**Usage Guide**

# Running the PCRF Test Tool

1. Untar the package
2. Edit the **message\_flow.txt** file as per the test scenario
3. Edit the **pcrf\_properties.txt** file to configure the PCRF properties
4. Run "run\_pcrf\_simulator.sh"
5. To change the Origin-State-Id at any time, edit the file ‘osi\_file.txt’ (By default Origin-State-Id = 1000001)

# Messages Supported

## CER

Listens for CER

No arguments supported

**Syntax:**

CER

## CCR

Listens for CCR

No arguments supported

**Syntax:**

CCR

## RAA

Listens for RAA

No arguments supported

**Syntax:**

RAA

## CEA

Sends CEA message

**Arguments:** Result-Code AVP value

**Syntax:**

CEA|response\_code=2001

## CCA

Sends CCA message

**Arguments:** Result-Code AVP value, Charging-Rule-Install name & array index

**Syntax:**

CCA|response\_code=2001|charging\_rule\_install=policy gold|index=1

## RARU

Sends RAR message

**Arguments**: Charging-Rule-Remove value, Charging-Rule-Install value & array index

**Syntax:**

RARU|charging\_rule\_remove=policy gold|charging\_rule\_install=policy silver|index=1

## RART

Sends RAR message

**Arguments**: Array Index

**Syntax:**

RART|index=2

## DWR

DWR messages can be enabled by setting the flag ‘DWR\_enabled’ in pcrf\_properties.txt. The interval can be set by ‘DWR\_interval’ in the same file.

## SLEEP

Sleep for specified time

**Arguments:** Time in seconds

**Syntax:**

SLEEP|time=20

## CREATE\_SOCKET

Opens the socket in listening mode **(not recommended)**

No arguments

**Syntax:**

CREATE\_SOCKET

## CLOSE\_SOCKET

Closes the socket **(not recommended)**

No arguments

**Syntax:**

CLOSE\_SOCKET

*Array Index is used to identify the subscriber, e.g- The subscriber session learnt first has index ‘1’, subscriber session learnt second has index ‘2’ and so on.*

# Important:

1. *Array Index is used to identify the subscriber, e.g- The subscriber session learnt first has index ‘1’, subscriber session learnt second has index ‘2’ and so on.*
2. *This tool is a send-expect type of a tool so the sequence of messages is vital*

# Sample Message Flow File:

####Define Message Flow below this line####

CER

CEA|response\_code=2001

CCR

CCA|response\_code=2001|charging\_rule\_install=policy gold|index=1

SLEEP|time=10

RARU|charging\_rule\_remove=policy gold|charging\_rule\_install=policy silver|index=1

RAA

SLEEP|time=10

RART|index=1

SLEEP|time=20

####End of Message Sequence####

# Sample PCRF Properties File:

Hostname=pcrf1.sayan1.net

Realm=sayan1.net

Host-IP=10.102.163.134

Product-Name=PerlPCRF

DWR\_enabled=YES

DWR\_interval=10

# Sample Logs:

[root@localhost ~]# ls -ltr PCRF\_Test\_Tool.tgz

-rw-r--r-- 1 root root 4777 2016-08-23 12:56 PCRF\_Test\_Tool.tgz

[root@localhost ~]# tar -xzvf PCRF\_Test\_Tool.tgz

PCRF\_Test\_Tool/

PCRF\_Test\_Tool/run\_pcrf\_simulator.sh

PCRF\_Test\_Tool/pcrf\_template.pl

PCRF\_Test\_Tool/pcrf\_properties.txt

PCRF\_Test\_Tool/perl\_pcrf.pl

PCRF\_Test\_Tool/osi\_file.txt

PCRF\_Test\_Tool/message\_flow.txt

PCRF\_Test\_Tool/parser.pl

[root@localhost ~]# cd PCRF\_Test\_Tool

[root@localhost PCRF\_Test\_Tool]# ./run\_pcrf\_simulator.sh

PCRF Ready and listening on port 3868!!!

###Received CER###

#################### Sending CEA#####################

#################### Sent CEA #####################

###Received CCR###

#################### Sending CCA #####################

#################### Sent CCA #####################

###Received CCR###

#################### Sending CCA #####################

#################### Sent CCA #####################

#################### Sending DWR #####################

#################### Sent DWR #####################

###Received DWA###

#################### Sending RAR-U #####################

#################### Sent RAR-U #####################

###Received RAA###

#################### Sending DWR #####################

#################### Sent DWR #####################

###Received DWA###

#################### Sending DWR #####################

#################### Sent DWR #####################

###Received DWA###

### Closing Socket !!!

A thread exited while 2 threads were running.

[root@localhost PCRF\_Test\_Tool]#