

Common Cisco CMTS Commands (10K)

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1. “[show cable modem summary total](#)“ This command will show you the number of modems/MTA’s on all the interfaces and give you an idea of how many modems are online or offline and also this lets you see if the protection card is being used (if you see any modem counts on interfaces 5/1/* protection is working). You will also see the description field and this has the node names listed out to show you what nodes are associated with the interfaces.

```
GrayCMTK01#show cable modem summary total
```

Interface	Cable Modem				Description
	Total	Registered	Unregistered	Offline	
Cable5/0/0/U0	128	124	4	4	Node MCO12 VNS
Cable5/0/0/U1	123	120	3	2	Node MCO12 VNS
Cable5/0/0/U2	104	100	4	3	Node MCO11
Cable5/0/0/U3	209	199	10	7	Node MCO18 & MC25A
Cable5/0/1/U0	99	94	5	3	Node MCO19
Cable5/0/1/U1	74	72	2	2	Node MCO07
Cable5/0/1/U2	1	1	0	0	Node MCO08 & MC163
Cable5/0/1/U3	236	230	6	3	Node MCO04 & MCO03
Cable5/0/2/U0	91	88	3	3	Node MCO20 & MC158
Cable5/0/2/U1	95	87	8	5	Node MCO13
Cable5/0/2/U2	58	56	2	2	Node MCO01 & MCO02
Cable5/0/2/U3	118	112	6	4	Node MCO21 & MCO23
Cable5/0/3/U0	82	79	3	3	Node MCO14
Cable5/0/3/U1	152	149	3	3	Node MCO26
Cable5/0/3/U2	78	74	4	2	Node MCO10 & MCO25
Cable5/0/3/U3	77	75	2	2	Node MCO16 & MCO09
Cable5/0/4/U0	111	107	4	3	Node MCO05 VNS
Cable5/0/4/U1	112	106	6	6	Node MCO05 VNS
Cable5/0/4/U2	158	150	8	4	Node MCO22 & MCO17
Cable5/0/4/U3	72	69	3	1	Node MCO15
Total:	2178	2092	86	62	

```
GrayCMTK01#
```

2. “[show cable call](#)” This command will let you see the active calls on the CMTS. This command is important because it will let you see how many calls are on the interfaces and this can help you plan capacity. This command also shows you active E-911 calls, this will let you know if the nodes is safe for maintenance or not.

```
GrayCMTK01#show cable call
```

Interface	ActiveHiPriCalls	ActiveAllCalls	PostHiPriCallCMs	RecentHiPriCMs
Cable5/0/0	0	6	0	0
Cable5/0/1	0	4	0	0
Cable5/0/2	0	4	0	0
Cable5/0/3	0	6	0	0
Cable5/0/4	0	5	0	0
Cable5/1/0	0	0	0	0
Cable5/1/1	0	0	0	0
Cable5/1/2	0	0	0	0
Cable5/1/3	0	0	0	0
Cable5/1/4	0	0	0	0
Total	0	25	0	0

```
GrayCMTK01#
```

3. “[show interfaces cable 5/0/0 modem 0 | include \[Mac address or IP address\]](#)” This command will let you get the status of a modem. When you add the last line of this command [include] you can use a part of the whole MAC or IP Address.

```
GrayCMTK01#show interfaces cable 5/0/0 modem 0 | include 68.101.
20    10    host    unknown  68.101.47.50    static  0006.25e3.8fa3
126   11    host    unknown  68.101.50.37    static  0009.5ba1.f3e3
127   10    host    unknown  68.101.49.228   static  0030.1b27.e410
135   10    host    unknown  68.101.49.238   static  0008.00c0.cd33
150   10    host    unknown  68.101.50.57    static  0013.106b.ff86
360   11    host    unknown  68.101.47.51    static  0006.b104.737e
419   10    host    unknown  68.101.50.49    static  000f.6667.83a0
421   10    host    unknown  68.101.51.179   static  0012.1723.057a
431   10    host    unknown  68.101.50.56    static  000f.66e5.7976
723   10    host    unknown  68.101.51.170   static  0006.b122.76a6
771   11    host    unknown  68.101.50.47    static  000f.6667.513c
853   10    host    unknown  68.101.49.254   static  0013.10fe.6f51
GrayCMTK01#
```

4. “[show controllers cable 5/0/0 upstream 0 | include SNR](#)” This command allows you to see the signal to noise ratio (SNR) on a cable upstream. With most upstream’s now 1-to-1 this command will help you see the SNR the CMTS is seeing back from the node in real time.

```
GrayCMTK01#show controllers cable 5/0/0 upstream 0 | include SNR
US phy SNR_estimate for good packets - 25.462 dB
GrayCMTK01#show controllers cable 5/0/0 upstream 0 | include SNR
US phy SNR_estimate for good packets - 26.960 dB
GrayCMTK01#show controllers cable 5/0/0 upstream 0 | include SNR
US phy SNR_estimate for good packets - 26.7647 dB
GrayCMTK01#
```

5. “[clear cable modem \[MAC or IP\]](#)” or “[clear cable modem \[MAC or IP\] Delete](#)” This command will allow you to clear out a cable modem that has been removed from the system or that might be hung up. FSR’s might need this command ran after swapping a cable modem.

```
GrayCMTK01#clear cable modem 0000.39c1.7863 delete
GrayCMTK01#
```

5. “[show cable modem \[IP or MAC\] flap](#)” This command will let you see if the cable modem has been taking hits, Misses, and flaps. Edgehealth has this information but for some reason it is not accurate so use this command to get the flap numbers. This command also lets you see the last time the modem had a flap. Flaps can help you to see if there are plant issues like bad drops or issues with line extenders.

```
GrayCMTK01#sho cable modem 10.0.117.64 flap
MAC Address    I/F      Ins  Hit  Miss  CRC  P-Adj  Flap  Time
000f.9faa.754c C5/0/0/U0 0    43680 213   0    0      2     Jun 1 00:11:48
GrayCMTK01#
```

- 6.” [Show cable modem \[IP or MAC\] Verbose](#)” This command gives you a lot of information on the cable modem like the numbers of CEP IP’s, Flaps, bandwidth, errors, IP address, MAC address, RX/TX Power, time online and DOCSIS version.

```
GrayCHTK01#sho cable modem 10.0.117.64 verbose
MAC Address           : 000f.9faa.754c
IP Address            : 10.0.117.64
Prim Sid              : 22
Interface              : C5/0/0/U0
sysDescr              :
Upstream Power        : 0.00 dBmV (SNR = 26.96 dB)
Downstream Power      : 0.00 dBmV (SNR = ----- dB)
Timing Offset         : 2683
Initial Timing Offset : 2683
Received Power        : 1.25 dBmV
MAC Version           : DOC1.1
QoS Provisioned Mode  : DOC1.1
Enable DOCSIS2.0 Mode : Y
Phy Operating Mode    : tdma
Capabilities           : (Frag=Y, Concat=Y, PHS=Y, Priv=BPI+)
Sid/Said Limit        : (Max US Sids=4, Max DS Sids=15)
Optional Filtering Support : (802.1P=N, 802.1Q=N)
Transmit Equalizer Support : (Taps/Symbol= 1, Num of Taps= 24)
Number of CPE IPs     : 1(Max CPE IPs = 16)
CFG Max-CPE           : 1
Flaps                  : 2(Jun 1 00:11:48)
Errors                 : 0 CRCs, 0 HCSes
Stn Mtn Failures      : 0 aborts, 2 exhausted
Total US Flows         : 2(2 active)
Total DS Flows         : 2(2 active)
Total US Data          : 5188091 packets, 1527730438 bytes
Total US Throughput    : 342601 bits/sec, 54 packets/sec
Total DS Data          : 9088184 packets, 491308274 bytes
Total DS Throughput    : 44835 bits/sec, 44 packets/sec
Active Classifiers     : 3 (Max = NO LIMIT)
DSA/DSX messages      : permit all
Total Time Online     : 11h10m
GrayCHTK01#
```