

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct to the best of my knowledge, information, and belief.

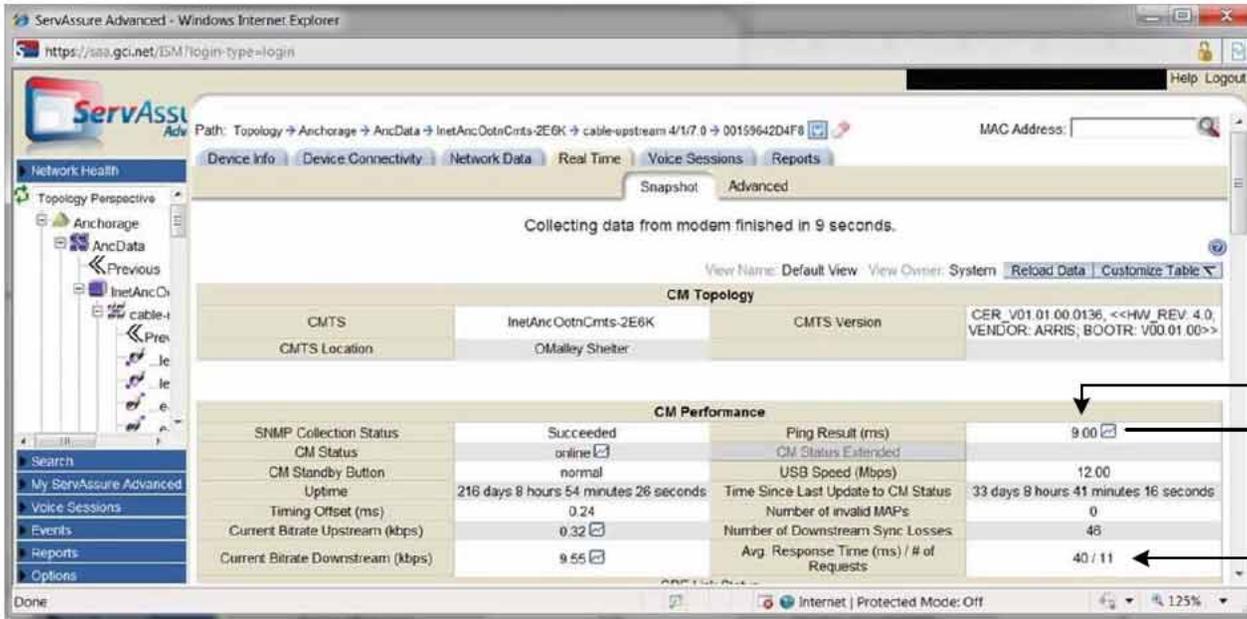

Paul M. Dowling
8/13/2014

ATTACHMENT 1

GCI Latency Test Reports

GCI CMTS to Cable Modem Latency Measurement. Introduction

GCI deploys Arris brand CMTSs in its Cable Modem Network, and uses Arris ServAssure software to provide performance management and analytics for the GCI Cable Modem network.



This screen capture of the Arris ServAssure software shows the Real Time Ping Results in ms for the current round-trip time of an ICMP ping request from the CMTS to an individual Cable Modem. In this example the ping time is 9.00 ms.



By selecting the icon to the right of the ping result value, a window will open showing the Ping Result in 10 second increments for the period of the Real Time test. In this example the maximum and minimum Ping Results is 12 ms and 8 ms respectively.

Note, the field "Ave. Response Time (ms) / # of Requests" shows the current round-trip delay of an SNMP request to the Cable Modem and the total number of requests. This is not a measure of the CMTS to Cable Modem latency.

GCI CMTS to Cable Modem Latency Measurement, Anchorage Sample, page 1

Path: Topology → Anchorage → AncData → InetAncCmts-2E8K → cable-upstream-4117-2 → 8019642DF8

Collecting data from modem finished in 9 seconds.

CM Topology			
CMTS	InetAncCmts-2E8K	CMTS Version	CER_V01.01.00.0136, <-HW_REV_4.0, VENDOR_ARRRS_BOOTR_V00.01.00-->
CMTS Location	Chitaley Shelter		

CM Performance			
SAMP Collection Status	Succeeded	Ping Result (ms)	0.00
CM Status	online	CM Status Extended	
CM Standby Button	normal	USB Speed (Mbps)	12.00
Uptime	216 days 8 hours 54 minutes 28 seconds	Time Since Last Update to CM Status	33 days 8 hours 41 minutes 16 seconds
Timing Offset (ms)	0.24	Number of Invalid MAPs	0
Current Rate Upstream (Mbps)	0.32	Number of Downstream Sync Losses	46
Current Rate Downstream (Mbps)	0.55	Avg. Response Time (ms) / # of Requests	48 / 11

Path: Topology → Anchorage → AncData → InetAncCmts-2E8K → cable-downstream-1115-4 → 001E30C7FD

Collecting data from modem finished in 11 seconds.

CM Topology			
CMTS	InetAncCmts-2E8K	CMTS Version	CER_V01.01.00.0136, <-HW_REV_4.0, VENDOR_ARRRS_BOOTR_V00.01.00-->
CMTS Location	Chitaley Shelter		

CM Performance			
SAMP Collection Status	Succeeded	Ping Result (ms)	11.00
CM Status	online	CM Status Extended	
CM Standby Button	normal	USB Speed (Mbps)	12.00
Uptime	38 days 2 hours 15 minutes 30 seconds	Time Since Last Update to CM Status	33 days 10 hours 19 minutes 52 seconds
Timing Offset (ms)	0.19	Number of Invalid MAPs	5
Current Rate Upstream (Mbps)	0.33	Number of Downstream Sync Losses	0
Current Rate Downstream (Mbps)	0.66	Avg. Response Time (ms) / # of Requests	26 / 14

Path: Topology → Anchorage → AncData → InetAncCmts-2E8K → cable-upstream-21111-5 → 001E30C819F

Collecting data from modem for 23 seconds.

CM Topology			
CMTS	InetAncCmts-2E8K	CMTS Version	CER_V01.01.00.0136, <-HW_REV_4.0, VENDOR_ARRRS_BOOTR_V00.01.00-->
CMTS Location	Chitaley Shelter		

CM Performance			
SAMP Collection Status	Succeeded	Ping Result (ms)	11.00
CM Status	online	CM Status Extended	
CM Standby Button	normal	USB Speed (Mbps)	12.00
Uptime	38 days 2 hours 44 minutes 20 seconds	Time Since Last Update to CM Status	33 days 10 hours 34 minutes 15 seconds
Timing Offset (ms)	0.19	Number of Invalid MAPs	41
Current Rate Upstream (Mbps)	0.94	Number of Downstream Sync Losses	0
Current Rate Downstream (Mbps)	0.76	Avg. Response Time (ms) / # of Requests	35 / 14

Path: Topology → Anchorage → AncData → InetAncCmts-2E8K → cable-downstream-12118-4 → 800CA37FEE

Collecting data from modem for 24 seconds.

CM Topology			
CMTS	InetAncCmts-2E8K	CMTS Version	CER_V01.01.00.0136, <-HW_REV_4.0, VENDOR_ARRRS_BOOTR_V00.01.00-->
CMTS Location	Chitaley Shelter		

CM Performance			
SAMP Collection Status	Succeeded	Ping Result (ms)	9.00
CM Status	online	CM Status Extended	
CM Standby Button	normal	USB Speed (Mbps)	12.00
Uptime	7 days 15 hours 13 minutes 25 seconds	Time Since Last Update to CM Status	7 days 15 hours 11 minutes 40 seconds
Timing Offset (ms)	0.27	Number of Invalid MAPs	0
Current Rate Upstream (Mbps)	0.32	Number of Downstream Sync Losses	0
Current Rate Downstream (Mbps)	0.52	Avg. Response Time (ms) / # of Requests	34 / 14

GCI CMTS to Cable Modem Latency Measurement, Anchorage Sample, page 2

Path: Topology > Anchorage > AncData > InetAncOutCmts-2E6K > cable-upstream 3022 > 2011E303M44

Collecting data from modem for 25 seconds.

CM Topology			
CMTS	InetAncOutCmts-2E6K	CMTS Version	CER_V01 01.00.0136, <=HW_REV_4.0 VENDOR_ARRIS_BOOTR_V00.01.00>
CMTS Location	Obilsky Shelter		

CM Performance			
SNMP Collection Status	Succeeded	Ping Result (ms)	11.00
CM Status	online	CM Status Extended	
CM Standby Button	normal	USB Speed (Mbps)	12.00
Uptime	1 day 31 seconds	Time Since Last Update to CM Status	1 day 22 seconds
Timing Offset (ms)	0.24	Number of Invalid SNMPs	0
Current Bitrate Upstream (Mbps)	0.40	Number of Downstream Sync Losses	0
Current Bitrate Downstream (Mbps)	4.85	Avg. Response Time (ms) / # of Requests	36 / 14

Path: Topology > Anchorage > AncData > InetAncOutCmts-2E6K > cable-downstream 101013 > 00111DF1M09

Collecting data from modem for 25 seconds.

CM Topology			
CMTS	InetAncOutCmts-2E6K	CMTS Version	CER_V01 01.00.0136, <=HW_REV_4.0 VENDOR_ARRIS_BOOTR_V00.01.00>
CMTS Location	Obilsky Shelter		

CM Performance			
SNMP Collection Status	Succeeded	Ping Result (ms)	10.00
CM Status	online	CM Status Extended	
CM Standby Button	normal	USB Speed (Mbps)	12.00
Uptime	133 days 8 hours 49 minutes 8 seconds	Time Since Last Update to CM Status	33 days 9 hours 56 minutes 46 seconds
Timing Offset (ms)	0.23	Number of Invalid SNMPs	0
Current Bitrate Upstream (Mbps)	88.06	Number of Downstream Sync Losses	20
Current Bitrate Downstream (Mbps)	37.17	Avg. Response Time (ms) / # of Requests	36 / 13

GCI CMTS to Cable Modem Latency Measurement, Fairbanks Sample, page 1

Path: Topology > Fairbanks > FskData > InetFskUtnCmts-1 > cable-downstream-1251 > 011E38C208

Collecting data from modem for 26 seconds.

CM Topology			
CMTS	InetFskUtnCmts-1	CMTS Version	CER_V01.01.00.01.36 --HW_REV_4.0 VENDOR_ARIS. BOOTR_V00.01.00--
CMTS Location	FBK UOTN		

CM Performance			
SNMP Collection Status	Succeeded	Ping Result (ms)	18.00
CM Status	online	CM Status Extended	
CM Standby (Button)	normal	USB Speed (Mbps)	12.00
Uptime	35 days 19 hours 3 minutes 1 second	Time Since Last Update to CM Status	35 days 19 hours 8 minutes 50 seconds
Timing Offset (ms)	0.12	Number of Invalid MAPs	0
Current Rate Upstream (Mbps)	0.32	Number of Downstream Sync Losses	0
Current Rate Downstream (Mbps)	2.36	Avg. Response Time (ms) / # of Requests	43 / 14

Path: Topology > Fairbanks > FskData > InetFskUtnCmts-1 > cable-downstream-1124 > 8044BC261E

Collecting data from modem for 25 seconds.

CM Topology			
CMTS	InetFskUtnCmts-1	CMTS Version	CER_V01.01.00.01.36 --HW_REV_4.0 VENDOR_ARIS. BOOTR_V00.01.00--
CMTS Location	FBK UOTN		

CM Performance			
SNMP Collection Status	Succeeded	Ping Result (ms)	21.00
CM Status	online	CM Status Extended	
CM Standby (Button)	normal	USB Speed (Mbps)	12.00
Uptime	42 days 19 hours 47 minutes 40 seconds	Time Since Last Update to CM Status	45 days 18 hours 16 minutes 17 seconds
Timing Offset (ms)	0.21	Number of Invalid MAPs	0
Current Rate Upstream (Mbps)	0.33	Number of Downstream Sync Losses	0
Current Rate Downstream (Mbps)	3.18	Avg. Response Time (ms) / # of Requests	44 / 14

Path: Topology > Fairbanks > FskData > InetFskUtnCmts-1 > cable-downstream-1522 > 011E391202

Collecting data from modem for 53 seconds.

CM Topology			
CMTS	InetFskUtnCmts-1	CMTS Version	CER_V01.01.00.01.36 --HW_REV_4.0 VENDOR_ARIS. BOOTR_V00.01.00--
CMTS Location	FBK UOTN		

CM Performance			
SNMP Collection Status	Succeeded	Ping Result (ms)	20.00
CM Status	online	CM Status Extended	
CM Standby (Button)	normal	USB Speed (Mbps)	12.00
Uptime	28 days 17 hours 49 minutes 26 seconds	Time Since Last Update to CM Status	28 days 17 hours 51 minutes 24 seconds
Timing Offset (ms)	0.23	Number of Invalid MAPs	0
Current Rate Upstream (Mbps)	0.16	Number of Downstream Sync Losses	0
Current Rate Downstream (Mbps)	1.44	Avg. Response Time (ms) / # of Requests	43 / 14

Path: Topology > Fairbanks > FskData > InetFskUtnCmts-1 > cable-upstream-165 > 8054BC269C

Collecting data from modem finished in 11 seconds.

CM Topology			
CMTS	InetFskUtnCmts-1	CMTS Version	CER_V01.01.00.01.36 --HW_REV_4.0 VENDOR_ARIS. BOOTR_V00.01.00--
CMTS Location	FBK UOTN		

CM Performance			
SNMP Collection Status	Succeeded	Ping Result (ms)	19.00
CM Status	online	CM Status Extended	
CM Standby (Button)	normal	USB Speed (Mbps)	12.00
Uptime	45 days 17 hours 58 minutes 33 seconds	Time Since Last Update to CM Status	45 days 18 hours 4 minutes 40 seconds
Timing Offset (ms)	0.12	Number of Invalid MAPs	0
Current Rate Upstream (Mbps)	0.32	Number of Downstream Sync Losses	0
Current Rate Downstream (Mbps)	3.38	Avg. Response Time (ms) / # of Requests	44 / 14

GCI CMTS to Cable Modem Latency Measurement, Fairbanks Sample, page 2

Path: Topology > Fairbanks > FxdData > InetFBKUserCmts-1 > cable-upstream-3/17.8 > 881987791C7D

Collecting data from modem for 25 seconds.

View Name: Default View | View Owner: System | Reload Data | Customize Table

CMTS Topology		CMTS Version
CMTS	InetFBKUserCmts-1	CER_V01.01.00.01.36 --HW_REV_4.0, VENDOR: ARRIS, BOOTR: V00.01.00--
CMTS Location	FBK UOTN	

CM Performance			
SRMP Collection Status	Succeeded	Ping Result (ms)	19.00
CM Status	online	CM Status Extended	
CM Standby Button	normal	USB Speed (Mbps)	12.00
Uptime	30 days 1 hour 29 minutes 12 seconds	Time Since Last Update to CM Status	9 days 22 hours 11 minutes 20 seconds
Timing Offset (ms)	0.21	Number of Invalid MAPs	6,488
Current Bitrate Upstream (Mbps)	0.53	Number of Downstream Sync Losses	57
Current Bitrate Downstream (Mbps)	4.10	Avg. Response Time (ms) / # of Requests	55 / 14

Path: Topology > Fairbanks > FxdData > InetFBKUserCmts-1 > cable-upstream-3/17.8 > 881987791C7D

Collecting data from modem for 25 seconds.

View Name: Default View | View Owner: System | Reload Data | Customize Table

CMTS Topology		CMTS Version
CMTS	InetFBKUserCmts-1	CER_V01.01.00.01.36 --HW_REV_4.0, VENDOR: ARRIS, BOOTR: V00.01.00--
CMTS Location	FBK UOTN	

CM Performance			
SRMP Collection Status	Succeeded	Ping Result (ms)	19.00
CM Status	online	CM Status Extended	
CM Standby Button	normal	USB Speed (Mbps)	12.00
Uptime	11 days 8 hours 31 minutes 58 seconds	Time Since Last Update to CM Status	11 days 8 hours 33 minutes 8 seconds
Timing Offset (ms)	0.19	Number of Invalid MAPs	0
Current Bitrate Upstream (Mbps)	0.27	Number of Downstream Sync Losses	0
Current Bitrate Downstream (Mbps)	2.56	Avg. Response Time (ms) / # of Requests	44 / 14

GCI CMTS to Cable Modem Latency Measurement, Juneau Sample, page 1

Path: Topology > Juneau > JunData > InstJunAd-Cmts-1 > cable-upstream-3113 > 801E3A83AC

Collecting data from modem for 41 seconds.

CM Topology

CMTS	InstJunAd-Cmts-1	CMTS Version	CMTS_V08.01.05.48_<<HW_REV_3.0_VENDOR_AARRS_BOOTR_V00.01.00>>
CMTS Location	Juneau Data Center		

CM Performance

SNMP Collection Status	Succeeded	Ping Result (ms)	44.00
CM Status	online	CM Status Extended	
CM Standby Button	normal	USB Speed (Mbps)	12.00
Uptime	3 days 8 hours 25 minutes 42 seconds	Time Since Last Update to CM Status	3 days 8 hours 25 minutes 58 seconds
Timing Offset (ms)	0.37	Number of Invalid MAPs	0
Current Srate Upstream (Mbps)	1.40	Number of Downstream Sync Losses	0
Current Srate Downstream (Mbps)	3.42	Avg. Response Time (ms) / # of Requests	69 / 14

Path: Topology > Juneau > JunData > InstJunAd-Cmts-1 > cable-upstream-5175 > 801E3C6517

Collecting data from modem for 42 seconds.

CM Topology

CMTS	InstJunAd-Cmts-1	CMTS Version	CMTS_V08.01.05.48_<<HW_REV_3.0_VENDOR_AARRS_BOOTR_V00.01.00>>
CMTS Location	Juneau Data Center		

CM Performance

SNMP Collection Status	Succeeded	Ping Result (ms)	44.00
CM Status	online	CM Status Extended	
CM Standby Button	normal	USB Speed (Mbps)	12.00
Uptime	1 day 17 hours 20 minutes 44 seconds	Time Since Last Update to CM Status	1 day 17 hours 20 minutes 32 seconds
Timing Offset (ms)	0.38	Number of Invalid MAPs	0
Current Srate Upstream (Mbps)	0.27	Number of Downstream Sync Losses	0
Current Srate Downstream (Mbps)	3.08	Avg. Response Time (ms) / # of Requests	69 / 14

Path: Topology > Juneau > JunData > InstJunAd-Cmts-1 > cable-downstream-1313 > 801B8C751F

Collecting data from modem for 53 seconds.

CM Topology

CMTS	InstJunAd-Cmts-1	CMTS Version	CMTS_V08.01.05.48_<<HW_REV_3.0_VENDOR_AARRS_BOOTR_V00.01.00>>
CMTS Location	Juneau Data Center		

CM Performance

SNMP Collection Status	Succeeded	Ping Result (ms)	44.00
CM Status	online	CM Status Extended	
CM Standby Button	normal	USB Speed (Mbps)	12.00
Uptime	23 days 11 hours 6 minutes 8 seconds	Time Since Last Update to CM Status	23 days 11 hours 8 minutes 58 seconds
Timing Offset (ms)	0.12	Number of Invalid MAPs	0
Current Srate Upstream (Mbps)	2.52	Number of Downstream Sync Losses	0
Current Srate Downstream (Mbps)	4.71	Avg. Response Time (ms) / # of Requests	69 / 14

Path: Topology > Juneau > JunData > InstJunAd-Cmts-1 > cable-downstream-1325 > 801C78881F

Collecting data from modem for 37 seconds.

CM Topology

CMTS	InstJunAd-Cmts-1	CMTS Version	CMTS_V08.01.05.48_<<HW_REV_3.0_VENDOR_AARRS_BOOTR_V00.01.00>>
CMTS Location	Juneau Data Center		

CM Performance

SNMP Collection Status	Succeeded	Ping Result (ms)	42.00
CM Status	online	CM Status Extended	
CM Standby Button	normal	USB Speed (Mbps)	12.00
Uptime	263 days 19 hours 45 minutes 2 seconds	Time Since Last Update to CM Status	66 days 10 hours 48 minutes 28 seconds
Timing Offset (ms)	0.30	Number of Invalid MAPs	0
Current Srate Upstream (Mbps)	0.27	Number of Downstream Sync Losses	20
Current Srate Downstream (Mbps)	3.33	Avg. Response Time (ms) / # of Requests	43 / 13

GCI CMTS to Cable Modem Latency Measurement, Juneau Sample, page 2

Path: Topology > Juneau > JunData > InstJunAdCmts-1 > cable-downstream 1313 > 821887A212F

Collecting data from modem for 53 seconds.

View Name: Default View View Color: System Refresh Data | Customize Table

CMTS Topology	
CMTS	InstJunAdCmts-1
CMTS Location	Juneau Data Center
CMTS Version	CMTS_V08.01.05.48_+HW_REV_3.0_VENDCR_ANR9S_BOOTR_V08.01.00+

CM Performance			
SRMP Collection Status	Succeeded	Ping Result (ms)	43.00
CM Status	online	CM Status Extended	
CM Standby Button	normal	USB Speed (Mbps)	12.00
Uptime	26 days 2 hours 50 minutes 48 seconds	Time Since Last Update to CM Status	15 days 18 hours 22 minutes 21 seconds
Timing Offset (ms)	0.13	Number of Invalid MAP's	0
Current Bitrate Upstream (Mbps)	0.52	Number of Downstream Sync Losses	0
Current Bitrate Downstream (Mbps)	5.33	Avg. Response Time (ms) / # of Requests	68 / 14

Path: Topology > Juneau > JunData > InstJunAdCmts-1 > cable-upstream 455 > 821887A212F

Collecting data from modem for 50 seconds.

View Name: Default View View Color: System Refresh Data | Customize Table

CMTS Topology	
CMTS	InstJunAdCmts-1
CMTS Location	Juneau Data Center
CMTS Version	CMTS_V08.01.05.48_+HW_REV_3.0_VENDCR_ANR9S_BOOTR_V08.01.00+

CM Performance			
SRMP Collection Status	Succeeded	Ping Result (ms)	43.00
CM Status	online	CM Status Extended	
CM Standby Button	normal	USB Speed (Mbps)	12.00
Uptime	12 days 23 hours 22 minutes 17 seconds	Time Since Last Update to CM Status	12 days 23 hours 23 minutes 29 seconds
Timing Offset (ms)	0.13	Number of Invalid MAP's	1
Current Bitrate Upstream (Mbps)	0.57	Number of Downstream Sync Losses	0
Current Bitrate Downstream (Mbps)	26.23	Avg. Response Time (ms) / # of Requests	68 / 14

GCI CMTS to Cable Modem Latency Measurement, Sitka Sample, page 1

Path: Topology > Sitka > SData > Inet5Cms-1 > cable-downstream 132 > 802042915A

Collecting data from modem for 73 seconds.

CM Topology			
CMTS	Inet5Cms-1	CMTS Version	CMTS_V08.01.06.48 --HW_REV_3.0 VENDOR_ARRIS_BOOTR_V08.01.00--
CMTS Location	Sitka SLR Shelter		

CM Performance			
SNMP Collection Status	Succeeded	Ping Result (ms)	63.00
CM Status	online	CM Status Extended	
CM Standby Button	normal	USB Speed (Mbps)	12.00
Uptime	11 days 21 hours 8 minutes 23 seconds	Time Since Last Update to CM Status	11 days 21 hours 19 minutes 32 seconds
Timing Offset (ms)	0.12	Number of Invalid MAPs	0
Current State Upstream (Mbps)	0.27	Number of Downstream Sync Losses	0
Current State Downstream (Mbps)	2.05	Avg. Response Time (ms) / # of Requests	87 / 14

Path: Topology > Sitka > SData > Inet5Cms-1 > cable-downstream 1316 > 802042915A

Collecting data from modem for 65 seconds.

CM Topology			
CMTS	Inet5Cms-1	CMTS Version	CMTS_V08.01.06.48 --HW_REV_3.0 VENDOR_ARRIS_BOOTR_V08.01.00--
CMTS Location	Sitka SLR Shelter		

CM Performance			
SNMP Collection Status	Succeeded	Ping Result (ms)	64.00
CM Status	online	CM Status Extended	
CM Standby Button	normal	USB Speed (Mbps)	12.00
Uptime	11 days 15 hours 32 minutes 46 seconds	Time Since Last Update to CM Status	2 days 2 hours 13 minutes 13 seconds
Timing Offset (ms)	0.17	Number of Invalid MAPs	3
Current State Upstream (Mbps)	0.27	Number of Downstream Sync Losses	3
Current State Downstream (Mbps)	3.08	Avg. Response Time (ms) / # of Requests	80 / 14

Path: Topology > Sitka > SData > Inet5Cms-1 > cable-upstream 48.9 > 802042915A

Collecting data from modem for 56 seconds.

CM Topology			
CMTS	Inet5Cms-1	CMTS Version	CMTS_V08.01.06.48 --HW_REV_3.0 VENDOR_ARRIS_BOOTR_V08.01.00--
CMTS Location	Sitka SLR Shelter		

CM Performance			
SNMP Collection Status	Succeeded	Ping Result (ms)	64.00
CM Status	online	CM Status Extended	
CM Standby Button	normal	USB Speed (Mbps)	12.00
Uptime	11 days 15 hours 10 minutes 20 seconds	Time Since Last Update to CM Status	1 day 11 hours 39 minutes 10 seconds
Timing Offset (ms)	0.13	Number of Invalid MAPs	0
Current State Upstream (Mbps)	1.95	Number of Downstream Sync Losses	0
Current State Downstream (Mbps)	4.81	Avg. Response Time (ms) / # of Requests	88 / 14

Path: Topology > Sitka > SData > Inet5Cms-1 > cable-downstream 1216 > 802042915A

Collecting data from modem for 54 seconds.

CM Topology			
CMTS	Inet5Cms-1	CMTS Version	CMTS_V08.01.06.48 --HW_REV_3.0 VENDOR_ARRIS_BOOTR_V08.01.00--
CMTS Location	Sitka SLR Shelter		

CM Performance			
SNMP Collection Status	Succeeded	Ping Result (ms)	62.00
CM Status	online	CM Status Extended	
CM Standby Button	normal	USB Speed (Mbps)	12.00
Uptime	11 days 21 hours 18 minutes 48 seconds	Time Since Last Update to CM Status	11 days 21 hours 10 minutes 41 seconds
Timing Offset (ms)	0.13	Number of Invalid MAPs	0
Current State Upstream (Mbps)	0.32	Number of Downstream Sync Losses	0
Current State Downstream (Mbps)	2.46	Avg. Response Time (ms) / # of Requests	88 / 14

GCI CMTS to Cable Modem Latency Measurement, Sitka Sample, page 2

Path: Topology > Sitka > SitData > Inet5Cmts-1 > cmts-upstream 38.9 > 8022RNE23A

Collecting data from modem for 55 seconds.

CM Topology			
CMTS	Inet5Cmts-1	CMTS Version	CMTS_V08.01.05.48 --HW_REV_3.0
CMTS Location	Sitka SLR Sheffer		VENDOR_AARRIS_BOOTR_V08.01.00--

CM Performance			
SRMP Collection Status	Succeeded	Ping Result (ms)	61.00
CM Status	online	CM Status Extended	
CM Standby Button	normal	USB Speed (Mbps)	12.80
Uptime	47 days 18 hours 8 minutes 38 seconds	Time Since Last Update to CM Status	47 days 18 hours 13 minutes 51 seconds
Timing Offset (ms)	0.39	Number of invalid MAPs	0
Current State Upstream (Mbps)	0.33	Number of Downstream Sync Losses	0
Current State Downstream (Mbps)	2.26	Avg. Response Time (ms) / # of Requests	88 / 14

Path: Topology > Sitka > SitData > Inet5Cmts-1 > cmts-downstream 10.15 > 8022ABC27AF8

Collecting data from modem for 50 seconds.

CM Topology			
CMTS	Inet5Cmts-1	CMTS Version	CMTS_V08.01.05.48 --HW_REV_3.0
CMTS Location	Sitka SLR Sheffer		VENDOR_AARRIS_BOOTR_V08.01.00--

CM Performance			
SRMP Collection Status	Succeeded	Ping Result (ms)	61.00
CM Status	online	CM Status Extended	
CM Standby Button	normal	USB Speed (Mbps)	12.80
Uptime	21 hours 21 minutes 18 seconds	Time Since Last Update to CM Status	21 hours 21 minutes 4 seconds
Timing Offset (ms)	0.15	Number of invalid MAPs	0
Current State Upstream (Mbps)	0.36	Number of Downstream Sync Losses	0
Current State Downstream (Mbps)	2.91	Avg. Response Time (ms) / # of Requests	88 / 14

GCI CMTS to Cable Modem Latency Measurement, Kodiak Sample, page 1

Path: Topology > Kodiak > KodiakData > InetKodiak@cmbs-1 > cable-downstream 1425 > 8102DF34251

Collecting data from modem for 58 seconds.

CM Topology

CMTS	InetKodiak@cmbs-1	CMTS Version	CMTS_V08.01.05.48_44HW_REV.3.0_VENDOR_ANDROID_BOOTR_V00.01.00
CMTS Location			

CM Performance

SNMP Collection Status	Succeeded	Ping Result (ms)	15.00
CM Status	online	CM Status Extended	
CM Standby Status	Uptime	USB Speed (Mbps)	12.00
Uptime	36 days 8 hours 1 minute 53 seconds	Time Since Last Update to CM Status	8 days 21 minutes 11 seconds
Timing Offset (ms)	0.14	Number of Invalid MAPs	0
Current Bitrate Upstream (Mbps)	0.33	Number of Downstream Sync Losses	0
Current Bitrate Downstream (Mbps)	0.84	Avg. Response Time (ms) / # of Requests	18 / 14

Path: Topology > Kodiak > KodiakData > InetKodiak@cmbs-1 > cable-upstream 1416 > 8102DF34251

Collecting data from modem for 55 seconds.

CM Topology

CMTS	InetKodiak@cmbs-1	CMTS Version	CMTS_V08.01.05.48_44HW_REV.3.0_VENDOR_ANDROID_BOOTR_V00.01.00
CMTS Location			

CM Performance

SNMP Collection Status	Succeeded	Ping Result (ms)	10.00
CM Status	online	CM Status Extended	
CM Standby Status	Uptime	USB Speed (Mbps)	12.00
Uptime	28 days 13 hours 20 minutes 55 seconds	Time Since Last Update to CM Status	4 days 15 hours 33 minutes 43 seconds
Timing Offset (ms)	0.15	Number of Invalid MAPs	0
Current Bitrate Upstream (Mbps)	2.57	Number of Downstream Sync Losses	1
Current Bitrate Downstream (Mbps)	0.91	Avg. Response Time (ms) / # of Requests	35 / 13

Path: Topology > Kodiak > KodiakData > InetKodiak@cmbs-1 > cable-downstream 1324 > 8022423F175

Collecting data from modem for 53 seconds.

CM Topology

CMTS	InetKodiak@cmbs-1	CMTS Version	CMTS_V08.01.05.48_44HW_REV.3.0_VENDOR_ANDROID_BOOTR_V00.01.00
CMTS Location			

CM Performance

SNMP Collection Status	Succeeded	Ping Result (ms)	24.00
CM Status	online	CM Status Extended	
CM Standby Status	Uptime	USB Speed (Mbps)	12.00
Uptime	73 days 7 hours 29 minutes 6 seconds	Time Since Last Update to CM Status	8 days 24 minutes 58 seconds
Timing Offset (ms)	0.17	Number of Invalid MAPs	0
Current Bitrate Upstream (Mbps)	18.72	Number of Downstream Sync Losses	0
Current Bitrate Downstream (Mbps)	14.75	Avg. Response Time (ms) / # of Requests	47 / 14

Path: Topology > Kodiak > KodiakData > InetKodiak@cmbs-1 > cable-downstream 1424 > 8102D322041

Collecting data from modem for 45 seconds.

CM Topology

CMTS	InetKodiak@cmbs-1	CMTS Version	CMTS_V08.01.05.48_44HW_REV.3.0_VENDOR_ANDROID_BOOTR_V00.01.00
CMTS Location			

CM Performance

SNMP Collection Status	Succeeded	Ping Result (ms)	14.00
CM Status	online	CM Status Extended	
CM Standby Status	Uptime	USB Speed (Mbps)	12.00
Uptime	36 days 8 hours 3 minutes 41 seconds	Time Since Last Update to CM Status	8 days 32 minutes 25 seconds
Timing Offset (ms)	0.12	Number of Invalid MAPs	0
Current Bitrate Upstream (Mbps)	0.32	Number of Downstream Sync Losses	0
Current Bitrate Downstream (Mbps)	6.87	Avg. Response Time (ms) / # of Requests	18 / 13

GCI CMTS to Cable Modem Latency Measurement, Kodiak Sample, page 2

Path: Topology > Kodiak > Kodiak > InetKod-Ecres-1 > cable-upstream-415-0 > 801030A5A1

Collecting data from modem for 53 seconds.

CM Topology

CMTS	InetKod-Ecres-1	CMTS Version	CMTS_V08.01.06.48 --HW REV 3.0 VENDOR:ARRIS_BOOTR_V08.01.00--
CMTS Location			

CM Performance

SRMP Collection Status	Succeeded	Ping Result (ms)	19.00
CM Status	online	CM Status Calendar	
CM Standby Bulletin		USB Speed (Mbps)	12.00
Uptime	32 days 22 hours 45 minutes 17 seconds	Time Since Last Update to CM Status	9 days 34 minutes 20 seconds
Tuning Offset (ms)	0.19	Number of Invalid MAPs	0
Current Bitrate Upstream (Mbps)	0.33	Number of Downstream Sync Losses	1
Current Bitrate Downstream (Mbps)	8.30	Avg. Response Time (ms) / # of Requests	20 / 13

Path: Topology > Kodiak > Kodiak > InetKod-Ecres-1 > cable-upstream-415-0 > 8015A1170000

Collecting data from modem for 53 seconds.

CM Topology

CMTS	InetKod-Ecres-1	CMTS Version	CMTS_V08.01.06.48 --HW REV 3.0 VENDOR:ARRIS_BOOTR_V08.01.00--
CMTS Location			

CM Performance

SRMP Collection Status	Succeeded	Ping Result (ms)	13.00
CM Status	online	CM Status Calendar	
CM Standby Bulletin	normal	USB Speed (Mbps)	12.00
Uptime	15 days 22 hours 41 minutes 14 seconds	Time Since Last Update to CM Status	9 days 35 minutes 33 seconds
Tuning Offset (ms)	0.19	Number of Invalid MAPs	0
Current Bitrate Upstream (Mbps)	0.33	Number of Downstream Sync Losses	0
Current Bitrate Downstream (Mbps)	7.79	Avg. Response Time (ms) / # of Requests	41 / 13

GCI CMTS to Cable Modem Latency Measurement, Homer Sample, page 1

Path: Topology > Homer > HwData > InfrwCmts-1 > cable-upstream 10.9 > 82199C02049

MAC Address: [REDACTED]

Collecting data from modem for 50 seconds.

CM Topology

CMTS	InfrwCmts-1	CMTS Version	CMTS_V08.01.06.48 --HW_REV_3.0 VENDOR_ARRIS_BOOTR_V08.01.00--
CMTS Location	HOMER		

CM Performance

SRMP Collection Status	Succeeded	Ping Result (ms)	18.00
CM Status	online	CM Status Colorcode	
CM Standby Button	normal	USB Speed (Mbps)	12.00
Uptime	27 days 2 hours 8 minutes 18 seconds	Time Since Last Update to CM Status	22 days 18 hours 59 minutes 9 seconds
Timing Offset (ms)	0.15	Number of Invalid MAPs	4
Current Bitrate Upstream (Mbps)	0.27	Number of Downstream Sync Losses	0
Current Bitrate Downstream (Mbps)	0.94	Avg. Response Time (ms) / # of Requests	42 / 14

Path: Topology > Homer > HwData > InfrwCmts-1 > cable-downstream 14.1 > 82CABC1E0CA

MAC Address: [REDACTED]

Collecting data from modem for 50 seconds.

CM Topology

CMTS	InfrwCmts-1	CMTS Version	CMTS_V08.01.06.48 --HW_REV_3.0 VENDOR_ARRIS_BOOTR_V08.01.00--
CMTS Location	HOMER		

CM Performance

SRMP Collection Status	Succeeded	Ping Result (ms)	18.00
CM Status	online	CM Status Colorcode	
CM Standby Button	normal	USB Speed (Mbps)	12.00
Uptime	57 days 18 hours 8 minutes 5 seconds	Time Since Last Update to CM Status	57 days 18 hours 15 minutes 2 seconds
Timing Offset (ms)	0.15	Number of Invalid MAPs	0
Current Bitrate Upstream (Mbps)	14.09	Number of Downstream Sync Losses	0
Current Bitrate Downstream (Mbps)	11.58	Avg. Response Time (ms) / # of Requests	45 / 14

Path: Topology > Homer > HwData > InfrwCmts-1 > cable-upstream 25.9 > 82CABC1E0CA

MAC Address: [REDACTED]

Collecting data from modem for 53 seconds.

CM Topology

CMTS	InfrwCmts-1	CMTS Version	CMTS_V08.01.06.48 --HW_REV_3.0 VENDOR_ARRIS_BOOTR_V08.01.00--
CMTS Location	HOMER		

CM Performance

SRMP Collection Status	Succeeded	Ping Result (ms)	21.00
CM Status	online	CM Status Colorcode	
CM Standby Button	normal	USB Speed (Mbps)	12.00
Uptime	57 days 18 hours 8 minutes 48 seconds	Time Since Last Update to CM Status	26 days 14 hours 26 minutes 20 seconds
Timing Offset (ms)	0.20	Number of Invalid MAPs	19
Current Bitrate Upstream (Mbps)	1,913.89	Number of Downstream Sync Losses	0
Current Bitrate Downstream (Mbps)	27.96	Avg. Response Time (ms) / # of Requests	48 / 14

Path: Topology > Homer > HwData > InfrwCmts-1 > cable-downstream 14.9 > 82D58E91998

MAC Address: [REDACTED]

Collecting data from modem for 55 seconds.

CM Topology

CMTS	InfrwCmts-1	CMTS Version	CMTS_V08.01.06.48 --HW_REV_3.0 VENDOR_ARRIS_BOOTR_V08.01.00--
CMTS Location	HOMER		

CM Performance

SRMP Collection Status	Succeeded	Ping Result (ms)	18.00
CM Status	online	CM Status Colorcode	
CM Standby Button	normal	USB Speed (Mbps)	12.00
Uptime	57 days 18 hours 6 minutes 42 seconds	Time Since Last Update to CM Status	57 days 16 hours 14 minutes 29 seconds
Timing Offset (ms)	0.14	Number of Invalid MAPs	395
Current Bitrate Upstream (Mbps)	0.52	Number of Downstream Sync Losses	0
Current Bitrate Downstream (Mbps)	1.10	Avg. Response Time (ms) / # of Requests	43 / 14

GCI CMTS to Cable Modem Latency Measurement, Homer Sample, page 2

Path: Topology > Homer > HmData > InHmData > Cable-Downstream-135 > 8022486AAA

Collecting data from modem for 53 seconds.

View Home Default View View Owner System Refresh Data Table

CM Topology	
CMTS	InHmData-1
CMTS Version	CMTS_V08.01.05.48_4-MV_REV_3.0_VENDOR_ARRR_BOOTR_V00.01.00
CMTS Location	HOMER

CM Performance			
SNMP Collection Status	Succeeded	Ping Result (ms)	15.00
CM Status	online	CM Status Estimated	
CM Standby Button	normal	USB Speed (Mbps)	12.80
Uptime	27 days 16 hours 7 minutes 58 seconds	Time Since Last Update to CM Status	45 days 23 hours 25 minutes 42 seconds
Timing Offset (ms)	0.20	Number of Invalid MAPs	2
Current State (Upstream (Mbps))	0.27	Number of Downstream Sync Losses	0
Current State (Downstream (Mbps))	1.25	Avg. Response Time (ms) / # of Requests	39 / 14

Path: Topology > Homer > HmData > InHmData > Cable-Downstream-135 > 8022486AAA

Collecting data from modem for 50 seconds.

View Home Default View View Owner System Refresh Data Table

CM Topology	
CMTS	InHmData-1
CMTS Version	CMTS_V08.01.05.48_4-MV_REV_3.0_VENDOR_ARRR_BOOTR_V00.01.00
CMTS Location	HOMER

CM Performance			
SNMP Collection Status	Succeeded	Ping Result (ms)	18.00
CM Status	online	CM Status Estimated	
CM Standby Button	normal	USB Speed (Mbps)	12.80
Uptime	12 days 22 hours 35 minutes 47 seconds	Time Since Last Update to CM Status	13 days 1 hour 25 minutes 46 seconds
Timing Offset (ms)	0.20	Number of Invalid MAPs	4
Current State (Upstream (Mbps))	0.43	Number of Downstream Sync Losses	0
Current State (Downstream (Mbps))	2.14	Avg. Response Time (ms) / # of Requests	42 / 14

GCI CMTS to Cable Modem Latency Measurement, Kenai Sample, page 1



Note: Kenai is served off of a CMTS in Soldotna (hence the reference to Soldotna in the ServAssure reports on this and the following page). The Kenai Cable Modems are on a separate port on the CMTS from those in Soldotna, and these tests represent Cable Modems in Kenai.

GCI CMTS to Cable Modem Latency Measurement, Kenai Sample, page 2

Path: Topology > Subline > SubData > InetSubCmts-1 > cable-upstream 3142 > 011CE09C3B

Collecting data from modem for 35 seconds.

CM Topology

CMTS	InetSubCmts-1	CMTS Version	CER_V01.01.00.0136_4+HW_REV_4.0
CMTS Location	Subline SLR Shelter		VENDOR: ARRIS, BOOTR: V00.01.00+

CM Performance

DMMP Collection Status	Succeeded	Ping Result (ms)	16.00
CM Status	online	CM Status Extension	
CM Standby Status	normal	USB Speed (Mbps)	12.00
Timing Offset (ms)	0.19	Time Since Last Update to CM Status	8 days 8 hours 29 minutes 29 seconds
Current Bitrate Upstream (Mbps)	0.32	Number of Invalid MAPs	0
Current Bitrate Downstream (Mbps)	2.16	Number of Downstream Sync Losses	0
		Avg. Response Time (ms) / # of Requests	18 / 13

Path: Topology > Subline > SubData > InetSubCmts-1 > cable-downstream 1102 > 002D11F312

Collecting data from modem for 48 seconds.

CM Topology

CMTS	InetSubCmts-1	CMTS Version	CER_V01.01.00.0136_4+HW_REV_4.0
CMTS Location	Subline SLR Shelter		VENDOR: ARRIS, BOOTR: V00.01.00+

CM Performance

DMMP Collection Status	Succeeded	Ping Result (ms)	13.00
CM Status	online	CM Status Extension	
CM Standby Status	normal	USB Speed (Mbps)	12.00
Timing Offset (ms)	0.23	Time Since Last Update to CM Status	4 days 20 hours 8 minutes 18 seconds
Current Bitrate Upstream (Mbps)	0.33	Number of Invalid MAPs	1
Current Bitrate Downstream (Mbps)	1.85	Number of Downstream Sync Losses	0
		Avg. Response Time (ms) / # of Requests	37 / 14

GCI CMTS to Cable Modem Latency Measurement, Soldotna Sample, page 1

Path: Topology > Soldotna > SdData > InetSdCmts-1 > Cable-upstream 14/E3 > 0002200802

Collecting data from modem for 362 seconds.

CM Topology			
CMTS	InetSdCmts-1	CMTS Version	CER_V01 01.00 01.36 --HW_REV_4.0 VENDOR_AARRS_BOOTR_V00 01 00--
CMTS Location			
Soldotna SLR Shelter			
CM Performance			
SNMP Collection Status	Succeeded	Ping Result (ms)	16.00
CM Status	online	CM Status Extended	12.00
CM Standby Button	Uptime	USB Speed (Mbps)	0
Uptime	49 days 6 hours 28 minutes 34 seconds	Time Since Last Update to CM Status	15 days 8 hours 42 minutes 22 seconds
Timing Offset (ms)	0.23	Number of invalid MAPs	0
Current State Upstream (Mbps)	0.33	Number of Downstream Sync Losses	1
Current State Downstream (Mbps)	2.77	Avg. Response Time (ms) / # of Requests	20 / 14

Path: Topology > Soldotna > SdData > InetSdCmts-1 > Cable-upstream 14/E3 > 010800000AP

Collecting data from modem for 53 seconds.

CM Topology			
CMTS	InetSdCmts-1	CMTS Version	CER_V01 01.00 01.36 --HW_REV_4.0 VENDOR_AARRS_BOOTR_V00 01 00--
CMTS Location			
Soldotna SLR Shelter			
CM Performance			
SNMP Collection Status	Succeeded	Ping Result (ms)	20.00
CM Status	online	CM Status Extended	12.00
CM Standby Button	Uptime	USB Speed (Mbps)	0
Uptime	50 days 21 hours 44 minutes 18 seconds	Time Since Last Update to CM Status	3 days 14 hours 2 minutes 58 seconds
Timing Offset (ms)	0.17	Number of invalid MAPs	0
Current State Upstream (Mbps)	0.32	Number of Downstream Sync Losses	2
Current State Downstream (Mbps)	4.03	Avg. Response Time (ms) / # of Requests	45 / 15

Path: Topology > Soldotna > SdData > InetSdCmts-1 > Cable-upstream 12/34 > 000500010004

Collecting data from modem for 28 seconds.

CM Topology			
CMTS	InetSdCmts-1	CMTS Version	CER_V01 01.00 01.36 --HW_REV_4.0 VENDOR_AARRS_BOOTR_V00 01 00--
CMTS Location			
Soldotna SLR Shelter			
CM Performance			
SNMP Collection Status	Collecting	Ping Result (ms)	14.00
CM Status	online	CM Status Extended	12.00
CM Standby Button	Uptime	USB Speed (Mbps)	0
Uptime	37 days 20 hours 35 minutes 1 second	Time Since Last Update to CM Status	15 days 8 hours 40 minutes 37 seconds
Timing Offset (ms)	0.55	Number of invalid MAPs	0
Current State Upstream (Mbps)	0	Number of Downstream Sync Losses	0
Current State Downstream (Mbps)	0	Avg. Response Time (ms) / # of Requests	51 / 7

Path: Topology > Soldotna > SdData > InetSdCmts-1 > Cable-upstream 14/E3 > 00080201294

Collecting data from modem for 55 seconds.

CM Topology			
CMTS	InetSdCmts-1	CMTS Version	CER_V01 01.00 01.36 --HW_REV_4.0 VENDOR_AARRS_BOOTR_V00 01 00--
CMTS Location			
Soldotna SLR Shelter			
CM Performance			
SNMP Collection Status	Succeeded	Ping Result (ms)	17.00
CM Status	online	CM Status Extended	12.00
CM Standby Button	Uptime	USB Speed (Mbps)	0
Uptime	51 days 7 seconds	Time Since Last Update to CM Status	15 days 8 hours 10 minutes 38 seconds
Timing Offset (ms)	0.27	Number of invalid MAPs	0
Current State Upstream (Mbps)	0.27	Number of Downstream Sync Losses	29
Current State Downstream (Mbps)	2.65	Avg. Response Time (ms) / # of Requests	18 / 13

GCI CMTS to Cable Modem Latency Measurement, Soldotna Sample, page 2

Collecting data from modem for 53 seconds.

CM Topology			
CMTS	latSatCmts-1	CMTS Version	CER_V01 01.00 01.36 --HW_REV_4.0
CMTS Location	Soldotna SLN Shelter		VENDOR: ARRIS, BOOTR: V00 01 00--

CM Performance			
SNMP Collection Status	Succeeded	Ping Result (ms)	21.00
CM Status	online	CM Status Extended	
CM Standby Button	normal	USB Speed (Mbps)	12.00
Uptime	14 days 10 hours 11 minutes 47 seconds	Time Since Last Update to CM Status	14 days 10 hours 11 minutes 11 seconds
Timing Offset (ms)	0.31	Number of Invalid MAP's	0
Current SRate (Upstream (Mbps))	0.32	Number of Downstream Sync Losses	0
Current SRate Downstream (Mbps)	2.87	Avg. Response Time (ms) / # of Requests	41 / 13

Collecting data from modem for 60 seconds.

CM Topology			
CMTS	latSatCmts-1	CMTS Version	CER_V01 01.00 01.36 --HW_REV_4.0
CMTS Location	Soldotna SLN Shelter		VENDOR: ARRIS, BOOTR: V00 01 00--

CM Performance			
SNMP Collection Status	Succeeded	Ping Result (ms)	18.00
CM Status	online	CM Status Extended	
CM Standby Button	normal	USB Speed (Mbps)	12.00
Uptime	14 days 11 hours 11 minute 9 seconds	Time Since Last Update to CM Status	14 days 10 hours 17 minutes 55 seconds
Timing Offset (ms)	0.30	Number of Invalid MAP's	0
Current SRate (Upstream (Mbps))	0.32	Number of Downstream Sync Losses	22
Current SRate Downstream (Mbps)	3.03	Avg. Response Time (ms) / # of Requests	12 / 13