**SETUP AND PROCEDURE FOR EXECUTING TCL SCRIPTS**



1. **TEST SETUP REQUIREMENTS:**

* We need one RDKB device upgraded with latest build and should be enabled with WEBPA.
* Require 2 Client machines (One Linux – CentOS 6 or higher, One windows – Windows7/8 with Netgear AC Wi-Fi adapter connected to it)
* Linux machine should be connected to Ethernet Port 1 on the RDKB device via LAN cable.
* In this Setup Linux machine will act as Ethernet Client and Windows machine will act as WLAN/Wi-Fi Client.
* Linux machine should have 2 interfaces in which will be WAN interface and the other will be LAN interface ( Connected to device via Ethernet cable)

1. **SOFTWARE AND INITIAL SETTINGS:**

* Install XAMPP on both Windows and Linux machine with the latest version.
* In Windows open XAMPP Control Panel and start Apache and Filezilla modules. If default http service (port 80) is running, stop it by giving **Taskkill /PID (*processID*) /F** *(find the process ID by giving netstat –ao).* After that we need to create a text file named **test1.txt** in C:\XAMPP\htdocs\ folder and also create an ftp username and password for Filezilla.
* In Linux while XAMPP is running we have to stop the default http and ftp services if running by giving commands **service httpd stop** and **service vsftpd stop.**
* Start Xampp service in Linux by giving command **sudo /opt/lampp/lampp start.** Like in Windows machine we have to create a text file named **test.txt** in the directory **cd /opt/lampp/htdocs/** and createan ftp user.
* Telnet service should be installed and started on Linux machine.
* **wget** software should be installed on both Linux and Windows.
* We also require one WAN machine which is already on the network to send traffic from Wi-Fi Client and check. Same Configurations should be there which we made on WLAN client like XAMPP etc.
* For Wi-Fi SSID Connectivity, we require 6 xml files to be placed in the Windows machine and sample profiles are attached below. For Ex. If a user is created on windows machine as rdkb, the files should be placed in the directory as shown C:\Users\rdkb\Repository.

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1. **CREATING WIFI PROFILE**

There are 6 sample xml files under the Repository folder. Please create these 6 files for your setup using the following steps.

Wireless.xml

1. Set SSID to RDKB-2.4, password as wifitest123 & Security mode as WPA2-Personal on the device GUI. (http://<CM\_IP>/)
2. Connect Windows WiFi client to RDKB-2.4.
3. Use the command **netsh wlan export profile name=”RDKB-2.4”**  (in windows cmd) and an XML file will be created in the current folder. Copy this as Wireless.xml in C:\Users\{user}\Repository\

Create other 5 profiles using the following values.

**Wireless-5GHz** (RDKB-5, wifitest123, WPA2-Personal)

**Wireless-5GHz-invalid**  (RDKB-5, wifitest1234, WPA2-Personal)

**Wireless-invalid** (RDKB-2.4, wifitest1234, WPA2-Personal)

**Wireless-open-2.4**      (RDKB-2.4, open)

**Wireless-open-5**      (RDKB-5, open)

1. **TEST CONFIGURATION FILE:**

The Configuration file is available in the folder where we need to update the setup details like IP address, Credentials of Windows & Linux machines, RDKB device details etc which will be explained in detail below.

Open the Config file by giving vi <ConfigurationFile Name>. We have named the configuration file according to the serial Number of device. Eg: If the Serial number of Device is F3MBUT698903373, the name of Configuration File will be Config\_F3MBUT698903373.

Below I have explained a sample configuration file on what details need to be updated. First word on each line defines the Variable name that were used throughout the TCL scripts and second word indicates the value which we need to update.

Ex. **telnetIP 10.255.42.162** telnetIP – Variable name and 10.255.42.162 – Value

**#vi Config\_F3MBUT698903373**

#*Java files path (no change should be made on the below files)*

classPath **/home/rdkb/HDM/WEBPA2.0.jar:/home/rdkb/HDM/lib/commons-logging-1.1.2.jar**

class **com.comcast.xarcbatch.rdkb.WebPAClient**

#*Device Details - Cable Modem*

cmIP **10.254.207.34**

SerialNo **14:CF:E2:14:C2:32**  *(Update the CM MAC address of RDKB device)*

DeviceType **XB3**

OUI **0000CA**

#*SSID Name Details for 2.4GHZ and 5GHZ Radio.*

SSID2 **RDKB-2.4** *(RDKB-2.4 is the unique SSID name for 2.4GHz radio that we have used)*

SSID5 **RDKB-5** *(RDKB-5 is the unique SSID name for 5GHz radio that we have used)*

#*SSID and Radio Index Details for 2.4GHZ and 5GHZ Radio.*

RadioIndex2 **10000** *(10000 is the default instance for 2.4GHz radio and 10100 for 5GHz radio)*

SSIDIndex2 **10001**

RadioIndex5 **10100**

SSIDIndex5 **10101**

*#Ethernet PC connected to the Cable Modem - Details*

telnetIP **10.255.x.x** *(Linux machine IP address)*

UserName **xxxx**  *(Linux machine Username)*

Password **xxxx**  *(Linux machine Password)*

OsName1 **linux**  *(OS)*

*#Wireless LAN PC Details*

WlanIP **10.255.x.x**  *(Windows machine IP)*

WlanName **xxxx** *(Windows machine Username)*

WlanPassword **xxxx**  *(Windows machine Password)*

WlanInterfaceName **Wireless\_Network\_Connection\_6** *(Wireless interface)*

WlanAdminName **Administrator**

WlanAdminPassword **xxxx**

ProfilePath **C:\Users\*(username)\*Repository** *(User’s Path where the xml files are kept)*

Interface **6**  *(Wireless Connection Interface number)*

*#WAN Machine Details (Require one WAN PC to send traffic from WLAN client and check)*

WanIP **10.255.x.x** *(WAN PC (windows) – IP address)*

WanName **xxxx** *(WAN PC username)*

WanPassword **xxyy**   *(WAN PC password)*

#Lan ftp details

FtpIP **10.255.x.x** *(Linux IP address)*

FtpName **xxxx**  *(FTP username Configured on Linux and Windows)*

FtpPassword **xxxx**   *(FTP Password)*

#Wan ftp details

WanFtpIP **10.255.x.x**

WanFtpName **xxxx** *(WAN FTP Username)*

WanFtpPassword **xxxx**   *(WAN FTP Password)*

**EXECUTING TCL SCRIPT:**

Ensure that TCL is installed on the Linux machine were the TCL scripts will be executed. Below is the command to execute the TCL script.

**#tclsh TC\_ERTR\_0001.tcl** **Config\_F3MBUT698903373.txt**

*TC\_ERTR\_0001.tcl - TCL file name*

*Config\_F3MBUT698903373 - Config file name*