

RDKM Webconfig Server Setup

- [How To Bring up Webconfig Server:](#)
- [Build And Run Application](#)
- [Set Data to DB](#)
- [Verify data in DB](#)
- [RDK Device downloads data](#)
- [RDK-B Device ForceSync](#)
 - [For lan subdoc](#)
 - [For Onewifi subdoc](#)
- [RDK-B Device Reboot Sync](#)
- [RDK-B Supplementary Sync](#)
- [Write Data To DB](#)
 - [Test Application](#)
 - [REST API](#)
 - [Test Utility](#)

Webconfig is a configuration management server from which RDK devices download configurations during bootup or when updates are available. The project is written in Go and has been open-sourced to the RDK community. You can find it here: <https://github.com/rdkcentral/webconfig/blob/develop/README.md>. The objective is to set up the Webconfig server using the open-sourced repository, so that it can be used by the RDK reference platform."

****Note :**

- All tests mentioned in this page are done on RDK-B reference device Rpi4.
- Last verified in below kirkstone release

```
root@RaspberryPi-Gateway:~# cat /version.txt
imagename:rdkb-generic-broadband-image_rdkb-2024q1-kirkstone_20240417053101
BRANCH=rdkb-2024q1-kirkstone
YOCTO_VERSION=kirkstone
VERSION=rdkb-2024q1-kirkstone.04.17.24
SPIN=0
BUILD_TIME="2024-04-17 05:31:01"
Generated on Wed Apr 17 05:31:01 UTC 2024
```

- Webconfig supports 2 types of transport between cloud and devices (http/webpa and mqtt). The RDKM reference server support only http /webpa

How To Bring up Webconfig Server:

- GO version 1.17 and above
- Cassandra should be running
- Java (openjdk > 11.0)

```

~$ sudo wget https://golang.org/dl/gol.20.3.linux-amd64.tar.gz
~$ sudo tar -C /usr/local -xzf gol.20.3.linux-amd64.tar.gz
~$ ls /usr/local/go/bin/
go gofmt
~# go version
go version gol.20.3 linux/amd64

~# java -version
openjdk version "11.0.18" 2023-01-17
OpenJDK Runtime Environment (build 11.0.18+10-post-Ubuntu-0ubuntu122.04)
OpenJDK 64-Bit Server VM (build 11.0.18+10-post-Ubuntu-0ubuntu122.04, mixed mode, sharing)
~#
~# echo "deb https://deb.debian.cassandra.apache.org 4lx main" | sudo tee -a /etc/apt/sources.list.d/cassandra.sources.list
deb https://deb.debian.cassandra.apache.org 4lx main
~#
~# curl https://downloads.apache.org/cassandra/KEYS | sudo apt-key add
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left   Speed
  0     0     0     0     0     0  0 --:--:-- --:--:-- --:--:--    0Warning: apt-key is deprecated. Manage keyring files in trusted.gpg.d instead (see apt-key(8)).
100 274k 100 274k    0     0 193k      0  0:00:01  0:00:01 --:--:-- 193k
OK
~# sudo apt-get update
~# sudo apt-get install cassandra
~# ls /usr/sbin/cassandra
~# cassandra -v
4.1.1

:~# ps -ef | grep cassa
cassand+  222987      1  0 May04 ?        02:01:43 /usr/bin/java

```

Build And Run Application

```

$ export WEBCONFIG_KEY=`head -c 32 /dev/random | base64`
$ mkdir -p /app/logs/webconfig
$ cd /go/src/github.com/rdkcentral/webconfig
$ make
$ bin/webconfig-linux-amd64 -f config/sample_webconfig.conf

```

** Note:

After build, modify "config/sample_webconfig.conf" based on the server ip and port detail

Set Data to DB

- To write data to DB, follow section [WriteDataToDB](#) . The section provide REST API and also Web UI to write config to server DB
- If you already have binary data, can push directly to server using below REST API

```

curl -s -i "http://webconfig.rdkcentral.com:9007/api/v1/device/d83add0d178f/document/privatessid" -H
'Content-type: application/msgpack' --data-binary @privatessid.msgpack -X POST

curl -s -i "http://webconfig.rdkcentral.com:9007/api/v1/device/d83add0d178f/document/lan" -H 'Content-type:
application/msgpack' --data-binary @lan.msgpack -X POST

```

Verify data in DB

```
cqlsh:webconfig> select * from xpc_group_config where cpe_mac='D83ADD0D178F';

 cpe_mac      | group_id  | error_code | error_details | expiry | params |
payload
| state | updated_time          | version
-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+-----+
D83ADD0D178F |          |          |          |          |          |
|
0x81a6456e61626c65a474727565 |          | 2 | 2023-05-16 23:48:41.941000+0000 | 683076856
D83ADD0D178F |          |          |          |          |          |
0x8c105971de71bd30ae8a6d0fb10973174a97a0da0bd372b87f2342c132c554421de36916a06721d18cc1226d2a830b4af4297aa9161
1af89de4bf78b59859707 |          | 2 | 2023-05-16 23:48:24.845000+0000 | 563331257

(2 rows)
cqlsh:webconfig>
```

RDK Device downloads data

```
~# curl -s "http://webconfig.rdkcentral.com:9007/api/v1/device/d83add0d178f
/config"
--2xKIXjfJuErFW+hmNCwEoMoY8I+ECM9efrV6EI4efSSW9QjI
Content-type: application/msgpack
Etag: 683076856
Namespace: moca

Enabletrue
--2xKIXjfJuErFW+hmNCwEoMoY8I+ECM9efrV6EI4efSSW9QjI
Content-type: application/msgpack
Etag: 563331257
Namespace: privatessid

2.4rdkm_2.45rdkm_5
--2xKIXjfJuErFW+hmNCwEoMoY8I+ECM9efrV6EI4efSSW9QjI--
```

RDK-B Device ForceSync

- Make sure Webconfig service is running, otherwise restart service - **systemctl restart webconfig**
- Verify data is in DB by following **"Set Data to DB"** section.

For lan subdoc

- Below results are pulled for "lan" subdoc with below values

```
"lan": {
  "DhcpServerEnable": True,
  "LanIPAddress": "10.0.0.1",
  "LanSubnetMask": "255.255.255.0",
  "DhcpStartIPAddress": "10.0.0.7",
  "DhcpEndIPAddress": "10.0.0.249",
  "LeaseTime": 3600
}
```

- Set below tr181 params for Webconfig server setting

NOTE - The Webconfig URL used below is a reference setup, change it to respective webconfig URL and change the MAC to DUT CM MAC

```

root@Docsis-Gateway:~# dmcli eRT getv Device.X_RDK_WebConfig.
CR component name is: eRT.com.cisco.sptvg.ccsp.CR
subsystem_prefix eRT.
getv from/to component(webconfig): Device.X_RDK_WebConfig.
Execution succeed.
Parameter      1 name: Device.X_RDK_WebConfig.RfcEnable
                  type:      bool,      value: true
Parameter      2 name: Device.X_RDK_WebConfig.URL
                  type:      string,     value: http://webconfig.rdkcentral.com:9007/api/v1/device/e45f0156ff0e
/config

```

- Trigger Force Sync for root subdoc

```

root@RaspberryPi-Gateway:~# dmcli eRT setv Device.X_RDK_WebConfig.ForceSync string root
CR component name is: eRT.com.cisco.sptvg.ccsp.CR
subsystem_prefix eRT.
setv from/to component(webconfig): Device.X_RDK_WebConfig.ForceSync
Execution succeed.

```

- Webconfig client will receive the response from server and parse the data and send to corresponding component

```

240424-13:27:44.330309 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: curl Ip resolve option set as default
mode
240424-13:27:44.963139 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: g_ETAG updated for primary sync is
4185550430
240424-13:27:44.963377 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: webConfig curl response 0 http_code
200
240424-13:27:44.963465 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: curl response Time: 0.6 seconds
240424-13:27:44.963547 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: ct is multipart/mixed;
boundary=2xKixjfJuErFW+hMNCwEoMoY8I+ECM9efrV6EI4efSSW9QjI, content_res is 0
240424-13:27:44.963614 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: Content-Type is multipart/mixed. Valid
240424-13:27:44.964065 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: Size of the docs is :1
240424-13:27:44.964174 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: Primary sync , update global root
version to tmp list
240424-13:27:44.964249 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: Added 2 mp entries To tmp List
240424-13:27:44.964318 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: node is pointing to temp->name root
temp->version 4185550430 temp->status pending temp->error_details none
240424-13:27:44.964384 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: node is pointing to temp->name lan
temp->version 3259977430 temp->status pending_apply temp->error_details none
240424-13:27:44.964459 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: doc lan is updated to version
3259977430 status pending error_details none error_code 0 trans_id 0 temp->retry_count 0
240424-13:27:44.964741 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: subdoc_name: lan, version:
3259977430, transaction_id: 54363
240424-13:27:44.964874 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: doc lan is updated to version
3259977430 status pending error_details none error_code 0 trans_id 54363 temp->retry_count 0
240424-13:27:44.964944 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: Request:> param[0].name = Device.
DHCPv4.Server.Lan, type = 5
240424-13:27:44.969342 [mod=WEBCONFIG, lvl=INFO] [tid=5745] WEBCONFIG: Received msg lan,54363,3259977430,ACK,
13 from topic webconfigSignal
240424-13:27:44.969469 [mod=WEBCONFIG, lvl=INFO] [tid=5745] WEBCONFIG: Received webconfig event signal Info
lan,54363,3259977430,ACK,13

```

- At this point Ccsp component will receive data from webconfig client and apply the settings in subdoc

```

240424-13:27:44.967384 [mod=PAM, lvl=WARN] [tid=1450] MSGPACK_UNPACK_SUCCESS :2
240424-13:27:44.967475 [mod=PAM, lvl=WARN] [tid=1450] pLanInfo->entries_count is 1
240424-13:27:44.967541 [mod=PAM, lvl=WARN] [tid=1450] pLanInfo->subdoc_name is lan
240424-13:27:44.967608 [mod=PAM, lvl=WARN] [tid=1450] pLanInfo->version is 3259977430
240424-13:27:44.967673 [mod=PAM, lvl=WARN] [tid=1450] pLanInfo->transaction_id is 54363
240424-13:27:44.967736 [mod=PAM, lvl=WARN] [tid=1450] Lan configuration received
240424-13:27:44.967808 [mod=PAM, lvl=INFO] [tid=1450] PushBlobRequest : subdoc_name lan , txid 54363,
version 3259977430 , entries 1
240424-13:27:44.967880 [mod=PAM, lvl=INFO] [tid=1450] Inside FUNC checkNewVersionUpdateRequired LINE 1244
240424-13:27:44.967954 [mod=PAM, lvl=INFO] [tid=1450] checkIfVersionExecInQueue : Queue Empty
240424-13:27:44.968020 [mod=PAM, lvl=INFO] [tid=1450] New version available , prcessing new Blob request
240424-13:27:44.968118 [mod=PAM, lvl=INFO] [tid=1450] calculateTimeout is NULL , using default timeout
routine
240424-13:27:44.968187 [mod=PAM, lvl=INFO] [tid=1450] PushBlobRequest timeout received from calcTimeout is 13
240424-13:27:44.968256 [mod=PAM, lvl=INFO] [tid=1450] getPendingQueueTimeout : Queue Empty
240424-13:27:44.968328 [mod=PAM, lvl=INFO] [tid=1450] PushBlobRequest : Send received request ACK , timeout
is 13
240424-13:27:44.968401 [mod=PAM, lvl=INFO] [tid=1450] send_ACK : doc name lan , doc version 3259977430, txid
is 54363 timeout is 13
240424-13:27:44.968475 [mod=PAM, lvl=INFO] [tid=1450] isWebCfgRbusEnabled: rbus enabled is 1
240424-13:27:44.968541 [mod=PAM, lvl=INFO] [tid=1450] sendWebConfigSignal : rbus_set :: event_name :
webconfigSignal ::
240424-13:27:44.970653 [mod=PAM, lvl=INFO] [tid=1817] Received event
240424-13:27:44.971039 [mod=PAM, lvl=INFO] [tid=13977] Inside FUNC execute_request LINE 854
240424-13:27:44.971057 [mod=PAM, lvl=WARN] [tid=1450] PushBlobRequest complete
240424-13:27:44.971258 [mod=PAM, lvl=WARN] [tid=1450] Before committing:Device.DHCPv4.Server.
240424-13:27:44.971332 [mod=PAM, lvl=WARN] [tid=1450] After committing:Device.DHCPv4.Server.:0
240424-13:27:44.972710 [mod=PAM, lvl=WARN] [tid=13977] Dhcpv4_Reset_Cache done
240424-13:27:44.972794 [mod=PAM, lvl=WARN] [tid=13977] CheckIpIsValid:IpAddressReceivedIs:10.0.0.1
240424-13:27:44.972859 [mod=PAM, lvl=WARN] [tid=13977] CheckIpIsValid:IpAddressReceivedIs:10.0.0.20
240424-13:27:44.972919 [mod=PAM, lvl=WARN] [tid=13977] CheckIpIsValid:IpAddressReceivedIs:10.0.0.50
240424-13:27:44.972986 [mod=PAM, lvl=WARN] [tid=13977] Dhcpv4_Lan_Ip_IsInPrivate_Blocked_AddrRange:addr:
a000001
240424-13:27:44.973102 [mod=PAM, lvl=WARN] [tid=13977] Entering Dhcpv4_Lan_BackupFromDb
240424-13:27:44.977168 [mod=PAM, lvl=WARN] [tid=13977] Dhcpv4_Cache_ApplyAllToDb line.no 328 numOfParam 6
240424-13:27:44.981057 [mod=PAM, lvl=WARN] [tid=13977] Dhcpv4_Cache_ApplyAllToDb line.no 344 Success

```

- Verify subdoc settings are applied to tr181 data model by doing regular dmcli get command

```

root@RaspberryPi-Gateway:~# dmcli eRT getv Device.DHCPv4.Server.Pool.1.
CR component name is: eRT.com.cisco.spvtg.ccsp.CR
subsystem_prefix eRT.
getv from/to component(eRT.com.cisco.spvtg.ccsp.pam): Device.DHCPv4.Server.Pool.1.
Execution succeed.
Parameter 1 name: Device.DHCPv4.Server.Pool.1.Enable
              type:      bool,      value: false
Parameter 2 name: Device.DHCPv4.Server.Pool.1.X_CISCO_COM_TimeOffset
              type:      int,       value: 0
Parameter 3 name: Device.DHCPv4.Server.Pool.1.Status
              type:      string,    value: Disabled
Parameter 4 name: Device.DHCPv4.Server.Pool.1.Alias
              type:      string,    value: ServerPool-1
Parameter 5 name: Device.DHCPv4.Server.Pool.1.Order
              type:      uint,      value: 1
Parameter 6 name: Device.DHCPv4.Server.Pool.1.Interface
              type:      string,    value: Device.IP.Interface.4.
Parameter 7 name: Device.DHCPv4.Server.Pool.1.VendorClassID
              type:      string,    value:
Parameter 8 name: Device.DHCPv4.Server.Pool.1.VendorClassIDExclude
              type:      bool,      value: false
Parameter 9 name: Device.DHCPv4.Server.Pool.1.VendorClassIDMode
              type:      string,    value:
Parameter 10 name: Device.DHCPv4.Server.Pool.1.ClientID
              type:      string,    value:
Parameter 11 name: Device.DHCPv4.Server.Pool.1.ClientIDExclude
              type:      bool,      value: false
Parameter 12 name: Device.DHCPv4.Server.Pool.1.UserClassID
              type:      string,    value:
Parameter 13 name: Device.DHCPv4.Server.Pool.1.UserClassIDExclude
              type:      bool,      value: false
Parameter 14 name: Device.DHCPv4.Server.Pool.1.Chaddr
              type:      string,    value:
Parameter 15 name: Device.DHCPv4.Server.Pool.1.ChaddrMask
              type:      string,    value:
Parameter 16 name: Device.DHCPv4.Server.Pool.1.ChaddrExclude
              type:      bool,      value: false
Parameter 17 name: Device.DHCPv4.Server.Pool.1.MinAddress
              type:      string,    value: 10.0.0.20
Parameter 18 name: Device.DHCPv4.Server.Pool.1.MaxAddress
              type:      string,    value: 10.0.0.50
Parameter 19 name: Device.DHCPv4.Server.Pool.1.ReservedAddresses
              type:      string,    value:
Parameter 20 name: Device.DHCPv4.Server.Pool.1.SubnetMask
              type:      string,    value: 255.255.255.0
Parameter 21 name: Device.DHCPv4.Server.Pool.1.DNSServers
              type:      string,    value:
Parameter 22 name: Device.DHCPv4.Server.Pool.1.DNSServersEnabled
              type:      bool,      value: false
Parameter 23 name: Device.DHCPv4.Server.Pool.1.DomainName
              type:      string,    value: utopia.net
Parameter 24 name: Device.DHCPv4.Server.Pool.1.IPRouters
              type:      string,    value: 10.0.0.1
Parameter 25 name: Device.DHCPv4.Server.Pool.1.LeaseTime
              type:      int,       value: 3600
Parameter 26 name: Device.DHCPv4.Server.Pool.1.StaticAddressNumberOfEntries
              type:      uint,      value: 0
Parameter 27 name: Device.DHCPv4.Server.Pool.1.OptionNumberOfEntries
              type:      uint,      value: 1
Parameter 28 name: Device.DHCPv4.Server.Pool.1.ClientNumberOfEntries
              type:      uint,      value: 0
Parameter 29 name: Device.DHCPv4.Server.Pool.1.Option.1.Enable
              type:      bool,      value: true
Parameter 30 name: Device.DHCPv4.Server.Pool.1.Option.1.Alias
              type:      string,    value: Option1
Parameter 31 name: Device.DHCPv4.Server.Pool.1.Option.1.Tag
              type:      uint,      value: 6
Parameter 32 name: Device.DHCPv4.Server.Pool.1.Option.1.Value
              type:      string,    value: Value2

```

For Onewifi subdoc

- Below results are pulled for "privatessid" subdoc with below values.

```
{
  "private_ssid_2g": {
    "SSID": "rdkm-ssid-4",
    "Enable": true,
    "SSIDAdvertisementEnabled": true
  },
  "private_ssid_5g": {
    "SSID": "rdkm-ssid-5",
    "Enable": true,
    "SSIDAdvertisementEnabled": true
  },
  "private_security_2g": {
    "Passphrase": "rdkm@1234",
    "EncryptionMethod": "AES",
    "ModeEnabled": "WPA2-Personal"
  },
  "private_security_5g": {
    "Passphrase": "rdkm@1234",
    "EncryptionMethod": "AES",
    "ModeEnabled": "WPA2-Personal"
  }
}
```

- Set Webconfig settings as above in Device.X_RDK_WebConfig.URL data model
- Trigger Force Sync for root subdoc
- Webconfig client will receive the response from server and parse the data and send to corresponding component

```
root@RaspberryPi-Gateway:~# dmcli eRT setv Device.X_RDK_WebConfig.ForceSync string root
CR component name is: eRT.com.cisco.sptvg.ccsp.CR
subsystem_prefix eRT.
setv from/to component(webconfig): Device.X_RDK_WebConfig.ForceSync
Execution succeed.

root@RaspberryPi-Gateway:~# 240424-13:41:43.604510 [mod=WEBCONFIG, lvl=INFO] [tid=5745] WEBCONFIG: Received
poke request, proceed to parseForceSyncJson
240424-13:41:43.604651 [mod=WEBCONFIG, lvl=INFO] [tid=5745] WEBCONFIG: Force sync json parsed: [root]
240424-13:41:43.604700 [mod=WEBCONFIG, lvl=INFO] [tid=5745] WEBCONFIG: Trigger force sync
240424-13:41:43.604840 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: ForceSyncDoc root ForceSyncTransID.
240424-13:41:43.604913 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: Proceed to execute_token_script
function
240424-13:41:43.604995 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: execute_token_script command is
initiated
240424-13:41:43.607217 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: execute_token_script command is
executed
240424-13:41:43.619330 WEBCONFIG: read file script is called
240424-13:41:43.623620 WEBCONFIG: CURL_RESPONSE path is /tmp/.curlresponse
240424-13:41:43.625621 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: execute_token_script command is
success
240424-13:41:43.625722 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: execute_token_script is done
240424-13:41:43.625777 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: Failed to read token from /etc/parodus
/parodus_read_file.sh. Proceeding to create new token.
240424-13:41:43.625861 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: execute_token_script command is
initiated
240424-13:41:43.626927 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: execute_token_script command is
executed
240424-13:41:43.647493 WEBCONFIG: No /nvram/certs/devicecert_1.pk12 using static cert
240424-13:41:43.651592 WEBCONFIG: No /usr/bin/GetConfigFile to fetch /tmp/.cfgStaticxpki
240424-13:41:43.655631 WEBCONFIG: Failure configuration file missing
240424-13:41:43.657306 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: execute_token_script command is
success
240424-13:41:43.657404 [mod=WEBCONFIG, lvl=ERROR] [tid=6167] WEBCONFIG: Failed to create new token
```

240424-13:41:43.657465 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: reboot reason is unknown
240424-13:41:43.657827 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: versionsList is NONE-REBOOT
240424-13:41:43.657890 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: version_header formed IF-NONE-MATCH:
NONE-REBOOT,3259977430,2433379681
240424-13:41:43.657941 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: docList fetched root,lan,privatessid
240424-13:41:43.657991 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: schema_header formed Schema-Version:
v1.0
240424-13:41:43.658039 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: supportedVersion fetched is NULL
240424-13:41:43.658087 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: supportedDocs_header formed X-System-
Supported-Docs:
16777247,33554435,50331649,67108865,83886081,100663297,117440513,134217729,201326594,218103809
240424-13:41:43.658138 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: bootTime_header formed X-System-Boot-
Time: 1713964800
240424-13:41:43.658189 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: FwVersion_header formed X-System-
Firmware-Version: rdkb-generic-broadband-image_rdkb-2024q1-kirkstone_202404170531
240424-13:41:43.658239 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: status_header formed X-System-Status:
Operational
240424-13:41:43.658291 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: currentTime_header formed X-System-
Current-Time: 1713966103
240424-13:41:43.658340 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: systemReadyTime_header formed X-
System-Ready-Time: 1713964909
240424-13:41:43.658449 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: uuid_header formed Transaction-ID:
76e243ed-fla5-4c28-a0cb-24a9606aae12
240424-13:41:43.658500 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: productClass_header formed X-System-
Product-Class: XB3
240424-13:41:43.658550 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: modelName_header formed X-System-
Model-Name: RPI
240424-13:41:43.658610 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: The get_global_supplementarySync() is
0
240424-13:41:43.662347 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: Global set Webconfig URL:
http://webconfig.rdkcentral.com:9007/api/v1/device/e45f01fb134b/config
240424-13:41:43.662435 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: Webconfig root ConfigURL is
http://webconfig.rdkcentral.com:9007/api/v1/device/e45f01fb134b/config?group_id=root,lan,privatessid
240424-13:41:43.662497 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: g_interface fetched is erouter0
240424-13:41:43.662557 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: curl Ip resolve option set as default
mode
240424-13:41:44.770105 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: g_ETAG updated for primary sync is
3526226773
240424-13:41:44.770348 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: webConfig curl response 0 http_code
200
240424-13:41:44.770432 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: curl response Time: 1.1 seconds
240424-13:41:44.770514 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: ct is multipart/mixed;
boundary=2xKIXjfJuErFw+hmcNCwEoMoY8I+ECM9efrV6EI4efSSW9QjI, content_res is 0
240424-13:41:44.770580 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: Content-Type is multipart/mixed. Valid
240424-13:41:44.771041 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: Size of the docs is :1
240424-13:41:44.771153 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: Primary sync , update global root
version to tmp list
240424-13:41:44.771226 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: Added 2 mp entries To tmp List
240424-13:41:44.771295 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: node is pointing to temp->name root
temp->version 3526226773 temp->status pending temp->error_details none
240424-13:41:44.771361 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: node is pointing to temp->name
privatessid temp->version 4155806053 temp->status pending_apply temp->error_details none
240424-13:41:44.771492 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: doc privatessid is updated to version
4155806053 status pending error_details none error_code 0 trans_id 0 temp->retry_count 0
240424-13:41:44.771777 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: subdoc_name: privatessid, version:
4155806053, transaction_id: 59566
240424-13:41:44.771915 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: doc privatessid is updated to version
4155806053 status pending error_details none error_code 0 trans_id 59566 temp->retry_count 0
240424-13:41:44.771985 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: Request:> param[0].name = Device.WiFi.
Private, type = 5
240424-13:41:44.776836 [mod=WEBCONFIG, lvl=INFO] [tid=5745] WEBCONFIG: Received msg privatessid,
59566,4155806053,ACK,90 from topic webconfigSignal
240424-13:41:44.776940 [mod=WEBCONFIG, lvl=INFO] [tid=5745] WEBCONFIG: Received webconfig event signal Info
privatessid,59566,4155806053,ACK,90
240424-13:41:44.777137 [mod=WEBCONFIG, lvl=INFO] [tid=6172] WEBCONFIG: TIMEOUT EVENT: privatessid,
59566,4155806053,ACK,90 (doc apply need time)
240424-13:41:44.777211 [mod=WEBCONFIG, lvl=INFO] [tid=6172] WEBCONFIG: doc apply need time, start timer.
240424-13:41:44.777278 [mod=WEBCONFIG, lvl=INFO] [tid=6172] WEBCONFIG: Timer list is empty
240424-13:41:44.777347 [mod=WEBCONFIG, lvl=INFO] [tid=6172] WEBCONFIG: new_node->subdoc_name privatessid
new_node->txid 59566 new_node->timeout 90 status 1 added to list
240424-13:41:44.777410 [mod=WEBCONFIG, lvl=INFO] [tid=6172] WEBCONFIG: startWebcfgTimer success


```

240424-13:41:44.777631 [mod=WEBCONFIG, lvl=INFO] [tid=6168] WEBCONFIG: dest is event:subdoc-report
/privatessid/mac:e45f01fb134b/ack
240424-13:41:44.777720 [mod=WEBCONFIG, lvl=INFO] [tid=6168] WEBCONFIG: stringifiedNotifyPayload is
{"device_id":"mac:e45f01fb134b","namespace":"privatessid","application_status":"pending","timeout":90,"
transaction_uuid":"76e243ed-fla5-4c28-a0cb-24a9606aae12","version":"4155806053"}
240424-13:41:44.777975 [mod=WEBCONFIG, lvl=INFO] [tid=6168] WEBCONFIG: Notification successfully sent to
Webconfig.Upstream
240424-13:41:44.779256 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: The ret status for rbus_setMulti is 0
240424-13:41:44.779355 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: ccspRetStatus is 100
240424-13:41:44.779480 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: setValues success. ccspStatus : 100
240424-13:41:44.784885 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: The offset obtained from
getTimeOffset is 0
240424-13:41:44.790344 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: The Maintenance Sync triggers at Thu
240425 00:30:21 in LTime
240424-13:41:44.790468 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: Maintenance sync start time in UTC is
Thu 240425 00:30:21
240424-13:41:44.790520 [mod=WEBCONFIG, lvl=INFO] [tid=6167] WEBCONFIG: reset maintenanceSync to false
240424-13:41:44.794818 [mod=WEBCONFIG, lvl=INFO] [tid=5745] WEBCONFIG: Received msg privatessid,
59566,4155806053,ACK,0 from topic webconfigSignal
240424-13:41:44.794915 [mod=WEBCONFIG, lvl=INFO] [tid=5745] WEBCONFIG: Received webconfig event signal Info
privatessid,59566,4155806053,ACK,0
240424-13:41:44.795129 [mod=WEBCONFIG, lvl=INFO] [tid=6172] WEBCONFIG: ACK EVENT: privatessid,
59566,4155806053,ACK,0 (doc apply success)
240424-13:41:44.795199 [mod=WEBCONFIG, lvl=INFO] [tid=6172] WEBCONFIG: doc apply success, proceed to add to
DB
240424-13:41:44.795257 [mod=WEBCONFIG, lvl=INFO] [tid=6172] WEBCONFIG: doc privatessid is updated to version
4155806053 status success error_details none error_code 0 trans_id 59566 temp->retry_count 0
240424-13:41:44.795347 [mod=WEBCONFIG, lvl=INFO] [tid=6172] WEBCONFIG: doc root is updated to version
3526226773 status success error_details none error_code 0 trans_id 0 temp->retry_count 0
240424-13:41:44.795575 [mod=WEBCONFIG, lvl=INFO] [tid=6168] WEBCONFIG: dest is event:subdoc-report
/privatessid/mac:e45f01fb134b/status
240424-13:41:44.795677 [mod=WEBCONFIG, lvl=INFO] [tid=6168] WEBCONFIG: stringifiedNotifyPayload is
{"device_id":"mac:e45f01fb134b","namespace":"privatessid","application_status":"success","transaction_uuid":"
76e243ed-fla5-4c28-a0cb-24a9606aae12","version":"4155806053"}
240424-13:41:44.795888 [mod=WEBCONFIG, lvl=INFO] [tid=6168] WEBCONFIG: Notification successfully sent to
Webconfig.Upstream
240424-13:41:44.795938 [mod=WEBCONFIG, lvl=INFO] [tid=6172] WEBCONFIG: Tmp list root doc delete is required

```

- Check Onewifi debug logs to verify subdoc data parsing, below log is captured from /tmp/wifiCtrl log file

```

[OneWifi] 240424-13:41:44.774300<D> get_private_vap Rbus property=Device.WiFi.Private
[OneWifi] 240424-13:41:44.774457<D> get_private_vap Rbus set string len=496, str:
h69wcm12YXRlX3NzaWRfMmeDPNTSUSrcmRrbS1zc2lkLTSMRW5hYmxlZ7hTU01EQWR2ZXJ0aXNlbWVudEVuYVJsZWTD3ByaXZhdGVfc3NpZ
F81Z4OkU1NJRKtyZGttLXNzaWQtNaZFbmFibGXDUFNtSURBZHZlcnRpc2VtZW50RW5hYmxlZMOzcHJpdmF0ZV9zZWNLcm10eV8yZ4OqUGFzc3
BocmFzZalyZGttQDEyMzSwRW5jcnlwdGlvbk1ldGhvZKzNBVRvTW9kZUVuYVJsZWStVlBBM1lQZXJzb25hbLNwcml2YXRlX3N1Y3VyaXR5XzV
ng6pQYXNzcGhyYXNlqXJka2lAMTIZNLBFbmNyeXB0aW9uTWV0aG9ko0FFU6tNb2RlRW5hYmxlZK1XUEEYLVBlcnNvbWFs3N1YmRvY19uYW1l
q3ByaXZhdGVzc2lkp3ZlcnNpb27097SRZa50cmFuc2FjdGlvbl9pZM3orn==
[OneWifi] 240424-13:41:44.775118<D> webconf_ver_txn, ver: 4155806053, txn: 59566
[OneWifi] 240424-13:41:44.777870<I> webconf_process_private_vap:3604: PushBlobRequest Complete
[OneWifi] 240424-13:41:44.788504<D> update_vap_info: parsing private_ssid_2g and private_security_2g blob
[OneWifi] 240424-13:41:44.788673<I> SSID blob:
[OneWifi] 240424-13:41:44.788772<I> "SSID": rdkm-ssid-4
[OneWifi] 240424-13:41:44.788864<I> Enter validate_private_home_ssid_param and ssid_name=rdkm-ssid-4
[OneWifi] 240424-13:41:44.788968<I> validate_private_home_ssid_param: ssidparam validation passed
[OneWifi] 240424-13:41:44.789070<I> "Enable": true
[OneWifi] 240424-13:41:44.789164<I> "SSIDAdvertisementEnabled": true
[OneWifi] 240424-13:41:44.789263<I> Security blob:
[OneWifi] 240424-13:41:44.789355<I> "Passphrase": <Masked>
[OneWifi] 240424-13:41:44.789453<I> "EncryptionMethod": AES
[OneWifi] 240424-13:41:44.789548<I> "ModeEnabled": WPA2-Personal
[OneWifi] 240424-13:41:44.789664<I> Enter validate_private_home_security_param mode_enabled=WPA2-Personal,
encryption_method=AES
[OneWifi] 240424-13:41:44.789761<I> validate_private_home_security_param: securityparam validation passed
[OneWifi] 240424-13:41:44.789899<D> update_vap_info: parsing private_ssid_5g and private_security_5g blob
[OneWifi] 240424-13:41:44.790009<I> SSID blob:
[OneWifi] 240424-13:41:44.790107<I> "SSID": rdkm-ssid-5
[OneWifi] 240424-13:41:44.790198<I> Enter validate_private_home_ssid_param and ssid_name=rdkm-ssid-5
[OneWifi] 240424-13:41:44.790288<I> validate_private_home_ssid_param: ssidparam validation passed
[OneWifi] 240424-13:41:44.790386<I> "Enable": true
[OneWifi] 240424-13:41:44.790476<I> "SSIDAdvertisementEnabled": true
[OneWifi] 240424-13:41:44.790554<I> Security blob:
[OneWifi] 240424-13:41:44.790639<I> "Passphrase": <Masked>
[OneWifi] 240424-13:41:44.790717<I> "EncryptionMethod": AES
[OneWifi] 240424-13:41:44.790797<I> "ModeEnabled": WPA2-Personal
[OneWifi] 240424-13:41:44.790879<I> Enter validate_private_home_security_param mode_enabled=WPA2-Personal,
encryption_method=AES
[OneWifi] 240424-13:41:44.790957<I> validate_private_home_security_param: securityparam validation passed
[OneWifi] 240424-13:41:44.793120<I> CONFIG_WIFI=0 is_factory_reset_done=-1 fun captive_portal_check
[OneWifi] 240424-13:41:44.793228<I> FactoryReset is not done and captive portal customization already done
fun captive_portal_check return
[OneWifi] 240424-13:41:44.793418<D> push_blob_data:3345: Encoded blob:

```

- Verify subdoc settings are applied to tr181 data model by doing regular dmcli get command

```

root@RaspberryPi-Gateway:~# dmcli eRT getv Device.WiFi.SSID.1.SSID
CR component name is: eRT.com.cisco.spvtg.ccsp.CR
subsystem_prefix eRT.
getv from/to component(eRT.com.cisco.spvtg.ccsp.wifi): Device.WiFi.SSID.1.SSID
Execution succeed.
Parameter      1 name: Device.WiFi.SSID.1.SSID
                type:      string,      value: rdkm-ssid-4

root@RaspberryPi-Gateway:~# dmcli eRT getv Device.WiFi.SSID.2.SSID
CR component name is: eRT.com.cisco.spvtg.ccsp.CR
subsystem_prefix eRT.
getv from/to component(eRT.com.cisco.spvtg.ccsp.wifi): Device.WiFi.SSID.2.SSID
Execution succeed.
Parameter      1 name: Device.WiFi.SSID.2.SSID
                type:      string,      value: rdkm-ssid-5

root@RaspberryPi-Gateway:~#
root@RaspberryPi-Gateway:~# dmcli eRT getv Device.WiFi.AccessPoint.1.Security.KeyPassphrase
CR component name is: eRT.com.cisco.spvtg.ccsp.CR
subsystem_prefix eRT.
getv from/to component(eRT.com.cisco.spvtg.ccsp.wifi): Device.WiFi.AccessPoint.1.Security.KeyPassphrase
Execution succeed.
Parameter      1 name: Device.WiFi.AccessPoint.1.Security.KeyPassphrase
                type:      string,      value: rdkm@1234

root@RaspberryPi-Gateway:~#
root@RaspberryPi-Gateway:~# dmcli eRT getv Device.WiFi.AccessPoint.2.Security.KeyPassphrase
CR component name is: eRT.com.cisco.spvtg.ccsp.CR
subsystem_prefix eRT.
getv from/to component(eRT.com.cisco.spvtg.ccsp.wifi): Device.WiFi.AccessPoint.2.Security.KeyPassphrase
Execution succeed.
Parameter      1 name: Device.WiFi.AccessPoint.2.Security.KeyPassphrase
                type:      string,      value: rdkm@1234

root@RaspberryPi-Gateway:~#
root@RaspberryPi-Gateway:~# dmcli eRT getv Device.WiFi.AccessPoint.1.Security.ModeEnabled
CR component name is: eRT.com.cisco.spvtg.ccsp.CR
subsystem_prefix eRT.
getv from/to component(eRT.com.cisco.spvtg.ccsp.wifi): Device.WiFi.AccessPoint.1.Security.ModeEnabled
Execution succeed.
Parameter      1 name: Device.WiFi.AccessPoint.1.Security.ModeEnabled
                type:      string,      value: WPA2-Personal

root@RaspberryPi-Gateway:~# dmcli eRT getv Device.WiFi.AccessPoint.2.Security.ModeEnabled
CR component name is: eRT.com.cisco.spvtg.ccsp.CR
subsystem_prefix eRT.
getv from/to component(eRT.com.cisco.spvtg.ccsp.wifi): Device.WiFi.AccessPoint.2.Security.ModeEnabled
Execution succeed.
Parameter      1 name: Device.WiFi.AccessPoint.2.Security.ModeEnabled
                type:      string,      value: WPA2-Personal

root@RaspberryPi-Gateway:~#

```

RDK-B Device Reboot Sync

```

root@RaspberryPi-Gateway:~# cat /rdklogs/logs/WEBCONFIGlog.txt.0 CR component name is: eRT.com.cisco.spvtg.
ccsp.CR
subsystem_prefix eRT.
setv from/to component(webconfig): Device.X_RDK_WebConfig.ForceSync
Execution succeed.

root@RaspberryPi-Gateway:~# 230518-19:59:56.595249 [mod=WEBCONFIG, lvl=INFO] [tid=5737] WEBCONFIG: Received
poke request, proceed to parseForceSyncJson
230518-19:59:56.595416 [mod=WEBCONFIG, lvl=INFO] [tid=5737] WEBCONFIG: Force sync json parsed: [privatessid]
230518-19:59:56.595493 [mod=WEBCONFIG, lvl=INFO] [tid=5737] WEBCONFIG: Trigger force sync

```

```
230518-19:59:56.595644 [mod=WEBCONFIG, lvl=INFO] [tid=5878] WEBCONFIG: ForceSyncDoc privatessid
ForceSyncTransID.
230518-19:59:56.622941 WEBCONFIG: read file script is called
230518-19:59:56.631238 WEBCONFIG: CURL_RESPONSE path is /tmp/.curlresponse
230518-19:59:56.634573 [mod=WEBCONFIG, lvl=INFO] [tid=5878] WEBCONFIG: Failed to read token from /etc/parodus
/parodus_read_file.sh. Proceeding to create new token.
230518-19:59:56.670815 WEBCONFIG: No /nvram/certs/devicecert_1.pk12 using static cert
230518-19:59:56.680418 WEBCONFIG: No /usr/bin/GetConfigFile to fetch /tmp/.cfgStaticxpki
230518-19:59:56.689169 WEBCONFIG: Failure configuration file missing
230518-19:59:56.691845 [mod=WEBCONFIG, lvl=ERROR] [tid=5878] WEBCONFIG: Failed to create new token
230518-19:59:56.691963 [mod=WEBCONFIG, lvl=INFO] [tid=5878] WEBCONFIG: reboot reason is unknown
230518-19:59:56.692087 [mod=WEBCONFIG, lvl=INFO] [tid=5878] WEBCONFIG: versionsList is NONE-REBOOT
230518-19:59:56.692158 [mod=WEBCONFIG, lvl=INFO] [tid=5878] WEBCONFIG: version_header formed IF-NONE-MATCH:
NONE-REBOOT
230518-19:59:56.692225 [mod=WEBCONFIG, lvl=INFO] [tid=5878] WEBCONFIG: schema_header formed Schema-Version:
v1.0
230518-19:59:56.692289 [mod=WEBCONFIG, lvl=INFO] [tid=5878] WEBCONFIG: supportedVersion fetched is NULL
230518-19:59:56.692352 [mod=WEBCONFIG, lvl=INFO] [tid=5878] WEBCONFIG: supportedDocs_header formed X-System-
Supported-Docs:
16777247,33554435,50331649,67108865,83886081,100663297,117440513,134217729,201326594,218103809,251658241
230518-19:59:56.692427 [mod=WEBCONFIG, lvl=INFO] [tid=5878] WEBCONFIG: bootTime_header formed X-System-Boot-
Time: 1684439782
230518-19:59:56.692494 [mod=WEBCONFIG, lvl=INFO] [tid=5878] WEBCONFIG: FwVersion_header formed X-System-
Firmware-Version: rdkb-generic-broadband-image_rdk-next_20230511162210
230518-19:59:56.692560 [mod=WEBCONFIG, lvl=INFO] [tid=5878] WEBCONFIG: status_header formed X-System-Status:
Operational
230518-19:59:56.692631 [mod=WEBCONFIG, lvl=INFO] [tid=5878] WEBCONFIG: currentTime_header formed X-System-
Current-Time: 1684439996
230518-19:59:56.692697 [mod=WEBCONFIG, lvl=INFO] [tid=5878] WEBCONFIG: systemReadyTime_header formed X-
System-Ready-Time: 1684439892
230518-19:59:56.692827 [mod=WEBCONFIG, lvl=INFO] [tid=5878] WEBCONFIG: uuid_header formed Transaction-ID:
825e8635-2f91-4bcf-88d7-97c92b588e40
230518-19:59:56.692894 [mod=WEBCONFIG, lvl=INFO] [tid=5878] WEBCONFIG: productClass_header formed X-System-
Product-Class: XB3
230518-19:59:56.692963 [mod=WEBCONFIG, lvl=INFO] [tid=5878] WEBCONFIG: modelName_header formed X-System-
Model-Name: RPI
230518-19:59:56.693028 [mod=WEBCONFIG, lvl=INFO] [tid=5878] WEBCONFIG: The get_global_supplementarySync() is
0
230518-19:59:56.697086 [mod=WEBCONFIG, lvl=INFO] [tid=5878] WEBCONFIG: docList is root
230518-19:59:56.697189 [mod=WEBCONFIG, lvl=INFO] [tid=5878] WEBCONFIG: Webconfig root ConfigURL is
http://webconfig.rdkcentral.com:9007/api/v1/device/e45f0156ff0e/config?group_id=root
230518-19:59:56.697265 [mod=WEBCONFIG, lvl=INFO] [tid=5878] WEBCONFIG: g_interface fetched is erouter0
230518-19:59:56.697343 [mod=WEBCONFIG, lvl=INFO] [tid=5878] WEBCONFIG: curl Ip resolve option set as default
mode
230518-19:59:57.023404 [mod=WEBCONFIG, lvl=INFO] [tid=5878] WEBCONFIG: g_ETAG updated for primary sync is
1883965250
230518-19:59:57.023608 [mod=WEBCONFIG, lvl=INFO] [tid=5878] WEBCONFIG: webConfig curl response 0 http_code
200
230518-19:59:57.023767 [mod=WEBCONFIG, lvl=INFO] [tid=5878] WEBCONFIG: curl response Time: 0.3 seconds
230518-19:59:57.023847 [mod=WEBCONFIG, lvl=INFO] [tid=5878] WEBCONFIG: ct is multipart/mixed;
boundary=2xKIXjfJuErFw+hmNCwEoMoY8I+ECM9efrV6EI4efSSW9QjI, content_res is 0
230518-19:59:57.023912 [mod=WEBCONFIG, lvl=INFO] [tid=5878] WEBCONFIG: Content-Type is multipart/mixed. Valid
230518-19:59:57.024303 [mod=WEBCONFIG, lvl=INFO] [tid=5878] WEBCONFIG: Size of the docs is :1
230518-19:59:57.024415 [mod=WEBCONFIG, lvl=ERROR] [tid=5878] WEBCONFIG: Multipart list is empty
230518-19:59:57.024518 [mod=WEBCONFIG, lvl=INFO] [tid=5879] WEBCONFIG: dest is event:subdoc-report
/privatessid/mac:e45f0156ff0e/status
230518-19:59:57.024638 [mod=WEBCONFIG, lvl=INFO] [tid=5878] WEBCONFIG: The Maintenance Sync triggers at Fri
230519 02:01:29
230518-19:59:57.024728 [mod=WEBCONFIG, lvl=INFO] [tid=5879] WEBCONFIG: stringifiedNotifyPayload is
{"device_id":"mac:e45f0156ff0e","namespace":"privatessid","application_status":"failed","error_code":311,"
error_details":"multipart_cache_NULL","transaction_uuid":"unknown","version":"0"}
230518-19:59:57.024792 [mod=WEBCONFIG, lvl=INFO] [tid=5878] WEBCONFIG: reset maintenanceSync to false
230518-19:59:57.025021 [mod=WEBCONFIG, lvl=INFO] [tid=5879] WEBCONFIG: Notification successfully sent to
Webconfig.Upstream
[ 216.048167] sh[9497]: device wlan0 is already a member of a bridge; can't enslave it to bridge brlan0.
[ 216.074517] sh[9498]: interface wlan1 does not exist!
[ 226.262396] sh[10157]: device wlan0 is already a member of a bridge; can't enslave it to bridge brlan0.
[ 226.289465] sh[10158]: interface wlan1 does not exist!
[ 236.478289] sh[10362]: device wlan0 is already a member of a bridge; can't enslave it to bridge brlan0.
[ 236.503898] sh[10363]: interface wlan1 does not exist!
[ 239.775543] audit: type=1701 audit(1684440023.027:82): auid=4294967295 uid=0 gid=0 ses=4294967295
```

```
pid=10420 comm="irq0" exe="/home/root/irq0" sig=11 res=1
[ 239.807159] audit: type=1701 audit(1684440023.057
```

RDK-B Supplementary Sync

- Add a multi profile for CPE in RDKM Xconf server
- Make sure telemetry service is running in device
- Set the Webconfig Spplimentary URL same as X_RDK_WebConfig.URL

```
Parameter      8 name: Device.X_RDK_WebConfig.SupplementaryServiceUrls.Telemetry
                type:      string,      value: http://webconfig.rdkcentral.com:9007/api/v1/device
/e45f01fb134b/config
```

- Telemetry Profile Sync - Run below dmcli command

```
root@RaspberryPi-Gateway:~# dmcli eRT setv Device.X_RDK_WebConfig.ForceSync string telemetry
CR component name is: eRT.com.cisco.spytg.ccsp.CR
subsystem_prefix eRT.
setv from/to component(webconfig): Device.X_RDK_WebConfig.ForceSync
Execution succeed.

root@RaspberryPi-Gateway:~# 240425-11:57:36.471110 [mod=WEBCONFIG, lvl=INFO] [tid=11897] WEBCONFIG:
Received poke request, proceed to parseForceSyncJson
240425-11:57:36.471251 [mod=WEBCONFIG, lvl=INFO] [tid=11897] WEBCONFIG: Force sync json parsed:
[telemetry]
240425-11:57:36.471301 [mod=WEBCONFIG, lvl=INFO] [tid=11897] WEBCONFIG: Trigger force sync
240425-11:57:36.471459 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: ForceSyncDoc telemetry
ForceSyncTransID.
240425-11:57:36.471512 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: Received supplementary poke
request for telemetry
240425-11:57:36.471580 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: Proceed to
execute_token_script function
240425-11:57:36.471658 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: execute_token_script command
is initiated
240425-11:57:36.472778 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: execute_token_script command
is executed
240425-11:57:36.484814 WEBCONFIG: read file script is called
240425-11:57:36.488454 WEBCONFIG: CURL_RESPONSE path is /tmp/.CURLresponse
240425-11:57:36.490083 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: execute_token_script command
is success
240425-11:57:36.490180 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: execute_token_script is done
240425-11:57:36.490233 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: Failed to read token from /etc
/parodus/parodus_read_file.sh. Proceeding to create new token.
240425-11:57:36.490321 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: execute_token_script command
is initiated
240425-11:57:36.491420 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: execute_token_script command
is executed
240425-11:57:36.511044 WEBCONFIG: No /nvram/certs/devicecert_1.pk12 using static cert
240425-11:57:36.514614 WEBCONFIG: No /usr/bin/GetConfigFile to fetch /tmp/.cfgStaticxpki
240425-11:57:36.518288 WEBCONFIG: Failure configuration file missing
240425-11:57:36.519809 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: execute_token_script command
is success
240425-11:57:36.519897 [mod=WEBCONFIG, lvl=ERROR] [tid=12963] WEBCONFIG: Failed to create new token
240425-11:57:36.519950 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: schema_header formed Schema-
Version: vl.0
240425-11:57:36.519995 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: supportedVersion fetched is
NULL
240425-11:57:36.520038 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: supportedDocs_header formed X-
System-Supported-Docs:
16777247,33554435,50331649,67108865,83886081,100663297,117440513,134217729,201326594,218103809
240425-11:57:36.520081 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: supplementaryDocs_header
formed X-System-SupplementaryService-Sync: telemetry
240425-11:57:36.520125 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: bootTime_header formed X-
System-Boot-Time: 1714045766
240425-11:57:36.520179 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: FwVersion_header formed X-
System-Firmware-Version: rdkb-generic-broadband-image_rdkb-2024q1-kirkstone_202404170531
240425-11:57:36.520236 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: status_header formed X-System-
Status: Operational
```

240425-11:57:36.520296 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: currentTime_header formed X-System-Current-Time: 1714046256
240425-11:57:36.520370 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: systemReadyTime_header formed X-System-Ready-Time: 1714046050
240425-11:57:36.520501 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: uuid_header formed Transaction-ID: 09730dea-a17a-44f0-8672-60c522543080
240425-11:57:36.520560 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: productClass_header formed X-System-Product-Class: XB3
240425-11:57:36.520616 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: modelName_header formed X-System-Model-Name: RPI
240425-11:57:36.520672 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: telemetryVersion_header formed X-System-Telemetry-Profile-Version: 2.0
240425-11:57:36.520728 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: PartnerID_header formed X-System-PartnerID: RDKM
240425-11:57:36.523292 [mod=WEBCONFIG, lvl=ERROR] [tid=12963] WEBCONFIG: Failed to get AccountID
240425-11:57:36.523382 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: DeviceWanMac_header formed X-System-Wan-Mac: e45f01fb134b
240425-11:57:36.523445 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: The get_global_supplementarySync() is 1
240425-11:57:36.526942 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: Global set Supplementary URL: http://webconfig.rdkcentral.com:9007/api/v1/device/e45f01fb134b/config
240425-11:57:36.527026 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: Webconfig root ConfigURL is http://webconfig.rdkcentral.com:9007/api/v1/device/e45f01fb134b/config
240425-11:57:36.527088 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: g_interface fetched is erouter0
240425-11:57:36.527147 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: curl Ip resolve option set as default mode
240425-11:57:37.279998 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: webConfig curl response 0 http_code 200
240425-11:57:37.280156 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: curl response Time: 0.8 seconds
240425-11:57:37.280243 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: ct is multipart/mixed; boundary=2xKixjfJuErFW+hmcNcWEOmY8I+ECM9efrV6EI4efSSW9QjI, content_res is 0
240425-11:57:37.280309 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: Content-Type is multipart /mixed. Valid
240425-11:57:37.280734 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: Size of the docs is :1
240425-11:57:37.280844 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: Added 2 mp entries To tmp List
240425-11:57:37.280914 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: node is pointing to temp->name root temp->version 0 temp->status pending temp->error_details none
240425-11:57:37.280980 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: node is pointing to temp->name telemetry temp->version 1755879973 temp->status pending_apply temp->error_details none
240425-11:57:37.281053 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: doc telemetry is updated to version 1755879973 status pending error_details none error_code 0 trans_id 0 temp->retry_count 0
240425-11:57:37.281338 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: subdoc_name: telemetry, version: 1755879973, transaction_id: 18072
240425-11:57:37.281530 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: doc telemetry is updated to version 1755879973 status pending error_details none error_code 0 trans_id 18072 temp->retry_count 0
240425-11:57:37.281600 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: Request:> param[0].name = Device.X_RDKCENTRAL-COM_T2.ReportProfilesMsgPack, type = 5
240425-11:57:37.285333 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: The ret status for rbus_setMulti is 0
240425-11:57:37.285560 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: ccspRetStatus is 100
240425-11:57:37.285649 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: setValues success. ccspStatus : 100
240425-11:57:37.285765 [mod=WEBCONFIG, lvl=INFO] [tid=11897] WEBCONFIG: Received msg telemetry, 18072,1755879973,ACK,13 from topic webconfigSignal
240425-11:57:37.286570 [mod=WEBCONFIG, lvl=INFO] [tid=11897] WEBCONFIG: Received webconfig event signal Info telemetry,18072,1755879973,ACK,13
240425-11:57:37.289442 [mod=WEBCONFIG, lvl=INFO] [tid=12968] WEBCONFIG: TIMEOUT EVENT: telemetry, 18072,1755879973,ACK,13 (doc apply need time)
240425-11:57:37.289554 [mod=WEBCONFIG, lvl=INFO] [tid=12968] WEBCONFIG: doc apply need time, start timer.
240425-11:57:37.289623 [mod=WEBCONFIG, lvl=INFO] [tid=12968] WEBCONFIG: Timer list is empty
240425-11:57:37.289691 [mod=WEBCONFIG, lvl=INFO] [tid=12968] WEBCONFIG: new_node->subdoc_name telemetry new_node->txid 18072 new_node->timeout 13 status 1 added to list
240425-11:57:37.289754 [mod=WEBCONFIG, lvl=INFO] [tid=12968] WEBCONFIG: startWebcfgTimer success
240425-11:57:37.289991 [mod=WEBCONFIG, lvl=INFO] [tid=12964] WEBCONFIG: dest is event:subdoc-report /telemetry/mac:e45f01fb134b/ack
240425-11:57:37.290085 [mod=WEBCONFIG, lvl=INFO] [tid=12964] WEBCONFIG: stringifiedNotifyPayload is {"device_id":"mac:e45f01fb134b","namespace":"telemetry","application_status":"pending","timeout":13,"transaction_uuid":"09730dea-a17a-44f0-8672-60c522543080","version":"1755879973"}

```

240425-11:57:37.291339 [mod=WEBCONFIG, lvl=INFO] [tid=12964] WEBCONFIG: Notification successfully
sent to Webconfig.Upstream
240425-11:57:37.292186 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: The offset obtained from
getTimeOffset is 0
240425-11:57:37.296886 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: The Maintenance Sync triggers
at Fri 240426 01:37:22 in LTime
240425-11:57:37.297004 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: Maintenance sync start time
in UTC is Fri 240426 01:37:22
240425-11:57:37.297064 [mod=WEBCONFIG, lvl=INFO] [tid=12963] WEBCONFIG: reset maintenanceSync to false
240425-11:57:37.315740 [mod=WEBCONFIG, lvl=INFO] [tid=11897] WEBCONFIG: Received msg telemetry,
18072,1755879973,ACK,0 from topic webconfigSignal
240425-11:57:37.315855 [mod=WEBCONFIG, lvl=INFO] [tid=11897] WEBCONFIG: Received webconfig event
signal Info telemetry,18072,1755879973,ACK,0
240425-11:57:37.315964 [mod=WEBCONFIG, lvl=INFO] [tid=12968] WEBCONFIG: ACK EVENT: telemetry,
18072,1755879973,ACK,0 (doc apply success)
240425-11:57:37.316020 [mod=WEBCONFIG, lvl=INFO] [tid=12968] WEBCONFIG: doc apply success, proceed to
add to DB
240425-11:57:37.316072 [mod=WEBCONFIG, lvl=INFO] [tid=12968] WEBCONFIG: doc telemetry is updated to
version 1755879973 status success error_details none error_code 0 trans_id 18072 temp->retry_count 0
240425-11:57:37.316133 [mod=WEBCONFIG, lvl=INFO] [tid=12968] WEBCONFIG: No DB update for
supplementary sync as version is not required to be stored.
240425-11:57:37.316178 [mod=WEBCONFIG, lvl=INFO] [tid=12968] WEBCONFIG: Tmp list root doc delete is
required
240425-11:57:37.316186 [mod=WEBCONFIG, lvl=INFO] [tid=12964] WEBCONFIG: dest is event:subdoc-report
/telemetry/mac:e45f01fb134b/status
240425-11:57:37.316313 [mod=WEBCONFIG, lvl=INFO] [tid=12964] WEBCONFIG: stringifiedNotifyPayload is
{"device_id":"mac:e45f01fb134b","namespace":"telemetry","application_status":"success",
"transaction_uuid":"09730dea-a17a-44f0-8672-60c522543080","version":"1755879973"}
240425-11:57:37.316483 [mod=WEBCONFIG, lvl=INFO] [tid=12964] WEBCONFIG: Notification successfully
sent to Webconfig.Upstream
240425-11:57:57.625014 [mod=WEBCONFIG, lvl=INFO] [tid=11897] WEBCONFIG: psm_get success ret 0 for
parameter Device.X_RDK_WebConfig.RfcEnable and value true
240425-11:57:57.625140 [mod=WEBCONFIG, lvl=INFO] [tid=11897] WEBCONFIG: base64 decoded data
containing 160 bytes
240425-11:57:57.625221 [mod=WEBCONFIG, lvl=INFO] [tid=11897] WEBCONFIG: Blob bd->entries[0].name
root, version: 3526226773, status: success, error_details: none, error_code: 0
240425-11:57:57.625268 [mod=WEBCONFIG, lvl=INFO] [tid=11897] WEBCONFIG: Blob bd->entries[1].name
privatessid, version: 4155806053, status: success, error_details: none, error_code: 0

```

- Check profile download detail in telemetry log

```

240425-11:57:37.291203 [mod=T2, lvl=INFO] [tid=15671] Number of report profiles in current
configuration is 1
240425-11:57:37.291340 [mod=T2, lvl=INFO] [tid=15671] rbuscore.c:2326 RBus Enabled

240425-11:57:37.291515 [mod=T2, lvl=INFO] [tid=15671] rbuscore.c:2326 RBus Enabled

240425-11:57:37.291633 [mod=T2, lvl=INFO] [tid=15671] No data elements present to unregister240425-11:
57:37.294903 [mod=T2, lvl=INFO] [tid=15671] Starting TimeoutThread for profile : RDKM_webconfig
240425-11:57:37.296052 [mod=T2, lvl=INFO] [tid=15671] Successfully enabled profile : RDKM_webconfig
240425-11:57:37.296193 [mod=T2, lvl=INFO] [tid=15671] T2ER isn't initialized or dispatch thread is
already running
240425-11:57:37.296270 [mod=T2, lvl=INFO] [tid=15672] Waiting for 1800 sec for next TIMEOUT for
profile as reporting interval is taken - RDKM_webconfig
240425-11:57:37.296394 [mod=T2, lvl=INFO] [tid=15672] Waiting for timeref or reporting interval for
the profile - RDKM_webconfig is started
240425-11:57:37.305400 [mod=T2, lvl=INFO] [tid=15671] rbuscore.c:2326 RBus Enabled

```

Write Data To DB

Test Application

Running a flash based web application - <http://webconfig.rdkcentral.com:9008/>

User can enter device and subdoc detail to push the change to the webconfig server.

Sample subdoc and corresponding tr181

subdoc Id	TR181 Param
lan	Device.DHCPv4.Server.Lan
privatessid	Device.WiFi.Private
portforwarding	Device.NAT.X_RDK_PortMapping.Data

WebConfig UI

Name

Data

TR181

MAC



REST API

Http REST API to push config to Webconfig server

```
curl -s -i "http://webconfig.rdkcentral.com:9008/api/v1/device/<MAC Address>/document/<subdoc_id>?param_name=<TR181 DM>" -H 'Content-type: application/json' --data '<subdoc json data>' -X POST
```

Example:


```
curl -s -i "http://webconfig.rdkcentral.com:9008/api/v1/device/E45F0156FF0E/document/privatessid?
param_name=Device.WiFi.Private" -H 'Content-type: application/json' --data '{
  "private_ssid_2g": {
    "SSID": "private_2_rdkm",
    "Enable": true,
    "SSIDAdvertisementEnabled": true
  },
  "private_security_2g": {
    "EncryptionMethod": "AES",
    "ModeEnabled": "WPA2-Personal",
    "Passphrase": "pass@1234"
  },
  "private_ssid_5g": {
    "SSID": "private_5_rdkm",
    "Enable": true,
    "SSIDAdvertisementEnabled": true
  },
  "private_security_5g": {
    "EncryptionMethod": "AES",
    "ModeEnabled": "WPA2-Personal",
    "Passphrase": "pass@1234"
  }
}' -X POST
```

Test Utility

**** Note :** Need Python 3.10.6

This utility binary will

- generate the desired data for a specific subdoc and push it to server.
- generated msgpack data will be pushed to the server which can be synced to RDK device using webconfig client.



create_webconfig_blo.pyc

Steps to follow –

- Copy the exe to a folder
- Create a json file with subdoc data in the same folder where the exe is present.

Sample data:

```
{  
  
  "DhcpServerEnable": "True",  
  
  "LanIPAddress": "10.0.0.1",  
  
  "LanSubnetMask": "255.255.255.0",  
  
  "DhcpStartIPAddress": "10.0.0.7",  
  
  "DhcpEndIPAddress": "10.0.0.249",  
  
  "LeaseTime": 3600  
  
}
```

- Run the exe with corresponding subdocType, Tr181 and MAC

Usage:

create_webconfig_blob.pyc <subdoc.json> <subdoc_type> <tr181> <eCM MAC>

Example :

python3 create_webconfig_blob.pyc lan.json "lan" "Device.DHCPv4.Server.Lan" "e45f0156ff0e"

python3 create_webconfig_blob.pyc lan.json "privatessid" "Device.WiFi.Private" "e45f0156ff0e"

python3 create_webconfig_blob.pyc lan.json "homessid" "Device.WiFi.Private" "e45f0156ff0e"