



QoE Billing System Troubleshooting Procedure

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QoE Billing System Troubleshooting Procedure

Check billing status: ssh to the QoE server with admin privileges.

```
bqnadm@bqn # show api billing status full
Type: visp
Server: xx.xx.xx.xx:22
State: ready
Timeout state: 04:01.557
Pending subscribers: xx
Last in "init" state: 00:06:04.125
Last in "connect" state: 00:05:59.124
Last in "ready" state: 00:00:58.442
Last in "get-subscriber-all" state: 00:00:58.746
Last in "get-subscriber-info" state: 468859:54:21.575
```

If **State** is **Init** and stays in **Init** for more than 5 minutes then it is an issue to investigate.

If **Timeout state** is more than 5 minutes and keeps increasing w/o resetting to 0 then it is an issue to investigate (this time is the billing polling period and should not go more than 6-7 minutes)

Investigation procedure:

ssh to the QoE server with admin privileges.

1) Configure API event logging levels:

```
bqnadm@bqn# configure
bqnadm@bqn(config)# api common
bqnadm@bqn(config-api)# event level general
bqnadm@bqn(config-api)# event level billing
bqnadm@bqn(config-api)# event level policy
bqnadm@bqn(config-api)# event level subscriber
bqnadm@bqn(config-api)# commit
bqnadm@bqn(config-api)# end
```

2) Save trace of the billing request/response messages in directory /opt/bqn/var/trace/

(This requires R4.12.x release and newer)

```
bqnadm@bqn0# configure
```

```
bqnadm@bqn0(config)# api billing
bqnadm@bqn0(config-billing)# trace request 5
bqnadm@bqn0(config-billing)# trace response 5
bqnadm@bqn0(config-billing)# commit
```

3) Enable API logging:

```
bqnadm@bqn0# configure
bqnadm@bqn0(config)# logging
bqnadm@bqn0(config-logging)# feature api full
bqnadm@bqn0(config-logging)# commit
bqnadm@bqn0(config-logging)# end
```

4) Wait for 10 minutes & collect logs (files will be saved to logged user home folder)

```
bqnadm@bqn0# show api billing status full | save billing-status-before-stopping-apimgr.txt
bqnadm@bqn0# show api event log 10000 | save billing-log- before-stopping-apimgr.txt
```

5) Stop the APIMGR process, which will be restarted automatically in 5 seconds.

```
bqnadm@bqn0# process stop apimgr 0
```

6) Wait for 10 minutes & collect logs (files will be saved to logged user home folder)

```
bqnadm@bqn0# show api billing status full | save billing-status-after-stopping-apimgr.txt
bqnadm@bqn0# show api event log 10000 | save billing-log- after-stopping-apimgr.txt
```

7) Disable API logging:

```
bqnadm@bqn0# configure
bqnadm@bqn0(config)# logging
bqnadm@bqn0(config-logging)# no feature api full
bqnadm@bqn0(config-logging)# commit
bqnadm@bqn0(config-logging)# end
```

8) Collect diagnostics through the UI (Administration → Diagnostics)

9) scp the following files from the logged user home folder:

```
billing-status-before-stopping-apimgr.txt
billing-log- before-stopping-apimgr.txt
billing-status-after-stopping-apimgr.txt
billing-log- after-stopping-apimgr.txt
```

10) scp the following files from the logged user /opt/bqn/var/trace/ folder:

(This applies for R4.12.x release and newer)

billing-rsp-0000
billing-rsp-0001
billing-rsp-0002
billing-rsp-0003
billing-rsp-0004
billing-req-0000
billing-req-0001
billing-req-0002
billing-req-0003
billing-req-0004

11) share the collected files and diagnostics file with Cambium support.