Sending and receiving SMS by command line with Huawei E3131 and HiLink on a debian system

I long time searched the internet for a guide how to send sms by command line with Huawei E3131 and HiLink on a debian based linux system. All of them not worked. It seems, that there was an update on the software.

HiLink shows the following versions to me:

- Device-Name: E3131
- Hardware-Version: CU1E3131IM
- Software-Version: 22.521.23.00.00
- Web-Frontend-Version: 17.100.08.00.03

Following the question: How to send / receive sms by command line on a debian based linux system with E3131?

There is a follow up question for setting up the hardware on a headless system on superuser

shell   sms   debian   dongle   huawei

edited Mar 20 at 10:18	asked Jun 24 '16 at 15:11
Community ♦ 1 1	Peters **51** 8

2 Answers

3 steps are necessary:

1. Get session id
2. Get token
3. Send / receive sms

Step 1 - Get session id

For getting the session id I use the following command in an own shell script:

```
#!/bin/bash

curl -b session.txt -c session.txt http://192.168.8.1/html/index.html > /dev/null 2>&1
```

Step 2 - Get token

For getting the token I use the following commands, also in an own shell script:

```
#!/bin/bash

TOKEN=$(curl -s -b session.txt -c session.txt http://192.168.8.1/html/smsinbox.html)
TOKEN=$(echo $TOKEN | cut -d'"' -f 10)

echo $TOKEN > token.txt
```

Step 3 Part A - Send SMS

Finally a third shell script for sending the sms, which also invokes the two other scripts:

```
#!/bin/bash

NUMBER=$1
MESSAGE=$2

./session.sh
./token.sh

LENGTH=${#MESSAGE}
TIME=$(date +"%Y-%m-%d %T")
TOKEN=$(<token.txt)

SMS="<request><Index>-1</Index><Phones><Phone>$NUMBER</Phone></Phones><Sca/>
<Content>$MESSAGE</Content><Length>$LENGTH</Length><Reserved>1</Reserved>
<Date>$TIME</Date></request>"

echo $SMS

curl -v -b session.txt -c session.txt -H "X-Requested-With: XMLHttpRequest" --data "$SMS"
http://192.168.8.1/api/sms/send-sms --header "__RequestVerificationToken: $TOKEN" --header
"Content-Type:text/xml"
```

Usage is:

```
command phonenumber "text"
```

Step 3 Part B - Receive SMS

And for receiving the last unread sms (or, if not avaiable, the last read sms) I use the following script:

```
#!/bin/bash

./session.sh
./token.sh

TOKEN=$(<token.txt)

DATA="<request><PageIndex>1</PageIndex><ReadCount>1</ReadCount><BoxType>1</BoxType>
<SortType>0</SortType><Ascending>0</Ascending><UnreadPreferred>1</UnreadPreferred>
</request>"

curl -b session.txt -c session.txt -H "X-Requested-With: XMLHttpRequest" --data "$DATA"
http://192.168.8.1/api/sms/sms-list --header "__RequestVerificationToken: $TOKEN" --header
"Content-Type:text/xml"
```

This is maybe not very good coding, but it works.

answered Jul 1 '16 at 15:42

Peters
51   8

1   This may work also for e3531 – Peters   Jul 1 '16 at 15:54

Thank you very, very much! – valentt Aug 26 '16 at 12:54

Although Peter has explained it really nicely, but I like to have single script, and also I use it on OpenWrt routers instead of Debian.

So here is my version for sending SMS:

```
#!/bin/sh

RESPONSE=`curl -s -X GET http://192.168.8.1/api/webserver/SesTokInfo`
COOKIE=`echo "$RESPONSE"| grep SessionID=| cut -b 10-147`
TOKEN=`echo "$RESPONSE"| grep TokInfo| cut -b 10-41`
NUMBER=$1
SMS=$2
DATA="<?xml version='1.0' encoding='UTF-8'?><request><Index>-1</Index><Phones>
<Phone>$NUMBER</Phone></Phones><Sca></Sca><Content>$SMS</Content><Length>11</Length>
<Reserved>1</Reserved><Date>-1</Date></request>"

curl -v http://192.168.8.1/api/sms/send-sms \
  -H "Cookie: $COOKIE" -H "__RequestVerificationToken: $TOKEN" -H "Content-Type:
application/x-www-form-urlencoded; charset=UTF-8" \
  --data $DATA
```

And here is script for reading last three sms messages:

```
#!/bin/sh
```

```
RESPONSE=`curl -s -X GET http://192.168.8.1/api/webserver/SesTokInfo`
COOKIE=`echo "$RESPONSE"| grep SessionID=| cut -b 10-147`
TOKEN=`echo "$RESPONSE"| grep TokInfo| cut -b 10-41`
DATA="<request><PageIndex>1</PageIndex><ReadCount>3</ReadCount><BoxType>1</BoxType>
<SortType>0</SortType><Ascending>0</Ascending><UnreadPreferred>1</UnreadPreferred>
</request>"

curl -b $COOKIE -c $COOKIE -H "X-Requested-With: XMLHttpRequest" --data "$DATA"
http://192.168.8.1/api/sms/sms-list --header "__RequestVerificationToken: $TOKEN" --header
"Content-Type:text/xml"
```

```
RESPONSE=`curl -s -X GET http://192.168.8.1/api/webserver/SesTokInfo`
COOKIE=`echo "$RESPONSE"| grep SessionID=| cut -b 10-147`
TOKEN=`echo "$RESPONSE"| grep TokInfo| cut -b 10-41`
DATA="<request><PageIndex>1</PageIndex><ReadCount>3</ReadCount><BoxType>1</BoxType>
<SortType>0</SortType><Ascending>0</Ascending><UnreadPreferred>1</UnreadPreferred>
</request>"

curl -b $COOKIE -c $COOKIE -H "X-Requested-With: XMLHttpRequest" --data "$DATA"
http://192.168.8.1/api/sms/sms-list --header "__RequestVerificationToken: $TOKEN" --header
"Content-Type:text/xml"
```