32) should be
used.
        Stored in non-vol, 5, 10 after factory reset."
    ::= { rdkbRgDot11ExtMgmtEntry 19 }

rdkbRgDot11ExtWmm OBJECT-TYPE
    SYNTAX  INTEGER {
        disable(0),
        enable(1)
        }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Mib to Enable/Disable Wifi-Multi Media (WMM) QOS fetures.
        This parameter is stored in non-vol and set to
        enable(1) after a factory reset."
    DEFVAL { 1 }
    ::= { rdkbRgDot11ExtMgmtEntry 20 }

 rdkbRgDot11ExtWmmNoAck OBJECT-TYPE
    SYNTAX  INTEGER {
        disable(0),
        enable(1)
        }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
```

```
        "Mib to control whether Wifi packets require acknowledgement.
        disable(0) Use acknowledgemnet for Wifi packets.
        enable(1)  Sets No acknowledgement which allows for higher throughput and
lower latency when some
                   packetloss is acceptable (ex. VoIP).
        Note: If WMM is disabled then this setting has no effect, and you can Not
disable Acks from being
        returned from the stations.
        This parameter is stored in non-vol and set to disable(0) after a factory
reset."
    DEFVAL { 0 }
    ::= { rdkbRgDot11ExtMgmtEntry 21 }

 rdkbRgDot11ExtMulticastRate OBJECT-TYPE
    SYNTAX      INTEGER {
                                disable(0),
                mbits1(1),
                mbits2(2),
                mbits5-5(5),
                mbits6(6),
                mbits9(9),
                mbits11(11),
                mbits12(12),
                mbits18(18),
                mbits24(24),
                mbits36(36),
                mbits48(48),
                mbits54(54)
        }
    UNITS       "Mbps"
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Forces the dot11 multicast Phy transmission rate.
         Note that the 802.11b rates, including mbits1(1), mbits2(2),
         mbits5-5(5), and mbits11(11), are not available in 5GHz.
         This object is stored in non-vol and defaults to disable(0) after
factory reset."
    DEFVAL { 0 }
    ::= { rdkbRgDot11ExtMgmtEntry 22 }

rdkbRgDot11ExtWirelessButtonOperation OBJECT-TYPE
    SYNTAX  INTEGER {
        disable(0),
        enable(1)
    }
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "To enable or disable the button press of wireless ON/OFF button.
         This feature will work only on products that have the wireless ON/OFF
button.
         This MIB will control if the Wireless ON/OFF button can be pressed or
not.
         If it's enabled then button press would take effect otherwise there will
not be any effect on button press.
         Note that if the device has multiple radios but a single Wireless ON/OFF
button,
         only the first instance (rdkbRgDot11ExtWirelessButtonOperation.32)
should be used.
         By default value will be set to enable(1)."
    DEFVAL { 1 }
    ::= { rdkbRgDot11ExtMgmtEntry 23 }


----------------------------------------
-- Dot11nExt - Radio Settings Table
---  Table to support Multiple 802.11n Radios
```

```
---  Note: Indexes may be set to support specific hardware interfaces.
---  Index 32 MUST match rdkbRgDot11n.
---------------------------------------

rdkbRgDot11nExt OBJECT IDENTIFIER ::= { rdkbRgDot11 7 }

rdkbRgDot11nExtTable  OBJECT-TYPE
    SYNTAX      SEQUENCE OF RdkbRgDot11nExtEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "Multiple 802.11n Radio Configuration Table
                 Index 32 should be set for Radio 0 -- 2.4 GHz if populated.
                 Index 112 should be set for Radio 1"
    ::= { rdkbRgDot11nExt 1 }

rdkbRgDot11nExtEntry OBJECT-TYPE
    SYNTAX      RdkbRgDot11nExtEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A row in the table which represents parameters for an 802.11n Radio."
    INDEX   { ifIndex }
    ::= { rdkbRgDot11nExtTable 1 }

RdkbRgDot11nExtEntry ::=
    SEQUENCE {
                rdkbRgdot11nExtMode               INTEGER,
                rdkbRgdot11nExtPhyRate            INTEGER,
                rdkbRgdot11nExtBand               INTEGER,
                rdkbRgdot11nExtBandWidth          INTEGER,
                rdkbRgdot11nExtSideBand           INTEGER,
                rdkbRgdot11nExtObssCoex           INTEGER,
                rdkbRgdot11nExtMulticastRate      INTEGER
        }

rdkbRgdot11nExtMode OBJECT-TYPE
    SYNTAX INTEGER {
        auto(1),
        off(2),
        n-only(3),
        b-mode(16),
        g-mode(32),
        bg-mode(48),
        a-mode(64),
        --n-only(128),
        gn-mode(160),
        bgn-mode(176),
        an-mode(192),
        ac-only(256),
        nac-only(384),
        anac-mode(448)
        }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Determines which 802.11 mode the radio will run in.
         This object must be set by either the legacy or bitmask method.

         In legacy method,
         auto(1)  : supports all the 802.11 modes available in the radio.
         off(2)   : supports the legacy mode only (11b/g in 2.4GHz and 11a in
5GHz).
         n-only(3): accepts 11n-capable clients only but supports all the modes
available in the radio.

         In bitmask method,
         b-mode(16)    : supports 11b mode in 2.4GHz.
```

```
         g-mode(32)    : supports 11g mode in 2.4GHz.
         bg-mode(48)   : supports 11b/g mode in 2.4GHz (16+32).
         a-mode(64)    : supports 11a mode in 5GHz.
         n-only(128)   : accepts 11n-capable clients only but supports both
legacy and 11n modes in 2.4GHz or 5GHz.
         gn-mode(160)  : supports 11g/n mode in 2.4GHz (32+128).
         bgn-mode(176) : supports all 11b/g/n modes in 2.4GHz (16+32+128).
         an-mode(192)  : supports 11a/n modes in 5GHz (64+128).
         ac-only(256)  : accepts 11ac-capable clients only but supports 11a/n/ac
modes in 5GHz.
         nac-only(384) : accepts 11n-capable clients only but supports 11a/n/ac
modes in 5GHz (128+256).
         anac-mode(448): supports all 11a/n/ac modes in 5GHz (64+128+256).

         Note: Some options may not be available depending on the radio model.
         Note: The change of this object value will also affect other MIB
selections, including rdkbRgdot11nExtBandWidth.
         This object is stored in non-vol and defaults to auto(1) after factory
reset."
     ::= { rdkbRgDot11nExtEntry 1 }

rdkbRgdot11nExtPhyRate OBJECT-TYPE
    SYNTAX INTEGER {
        auto(0),
        legacy(1),
        mbits6-5or13-5(2),
        mbits13or27(3),
        mbits19-5or40-5(4),
        mbits26or54(5),
        mbits39or81(6),
        mbits52or108(7),
        mbits58-5or121-5(8),
        mbits65or135(9),
        reserved1(10),
        reserved2(11),
        reserved3(12),
        reserved4(13),
        mbits78or162(14),
        mbits104or216(15),
        mbits117or243(16),
        mbits130or270(17)
        }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Forces the N Phy transmission rate for the AP to a particular speed.
Each pair of rates
         corresponds to a 20 MHz or 40 MHz channel configuration.
         This object is stored in non-vol and defaults to auto(0) after factory
reset.

         This MIB is being degraded, since it is better for higher band width
devices to run in 'auto' mode"
    DEFVAL { auto }
    ::= { rdkbRgDot11nExtEntry 2 }


rdkbRgdot11nExtBand OBJECT-TYPE
    SYNTAX INTEGER {
        band-2-4G(1),
        band-5G(2)
        }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Determines which Band that we will be operating in. Either the 2.4G or
the 5G Hz.
         Note: This is for N cards only.
```

```
         This object is stored in non-vol and defaults to band-2-4G(1) after
factory reset."
    ::= { rdkbRgDot11nExtEntry 3 }

rdkbRgdot11nExtBandWidth OBJECT-TYPE
    SYNTAX INTEGER {
        width-20MHz(1),
        width-40MHz(2),
        width-80MHz(3)
        }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Determines which Band Width that we will be operating in. Either the
20MHz or the 40MHz.
         Note: This is for N cards only, and this also affect other MIB
selections such as rdkbRgdot11nSideBand.
         The 80 MHz channel width is only applicable for 802.11ac capable cards.
If a user sets this to 80 MHz, SNMPset would fail for non-802.11ac cards
         This object is stored in non-vol and defaults to ? after factory reset."
    ::= { rdkbRgDot11nExtEntry 4 }

rdkbRgdot11nExtSideBand OBJECT-TYPE
    SYNTAX INTEGER {
        upper(1),
        lower(2)
        }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Determines which side Band the channel will operate in.
         Note: This is for N cards only, this mib is dependent of what
rdkbRgdot11nBandWidth is selected and only
         applies when 40MHz is selected.
         This object is stored in non-vol and defaults to lower(2) after factory
reset."
    ::= { rdkbRgDot11nExtEntry 5 }

rdkbRgdot11nExtObssCoex OBJECT-TYPE
        SYNTAX INTEGER {
                disable(0),
                enable(1)
                }
        MAX-ACCESS read-write
        STATUS     current
        DESCRIPTION
                "Allows MSO to control OBSS (Overlapping BSS) Coexistance
parameter for 802.11n 40MHz channel width.
                 By default it is enabled and is stored in non-vol
                 Factory reset would clear it and would be enable(1) after
factory reset.
                 When disabled, the 802.11n Wifi would stay in 40 MHz
channel-width inspite of interference from other
                 wifi channels. While enabled, 802.11n would coexist with 802.11g
channels using 20 MHz default channel-width
                "
        ::= { rdkbRgDot11nExtEntry 6 }

rdkbRgdot11nExtMulticastRate OBJECT-TYPE
    SYNTAX INTEGER {
        disable(0),
        legacy(1),
        mbits6-5or13-5(2),
        mbits13or27(3),
        mbits19-5or40-5(4),
        mbits26or54(5),
        mbits39or81(6),
        mbits52or108(7),
```

```
        mbits58-5or121-5(8),
        mbits65or135(9),
        reserved1(10),
        reserved2(11),
        reserved3(12),
        reserved4(13),
        mbits78or162(14),
        mbits104or216(15),
        mbits117or243(16),
        mbits130or270(17)
        }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Forces the dot11n Multicast Phy transmission rate.  Legacy mode forces
the the rate to be set
                 by dot11MulticastRate.
         This object is stored in non-vol and defaults to disable(0) after
factory reset."
    DEFVAL { 0 }
    ::= { rdkbRgDot11nExtEntry 7 }


-- rdkbRgDot11ApplySettings: do 'on the fly' config with settings from above.
-- This scalar object was placed by itself at ieee802rdkbRgDot11Mgmt 100 because
-- it applies all settings from all current and possibly future 802.11
-- groups.  Wanted to leave plenty of room to add new groups in the future.

rdkbRgDot11ApplySettings OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "If set to true(1), then all the settings (MIB values)
         from this MIB tree will be applied to run time configuration,
         modifying previous RG operation with the new settings.
         Before setting the value to true, MIBs modified in the MIB
         tree are stored in non-vol and will not modify RG operation
         until rdkbRgDot11ApplySettings is set to true or CM resets.
         Note: this applies only to the MIB objects that are stored
         in non-vol.
         Always returns false(2) when read."
    ::= { rdkbRgDot11 1001 }


-- =============
-- IP management
-- =============

rdkbRgIpMgmt OBJECT IDENTIFIER ::=  { rdkbRg 3 }


-- { rdkbRgIpMgmt 1 } reserved for WAN IP definition (currently only DHCP)


-- LAN NETWORK DEFINITIONS

rdkbRgIpMgmtLanTable OBJECT-TYPE
    SYNTAX SEQUENCE OF RdkbRgIpMgmtLanEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
            "Networks on the LAN side.
             Primary BSS stored in non-vol."
    ::= { rdkbRgIpMgmt 2 }

rdkbRgIpMgmtLanEntry OBJECT-TYPE
    SYNTAX      RdkbRgIpMgmtLanEntry
```

```
    MAX-ACCESS  not-accessible
    STATUS     current
    DESCRIPTION
            "List of networks on the LAN side."
    INDEX { ifIndex }
    ::= { rdkbRgIpMgmtLanTable 1 }

RdkbRgIpMgmtLanEntry ::= SEQUENCE {
    rdkbRgIpMgmtLanMode               INTEGER,
    rdkbRgIpMgmtLanNetwork            IpAddress,
    rdkbRgIpMgmtLanNetworksAllow      INTEGER,
    rdkbRgIpMgmtLanSubnetMask         IpAddress,
    rdkbRgIpMgmtLanGateway            IpAddress,
    rdkbRgIpMgmtLanDhcpServer         INTEGER,
    rdkbRgIpMgmtLanNapt               INTEGER,
    rdkbRgIpMgmtLanTypeOfService      INTEGER,
    rdkbRgIpMgmtLanDhcp125Option      INTEGER,
    rdkbRgIpMgmtLanHnap                   INTEGER,
    rdkbRgIpMgmtLanUpnp                           INTEGER
    }

rdkbRgIpMgmtLanMode OBJECT-TYPE
    SYNTAX INTEGER {
        bridge(1),
        router(2),
        l2tpv2-client(3),
        mixed(4),
        vlan(5)
        }
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "Defines the mode of operation for the device.
        Setting this object via SNMP for the primary BSS will cause
        the unit to reboot.
        Setting this object via SNMP for the secondary BSSs will not
        cause the unit to reboot.
        The value for primary BSS is stored in non-vol and is router
        after factory reset.
        The default value for other BSSs is router.
                This MIB supersedes rdkbRgDeviceMode for the .32 interface.
        l2tpv2-client(3)is obsoleted and NOT supported.

                bridge(1):      Sets individual interface to bridging mode
                                        (for IPv6 interfaces DHCPv6 is external)
                router(2):      Sets individual interface to routing mode
                                        (for IPv6 interfaces DHCPv6 is internal)
                l2tpv2-client(3): <obsolete>
                mixed(4):       For mixed mode. This setting is applicable only
to
                                        .32 interface. This value is used on
conjunction with
                                        rdkbRgIpMgmtLanPortControlTable
                                        *Note: mixed(4) mode NOT Supported by
DOCSIS 2.0 products.
                vlan (5):       Enables the vlan control feature.
                                        See rdkbRgVlanTable MIBs for VLAN
configuration information."
    DEFVAL { 2 }
    ::= { rdkbRgIpMgmtLanEntry 1 }

rdkbRgIpMgmtLanNetwork OBJECT-TYPE
    SYNTAX      IpAddress
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
            "The LAN-Trans network number.
            Default for primary BSS is 192.168.0.0
```

```
            Default for other BSSs is 192.168.ifIndex.0"
    ::= { rdkbRgIpMgmtLanEntry 3 }


rdkbRgIpMgmtLanNetworksAllow OBJECT-TYPE
                SYNTAX  INTEGER {
                default(0),
                anyPrivateClass(1),
                anyClass(2)
        }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
                "Allows the user via the internal Web GUI (Lan Setup page
                to input an IPv4 public or private Local IP address other than a
                class C Private address (the default Network for the Primary BSS
= 192.168.0.0/24, with
                the default Local Ip address = 192.168.0.1.)
                In all cases the mask must be 255.255.255.x since the RG is
limited to supporting
                a maximum of 253 IP addresses.
                (See RFC1918 for a description of private IP addresses and
specified ranges.)
                Available Mib settings:
                default(0):                     Only the third and fourth octets
are editable in
                                                        the Web GUI for the Local
IP address (Ex. 192.168.x.x/24).
                anyPrivateClass(1):     All 4 octets are editable in the Web GUI
for Local IP address, but
                                                        the network specified
must be a Private class A, B or C network address.
                                                        (Ex. A=10.x.x.x,
B=172.16.x.x, C=192.168.x.x).
                anyClass(2):            All 4 octets are editable in the Web GUI
for Local IP address, and
                                                        the network specified
could be any public or private class A, B, or C address.

                If the MSO specifically sets a Local IP address in
rdkbRgIpMgmtLanNetwork to a value other than
                the default value (for example: 192.168.0.1) then these fields
will be uneditable by the user (grayed out)."
        DEFVAL { 0 }
        ::= { rdkbRgIpMgmtLanEntry 4 }

rdkbRgIpMgmtLanSubnetMask OBJECT-TYPE
    SYNTAX      IpAddress
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
            "The device MUST provide the value of this MIB
            object in the Option 1 (Subnet Mask) of
            DHCP OFFER and ACK messages sent to a LAN IP Device."
    DEFVAL { 'ffffff00'h }    -- 255.255.255.0
    ::= { rdkbRgIpMgmtLanEntry 5 }

rdkbRgIpMgmtLanGateway OBJECT-TYPE
    SYNTAX      IpAddress
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
                "The type of this address is specified by
            rdkbRgIpMgmtLanNetwokRouterType. The PS MUST
            provide the value of this MIB object in the
            Option 3 (Router IP address) of the DHCP
            OFFER and ACK messages sent to the LAN IP Device.
            Default for primary BSS is 192.168.0.1
```

```
            Default for other BSSs is 192.168.ifIndex.1"
    ::= { rdkbRgIpMgmtLanEntry 7 }

rdkbRgIpMgmtLanDhcpServer OBJECT-TYPE
    SYNTAX INTEGER {
        disable(0),
        enable(1)
        }
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "The value for primary BSS is stored in non-vol.
         The default value for other BSSs is:
         Enabled by default if interface is in router mode.
         Always disabled if interface is in bridge mode."
    ::= { rdkbRgIpMgmtLanEntry 8 }

rdkbRgIpMgmtLanNapt OBJECT-TYPE
    SYNTAX INTEGER {
        disable(0),
        enable(1)
        }
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "The value for primary BSS is stored in non-vol.
         The default value for other BSSs is:
         Enabled by default if interface is in router mode.
         Always disabled if interface is in bridge mode."
    ::= { rdkbRgIpMgmtLanEntry 9 }

rdkbRgIpMgmtLanTypeOfService OBJECT-TYPE
      SYNTAX      INTEGER
      MAX-ACCESS  read-write
      STATUS      current
      DESCRIPTION
          "Definition of the TOS bits for the Network.
           This object does not apply to primary BSS."
      DEFVAL { 0 }
      ::= { rdkbRgIpMgmtLanEntry 10 }

rdkbRgIpMgmtLanDhcp125Option OBJECT-TYPE
      SYNTAX      INTEGER {
        disable(0),
        addSsidName(1)
        }
      MAX-ACCESS  read-write
      STATUS      current
      DESCRIPTION
          "This option controls if the RG adds a customer specific
           suboption (number 17) to DHCP DISCOVER and REQUEST
           from the clients that are bridged on the BSS:
         0: do not add the option
         1: add suboption 17 to vendor specific enterprise-id
            (9) within DHCP option 125. The content is the SSID name."
      DEFVAL { 0 }
      ::= { rdkbRgIpMgmtLanEntry 11 }

rdkbRgIpMgmtLanHnap OBJECT-TYPE
    SYNTAX INTEGER {
        disable(0),
        enable(1)
        }
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "The value for primary BSS is stored in non-vol and
         is enable after factory default.
```

```
         The default value for other BSSs is disable."
    ::= { rdkbRgIpMgmtLanEntry 12 }

rdkbRgIpMgmtLanUpnp OBJECT-TYPE
    SYNTAX INTEGER {
        disable(0),
        enable(1)
        }
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "Enable/Disable the UPnP agent.
             The value is stored in non-vol and is disabled after factory default
for the primary SSID.
                    The UPnP agents for additional networks are enabled by
default.
         "
    DEFVAL { 0 }
    ::= { rdkbRgIpMgmtLanEntry 13 }

-- LAN DHCP SERVERS DEFINITIONS

rdkbRgIpMgmtLanDhcpServerTable OBJECT-TYPE
    SYNTAX SEQUENCE OF RdkbRgIpMgmtLanDhcpServerEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
            "Networks on the LAN side.
             Stored in non-vol. .10-.128 for primary BSS
             after factory reset."
    ::= { rdkbRgIpMgmt 3 }

rdkbRgIpMgmtLanDhcpServerEntry OBJECT-TYPE
    SYNTAX      RdkbRgIpMgmtLanDhcpServerEntry
    MAX-ACCESS  not-accessible
    STATUS     current
    DESCRIPTION
            "List of networks on the LAN side."
    INDEX { ifIndex }
    ::= { rdkbRgIpMgmtLanDhcpServerTable 1 }

RdkbRgIpMgmtLanDhcpServerEntry ::= SEQUENCE {
    rdkbRgIpMgmtLanDhcpServerPoolStart         IpAddress,
    rdkbRgIpMgmtLanDhcpServerPoolEnd           IpAddress,
    rdkbRgIpMgmtLanDhcpServerLeaseTime         Unsigned32,
    rdkbRgIpMgmtLanDhcpServerTimeOffset        Integer32,
        rdkbRgIpMgmtLanDhcpServerDomainName        SnmpAdminString,
    }


rdkbRgIpMgmtLanDhcpServerPoolStart OBJECT-TYPE
    SYNTAX      IpAddress
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
            "The start of range LAN Trans IP Addresses. The type of
            this address is specified by rdkbRgIpMgmtLanDhcpServerPoolStartType.
            Default value depends on IP network and subnet."
    ::= { rdkbRgIpMgmtLanDhcpServerEntry 2 }

rdkbRgIpMgmtLanDhcpServerPoolEnd OBJECT-TYPE
    SYNTAX      IpAddress
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
            "The end of range for LAN-Trans IP Addresses. The type of
            this address is specified by rdkbRgIpMgmtLanDhcpServerPoolEndType.
            Default value depends on IP network and subnet."
```

```
    ::= { rdkbRgIpMgmtLanDhcpServerEntry 4 }

rdkbRgIpMgmtLanDhcpServerLeaseTime OBJECT-TYPE
    SYNTAX      Unsigned32
    UNITS       "seconds"
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
            "The PS MUST provide the value of this MIB object in the
            Option 51 (IP Address lease time) of the DHCP OFFER and
            ACK messages sent to the LAN IP Device."
    DEFVAL { 3600 }
    ::= { rdkbRgIpMgmtLanDhcpServerEntry 5 }

rdkbRgIpMgmtLanDhcpServerTimeOffset OBJECT-TYPE
    SYNTAX      Integer32 (-86400..86400) -- 0 to 24 hours (in seconds)
    UNITS       "seconds"
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
            "The PS MUST provide the value of this MIB object in
            the Option 2 (Time Offset from Coordinated
            Universal Time-UTC) in the DHCP OFFER and ACK
            messages sent to the LAN IP Device."
    DEFVAL { 0 }    -- UTC
    ::= { rdkbRgIpMgmtLanDhcpServerEntry 6 }

rdkbRgIpMgmtLanDhcpServerDomainName OBJECT-TYPE
    SYNTAX      SnmpAdminString
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
            "This is the domain name given to this DHCP server's clients."
    ::= { rdkbRgIpMgmtLanDhcpServerEntry 7 }


-- removed node rdkbRgIpMgmt 4

--================================================================
--
-- rdkbRgIpMgmtDnsServerTable (CDP WAN DNS Server Table)
--
-- The rdkbRgIpMgmtDnsServerTable is a table of 3 cable network
-- and Internet DNS Servers.
--
--================================================================

rdkbRgIpMgmtDnsServerTable OBJECT-TYPE
    SYNTAX SEQUENCE OF RdkbRgIpMgmtDnsServerEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
            "This table contains the IP addresses of cable network and
            Internet DNS servers, in the order of preference in which
            the PS's CNP will query them, when it cannot resolve a DNS
            query using local information. Entries in this table are
            updated with the information contained in DHCP Option 6,
            received during both the WAN-Man and WAN-Data IP
            acquisition processes.
            Stored in non-vol and 0.0.0.0 for all servers after
            factory reset."
    ::= { rdkbRgIpMgmt 5 }

rdkbRgIpMgmtDnsServerEntry OBJECT-TYPE
    SYNTAX      RdkbRgIpMgmtDnsServerEntry
    MAX-ACCESS  not-accessible
    STATUS     current
    DESCRIPTION
```

```
            "List of cable network and Internet DNS servers."
    INDEX { rdkbRgIpMgmtDnsServerOrder }
    ::= { rdkbRgIpMgmtDnsServerTable 1 }

RdkbRgIpMgmtDnsServerEntry ::= SEQUENCE {
    rdkbRgIpMgmtDnsServerOrder  INTEGER,
    rdkbRgIpMgmtDnsServerIp     IpAddress,
        rdkbRgIpMgmtDnsServerIpv6   InetAddress
    }

rdkbRgIpMgmtDnsServerOrder OBJECT-TYPE
    SYNTAX      INTEGER {
                    primary(1),
                    secondary(2),
                    tertiary(3)
                }
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "The order of preference for cable network and Internet DNS
            servers, as listed in DHCP option 6 (Domain Server)."
    ::= { rdkbRgIpMgmtDnsServerEntry 1 }

rdkbRgIpMgmtDnsServerIp OBJECT-TYPE
    SYNTAX      IpAddress
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
            "This parameter indicates the IP address of a WAN DNS
            server."
    ::= { rdkbRgIpMgmtDnsServerEntry 3 }

rdkbRgIpMgmtDnsServerIpv6 OBJECT-TYPE
    SYNTAX      InetAddress
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
            "This parameter indicates the IPv6 address of a WAN DNS
            server."
    ::= { rdkbRgIpMgmtDnsServerEntry 4 }

-- removed node rdkbRgIpMgmt 6,7,8


-- WAN interface

rdkbRgIpMgmtWanAddr OBJECT IDENTIFIER ::= { rdkbRgIpMgmt 9 }

rdkbRgIpMgmtWanAddrBase OBJECT IDENTIFIER ::= { rdkbRgIpMgmtWanAddr 1 }

rdkbRgIpMgmtWanMode OBJECT-TYPE
    SYNTAX INTEGER {
        dhcp(1),
        static(2),
        dualIp(3)
        }
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "When dualIp(3) is selected, the second IP stack is used for
         user operations.
         Stored in non-vol, dhcp(1) after factory reset."
    ::= { rdkbRgIpMgmtWanAddrBase 1 }

rdkbRgIpMgmtWanMtu OBJECT-TYPE
    SYNTAX INTEGER (0..1500)
    UNITS       "bytes"
    MAX-ACCESS     read-write
```

```
    STATUS         current
    DESCRIPTION
        "MTU size for the IP layer. Valid range is 256 to 1500.
         0 is the default which is 1500.
         Stored in non-vol, 0 after factory reset."
    ::= { rdkbRgIpMgmtWanAddrBase 2 }

rdkbRgIpMgmtWanTtl OBJECT-TYPE
    SYNTAX INTEGER (0..255)
    UNITS       "hops"
    MAX-ACCESS     read-write
    STATUS         current
    DESCRIPTION
        "TTL for the IP packets forwarded to WAN.
         0 means no change to the original TTL (after
         being decreased by 1).
         Stored in non-vol, 0 after factory reset."
    ::= { rdkbRgIpMgmtWanAddrBase 3 }


rdkbRgIpMgmtWanAddrDynamic OBJECT IDENTIFIER ::= { rdkbRgIpMgmtWanAddr 2 }

rdkbRgIpMgmtWanAddrDynamicIp OBJECT-TYPE
    SYNTAX      IpAddress
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "The IP address for the DHCP-assigned router address. This is the
outside-facing WAN address of the router. Stored in non-vol, 0.0.0.0 after
factory reset."
    ::= { rdkbRgIpMgmtWanAddrDynamic 1 }

rdkbRgIpMgmtWanAddrDynamicLeaseTime OBJECT-TYPE
    SYNTAX      Unsigned32
    UNITS       "seconds"
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
            "The lease time for the dynamically assigned WAN address."
    DEFVAL { 3600 }
    ::= { rdkbRgIpMgmtWanAddrDynamic 2 }

rdkbRgIpMgmtWanAddrStatic OBJECT IDENTIFIER ::= { rdkbRgIpMgmtWanAddr 3 }

rdkbRgIpMgmtWanStaticNetwork OBJECT-TYPE
    SYNTAX      IpAddress
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Stored in non-vol, 0.0.0.0 after factory reset."
    ::= { rdkbRgIpMgmtWanAddrStatic 1 }

rdkbRgIpMgmtWanStaticSubnetMask OBJECT-TYPE
    SYNTAX      IpAddress
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Stored in non-vol, 0.0.0.0 after factory reset."
    ::= { rdkbRgIpMgmtWanAddrStatic 2 }

rdkbRgIpMgmtWanStaticGateway OBJECT-TYPE
    SYNTAX      IpAddress
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Stored in non-vol, 0.0.0.0 after factory reset."
    ::= { rdkbRgIpMgmtWanAddrStatic 3 }
```

```
rdkbRgIpMgmtWanStaticNameServerEnable OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Defines whether static WAN DNS is enabled."
    ::= { rdkbRgIpMgmtWanAddrStatic 4 }

rdkbRgIpMgmtWanStaticHostName OBJECT-TYPE
    SYNTAX      SnmpAdminString
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "This is the static host name of WAN."
    ::= { rdkbRgIpMgmtWanAddrStatic 5 }

rdkbRgIpMgmtWanStaticDomainName OBJECT-TYPE
    SYNTAX      SnmpAdminString
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "This is the static domain name of WAN."
    ::= { rdkbRgIpMgmtWanAddrStatic 6 }

-- removed node rdkbRgIpMgmt 10,11,12

-- **********************
-- LAN PORT Control Table
-- **********************
rdkbRgIpMgmtLanPortControl   OBJECT IDENTIFIER ::=  { rdkbRgIpMgmt 13 }


rdkbRgIpMgmtLanPortControlTable OBJECT-TYPE
       SYNTAX      SEQUENCE OF RdkbRgIpMgmtLanPortControlEntry
       MAX-ACCESS  not-accessible
       STATUS      current
       DESCRIPTION
               "Table to control the mode for each LAN PORT.
               LAN PORTs are numbered 1-4 and are mapped to physical
               port location. Each port can either be in router or
               in bridge mode."
    ::= { rdkbRgIpMgmtLanPortControl 1 }

rdkbRgIpMgmtLanPortControlEntry OBJECT-TYPE
    SYNTAX      RdkbRgIpMgmtLanPortControlEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            ""
    INDEX { rdkbRgIpMgmtLanPortControlIndex }
    ::= { rdkbRgIpMgmtLanPortControlTable 1 }

RdkbRgIpMgmtLanPortControlEntry ::= SEQUENCE {
    rdkbRgIpMgmtLanPortControlIndex       INTEGER,
    rdkbRgIpMgmtLanPortMode               INTEGER
    }

rdkbRgIpMgmtLanPortControlIndex OBJECT-TYPE
    SYNTAX      INTEGER (1..4)
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "The index for each LAN port"
    ::= { rdkbRgIpMgmtLanPortControlEntry 1 }

rdkbRgIpMgmtLanPortMode OBJECT-TYPE
    SYNTAX  INTEGER {
            bridge (1),
```

```
            router (2)
            }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
            "Each physical LAN port can either be controlled
            as bridge or router. The rdkbRgIpMgmtLanPortMode MIB only works
            when RdkbRgIpMgmtLanMode.32=4(Mixed). Setting this MIB
            through SNMP will take effect only after
            rdkbRgIpMgmtApplySettings.0 set to true and this setting will
            reboot to take effect"
    ::= { rdkbRgIpMgmtLanPortControlEntry 2 }

-- removed node rdkbRgIpMgmt 14, 15

-- Apply setting to activate chagnes:
rdkbRgIpMgmtApplySettings OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "If set to true(1), then all the settings (MIB values)
         from this MIB tree will be applied to run time configuration,
         modifying previous RG operation with the new settings.
         Before setting the value to true, MIBs modified in the MIB
         tree are stored in non-vol and will not modify RG operation
         until rdkbRgIpMgmtApplySettings is set to true or CM resets.
         Note: this applies only to the MIB objects that are stored
         in non-vol.
         Always returns false(2) when read."
    ::= { rdkbRgIpMgmt 1001 }



-- ============================================
-- FIREWALL
--
-- Also includes port tiggering, forwarding, DMZ
-- ============================================

rdkbRgFirewall OBJECT IDENTIFIER ::=  { rdkbRg 4 }

rdkbRgFirewallBase OBJECT IDENTIFIER ::=  { rdkbRgFirewall 1 }

rdkbRgFirewallProtection OBJECT-TYPE
SYNTAX INTEGER {
disable(0),
low(1),
medium (2),
high (3),
custom (4)
}
MAX-ACCESS read-write
STATUS current
DESCRIPTION
"Controls the firewall. This parameter is stored in non-vol and
is enabled after factory reset.
Disable: Completely disables the SPI Firewall
Low/ Enable: Is Equivalent to Old Firewall Enable Mode with No Ports Restricted
Medium: Enables the SPI Firewall plus includes a list of Allowed Services that
will be allowed to through the Firewall
High: Enables the SPI Firewall plus a shortened list of Allowed Services
Custom: Enables the SPI Firewall set to custom values. For use with Puma-based
products."
::= { rdkbRgFirewallBase 1 }

rdkbRgFirewallDmzAddress OBJECT-TYPE
    SYNTAX      IpAddress
```

```
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
            "Stored in non-vol, 0.0.0.0 after facroty reset."
    ::= { rdkbRgFirewallBase 2 }

rdkbRgFirewallPortForwardEnable OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Enables or disables firewall port forwarding on the device."
    DEFVAL { false }
    ::= { rdkbRgFirewallBase 3 }

rdkbRgFirewallPortTriggerEnable OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Enables or disables firewall port triggering on the device."
    DEFVAL { false }
    ::= { rdkbRgFirewallBase 4 }

rdkbRgFirewallTraffic OBJECT IDENTIFIER ::=  { rdkbRgFirewall 2 }


rdkbRgFirewallWANBlockingEnable OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Controls WAN blocking RG feature.
         Stored in non-vol, enabled after factory reset."
    ::= { rdkbRgFirewallTraffic 4 }

-- Firewall events reporting

rdkbRgFirewallReport OBJECT IDENTIFIER ::=  { rdkbRgFirewall 4 }

rdkbRgFirewallReportEventTable OBJECT-TYPE
       SYNTAX      SEQUENCE OF RdkbRgFirewallReportEventEntry
       MAX-ACCESS  not-accessible
       STATUS      current
       DESCRIPTION
               "This table is stored in non-vol and is empty
                after factory reset."
    ::= { rdkbRgFirewallReport 1 }

rdkbRgFirewallReportEventEntry OBJECT-TYPE
    SYNTAX      RdkbRgFirewallReportEventEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            ""
    INDEX { rdkbRgFirewallReportEventIndex }
    ::= { rdkbRgFirewallReportEventTable 1 }

RdkbRgFirewallReportEventEntry ::= SEQUENCE {
    rdkbRgFirewallReportEventIndex          INTEGER,
    rdkbRgFirewallReportEventDescription    SnmpAdminString,
    rdkbRgFirewallReportEventCount          INTEGER,
    rdkbRgFirewallReportEventLastOccurance  SnmpAdminString,
    rdkbRgFirewallReportEventTarget         SnmpAdminString,
    rdkbRgFirewallReportEventSource         SnmpAdminString
    }

rdkbRgFirewallReportEventIndex OBJECT-TYPE
```

```
    SYNTAX      INTEGER
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "The index"
    ::= { rdkbRgFirewallReportEventEntry 1 }

rdkbRgFirewallReportEventDescription OBJECT-TYPE
    SYNTAX      SnmpAdminString
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            ""
    ::= { rdkbRgFirewallReportEventEntry 2 }

rdkbRgFirewallReportEventCount OBJECT-TYPE
    SYNTAX      INTEGER
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            ""
    ::= { rdkbRgFirewallReportEventEntry 3 }

rdkbRgFirewallReportEventLastOccurance OBJECT-TYPE
    SYNTAX      SnmpAdminString
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            ""
    ::= { rdkbRgFirewallReportEventEntry 4 }

rdkbRgFirewallReportEventTarget OBJECT-TYPE
    SYNTAX      SnmpAdminString
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            ""
    ::= { rdkbRgFirewallReportEventEntry 5 }

rdkbRgFirewallReportEventSource OBJECT-TYPE
    SYNTAX      SnmpAdminString
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            ""
    ::= { rdkbRgFirewallReportEventEntry 6 }


rdkbRgFirewallReportMgmt OBJECT IDENTIFIER ::=  { rdkbRgFirewallReport 2 }

rdkbRgFirewallReportMgmtClearLog OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "Note: this object does not need rdkbRgFirewallApplySettings
         to take effect."
    DEFVAL { false }
    ::= { rdkbRgFirewallReportMgmt 1 }

rdkbRgFirewallReportEmailLogNow OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "Triggers sending currect logs via email. Always returns false.
         Note: this objects does not need rdkbRgFirewallApplySettings to
         send the logs."
```

```
    DEFVAL { false }
    ::= { rdkbRgFirewallReportMgmt 2 }


rdkbRgFirewallReportEmail OBJECT IDENTIFIER ::=  { rdkbRgFirewallReport 3 }

rdkbRgFirewallReportEmailEnable OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "Enables sending logs via email. Email is sent when an event happens."
    ::= { rdkbRgFirewallReportEmail 1 }

rdkbRgFirewallReportEmailAddress OBJECT-TYPE
    SYNTAX SnmpAdminString
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "This is stored in non-vol and is empty after factory reset."
    ::= { rdkbRgFirewallReportEmail 2 }

rdkbRgFirewallReportEmailSmtpServer OBJECT-TYPE
    SYNTAX SnmpAdminString
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "IP address or FQDN.
         Stored in non-vol. Empty after factory reset."
    ::= { rdkbRgFirewallReportEmail 3 }

rdkbRgFirewallReportEmailUsername OBJECT-TYPE
    SYNTAX SnmpAdminString
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "This is stored in non-vol and is empty after factory reset."
    ::= { rdkbRgFirewallReportEmail 4 }

rdkbRgFirewallReportEmailPassword OBJECT-TYPE
    SYNTAX SnmpAdminString
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "This is stored in non-vol and is empty after factory reset."
    ::= { rdkbRgFirewallReportEmail 5 }


-- Firewall IP filtering

rdkbRgFirewallRules OBJECT IDENTIFIER ::=  { rdkbRgFirewall 5 }


-- removed node rdkbRgFirewall Node 1,2,3

rdkbRgFirewallMacFilterEnable OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "True = Enable the Mac address filtering feature. False = disable.
        this Value is written to non-vol and set to false after a factory reset."
    DEFVAL { false }
    ::= { rdkbRgFirewallRules 4 }

rdkbRgFirewallMacFilterMode OBJECT-TYPE
    SYNTAX      INTEGER {
        block(0),
```

```
        permit(1)
        }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "block(0)- Macs listed in the rdkbRgFirewallMacFilterEntryTable will be
blocked.
        permit(1)- Macs listed in the rdkbRgFirewallMacFilterEntryTable will be
permitted.
        This value is written to non-vol and is set to block(0) after a factory
reset."
    DEFVAL { 0 }
    ::= { rdkbRgFirewallRules 5 }

rdkbRgFirewallPortFilterEnable OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "True = Enable the Port filtering feature. False = disable.
        this Value is written to non-vol and set to false after a factory reset."
    DEFVAL { false }
    ::= { rdkbRgFirewallRules 6 }

rdkbRgFirewallUrlKeywordFiltering   OBJECT IDENTIFIER ::=  { rdkbRgFirewallRules
7 }

rdkbRgFirewallUrlKeywordFilterEnable OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "True = Enable the Url Keyword filtering feature. False = disable.
        this Value is written to non-vol and set to false after a factory reset."
    DEFVAL { false }
    ::= { rdkbRgFirewallUrlKeywordFiltering 1 }

rdkbRgFirewallUrlKeywordFilterTable  OBJECT-TYPE
    SYNTAX      SEQUENCE OF RdkbRgFirewallUrlKeywordFilterEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A table of url and keyword rules that are denied from accessing
Internet."
    ::= { rdkbRgFirewallUrlKeywordFiltering 2 }

rdkbRgFirewallUrlKeywordFilterEntry OBJECT-TYPE
    SYNTAX      RdkbRgFirewallUrlKeywordFilterEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A row in the table that specifies a single station MAC address."
    INDEX   { rdkbRgFirewallUrlKeywordFilterIndex }
    ::= { rdkbRgFirewallUrlKeywordFilterTable 1 }

RdkbRgFirewallUrlKeywordFilterEntry ::=
    SEQUENCE    {
            rdkbRgFirewallUrlKeywordFilterIndex           INTEGER,
            rdkbRgFirewallUrlKeywordFilterRowStatus       RowStatus,
            rdkbRgFirewallUrlKeywordFilterMethod          INTEGER,
            rdkbRgFirewallUrlKeywordFilterMatch           OCTET STRING,
            rdkbRgFirewallUrlKeywordFilterAlwaysBlock     TruthValue,
            rdkbRgFirewallUrlKeywordFilterBlockStartTime  OCTET STRING,
            rdkbRgFirewallUrlKeywordFilterBlockEndTime    OCTET STRING,
            rdkbRgFirewallUrlKeywordFilterBlockDays       BITS
    }

rdkbRgFirewallUrlKeywordFilterIndex OBJECT-TYPE
```

```
    SYNTAX      INTEGER (1..20)
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "The index"
    ::= { rdkbRgFirewallUrlKeywordFilterEntry 1 }

rdkbRgFirewallUrlKeywordFilterRowStatus OBJECT-TYPE
    SYNTAX      RowStatus
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
            "The row status. A row can be destroyed.
             If the row is not used, set to notInService."
    ::= { rdkbRgFirewallUrlKeywordFilterEntry 2 }

rdkbRgFirewallUrlKeywordFilterMethod OBJECT-TYPE
    SYNTAX      INTEGER {
                url(1),
                keyword(2)
        }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "If url(1),deny access to specific websites (URLs)
        If keyword(2), deny access to websites containing specific words"
    ::= { rdkbRgFirewallUrlKeywordFilterEntry 3 }

rdkbRgFirewallUrlKeywordFilterMatch OBJECT-TYPE
    SYNTAX      OCTET STRING
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "URLs or specific words according to Method set"
    ::= { rdkbRgFirewallUrlKeywordFilterEntry 4 }

rdkbRgFirewallUrlKeywordFilterAlwaysBlock OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "If true(1), always be blocked, regardless of startTime, endTime and
blockDays
        If false(2), blocked at time set in startTime, endTime and blockDays"
    DEFVAL { true }
    ::= { rdkbRgFirewallUrlKeywordFilterEntry 5 }

rdkbRgFirewallUrlKeywordFilterBlockStartTime OBJECT-TYPE
    SYNTAX      OCTET STRING (SIZE (5))
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "24 Hour format HH:MM to set the start time to block"
    ::= { rdkbRgFirewallUrlKeywordFilterEntry 6 }

rdkbRgFirewallUrlKeywordFilterBlockEndTime OBJECT-TYPE
    SYNTAX      OCTET STRING (SIZE (5))
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "24 Hour format HH:MM to set the end time to block"
    ::= { rdkbRgFirewallUrlKeywordFilterEntry 7 }

rdkbRgFirewallUrlKeywordFilterBlockDays OBJECT-TYPE
    SYNTAX      BITS {
        sun(0),
        mon(1),
        tue(2),
```

```
        wed(3),
        thu(4),
        fri(5),
        sat(6)
        }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "BITMAP to indicate which days to block"
    ::= { rdkbRgFirewallUrlKeywordFilterEntry 8 }

-- Removed node   rdkbRgFirewall 6,7


rdkbRgFirewallHttpBlockingEnable OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Enables or disables firewall HTTP blocking on the device."
    DEFVAL { false }
    ::= { rdkbRgFirewall 8 }

rdkbRgFirewallP2pBlockingEnable OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Enables or disables firewall P2P blocking on the device."
    DEFVAL { false }
    ::= { rdkbRgFirewall 9 }

rdkbRgFirewallIdentBlockingEnable OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Enables or disables firewall ident blocking on the device."
    DEFVAL { false }
    ::= { rdkbRgFirewall 10 }

rdkbRgFirewallIcmpBlockingEnable OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Enables or disables firewall ICMP blocking on the device."
    DEFVAL { false }
    ::= { rdkbRgFirewall 11 }

rdkbRgFirewallMulticastBlockingEnable OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Enables or disables firewall multicast blocking on the device."
    DEFVAL { false }
    ::= { rdkbRgFirewall 12 }

rdkbRgFirewallApplySettings OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "If set to true(1), then all the settings (MIB values)
         from this MIB tree will be applied to run time configuration,
         modifying previous RG operation with the new settings.
         Before setting the value to true, MIBs modified in the MIB
```

```
        tree are stored in non-vol and will not modify RG operation
        until rdkbRgFirewallApplySettings is set to true or CM resets.
        Note: this applies only to the MIB objects that are stored
        in non-vol.
        Always returns false(2) when read."
    ::= { rdkbRgFirewall 1001 }

rdkbRgFirewallFactoryReset OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Set true(1) to restore default settings of firewall.
        Always returns false(2) when read."
    ::= { rdkbRgFirewall 1002 }

-- ===
-- RIP
-- ===

rdkbRgRip OBJECT IDENTIFIER ::=  { rdkbRg 5 }

rdkbRgRipBase OBJECT IDENTIFIER ::=  { rdkbRgRip 1 }

rdkbRgRipEnabled OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Enables or disables router information protocol support in the device."
    DEFVAL { false }
    ::= { rdkbRgRipBase 1 }

rdkbRgRipMd5AuthEnable    OBJECT-TYPE
    SYNTAX     TruthValue
    MAX-ACCESS read-write
    STATUS     current
    DESCRIPTION
        "Setting this object to true(1) causes the device to enable md5 auth"
    ::= { rdkbRgRipBase 2 }

rdkbRgRipMd5KeyId OBJECT-TYPE
    SYNTAX     INTEGER (0..255)
    MAX-ACCESS read-write
    STATUS     current
    DESCRIPTION
        "Key ID value for Md5 auth.
        This object return an empty string when read."
    ::= { rdkbRgRipBase 3 }

rdkbRgRipMd5KeyValue OBJECT-TYPE
    SYNTAX     OCTET STRING (SIZE(0..16))
    MAX-ACCESS read-write
    STATUS     current
    DESCRIPTION
        "MD5 Key Value"
    ::= { rdkbRgRipBase 4 }

rdkbRgRipInterval OBJECT-TYPE
    SYNTAX     INTEGER  (10..600)
    MAX-ACCESS read-write
    STATUS     current
    DESCRIPTION
        "Interval in Seconds for the Rip Reporting interval."
    ::= { rdkbRgRipBase 5 }

rdkbRgRipDestIpAddressType OBJECT-TYPE
    SYNTAX      InetAddressType
```

```
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "The type of IP address assigned to the rgIpRipDestIpAddress."
    DEFVAL { ipv4 }
    ::= { rdkbRgRipBase 6 }

rdkbRgRipDestIpAddress OBJECT-TYPE
    SYNTAX      InetAddress
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Defines the RIP unicast destination IP Address for Rip Reports.
         If this value returns 0.0.0.0 then this is the default
         multicast IP address in the RFC (224.0.0.9)"
    ::= { rdkbRgRipBase 7 }

rdkbRgRipAuthType  OBJECT-TYPE
    SYNTAX      INTEGER {
        noAuth(1),
        simplePassword(2),
        md5(3)
        }
    MAX-ACCESS read-write
    STATUS     current
    DESCRIPTION
        "For use with puma-based products,
                NoAuth(1), no authentication,
                SimplePassword(2), simple plain password,
                MD5(3), md5 auth"
        DEFVAL { noAuth }
    ::= { rdkbRgRipBase 8 }

rdkbRgRipAuthSimplePassword OBJECT-TYPE
    SYNTAX     OCTET STRING
    MAX-ACCESS read-write
    STATUS     current
    DESCRIPTION
        "Simple password when auth type is 2"
    ::= { rdkbRgRipBase 9 }


-- ===========================
-- removed node rdkbRg 6
-- ===========================

-- ============================
-- MoCA specific configuration
-- ============================

rdkbRgMocaExtSpecific OBJECT IDENTIFIER ::= { rdkbRg 7 }

rdkbRgMocaExtBase OBJECT IDENTIFIER ::= { rdkbRgMocaExtSpecific 1 }

rdkbRgMocaExtProvisioning OBJECT IDENTIFIER ::= { rdkbRgMocaExtSpecific 2 }

rdkbRgMocaExtProvFilename OBJECT-TYPE
    SYNTAX SnmpAdminString
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Specifies the filename for extender provisioning.
         The string is sent in DHCP OFFER and ACK as boot file to the extender.
         If not set, boot file option is empty."
    DEFVAL { "" }
    ::= { rdkbRgMocaExtProvisioning 1 }

rdkbRgMocaExtProvServerType OBJECT-TYPE
```

```
    SYNTAX InetAddressType
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Specifies the type for IP address for extender provisioning"
    DEFVAL { ipv4 }
    ::= { rdkbRgMocaExtProvisioning 2 }

rdkbRgMocaExtProvServer OBJECT-TYPE
    SYNTAX InetAddress
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Specifies the IP address for extender provisioning.
         The address is sent in DHCP OFFER and ACK as next server to the
extender.
         If not set, the next server field is empty."
    DEFVAL  { '00000000'h } -- 0.0.0.0
    ::= { rdkbRgMocaExtProvisioning 3 }



-- ===========
-- Removed node rdkbRg 8,9,10,11,12
-- ===========


-- ==================================
-- Wifi Hotspot Specific Information
-- ==================================

rdkbRgWifiHotspotMib OBJECT IDENTIFIER ::= { rdkbRg 13 }

rdkbRgWifiHotspotBase OBJECT IDENTIFIER ::= { rdkbRgWifiHotspotMib 1 }

rdkbRgWifiHotspotEnabled OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Enables or disable Wifi Hotspot support in the device."
   ::= { rdkbRgWifiHotspotBase 1 }

rdkbRgWifiHotspotTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF RdkbRgWifiHotspotEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A table used to configure settings related to Wi-fi Hotspot."
    ::= { rdkbRgWifiHotspotBase 2 }

rdkbRgWifiHotspotEntry OBJECT-TYPE
    SYNTAX      RdkbRgWifiHotspotEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
         "An entry defining the Wi-fi hotspot characteristics of an
          individual Wi-Fi network interface."
    INDEX   { rdkbRgWifiHotspotIf }
    ::= { rdkbRgWifiHotspotTable 1 }

RdkbRgWifiHotspotEntry ::=
    SEQUENCE    {
        rdkbRgWifiHotspotInstance              Unsigned32,
        rdkbRgWifiHotspotIf                    INTEGER,
        rdkbRgWifiHotspotMode                  INTEGER,
        rdkbRgWifiHotspotCpeIdleTimeout        Unsigned32,
        rdkbRgWifiHotspotCpeSessionTimeout     Unsigned32,
```

```
        rdkbRgWifiHotspotRadiusAccAddressType  InetAddressType,
        rdkbRgWifiHotspotRadiusAccAddress      InetAddress,
        rdkbRgWifiHotspotRadiusAccPort         InetPortNumber,
        rdkbRgWifiHotspotRadiusAccKey          DisplayString,
        rdkbRgWifiHotspotPacketFilterMask      Unsigned32,
        rdkbRgWifiHotspotInsertDhcpOptionsMask Unsigned32,
        rdkbRgWifiHotspotRowStatus             RowStatus,
                rdkbRgWifiHotspotRadiusAccInterimInterval Unsigned32
    }


rdkbRgWifiHotspotInstance    OBJECT-TYPE
    SYNTAX      Unsigned32
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "The key for a unique instance of this object."
    ::= { rdkbRgWifiHotspotEntry 1 }

rdkbRgWifiHotspotIf OBJECT-TYPE
    SYNTAX      INTEGER {
                        wifi1-0(1),
                        wifi1-1(2),
                        wifi1-2(3),
                        wifi1-3(4),
                        wifi1-4(5),
                        wifi1-5(6),
                        wifi1-6(7),
                        wifi1-7(8),
                        wifi2-0(9),
                        wifi2-1(10),
                        wifi2-2(11),
                        wifi2-3(12),
                        wifi2-4(13),
                        wifi2-5(14),
                        wifi2-6(15),
                        wifi2-7(16)
        }
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "Wi-fi network interface."
    ::= { rdkbRgWifiHotspotEntry 2 }

rdkbRgWifiHotspotMode OBJECT-TYPE
    SYNTAX      INTEGER {
                disable(1),
                enableBridge(2),
                enableL2oGre(3)
    }
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "Wi-fi Hotsot mode:
         enableBridge - Wi-Fi traffic will be bridged
         enableL2oGre - Wi-Fi traffic will be sent over GRE tunnel.
                        GRE Tunnel should be configured and enabled."
    ::= { rdkbRgWifiHotspotEntry 3 }

rdkbRgWifiHotspotCpeIdleTimeout OBJECT-TYPE
    SYNTAX      Unsigned32
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "CPE inactivity/idle timeout in seconds which will trigger disconnect.
         Value of 0 will disable inactivity tracking."
    ::= { rdkbRgWifiHotspotEntry 4 }
```

```
rdkbRgWifiHotspotCpeSessionTimeout OBJECT-TYPE
    SYNTAX      Unsigned32
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "CPE maximum session duration timeout in seconds.
         Value of 0 will disable tracking session duration."
    ::= { rdkbRgWifiHotspotEntry 5 }

rdkbRgWifiHotspotRadiusAccAddressType OBJECT-TYPE
    SYNTAX      InetAddressType
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "The type of internet address used for
rdkbRgWifiHotspotRadiusAccAddress."
    ::= { rdkbRgWifiHotspotEntry 6 }

rdkbRgWifiHotspotRadiusAccAddress OBJECT-TYPE
    SYNTAX      InetAddress
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "The internet address of the RADIUS Accounting server for this service
set."
    ::= { rdkbRgWifiHotspotEntry 7 }

rdkbRgWifiHotspotRadiusAccPort OBJECT-TYPE
    SYNTAX      InetPortNumber
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "The UDP port used to communicate with the RADIUS Accounting server.
         Default value set to 1813."
    DEFVAL { 1813 }
    ::= { rdkbRgWifiHotspotEntry 8 }

rdkbRgWifiHotspotRadiusAccKey OBJECT-TYPE
    SYNTAX      DisplayString
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "The RADIUS Accounting server shared security key."
    ::= { rdkbRgWifiHotspotEntry 9 }

rdkbRgWifiHotspotPacketFilterMask OBJECT-TYPE
    SYNTAX      Unsigned32
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "Bit mask for limiting traffic to certain packet types.
         Possible value:
         11111111 11111111 11111111 11111111: Allow All traffic
         xxxxxxxx xxxxxxxx xxxxxxxx xxxxxxx1: Allow IPv4 (0x0800) packets
         xxxxxxxx xxxxxxxx xxxxxxxx xxxxxx1x: Allow IPv6 (0x86dd) packets
         xxxxxxxx xxxxxxxx xxxxxxxx xxxxx1xx: Allow IPx  (0x8137) packets
         xxxxxxxx xxxxxxxx xxxxxxxx xxxx1xxx: Allow ARP  (0x0806) packets
         xxxxxxxx xxxxxxxx xxxxxxxx xxx1xxxx: Allow RARP (0x8035) packets
         xxxxxxxx xxxxxxxx xxxxxxxx xx1xxxxx: Allow VLAN (0x8100) packets
         "
    ::= { rdkbRgWifiHotspotEntry 10 }

rdkbRgWifiHotspotInsertDhcpOptionsMask OBJECT-TYPE
    SYNTAX      Unsigned32
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "Bit mask for inserting DHCP options in DHCP Discover/Request packet from
```

```
        connected wifi client device.
        Possible value:
        0x1: Insert DHCP relay agent option 82.
             circuit-id sub-option: AP-MAC-ADDRESS;SSID-NAME;SSID-TYPE
        0x2: Insert DHCP relay agent option 82.
             remote-id  sub-option: String containing MAC address of connected
                                    wifi client device in the format
XX:XX:XX:XX:XX:XX.
        0x4: Insert/Modify DHCP option 60 with string containing SSID Name.
                0x8: Enables/Disables CM MAC address (format XX:XX:XX:XX:XX:XX)
included in DHCP option 82.2 remote-id"
    ::= { rdkbRgWifiHotspotEntry 11 }

rdkbRgWifiHotspotRowStatus OBJECT-TYPE
    SYNTAX RowStatus
    MAX-ACCESS read-create
    STATUS current
    DESCRIPTION
        "The RowStatus interlock for the creation and deletion
        can be modified at any time while the row is active(1)."
    ::= { rdkbRgWifiHotspotEntry 12 }

rdkbRgWifiHotspotRadiusAccInterimInterval OBJECT-TYPE
    SYNTAX      Unsigned32
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
             "Setting to control interval between each RADIUS interim update in
seconds.
             Feature may be disabled by setting to zero, else minimum value is
60"
        DEFVAL { 900 }
    ::= { rdkbRgWifiHotspotEntry 13 }

rdkbRgWifiHotspotAutRateLimit OBJECT-TYPE
    SYNTAX      Unsigned32
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Authentication rate limit in messages per second. If client exceeds
         this limit, authentication from the client is ignored for
         rdkbRgWifiHotspotAutDenialTimeout."
   ::= { rdkbRgWifiHotspotBase 3 }

rdkbRgWifiHotspotAutDenialTimeout OBJECT-TYPE
    SYNTAX      Unsigned32
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Timeout in seconds during which authentication from a client is ignored
         once authentication message rate exceeds rdkbRgWifiHotspotAutRateLimit."
   ::= { rdkbRgWifiHotspotBase 4 }

rdkbRgWifiHotspotRadiusOrigIf OBJECT-TYPE
    SYNTAX      INTEGER {
                eRouter(1),
                cm(2)
        }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Originating interface of radius authentication and accounting traffic."
    ::= { rdkbRgWifiHotspotBase 5 }

rdkbRgWifiHotspotIgnoreMaxCpeSetting OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
```

```
    DESCRIPTION
        "This setting is applicable for wifi hotspot bridged mode.
         When set to true(1), clients connected through the hotspot wifi will not
be
         counted when enforcing the 'Maximum CPE devices' on DOCSIS."
   ::= { rdkbRgWifiHotspotBase 6 }

rdkbRgWifiHotspotCapable OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Returns whether the device is capable of WiFi HotSpot functionality."
   ::= { rdkbRgWifiHotspotBase 7 }

rdkbRgWifiHotspotConnectedClientsTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF RdkbRgWifiHotspotConnectedClientsEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "Clients table connected to Wi-fi Hotspot."
    ::= { rdkbRgWifiHotspotBase 8 }

rdkbRgWifiHotspotConnectedClientsEntry OBJECT-TYPE
    SYNTAX      RdkbRgWifiHotspotConnectedClientsEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
         "An entry defining the Wi-fi hotspot connected clients"
    INDEX   { rdkbRgWifiHotspotIf, rdkbRgWifiHotspotConnectedClientsIndex }
    ::= { rdkbRgWifiHotspotConnectedClientsTable 1 }

RdkbRgWifiHotspotConnectedClientsEntry ::=
    SEQUENCE    {
        rdkbRgWifiHotspotConnectedClientsIndex              INTEGER,
                rdkbRgWifiHotspotConnectedClientsPhysAddr
PhysAddress,
        rdkbRgWifiHotspotConnectedClientsRssiLevel          Integer32,
                rdkbRgWifiHotspotConnectedClientsIpv4Addr
IpAddress,
                rdkbRgWifiHotspotConnectedClientsHostName
SnmpAdminString,
                rdkbRgWifiHotspotConnectedClientsDhcpv4Status
INTEGER,
    }

rdkbRgWifiHotspotConnectedClientsIndex    OBJECT-TYPE
    SYNTAX      INTEGER
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "The index of the client connected to specific hotspot ssid."
    ::= { rdkbRgWifiHotspotConnectedClientsEntry 1 }

rdkbRgWifiHotspotConnectedClientsPhysAddr OBJECT-TYPE
    SYNTAX      PhysAddress
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "MAC address of the client connected to the Hotspot SSID"
    ::= { rdkbRgWifiHotspotConnectedClientsEntry 2 }

rdkbRgWifiHotspotConnectedClientsRssiLevel OBJECT-TYPE
    SYNTAX      Integer32
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "Signal strength of the Hotspot client in dBm"
```

```
    ::= { rdkbRgWifiHotspotConnectedClientsEntry 3 }

rdkbRgWifiHotspotConnectedClientsIpv4Addr OBJECT-TYPE
    SYNTAX      IpAddress
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "IPv4 address obtained by the client from Hotspot DHCP server"
    ::= { rdkbRgWifiHotspotConnectedClientsEntry 4 }

rdkbRgWifiHotspotConnectedClientsHostName OBJECT-TYPE
    SYNTAX      SnmpAdminString
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "Hostname of the client based on DHCP option 12."
    ::= { rdkbRgWifiHotspotConnectedClientsEntry 5 }

rdkbRgWifiHotspotConnectedClientsDhcpv4Status OBJECT-TYPE
    SYNTAX      INTEGER  {
                                        discover(1),
                                        offer(2),
                                        request(3),
                                        ack(4),
                                        nack(5)
                         }
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "DHCPv4 status of the Hotspot client."
    ::= { rdkbRgWifiHotspotConnectedClientsEntry 6 }

rdkbRgWifiHotspotDisablePMKCaching OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Enables or disable WPA2 PMK Caching. By default this feature is enable"
        DEFVAL { true }
   ::= { rdkbRgWifiHotspotBase 9 }

rdkbRgWifiHotspotConnectionSpeedMin OBJECT-TYPE
    SYNTAX      Unsigned32
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Minimum connection speed in kbps required by client to maintain
connectivity."
   ::= { rdkbRgWifiHotspotBase 10 }

rdkbRgWifiHotspotConnectionSpeedTimeout OBJECT-TYPE
    SYNTAX      Unsigned32
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Timeout in seconds during which client is allowed to maintain
connectivity
         once connection speed is below rdkbRgWifiHotspotConnectionSpeedMin. When
timeout
         expires client is disassociated."
   ::= { rdkbRgWifiHotspotBase 11 }

-- ================================================
-- L2oGRE tunnel for Wifi Hotspot specific information
-- ================================================

rdkbRgL2ogreMib OBJECT IDENTIFIER ::= { rdkbRg 14 }
```

```
rdkbRgL2ogreBase OBJECT IDENTIFIER ::= { rdkbRgL2ogreMib 1 }

rdkbRgL2ogreEnabled OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Enables or disable GRE Tunnel support in the device."
    DEFVAL { false }
   ::= { rdkbRgL2ogreBase 1 }

rdkbRgL2ogrePriRemoteAddressType OBJECT-TYPE
    SYNTAX      InetAddressType
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "The IP address type (ipv4, ipv6 or dns) of primary remote
         endpoint of the GRE tunnel."
    DEFVAL { ipv4 }
    ::= { rdkbRgL2ogreBase 2 }

rdkbRgL2ogrePriRemoteAddress OBJECT-TYPE
    SYNTAX      InetAddress
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "IP address or FQDN of primary remote endpoint of the GRE tunnel."
    ::= { rdkbRgL2ogreBase 3 }

rdkbRgL2ogreSecRemoteAddressType OBJECT-TYPE
    SYNTAX      InetAddressType
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "The IP address type (ipv4, ipv6 or dns) of secondary remote
         endpoint of the GRE tunnel."
    DEFVAL { ipv4 }
    ::= { rdkbRgL2ogreBase 4 }

rdkbRgL2ogreSecRemoteAddress OBJECT-TYPE
    SYNTAX      InetAddress
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "IP address or FQDN of secondary remote endpoint of the GRE tunnel."
    ::= { rdkbRgL2ogreBase 5 }

rdkbRgL2ogreDSCP OBJECT-TYPE
    SYNTAX      Integer32 (0..63)
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "The method is used to set the high 6 bits of TOS in the
         IPv4 header or traffic class in IPv6 header."
    ::= { rdkbRgL2ogreBase 6 }

rdkbRgL2ogreKeepAliveMode OBJECT-TYPE
    SYNTAX      INTEGER {
                disabled(1),
                ping(2),
                ping-noswitchover(3)
    }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Keepalive modes for failover mechanism.
         ping - Use ICMP pings within tunnel as a keepalive messages."
    ::= { rdkbRgL2ogreBase 7 }
```

```
rdkbRgL2ogreKeepAliveCount OBJECT-TYPE
    SYNTAX      Integer32
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Number of keep-alive messages sent at regular interval."
    ::= { rdkbRgL2ogreBase 8 }

rdkbRgL2ogreKeepAliveInterval OBJECT-TYPE
    SYNTAX      Integer32
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Interval in seconds between keep-alive messages."
    ::= { rdkbRgL2ogreBase 9 }

rdkbRgL2ogreKeepAliveFailureThreshold OBJECT-TYPE
    SYNTAX      Integer32
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Number of keep-alive failures that will cause fail-over."
    ::= { rdkbRgL2ogreBase 10 }

rdkbRgL2ogreStatsTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF RdkbRgL2ogreStatsEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "This table provides statistical information of GRE tunnel."
    ::= { rdkbRgL2ogreBase 11 }

rdkbRgL2ogreStatsEntry OBJECT-TYPE
    SYNTAX      RdkbRgL2ogreStatsEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "This table provides statistical information of GRE tunnel."
    INDEX { rdkbRgL2ogreStatsIndex }
    ::= { rdkbRgL2ogreStatsTable 1 }

RdkbRgL2ogreStatsEntry ::= SEQUENCE {
    rdkbRgL2ogreStatsIndex                  Integer32,
    rdkbRgL2ogreStatsBytesSent              Counter64,
    rdkbRgL2ogreStatsBytesReceived          Counter64,
    rdkbRgL2ogreStatsPacketsSent            Counter64,
    rdkbRgL2ogreStatsPacketsReceived        Counter64,
    rdkbRgL2ogreStatsDiscardPacketsReceived Counter64,
    rdkbRgL2ogreStatsErrorPacketsReceived   Counter64,
    rdkbRgL2ogreStatsKeepAliveSent          Counter64,
    rdkbRgL2ogreStatsKeepAliveReceived      Counter64,
    rdkbRgL2ogreStatsRowStatus              RowStatus
}

rdkbRgL2ogreStatsIndex OBJECT-TYPE
    SYNTAX      Integer32 (1..256)
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "Table index"
    ::= { rdkbRgL2ogreStatsEntry 1 }

rdkbRgL2ogreStatsBytesSent OBJECT-TYPE
    SYNTAX      Counter64
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
```

```
        "Number bytes sent."
    ::= { rdkbRgL2ogreStatsEntry 2 }

rdkbRgL2ogreStatsBytesReceived OBJECT-TYPE
    SYNTAX      Counter64
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Number bytes received."
    ::= { rdkbRgL2ogreStatsEntry 3 }

rdkbRgL2ogreStatsPacketsSent OBJECT-TYPE
    SYNTAX      Counter64
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Number packets sent."
    ::= { rdkbRgL2ogreStatsEntry 4 }

rdkbRgL2ogreStatsPacketsReceived OBJECT-TYPE
    SYNTAX      Counter64
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Number packets received."
    ::= { rdkbRgL2ogreStatsEntry 5 }

rdkbRgL2ogreStatsDiscardPacketsReceived OBJECT-TYPE
    SYNTAX      Counter64
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Number packets received that were discarded.
         Because source network interface is down."
    ::= { rdkbRgL2ogreStatsEntry 6 }

rdkbRgL2ogreStatsErrorPacketsReceived OBJECT-TYPE
    SYNTAX      Counter64
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Number packets received that were in error.
         Because tunnel packets are not correct type.
         Eg. Received IP packet instead of L2 packets."
    ::= { rdkbRgL2ogreStatsEntry 7 }

rdkbRgL2ogreStatsKeepAliveSent OBJECT-TYPE
    SYNTAX      Counter64
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Number keepalive packets sent."
    ::= { rdkbRgL2ogreStatsEntry 8 }

rdkbRgL2ogreStatsKeepAliveReceived OBJECT-TYPE
    SYNTAX      Counter64
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Number keepalive packets received."
    ::= { rdkbRgL2ogreStatsEntry 9 }

rdkbRgL2ogreSourceIfTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF RdkbRgL2ogreSourceIfEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "This table contains information specific to network source interface
```

```
         whose traffic is mapped into GRE tunnel."
    ::= { rdkbRgL2ogreBase 12 }

rdkbRgL2ogreSourceIfEntry OBJECT-TYPE
    SYNTAX      RdkbRgL2ogreSourceIfEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "List of individual source interface entries mapped into GRE tunnel."
    INDEX { rdkbRgL2ogreSourceIfInstance }
    ::= { rdkbRgL2ogreSourceIfTable 1 }

RdkbRgL2ogreSourceIfEntry ::= SEQUENCE {
    rdkbRgL2ogreSourceIfInstance           Unsigned32,
    rdkbRgL2ogreSourceIf                   INTEGER,
    rdkbRgL2ogreSourceIfEnabled            TruthValue,
    rdkbRgL2ogreSourceIfVlanTag            Integer32,
    rdkbRgL2ogreSourceIfMplsHeader         Integer32,
    rdkbRgL2ogreSourceIfRowStatus          RowStatus
}

rdkbRgL2ogreSourceIfInstance    OBJECT-TYPE
    SYNTAX      Unsigned32
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "The key for a unique instance of this object."
    ::= {rdkbRgL2ogreSourceIfEntry 1 }

rdkbRgL2ogreSourceIf OBJECT-TYPE
    SYNTAX      INTEGER {
                        wifi1-0(1),
                        wifi1-1(2),
                        wifi1-2(3),
                        wifi1-3(4),
                        wifi1-4(5),
                        wifi1-5(6),
                        wifi1-6(7),
                        wifi1-7(8),
                        wifi2-0(9),
                        wifi2-1(10),
                        wifi2-2(11),
                        wifi2-3(12),
                        wifi2-4(13),
                        wifi2-5(14),
                        wifi2-6(15),
                        wifi2-7(16)
        }
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "Source interface whose traffic will be pass through GRE tunnel."
    ::= { rdkbRgL2ogreSourceIfEntry 2 }

rdkbRgL2ogreSourceIfEnabled OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "Enables or disable mapping traffic from network interface into GRE
tunnel."
   ::= { rdkbRgL2ogreSourceIfEntry 3 }

rdkbRgL2ogreSourceIfVlanTag OBJECT-TYPE
    SYNTAX      Integer32
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
```

```
        "Add VLAN tag consists of 16bit of Tag Protocol Identifier (TPID)
         and 16 bit of Tag Control Identifier (TCI).
         Value of 0 will disable adding VLAN tag.
         Tag Protocol Identifier (TPID) should set to 0x8100."
    ::= { rdkbRgL2ogreSourceIfEntry 4 }

rdkbRgL2ogreSourceIfMplsHeader OBJECT-TYPE
    SYNTAX      Integer32
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "MPLS Header. Value of 0 will disable adding MPLS Header."
    ::= { rdkbRgL2ogreSourceIfEntry 5 }

rdkbRgL2ogreSourceIfRowStatus OBJECT-TYPE
    SYNTAX      RowStatus
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "The RowStatus interlock for the creation and deletion of a table entry."
    ::= { rdkbRgL2ogreSourceIfEntry 6 }

rdkbRgL2ogreOrigIf OBJECT-TYPE
    SYNTAX      INTEGER {
                eRouter(1)
               }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Originating Interface of GRE tunnel."
    ::= { rdkbRgL2ogreBase 13 }

rdkbRgL2ogreConcentratorServiceName OBJECT-TYPE
    SYNTAX      DisplayString
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "FQDN of GRE tunnel concentrator/gw service.
         If this is set then, DNS Query of type SRV will be used for discovering
         FQDN of primary and secondary remote endpoint of GRE tunnel."
    ::= { rdkbRgL2ogreBase 14 }

rdkbRgL2ogreDnsResolverRetryTimerMin OBJECT-TYPE
    SYNTAX      Unsigned32
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Minimum timeout interval in seconds before retrying DNS query."
    ::= { rdkbRgL2ogreBase 15 }

rdkbRgL2ogreDnsResolverRetryTimerMax OBJECT-TYPE
    SYNTAX      Unsigned32
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Maximum timeout interval in seconds before retrying DNS query."
    ::= { rdkbRgL2ogreBase 16 }

rdkbRgL2ogreKeepAliveFailureInterval OBJECT-TYPE
    SYNTAX      Integer32
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Configured interval between pings for WLAN GW when disabled due to both
WLAN GWs failing."
    ::= { rdkbRgL2ogreBase 17 }

rdkbRgL2ogreKeepAliveReattemptInterval OBJECT-TYPE
```

```
    SYNTAX      Integer32
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Configured interval to reattempt connection to a primary WLAN GW even
when secondary WLAN GW is available and clients are connected."
    ::= { rdkbRgL2ogreBase 18 }


-- removed node rdgRg 15

-- ================================================
-- Network Extender Status MIB
-- ================================================

rdkbRgNetworkExtenders OBJECT IDENTIFIER ::= { rdkbRg 16 }

rdkbRgNetworkExtenderTable  OBJECT-TYPE
    SYNTAX      SEQUENCE OF RdkbRgNetworkExtenderEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "Multiple Attached Network Extender Table. Maximum of 8 Entries"

    ::= { rdkbRgNetworkExtenders 1 }

rdkbRgNetworkExtenderEntry OBJECT-TYPE
    SYNTAX      RdkbRgNetworkExtenderEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A row in the table which represents information about attached Network
Extender."
    INDEX   { rdkbRgNetworkExtenderIndex }
    ::= { rdkbRgNetworkExtenderTable 1 }

RdkbRgNetworkExtenderEntry ::= SEQUENCE {
      rdkbRgNetworkExtenderIndex                INTEGER,
      rdkbRgNetworkExtenderIpAddress            IpAddress,
      rdkbRgNetworkExtenderDeviceName           OCTET STRING,
      rdkbRgNetworkExtenderVenderName           OCTET STRING,
      rdkbRgNetworkExtenderModelNumber          OCTET STRING,
      rdkbRgNetworkExtenderFirmwareVersion      OCTET STRING
    }

rdkbRgNetworkExtenderIndex OBJECT-TYPE
    SYNTAX      INTEGER (1..8)
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "The index of the the table.  Up to 8 connected devices supported"
    ::= { rdkbRgNetworkExtenderEntry 1 }

rdkbRgNetworkExtenderIpAddress OBJECT-TYPE
    SYNTAX      IpAddress
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The IP Address of the Device"
    ::= { rdkbRgNetworkExtenderEntry 2 }

rdkbRgNetworkExtenderDeviceName OBJECT-TYPE
    SYNTAX      OCTET STRING (SIZE(0..32))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The Name of the Device as returned by HNAP"
    ::= { rdkbRgNetworkExtenderEntry 3 }
```

```
rdkbRgNetworkExtenderVenderName OBJECT-TYPE
    SYNTAX      OCTET STRING (SIZE(0..32))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The Vender Name as returned by HNAP"
    ::= { rdkbRgNetworkExtenderEntry 4 }

rdkbRgNetworkExtenderModelNumber OBJECT-TYPE
    SYNTAX      OCTET STRING (SIZE(0..32))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The Model Number of the Device as returned by HNAP"
    ::= { rdkbRgNetworkExtenderEntry 5 }

rdkbRgNetworkExtenderFirmwareVersion OBJECT-TYPE
    SYNTAX      OCTET STRING (SIZE(0..32))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The Firmware version of the Device as returned by HNAP"
    ::= { rdkbRgNetworkExtenderEntry 6 }

-- ================================================
-- Network Extender Radio Status Table
-- ================================================

rdkbRgNetworkExtenderRadioTable  OBJECT-TYPE
    SYNTAX      SEQUENCE OF RdkbRgNetworkExtenderRadioEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "Attached Network Extender Radio Table. Maximum of 32 entries (per
extender).
        If the attached device has no radios/SSID, this table will be empty"
    ::= { rdkbRgNetworkExtenders 2 }

rdkbRgNetworkExtenderRadioEntry OBJECT-TYPE
    SYNTAX      RdkbRgNetworkExtenderRadioEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A row in the table for Network Extender attached WiFi Radios."
    INDEX       {   rdkbRgNetworkExtenderIndex,
                            rdkbRgNetworkExtenderRadioIndex }
    ::= { rdkbRgNetworkExtenderRadioTable 1 }

RdkbRgNetworkExtenderRadioEntry ::= SEQUENCE {
        rdkbRgNetworkExtenderRadioIndex           INTEGER,
        rdkbRgNetworkExtenderRadioSSID            OCTET STRING,
        rdkbRgNetworkExtenderRadioBSSID           PhysAddress,
        rdkbRgNetworkExtenderRadioChannel         OCTET STRING,
        rdkbRgNetworkExtenderRadioMode            OCTET STRING
    }

rdkbRgNetworkExtenderRadioIndex OBJECT-TYPE
    SYNTAX      INTEGER (1..32)
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "The index of the radio/SSID. Up to 32 SSIDs supported"
    ::= { rdkbRgNetworkExtenderRadioEntry 1 }

rdkbRgNetworkExtenderRadioSSID OBJECT-TYPE
    SYNTAX      OCTET STRING (SIZE(0..32))
    MAX-ACCESS  read-only
```

```
    STATUS      current
    DESCRIPTION
        "The SSID of the radio as by HNAP"
    ::= { rdkbRgNetworkExtenderRadioEntry 2 }

rdkbRgNetworkExtenderRadioBSSID OBJECT-TYPE
    SYNTAX      PhysAddress
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The BSSID as reported by HNAP"
    ::= { rdkbRgNetworkExtenderRadioEntry 3 }

rdkbRgNetworkExtenderRadioChannel OBJECT-TYPE
    SYNTAX      OCTET STRING (SIZE(0..32))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Returns the Primary Radio Channel Number as reported by HNAP"
    ::= { rdkbRgNetworkExtenderRadioEntry 4 }

rdkbRgNetworkExtenderRadioMode OBJECT-TYPE
    SYNTAX      OCTET STRING (SIZE(0..32))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Returns the Radio Operational Mode as reported by HNAP"
    ::= { rdkbRgNetworkExtenderRadioEntry 5 }

-- ================================================
-- Network Extender Connected Client Table
-- ================================================
rdkbRgNetworkExtenderClientTable  OBJECT-TYPE
    SYNTAX      SEQUENCE OF RdkbRgNetworkExtenderClientEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "Attached Network Extender Client Table. Maximum of 64 Entries per
Extender"
    ::= { rdkbRgNetworkExtenders 3 }

rdkbRgNetworkExtenderClientEntry OBJECT-TYPE
    SYNTAX      RdkbRgNetworkExtenderClientEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A row in the table denoting Network Extender Clients."
    INDEX       {   rdkbRgNetworkExtenderIndex,
                    rdkbRgNetworkExtenderClientIndex }
    ::= { rdkbRgNetworkExtenderClientTable  1 }

RdkbRgNetworkExtenderClientEntry ::= SEQUENCE {
         rdkbRgNetworkExtenderClientIndex          INTEGER,
         rdkbRgNetworkExtenderClientMAC            PhysAddress,
         rdkbRgNetworkExtenderClientInterface      OCTET STRING
    }

rdkbRgNetworkExtenderClientIndex OBJECT-TYPE
    SYNTAX      INTEGER (1..64)
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "The index of the Client."
    ::= { rdkbRgNetworkExtenderClientEntry 1 }


rdkbRgNetworkExtenderClientMAC OBJECT-TYPE
    SYNTAX      PhysAddress
```

```
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Returns the client's MAC as reported by HNAP"
    ::= { rdkbRgNetworkExtenderClientEntry 2 }

rdkbRgNetworkExtenderClientInterface OBJECT-TYPE
    SYNTAX      OCTET STRING (SIZE(0..32))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Returns the client's connected interface per HNAP.   Wifi-2.4, Wifi-5.0,
Ethernet, etc"
    ::= { rdkbRgNetworkExtenderClientEntry 3 }

------------------------------
------- TR-069 module --------
------------------------------

rdkbTR069
                MODULE-IDENTITY
        LAST-UPDATED    "201408130000Z"
        ORGANIZATION    "TBD"
        CONTACT-INFO    "TBD"
        DESCRIPTION
            "Controls the configuration of TR-069 client"

        ::= { rdkbModules 3 }

rdkbTR069ClientConfig   OBJECT IDENTIFIER ::=  { rdkbTR069 1 }

rdkbTR069ClientMode OBJECT-TYPE
    SYNTAX INTEGER  {
        disable(0),
        enable(1)
        }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
            "Enabling this MIB starts the TR-069 client to communicate with ACS"
    DEFVAL { 0 }
    ::= { rdkbTR069ClientConfig 1 }

rdkbTR069ClientAcsUrl OBJECT-TYPE
    SYNTAX OCTET STRING (SIZE(0..255))
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        " Sets the ACS Management Server URL.
          This parameter is stored in non-vol and is NULL by default.
         "
    ::= { rdkbTR069ClientConfig 2 }

rdkbTR069ClientAcsUsername OBJECT-TYPE
    SYNTAX OCTET STRING (SIZE(0..255))
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        " Sets the username associated with the ACS Management Server.
          This parameter is stored in non-vol and is NULL by default.
        "
    ::= { rdkbTR069ClientConfig 3 }

rdkbTR069ClientAcsPassword OBJECT-TYPE
    SYNTAX OCTET STRING (SIZE(0..255))
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
```

```
        " Sets the password associated with the ACS Management Server.
          This parameter is stored in non-vol and is NULL by default.

          NOTE: This should be a hidden value in SNMPGET/SNMPWALK but user
                should be able to set this using SNMPSET
        "
    ::= { rdkbTR069ClientConfig 4 }

rdkbTR069ClientCrUsername OBJECT-TYPE
    SYNTAX OCTET STRING (SIZE(0..255))
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        " Set the username associated with the connection request from the ACS.
          This parameter is stored in non-vol and is NULL by default.
        "
    ::= { rdkbTR069ClientConfig 5 }

rdkbTR069ClientCrPassword OBJECT-TYPE
    SYNTAX OCTET STRING (SIZE(0..255))
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        " Set the password associated with the connection request from the ACS.
          This parameter is stored in non-vol and is NULL by default.

          NOTE: This should be a hidden value in SNMPGET/SNMPWALK but user
                should be able to set this using SNMPSET
        "
    ::= { rdkbTR069ClientConfig 6 }


rdkbTR069ClientPeriodicInform OBJECT-TYPE
    SYNTAX INTEGER  {
        disable(0),
        enable(1)
        }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
            "Enable the TR-069 client, allowing informs to occur at the periodic
rate."
    DEFVAL { 1 }
    ::= { rdkbTR069ClientConfig 7 }

rdkbTR069ClientPeriodicInformInterval OBJECT-TYPE
    SYNTAX INTEGER  (1..2147483647)
    UNITS       "Seconds"
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
            "Specify the periodic inform interval in seconds.
             Not advisable to have inform interval less than 180 seconds (3 min)"
    DEFVAL { 600 }
    ::= { rdkbTR069ClientConfig 8 }

rdkbTR069ClientAllowDocsisConfig OBJECT-TYPE
    SYNTAX INTEGER  {
        disable(0),
        enable(1)
        }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
         "In operation, X_DOCSIS_AllowDocsisConfiguration in a factory-defaulted
cable modem will be true,allowing the device to contact its ACS or an activation
server using either a factory-default
         ACS URL and other parameters, or ACS URL and other parameters supplied
```

```
in the DOCSIS configuration file.Once the initial contact is established the ACS
modifies the URL, and X_DOCSIS_AllowDocsisConfiguration
            is automatically set to false. Subsequent re-booting of the device
will use the modified address is accordance with TR-069.The ACS may relinquish
this control by explicitly setting X_DOCSIS_AllowDocsisConfiguration to false.
            The next time the device reboots the URL can again be accepted from
the DOCSSIS configuration file.X_DOCSIS_AllowDocsisConfiguration also defaults to
true, so resetting the device to factory defaults
            also re-enables the DOCSIS configuration file."
    DEFVAL { 1 }
    ::= { rdkbTR069ClientConfig 9 }


rdkbTR069ClientConnReqUrl OBJECT-TYPE
    SYNTAX OCTET STRING (SIZE(0..255))
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        " This is set by default during the initial bootup.Connection Request URL
is used by the ACS to solicit Gateway and make the client checkin to ACS.
          This parameter is stored in non-vol. "
    ::= { rdkbTR069ClientConfig 10 }

rdkbTR069ClientAcsControlPanelUrl OBJECT-TYPE
    SYNTAX OCTET STRING (SIZE(0..255))
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        " Set by the ACS when the client checks in. The user is re-directed to
this link when try to access local GUI
          This parameter is stored in non-vol and is NULL by default.
        "
    ::= { rdkbTR069ClientConfig 11 }

rdkbTR069ClientDeviceIdentifier OBJECT-TYPE
   SYNTAX INTEGER {
       useSerialNumber(0),
       useCmMacAddress(1)
   }
   MAX-ACCESS   read-write
   STATUS       current
   DESCRIPTION
       "Defines the value used to identify this device with the ACS.  This value
will show up in the ACS server under the Serial Number field.
            useSerialNumber(0):       The
InternetGatewayDevice.DeviceInfo.SerialNumber parameter will return the device's
serial number (e.g. 234567890).
            useCmMacAddress(1):    The
InternetGatewayDevice.DeviceInfo.SerialNumber parameter will return the device's
CM MAC address (e.g. 00407B1A2B3C).
       "
   DEFVAL { 0 }
   ::= { rdkbTR069ClientConfig 12 }

END
```