

PGW 2200 Softswitch ITP-SCTP 오류 해결

목차

[소개](#)

[사전 요구 사항](#)

[요구 사항](#)

[사용되는 구성 요소](#)


[표기 규칙](#)

[설계 고려 사항](#)

[ITP-SCTP 문제 해결](#)

[관련 정보](#)

소개

이 문서에서는 통화 제어 및 시그널링 모드 및 Cisco ITP(IP Transfer Point)의  Cisco PSTN(Public Switched Telephone Network) Gateway(PGW) 2200 Softswitch에 대한 SCTP(Stream Control Transmission Protocol) 트러블슈팅에 대해 설명합니다. SCTP는 IP 네트워크를 통해 PSTN 신호 메시지를 전송하도록 설계되었습니다. 프로토콜은 RFC [2960](#)에 정의되며, RFC [3286](#)에서 소개 텍스트 RFC를 제공합니다.

사전 요구 사항

요구 사항

이 문서의 독자는 다음 주제에 대해 알고 있어야 합니다.

- [Cisco Media Gateway Controller Software 릴리스 9](#)
- [초보자용 SCTP](#)
- [RFC 2960](#)
- SCTP

사용되는 구성 요소

이 문서의 정보는 Cisco PGW 2200 릴리스 9.4(1) 이상을 기반으로 합니다.

이 문서의 정보는 특정 랩 환경의 디바이스를 토대로 작성되었습니다. 이 문서에 사용된 모든 디바이스는 초기화된(기본) 컨피그레이션으로 시작되었습니다. 현재 네트워크가 작동 중인 경우, 모든 명령어의 잠재적인 영향을 미리 숙지하시기 바랍니다.

표기 규칙

문서 규칙에 대한 자세한 내용은 [Cisco 기술 팁 표기 규칙](#)을 참조하십시오.

설계 고려 사항

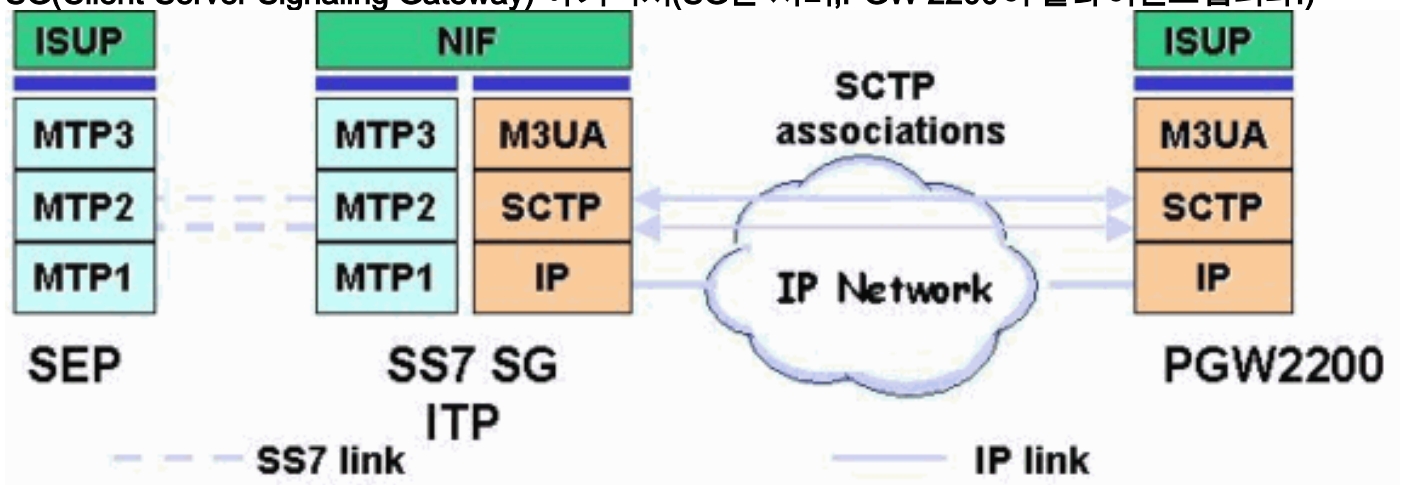
일반적으로 SS7(Signaling System 7) 네트워크는 특정 서비스 등급(GOS)을 위해 설계되었습니다. 이 시나리오는 SS7 네트워크를 설계할 때 엔드 투 엔드 GOS를 보장하기 위한 몇 가지 고려 사항을 다루는 ITU 사양 E.723을 참조하십시오.

ITU Specification E.723 문서는 0.9초의 IAM(End-to-End Initial Address Message) 전송 시간(단방향)을 처리하며 기타 세부 정보를 포함합니다.

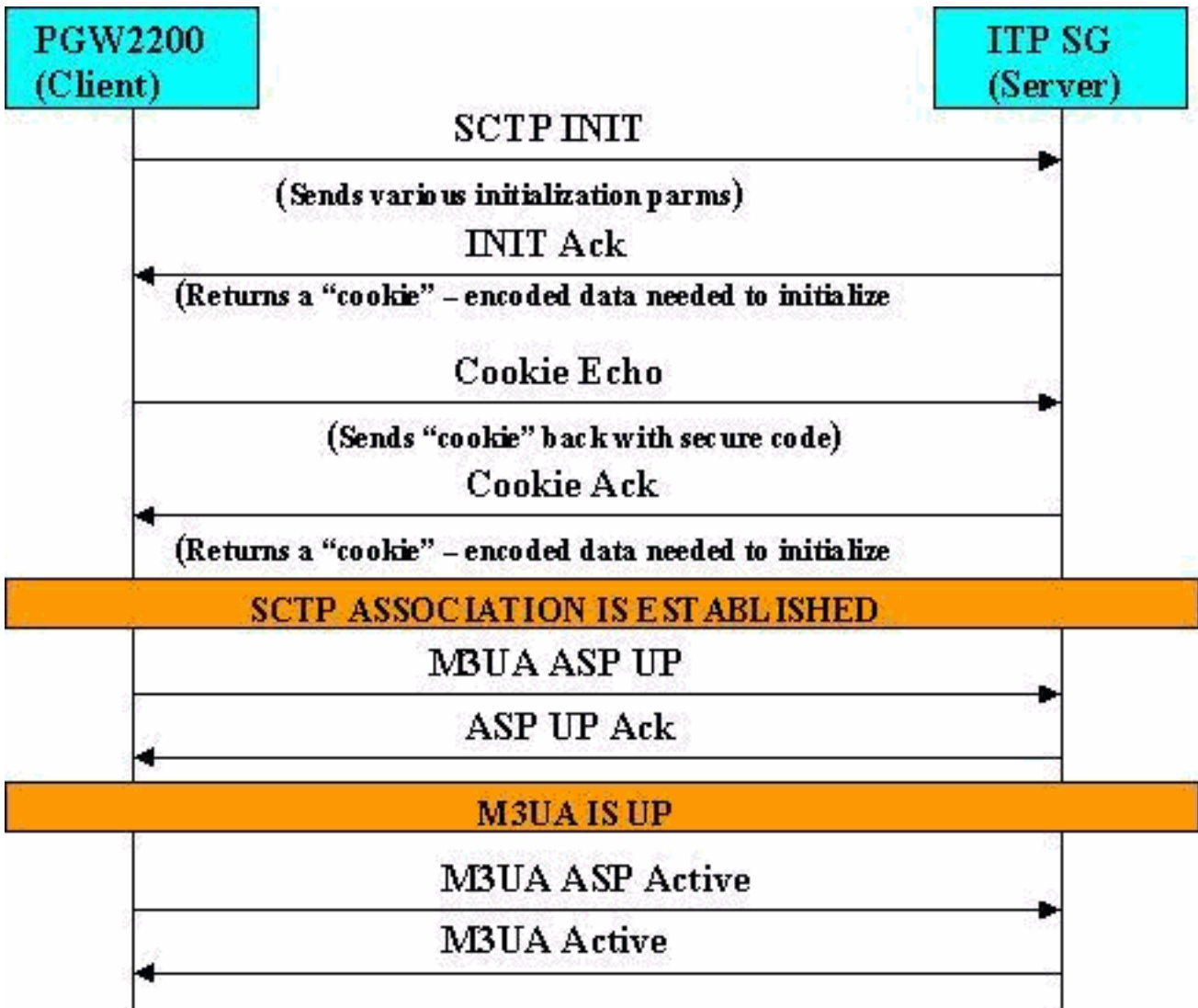
일반적으로 두 SS7oIP(SS7-over-IP) 노드 간에 200-300msec 미만의 RTT(round-trip time)는 대부분의 상위 레이어 SS7 애플리케이션의 요구 사항에 적합한 성능을 제공합니다.RTT는 이를 초과할 수 있지만 여러 홉이 애플리케이션 레이어 타이머를 초과하지 않도록 네트워크의 전반적인 설계를 평가해야 합니다.

ITP-SCTP 문제 해결

SG(Client-Server Signaling Gateway) 아키텍처(SG는 서버,PGW 2200이 클라이언트입니다.)



SCTP 메시지



ITP에서 debug 명령을 실행합니다.

```

v2650-2# debug ip sctp war
SCTP: Turning warnings debugging on
v2650-2# debug ip sctp signal
SCTP: Turning signal debugging on
v2650-2# debug ip sctp state
SCTP: Turning state debugging on
v2650-2# debug ip sctp init
  
```

PGW 2200에서는 하나의 연결이 서비스 중단됩니다.이 연결을 MML(Man-Machine Language) 명령 set-association:m3ua-assoc2:IS,confirm과 함께 서비스하고 ITP의 디버그를 따라 다른 상태(굵은 글꼴에 표시됨)를 검색합니다.

```

mgc-bru-14 mml> rtrv-association:all
MGC-01 - Media Gateway Controller 2004-03-18 19:04:23.597 MET
M RTRV
"m3ua-assoc1:IS"
/* M3UA Association 1 */
"m3ua-assoc2:OOS,COOS"
/* M3UA Association 2 */
;
mgc-bru-14 mml> set-association:m3ua-assoc2:IS,confirm
MGC-01 - Media Gateway Controller 2004-03-18 19:05:10.286 MET
  
```

```
M COMPLD
"m3ua-assoc2"
;
mgc-bru-14 mml>
```

PGW 2200 및 ITP에서 SCTP 및 MTP(Message Transfer Part) Level 3 User Adaptation(M3UA) 문제를 해결하는 데 도움이 되는 신호 흐름 및 디버그의 설명(굵은 항목과 함께 제공)은 아래와 같습니다.

참고: 신호 흐름은 초보자용 [SCTP에 설명되어 있습니다](#).

참고: 공간 제한으로 인해 아래 코드 중 일부가 여러 행에 표시됩니다.

```
Mar 18 18:05:10.413: SCTP: Process Init
Mar 18 18:05:10.413: SCTP: INIT_CHUNK, len 34
Mar 18 18:05:10.413: SCTP: Initiate Tag: 6C0C883A, Initial TSN:
6C0C883A, rwnd 18000
Mar 18 18:05:10.413: SCTP: Streams Inbound: 128, Outbound: 17
Mar 18 18:05:10.413: SCTP: IP Addr: 10.48.84.146
Mar 18 18:05:10.413: SCTP: Supported addr types: 5
Mar 18 18:05:10.413: SCTP: Assoc (new): Send InitAck
Mar 18 18:05:10.413: SCTP: INIT_ACK_CHUNK, len 108
Mar 18 18:05:10.413: SCTP: Initiate Tag: 446E8EA0, Initial TSN:
446E8EA0, rwnd 64000
Mar 18 18:05:10.413: SCTP: Streams Inbound: 17, Outbound: 2
Mar 18 18:05:10.413: SCTP: Responder cookie len 80
Mar 18 18:05:10.417: SCTP: IP Addr: 10.48.84.176
Mar 18 18:05:10.417: SCTP: Assoc (new): Process Cookie
Mar 18 18:05:10.417: SCTP: COOKIE_ECHO_CHUNK, len 80
Mar 18 18:05:10.417: SCTP: Assoc 66: Adding additional address (10.48.84.146)
as source and destination
Mar 18 18:05:10.918: SCTP: Assoc 66: Send CookieAck
Mar 18 18:05:10.918: SCTP: COOKIE_ACK_CHUNK
Mar 18 18:05:10.922: SCTP: Assoc 42: snmpID:66 state CLOSED -> ESTABLISHED
currEstab=1
Mar 18 18:05:10.922: SCTP: Assoc 42: tCurrEstab=1 currEstab=2
Mar 18 18:05:10.922: SCTP: Assoc 66: Sent ASSOC_UP signal for INCOMING_ASSOC
Mar 18 18:05:10.926: xuaSctpInboundPeerUp(Entry): InstanceId = 1, AssocId = 66
Mar 18 18:05:10.926: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId =
1100, pAspCb = 0x0
Mar 18 18:05:10.926: CS7 XUA MGMT API: aspm_validate_assoc: assocId = 66,
remotePort = 2905, remoteIpAddr = 10.48.84.146 0.0.0.0 0.0.0.0 0.0.0.0,
localPort = 2905, retCode = 0
Mar 18 18:05:10.926: xuaSctpSetAddrParms(Entry): assocId = 66
Mar 18 18:05:10.926: xuaSctpSetAddrParms: keepAlive = 1, keepAliveTimeout =
30000
Mar 18 18:05:10.926: xuaSctpSetAddrParms: tos = 0, maxPathRexmit = 4
Mar 18 18:05:10.926: xuaSctpSetAddrParms: IP addr 10.48.84.146 for assocId 66
set to active
Mar 18 18:05:10.926: xuaSctpInboundPeerUp: SCTP_ASSOC_UP processing complete
PGW-SW3-BR14(66) s=10.48.84.176 : 2905, d=10.48.84.146 : 2905
Mar 18 18:05:10.926: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId =
66, pAspCb = 0x81AD75BC
Mar 18 18:05:10.930: xuaGetPacket: getbuffer returned buffer = 8154E958
Mar 18 18:05:10.930: xuaGetPacket: sctp_receive returned datalen(8) from
stream(0)
Mar 18 18:05:10.930: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId =
66, pAspCb = 0x81AD75BC
Mar 18 18:05:10.930: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId =
66, pAspCb = 0x81AD75BC
Mar 18 18:05:10.930: CS7 XUA MGMT API: aspm_get_assoc_protocol: assocId = 66,
protocol = 1
```

Mar 18 18:05:10.930: **CS7 XUA PACKET RECEIVED FROM PGW-SW3-BR14: Message:**
Class = ASPSM, Type = ASPUP, Length = 8
Mar 18 18:05:10.930: No Message Parameters
Mar 18 18:05:10.930: CS7 XUA MGMT STATE: asp_state_chg_event: ASP PGW-SW3-BR14:
old state = ASP_DOWN, new state = ASP_INACTIVE, AS = PGW-SW3
Mar 18 18:05:10.930: **CS7 XUA MGMT STATE: update_as_state: AS PGW-SW3:**
old state = AS_DOWN, new state = AS_INACTIVE
Mar 18 18:05:10.930: CS7 XUA MGMT API: aspm_find_dpc_node: dpc = 1.6.1,
pointCode = 0x8184E4F4
Mar 18 18:05:10.930: CS7 XUA MGMT API: aspm_find_dpc_node: dpc = 1.6.1,
pointCode = 0x8184E4F4
Mar 18 18:05:10.930: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId =
66, pAspCb = 0x81AD75BC
Mar 18 18:05:10.930: xua_send: assocId = 66, streamNum = 0, pak = 0x8154E958,
routingContext = 0, freeOnErr = 1
Mar 18 18:05:10.930: **CS7 XUA PACKET SENT TO PGW-SW3-BR14: Message: Class =**
ASPSM, Type = ASPUP ACK, Length = 8
Mar 18 18:05:10.930: No Message Parameters
Mar 18 18:05:10.930: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId =
66, pAspCb = 0x81AD75BC
Mar 18 18:05:10.930: xuaGetPacket: getbuffer returned buffer = 8154F4C8
Mar 18 18:05:10.930: xuaGetPacket: sctp_receive returned datalen(0) from
stream(0)
Mar 18 18:05:10.934: CS7 XUA MGMT API: aspm_find_asCb_by_routingContext:
routingContext = 10, pAsCb = 0x81AE18B8
Mar 18 18:05:10.934: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId =
66, pAspCb = 0x81AD75BC
Mar 18 18:05:10.934: xua_send: assocId = 66, streamNum = 0, pak = 0x8154A794,
routingContext = 0, freeOnErr = 1
Mar 18 18:05:10.934: **CS7 XUA PACKET SENT TO PGW-SW3-BR14: Message: Class =**
MGMT, Type = NTFY, Length = 24
Mar 18 18:05:10.934: Parameter: Tag = STATUS, Length = 8
Mar 18 18:05:10.934: Value = 0x00010002
Mar 18 18:05:10.934: Parameter: **Tag = ROUTING CONTEXT**, Length = 8
Mar 18 18:05:10.934: **Value = 0x0000000A**
Mar 18 18:05:10.950: SCTP: Process Init
Mar 18 18:05:10.950: SCTP: INIT_CHUNK, len 34
Mar 18 18:05:10.950: SCTP: Initiate Tag: 6FC2653D, Initial TSN:
6FC2653D, rwnd 18000
Mar 18 18:05:10.950: SCTP: Streams Inbound: 128, Outbound: 17
Mar 18 18:05:10.950: SCTP: IP Addr: 10.48.84.181
Mar 18 18:05:10.950: SCTP: Supported addr types: 5
Mar 18 18:05:10.950: SCTP: Assoc (new): Send InitAck
Mar 18 18:05:10.950: SCTP: INIT_ACK_CHUNK, len 108
Mar 18 18:05:10.950: SCTP: Initiate Tag: 86E5560B, Initial TSN:
86E5560B, rwnd 64000
Mar 18 18:05:10.950: SCTP: Streams Inbound: 17, Outbound: 2
Mar 18 18:05:10.950: SCTP: Responder cookie len 80
Mar 18 18:05:10.950: SCTP: IP Addr: 10.48.84.176
Mar 18 18:05:10.954: SCTP: Assoc (new): Process Cookie
Mar 18 18:05:10.954: SCTP: COOKIE_ECHO_CHUNK, len 80
Mar 18 18:05:10.954: SCTP: Assoc 67: Adding additional address (10.48.84.181)
as source and destination
Mar 18 18:05:11.455: SCTP: Assoc 67: Send CookieAck
Mar 18 18:05:11.455: SCTP: COOKIE_ACK_CHUNK
Mar 18 18:05:11.455: SCTP: Assoc 43: snmpID:67 state CLOSED -> ESTABLISHED
currEstab=2
Mar 18 18:05:11.459: SCTP: Assoc 43: tCurrEstab=1 currEstab=3
Mar 18 18:05:11.459: SCTP: **Assoc 67: Sent ASSOC_UP signal for INCOMING_ASSOC**
Mar 18 18:05:11.463: xuaSctpInboundPeerUp(Entry): InstanceId = 1, AssocId = 67
Mar 18 18:05:11.463: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId =
1100, pAspCb = 0x0
Mar 18 18:05:11.463: **CS7 XUA MGMT API: aspm_validate_assoc: assocId = 67,**
remotePort = 2905, remoteIpAddr = 10.48.84.181 0.0.0.0 0.0.0.0 0.0.0.0,

localPort = 2905, retCode = 0

Mar 18 18:05:11.463: xuaSctpSetAddrParms(Entry): assocId = 67

Mar 18 18:05:11.463: xuaSctpSetAddrParms: keepAlive = 1, keepAliveTimeout = 30000

Mar 18 18:05:11.463: xuaSctpSetAddrParms: tos = 0, maxPathRexmit = 4

Mar 18 18:05:11.463: **xuaSctpSetAddrParms: IP addr 10.48.84.181 for assocId 67 set to active**

Mar 18 18:05:11.463: xuaSctpInboundPeerUp: SCTP_ASSOC_UP processing complete PGW-SW3-BR19(67) s=10.48.84.176 : 2905, d=10.48.84.181 : 2905

Mar 18 18:05:11.463: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId = 67, pAspCb = 0x81AF2DB0

Mar 18 18:05:11.463: xuaGetPacket: getbuffer returned buffer = 818AA374

Mar 18 18:05:11.463: xuaGetPacket: sctp_receive returned datalen(8) from stream(0)

Mar 18 18:05:11.463: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId = 67, pAspCb = 0x81AF2DB0

Mar 18 18:05:11.463: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId = 67, pAspCb = 0x81AF2DB0

Mar 18 18:05:11.463: CS7 XUA MGMT API: aspm_get_assoc_protocol: assocId = 67, protocol = 1

Mar 18 18:05:11.467: CS7 XUA PACKET RECEIVED FROM PGW-SW3-BR19: Message: Class = ASPSM, Type = ASPUP, Length = 8

Mar 18 18:05:11.467: No Message Parameters

Mar 18 18:05:11.467: CS7 XUA MGMT STATE: asp_state_chg_event: ASP PGW-SW3-BR19: old state = ASP_DOWN, new state = ASP_INACTIVE, AS = PGW-SW3

Mar 18 18:05:11.467: CS7 XUA MGMT API: aspm_find_dpc_node: dpc = 1.6.1, pointCode = 0x8184E4F4

Mar 18 18:05:11.467: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId = 67, pAspCb = 0x81AF2DB0

Mar 18 18:05:11.467: xua_send: assocId = 67, streamNum = 0, pak = 0x818AA374, routingContext = 0, freeOnErr = 1

Mar 18 18:05:11.467: CS7 XUA PACKET SENT TO PGW-SW3-BR19: Message: Class = ASPSM, Type = ASPUP ACK, Length = 8

Mar 18 18:05:11.467: No Message Parameters

Mar 18 18:05:11.467: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId = 67, pAspCb = 0x81AF2DB0

Mar 18 18:05:11.467: xuaGetPacket: getbuffer returned buffer = 818AA92C

Mar 18 18:05:11.467: xuaGetPacket: sctp_receive returned datalen(0) from stream(0)

Mar 18 18:05:11.487: xuaGetPacket: getbuffer returned buffer = 8154E958

Mar 18 18:05:11.487: xuaGetPacket: sctp_receive returned datalen(16) from stream(0)

Mar 18 18:05:11.487: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId = 66, pAspCb = 0x81AD75BC

Mar 18 18:05:11.487: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId = 66, pAspCb = 0x81AD75BC

Mar 18 18:05:11.487: CS7 XUA MGMT API: aspm_get_assoc_protocol: assocId = 66, protocol = 1

Mar 18 18:05:11.487: CS7 XUA PACKET RECEIVED FROM PGW-SW3-BR14: Message: Class = ASPTM, Type = ASPAC, Length = 16

Mar 18 18:05:11.487: Parameter: Tag = TRAFFIC MODE TYPE, Length = 8

Mar 18 18:05:11.487: Value = 0x00000001

Mar 18 18:05:11.487: CS7 XUA MGMT API: aspm_find_asCb_by_routingContext: routingContext = 10, pAsCb = 0x81AE18B8

Mar 18 18:05:11.487: CS7 XUA MGMT STATE: asp_state_chg_event: ASP PGW-SW3-BR14: **old state = ASP_INACTIVE, new state = ASP_ACTIVE, AS = PGW-SW3**

Mar 18 18:05:11: %CS7XUA-5-ASPSTATE: ASP PGW-SW3-BR14 is active in AS PGW-SW3

Mar 18 18:05:11.487: CS7 XUA MGMT STATE: update_as_state: AS PGW-SW3: **old state = AS_INACTIVE, new state = AS_ACTIVE**

Mar 18 18:05:11: %CS7XUA-5-ASSTATE: AS PGW-SW3 is active

Mar 18 18:05:11.487: CS7 XUA MGMT API: aspm_find_dpc_node: dpc = 1.6.1, pointCode = 0x8184E4F4

Mar 18 18:05:11.487: xua_dpc_notify: dpc=1.6.1, oldStatus=M3UA inactive, newStatus=M3UA active

Mar 18 18:05:11.487: xua_dpc_notify: Sending TFA for dpc=831
Mar 18 18:05:11.491: cs7_xua_process_L3_dest_accessible: TFA received for destination 1.6.1
Mar 18 18:05:11.491: CS7 XUA MGMT POINTCODE: update_dpc_status: called xua_dpc_notify() for dpc 1.6.1 status change, newStatus = DPC_M3UA_ACTIVE, retcode = 1
Mar 18 18:05:11.491: CS7 XUA MGMT POINTCODE: update_dpc_status: dpc 1.6.1 status change: **old status = DPC_M3UA_INACTIVE, new status = DPC_M3UA_ACTIVE**
Mar 18 18:05:11: %CS7XUA-5-XUAPCSTATUS: XUA PC 1.6.1 is M3UA active
Mar 18 18:05:11.491: CS7 XUA MGMT API: aspm_find_dpc_node: dpc = 1.6.1, pointCode = 0x8184E4F4
Mar 18 18:05:11.491: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId = 66, pAspCb = 0x81AD75BC
Mar 18 18:05:11.491: xua_send: assocId = 66, streamNum = 0, pak = 0x8154A794, routingContext = 0, freeOnErr = 1
Mar 18 18:05:11.491: CS7 XUA PACKET SENT TO PGW-SW3-BR14: Message: Class = ASPTM, **Type = ASPAC ACK**, Length = 24
Mar 18 18:05:11.491: Parameter: Tag = TRAFFIC MODE TYPE, Length = 8
Mar 18 18:05:11.491: Value = 0x00000001
Mar 18 18:05:11.491: Parameter: Tag = ROUTING CONTEXT, Length = 8
Mar 18 18:05:11.491: Value = 0x0000000A
Mar 18 18:05:11.491: xuaGetPacket: getbuffer returned buffer = 8154E958
Mar 18 18:05:11.491: xuaGetPacket: sctp_receive returned datalen(0) from stream(0)
Mar 18 18:05:11.495: CS7 XUA MGMT API: aspm_find_asCb_by_routingContext: routingContext = 10, pAsCb = 0x81AE18B8
Mar 18 18:05:11.495: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId = 66, pAspCb = 0x81AD75BC
Mar 18 18:05:11.495: xua_send: assocId = 66, streamNum = 0, pak = 0x818A72D8, routingContext = 0, freeOnErr = 1
Mar 18 18:05:11.495: CS7 XUA PACKET SENT TO PGW-SW3-BR14: Message: Class = MGMT, **Type = NTFY**, Length = 24
Mar 18 18:05:11.495: Parameter: Tag = STATUS, Length = 8
Mar 18 18:05:11.495: Value = 0x00010003
Mar 18 18:05:11.495: Parameter: Tag = ROUTING CONTEXT, Length = 8
Mar 18 18:05:11.495: Value = 0x0000000A
Mar 18 18:05:11.495: CS7 XUA MGMT API: aspm_find_asCb_by_routingContext: routingContext = 10, pAsCb = 0x81AE18B8
Mar 18 18:05:11.495: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId = 67, pAspCb = 0x81AF2DB0
Mar 18 18:05:11.495: xua_send: assocId = 67, streamNum = 0, pak = 0x815479D4, routingContext = 0, freeOnErr = 1
Mar 18 18:05:11.495: CS7 XUA PACKET SENT TO PGW-SW3-BR19: Message: Class = MGMT, **Type = NTFY**, Length = 24
Mar 18 18:05:11.495: Parameter: Tag = STATUS, Length = 8
Mar 18 18:05:11.499: Value = 0x00010003
Mar 18 18:05:11.499: Parameter: Tag = ROUTING CONTEXT, Length = 8
Mar 18 18:05:11.499: Value = 0x0000000A
Mar 18 18:05:11.499: xuaProcessMgmtQ (Entry)
Mar 18 18:05:11.499: xua_process_mgmt_event: Event DAVA for 1.6.1
Mar 18 18:05:11.499: CS7 XUA MGMT API: aspm_get_active_aspCb: protocol = 1, pPreviousAspCb = 0x0, pAspCb = 0x81AD75BC
Mar 18 18:05:11.499: CS7 XUA MGMT POINTCODE: cs7_aspm_xua_dpc: dpc 1.6.1 matched: **status = DPC_M3UA_ACTIVE**
Mar 18 18:05:11.499: CS7 XUA MGMT API: cs7_aspm_xua_dpc: dpc = 1.6.1, dpcStatus = 1
Mar 18 18:05:11.499: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId = 66, pAspCb = 0x81AD75BC
Mar 18 18:05:11.499: xua_send: assocId = 66, streamNum = 0, pak = 0x81549F00, routingContext = 0, freeOnErr = 1
Mar 18 18:05:11.503: **CS7 XUA PACKET SENT TO PGW-SW3-BR14: Message: Class = SSNM, Type = DAVA, Length = 24**
Mar 18 18:05:11.503: Parameter: Tag = AFFECTED POINT CODE, Length = 8

Mar 18 18:05:11.503: Value = 0x00000831 (1.6.1)
Mar 18 18:05:11.503: Parameter: Tag = ROUTING CONTEXT, Length = 8
Mar 18 18:05:11.503: Value = 0x0000000A
Mar 18 18:05:11.503: xua_process_mgmt_event: Send event DAVA for 1.6.1 to
asp PGW-SW3-BR14
Mar 18 18:05:11.503: CS7 XUA MGMT API: aspm_get_active_aspCb: protocol = 1,
pPreviousAspCb = 0x81AD75BC, pAspCb = 0x0
Mar 18 18:05:11.503: xua_process_mgmt_event: Event DAVA for 1.6.1
Mar 18 18:05:11.599: xuaGetPacket: getbuffer returned buffer = 818AA374
Mar 18 18:05:11.599: xuaGetPacket: sctp_receive returned datalen(8) from
stream(0)
Mar 18 18:05:11.599: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId =
67, pAspCb = 0x81AF2DB0
Mar 18 18:05:11.599: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId =
67, pAspCb = 0x81AF2DB0
Mar 18 18:05:11.599: CS7 XUA MGMT API: aspm_get_assoc_protocol: assocId = 67,
protocol = 1
Mar 18 18:05:11.599: CS7 XUA PACKET RECEIVED FROM PGW-SW3-BR19: Message:
Class = ASPTM, **Type = ASPIA**, Length = 8
Mar 18 18:05:11.599: No Message Parameters
Mar 18 18:05:11.599: CS7 XUA MGMT API: aspm_find_asCb_by_routingContext:
routingContext = 10, pAsCb = 0x81AE18B8
Mar 18 18:05:11.603: CS7 XUA MGMT API: aspm_find_dpc_node: dpc = 1.6.1,
pointCode = 0x8184E4F4
Mar 18 18:05:11.603: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId =
67, pAspCb = 0x81AF2DB0
Mar 18 18:05:11.603: xua_send: assocId = 67, streamNum = 0, pak = 0x815479D4,
routingContext = 0, freeOnErr = 1
Mar 18 18:05:11.603: CS7 XUA PACKET SENT TO PGW-SW3-BR19: Message: Class =
ASPTM, **Type = ASPIA ACK**, Length = 16
Mar 18 18:05:11.603: Parameter: Tag = ROUTING CONTEXT, Length = 8
Mar 18 18:05:11.603: Value = 0x0000000A
Mar 18 18:05:11.603: xuaGetPacket: getbuffer returned buffer = 818AA374
Mar 18 18:05:11.603: xuaGetPacket: sctp_receive returned datalen(0) from
stream(0)
Mar 18 18:05:11.603: xuaGetPacket: getbuffer returned buffer = 818AA374
Mar 18 18:05:11.607: xuaGetPacket: sctp_receive returned datalen(24) from
stream(0)
Mar 18 18:05:11.607: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId =
66, pAspCb = 0x81AD75BC
Mar 18 18:05:11.607: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId =
66, pAspCb = 0x81AD75BC
Mar 18 18:05:11.607: CS7 XUA MGMT API: aspm_get_assoc_protocol: assocId = 66,
protocol = 1
Mar 18 18:05:11.607: CS7 XUA PACKET RECEIVED FROM PGW-SW3-BR14: Message:
Class = SSNM, **Type = DAUD**, Length = 24
Mar 18 18:05:11.607: Parameter: Tag = ROUTING CONTEXT, Length = 8
Mar 18 18:05:11.607: Value = 0x0000000A
Mar 18 18:05:11.607: Parameter: Tag = AFFECTED POINT CODE, Length = 8
Mar 18 18:05:11.607: Value = 0x00000851 (1.10.1)
Mar 18 18:05:11.607: xua_daud_msg: Incoming- pak(818AA374) size(24)
Mar 18 18:05:11.607: xua_daud_msg: DAUD received from PGW-SW3-BR14 - dpc(851)
mask(0)
Mar 18 18:05:11.607: CS7 XUA MGMT API: cs7_aspm_xua_dpc: dpc = 1.10.1,
dpcStatus = 0
Mar 18 18:05:11.607: CS7 XUA MGMT API: cs7_aspm_xua_dpc: dpc = 1.10.1,
dpcStatus = 0
Mar 18 18:05:11.607: CS7 XUA MGMT API: cs7_aspm_xua_dpc: dpc = 1.10.1,
dpcStatus = 0
Mar 18 18:05:11.607: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId =
66, pAspCb = 0x81AD75BC
Mar 18 18:05:11.607: xua_send: assocId = 66, streamNum = 0, pak = 0x81549F00,
routingContext = 0, freeOnErr = 1
Mar 18 18:05:11.607: CS7 XUA PACKET SENT TO PGW-SW3-BR14: Message: Class =

SSNM, Type = DAVA, Length = 24
 Mar 18 18:05:11.607: Parameter: Tag = AFFECTED POINT CODE, Length = 8
 Mar 18 18:05:11.611: Value = 0x00000851 (1.10.1)
 Mar 18 18:05:11.611: Parameter: Tag = ROUTING CONTEXT, Length = 8
 Mar 18 18:05:11.611: Value = 0x0000000A
 Mar 18 18:05:11.611: xuaGetPacket: getbuffer returned buffer = 818AA374
 Mar 18 18:05:11.611: xuaGetPacket: sctp_receive returned datalen(0) from stream(0)
 Mar 18 18:05:12.428: cs7_xua_is_available_xua_dpc: dpc=80A
 Mar 18 18:05:12.428: CS7 XUA MGMT API: cs7_aspm_xua_dpc: dpc = 1.1.2, dpcStatus = 0
 Mar 18 18:05:12.973: cs7_xua_is_available_xua_dpc: dpc=80A
 Mar 18 18:05:12.973: CS7 XUA MGMT API: cs7_aspm_xua_dpc: dpc = 1.1.2, dpcStatus = 0
 Mar 18 18:05:18.178: cs7_xua_is_available_xua_dpc: dpc=80A

SCTP 및 M3UA 오류 처리

메시지 유형	설명
페이로드 데이터	전체 MTP3 라우팅 레이블을 포함하여 MTP-TRANSFER 프리미티브 SS7 MTP3-사용자 프로토콜 데이터를 포함합니다.
대상 사용 불가 (DUNA)	ASP(보조 신호 경로)에 대상을 사용할 수 없다는 신호를 보내는 데 사용됩니다. MTP 전송 금지와 유사합니다.
사용 가능한 대상(DAVA)	ASP에 대상을 사용할 수 있음을 알리는 데 사용됩니다. MTP 전송 허용과 유사합니다.
대상 감사 (DAUD)	SG에서 SS7 경로의 가용성 또는 혼잡을 요청하는 데 사용됩니다.
SS7 네트워크 혼잡 (SCON)	SG의 혼잡을 나타내는 데 사용됩니다.
대상 부품을 사용할 수 없음 (DUPU)	원격 피어 MTP3 사용자를 사용할 수 없음을 나타내기 위해 SG에서 전송됨.
대상 제한 (DRST)	SS7 대상이 제한되었음을 나타내는 ASP로 전송되었습니다. MTP와 비슷합니다.
ASP Up(ASPUP)	이 메시지는 ASP가 실행 중이고 유지 보수 관련 메시지를 수신할 준비가 되었음을 SG에 나타내는 데 사용됩니다.
ASP Up Ack	ASP Up 메시지를 승인합니다.
ASP 다운 (ASPDN)	ASP가 트래픽을 수신할 준비가 되지 않았음을 SG에 나타냅니다.
ASP 다운 ACK	ASP Down 메시지를 확인합니다.
등록 요청 (REG REQ)	ASP에서 SG로 전송하고 SG에 라우팅 키를 등록하는 데 사용됩니다.
등록 응답	등록 요청을 승인하는 데 사용됩니다.
등록 취소 요청	라우팅 키를 등록 취소하도록 SG에 신호를 보내는 데 사용됩니다.

(DEREG REQ)	
등록 취소 응답(DREG RSP)	등록 취소 요청을 승인하는 데 사용됩니다.
ASP 활성화 (ASPAC)	ASP가 현재 활성화 상태이며 트래픽을 받아들일 준비가 되었음을 나타냅니다.
ASP 활성화 ACK	ASP 활성화 메시지를 승인하는 데 사용됩니다.
ASP 비활성 (ASPIA)	ASP가 비활성 모드로 전환되었음을 나타내는 데 사용됩니다.
ASP 비활성 ACK	SG가 ASP 비활성화를 승인하기 위해 전송했습니다.
하트비트(비트)	하트비트 메시지입니다.
하트비트 ACK(비트 ACK)	하트비트 메시지를 승인합니다.
알림(NTFY)	M3UA 피어에 이벤트의 자동 표시를 제공합니다.

M3UA 오류 메시지 처리

오류 코드	응답	원인	작업
잘못된 버전	ASP 작동	SG가 지정된 버전을 지원하지 않음을 ASP에 알리는 데 사용됩니다. 이 오류는 SG로 전송된 ASP Up 요청에 대한 응답으로만 수신되어야 합니다.	현재 M3UA의 단일 버전만 있습니다.
지원되지 않는 메시지 클래스	모두	메시지가 잘못된 메시지 클래스로 수신되었음을 SG 또는 ASP에 나타냅니다.	ASP는 지원되지 않는 메시지 클래스가 있는 메시지를 받으면 메시지를 무시하고, 헤더를 오류 메시지의 진단 매개 변수에 넣은 다음, 이 오류 코드와 함께 오류 메시지를 보냅니다. 이 오류 메시지가 표시되면 기록됩니다.
지원된	모두	메시지가 잘못된 메시지 유형으로 수신되었음을 SG 또는 ASP에	위의 지원되지 않는 메시지 클래스와 동일합니다.

지 않는 메시지 유형		나타냅니다.	
지원되지 않는 트래픽 처리 모드	ASP AC	잘못된 트래픽 처리 유형이 포함되어 있다는 메시지를 수신한 ASP에 알립니다.	이 오류 메시지를 받으면 ASP에서 로그 항목을 생성하고 레이어 관리 콜백별로 구성 불일치 알림을 제공해야 합니다.
예기치 않은 메시지			메시지가 예기치 않게 수신될 때 전송됨 (즉, ASP가 활성 상태가 아니거나 ASP가 Down 상태이고 ASP Active가 수신된 경우)
프로토콜 오류			수신한 경우 기록됩니다. 일반 프로토콜 오류에 대해 전송되었습니다.
잘못된 스트림 식별자		잘못된 스트림 식별자로 메시지를 수신할 때 피어에서 전송됨. 이는 스트림 0이 아닌 다른 스트림에서 관리 메시지를 보낼 때 발생합니다. 잘못된 스트림에서 메시지의 수신자가 메시지를 삭제해야 합니다.	이 메시지를 받으면 코딩 오류가 발생했을 가능성이 높습니다. 이 메시지가 수신되면 유효한 스트림에서 메시지를 다시 전송해야 하며 오류를 기록해야 합니다.
거부됨 - 관리 차단	ASP Up ASP 작업	ASP UP 또는 ASP Act를 수신하고 일부 관리 차단이 발생한 경우 SG에서 보냅니다.	수신한 경우 기록됩니다. 기본 상태가 UP이면 ASP는 ASP UP 또는 ASP ACT 메시지를 주기적으로 계속 보냅니다.

ASP 식별자 필요	ASP 작동	ASP 식별자 없이 ASP UP에 대한 응답으로 SGP(signaling gateway process)에서 보냅니다.	수신한 경우 기록됩니다.그러나 ASP ID가 전송되었기 때문에 수신해서는 안 됩니다.
잘못된 ASP 식별자	ASP 작동	중복된 ASP 식별자를 사용하여 ASP UP 메시지에 대한 응답으로 전송되었습니다.	수신한 경우 기록됩니다.
잘못된 라우팅 컨텍스트	ASP AC ASP IA NTFY	메시지에 잘못된 라우팅 컨텍스트가 포함된 경우 전송됨.	수신한 경우 기록됩니다.또한 PGW 2200과 SG 간의 컨피그레이션이 일치하지 않음을 알리는 레이어 관리 알림이 전송됩니다.
잘못된 매개 변수 값	모두	잘못된 매개 변수 값으로 메시지를 받으면 피어에서 보냅니다.	수신된 경우 로깅됨
매개 변수 필드 오류	모두		수신한 경우 기록됩니다.
예기치 않은 매개 변수	모두	메시지에서 예기치 않은 매개 변수가 수신될 때 전송됨.	수신한 경우 기록됩니다.
대상 상	DAUD	SG가 상태를 제공하기를 원하지 않음을 나타내는 DAUD에 응답하여	수신한 경우 기록됩니다.또한 잘못된 컨피그레이션 경보를

태알수없음		ASP에 전송되었습니다	생성하기 위해 레이어 관리 알림이 전송됩니다.
잘못된 네트워크 모양	DATA DAV A DAU D SC ON DU P U DRS T	Network Appearance 매개 변수를 수신 엔터티(SG 또는 ASP)에서 인식할 수 없습니다.	

아래 예에서 연결은 oos(Out-of-Service)로 가져오며 신호 흐름 뒤에 옵니다.(굵은 정보 참조)

참고: 공간 제한으로 인해 아래 코드 중 일부가 여러 행에 표시됩니다.

```

mgc-bru-14 mml> rtrv-association:all
MGC-01 - Media Gateway Controller 2004-03-18 18:28:49.691 MET
M RTRV
"m3ua-assoc1:IS"
/* M3UA Association 1 */
"m3ua-assoc2:IS"
/* M3UA Association 2 */
;
mgc-bru-14 mml> set-association:m3ua-assoc2:OOS,confirm
MGC-01 - Media Gateway Controller 2004-03-18 18:41:34.240 MET
M COMPLD
"m3ua-assoc2"
;
mgc-bru-14 mml>

Mar 18 17:41:29.973: CS7 XUA MGMT API: aspm_find_dpc_node: dpc = 1.4.1,
pointCode = 0x0
Mar 18 17:41:30.875: cs7_xua_is_available_xua_dpc: dpc=80A
Mar 18 17:41:30.875: CS7 XUA MGMT API: cs7_aspm_xua_dpc: dpc = 1.1.2,
dpcStatus = 0
Mar 18 17:41:34.348: SCTP: Assoc 64: Sent TERMINATE_PENDING signal
Mar 18 17:41:34.348: SCTP: Assoc 64: Send Shutdown
Mar 18 17:41:34.348: SCTP: SHUTDOWN_ACK_CHUNK
Mar 18 17:41:34.348: SCTP: Assoc 40: snmpID:64 state ESTABLISHED ->
SHUTDOWN_ACKSENT currEstab=3
Mar 18 17:41:34.348: SCTP: Assoc 40: tCurrEstab=-1 currEstab=2
Mar 18 17:41:34.348: xuaSctpAssocTerminate(Entry): InstanceId = 1, AssocId = 64
Mar 18 17:41:34.348: xuaSctpAssocTerminate: TERMINATE signal for M3UA
Association (64) context=81AD75BC
Mar 18 17:41:34.348: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId =
64, pAspCb = 0x81AD75BC
Mar 18 17:41:34.348: CS7 XUA MGMT API: aspm_asp_cong_notify: ASP = PGW-SW3-BR14
Mar 18 17:41:34.352: CS7 XUA MGMT API: aspm_find_dpc_node: dpc = 1.6.1,

```

pointCode = 0x8184E4F4
Mar 18 17:41:34.352: **CS7 XUA MGMT STATE: asp_state_chg_event: ASP PGW-SW3-BR14:
old state = ASP_ACTIVE, new state = ASP_DOWN, AS = PGW-SW3**
Mar 18 17:41:34: %CS7XUA-5-ASPSTATE: ASP PGW-SW3-BR14 is inactive in AS PGW-SW3
Mar 18 17:41:34.352: CS7 XUA TIMER: update_as_state: started recovery timer for
AS PGW-SW3
Mar 18 17:41:34.352: **CS7 XUA MGMT STATE: update_as_state: AS PGW-SW3:
old state = AS_ACTIVE, new state = AS_PENDING**
Mar 18 17:41:34.352: CS7 XUA MGMT API: aspm_find_dpc_node: dpc = 1.6.1,
pointCode = 0x8184E4F4
Mar 18 17:41:34.352: CS7 XUA MGMT API: aspm_find_dpc_node: dpc = 1.6.1,
pointCode = 0x8184E4F4
Mar 18 17:41:34.352: CS7 XUA MGMT API: aspm_assoc_closed: assocId = 64, success
Mar 18 17:41:34.352: **SCTP: Assoc 64: Sent ASSOC_TERMINATE signal**
Mar 18 17:41:34.352: **SCTP: Assoc 40: snmpID:64 state SHUTDOWN_ACKSENT -> CLOSED
currEstab=2**
Mar 18 17:41:34.352: SCTP: Assoc 40: tCurrEstab=0 currEstab=2
Mar 18 17:41:34.352: CS7 XUA MGMT API: aspm_find_asCb_by_routingContext:
routingContext = 10, pAsCb = 0x81AE18B8
Mar 18 17:41:34.352: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId =
65, pAspCb = 0x81AF2DB0
Mar 18 17:41:34.356: xua_send: assocId = 65, streamNum = 0, pak = 0x818A39A8,
routingContext = 0, freeOnErr = 1
Mar 18 17:41:34.356: CS7 XUA PACKET SENT TO PGW-SW3-BR19: Message: Class =
MGMT, **Type = NTFY**, Length = 24
Mar 18 17:41:34.356: Parameter: Tag = STATUS, Length = 8
Mar 18 17:41:34.356: Value = 0x00020003
Mar 18 17:41:34.356: Parameter: Tag = ROUTING CONTEXT, Length = 8
Mar 18 17:41:34.356: Value = 0x0000000A
Mar 18 17:41:34.356: CS7 XUA MGMT API: aspm_find_asCb_by_routingContext:
routingContext = 10, pAsCb = 0x81AE18B8
Mar 18 17:41:34.356: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId =
65, pAspCb = 0x81AF2DB0
Mar 18 17:41:34.356: xua_send: assocId = 65, streamNum = 0, pak = 0x81549390,
routingContext = 0, freeOnErr = 1
Mar 18 17:41:34.356: CS7 XUA PACKET SENT TO PGW-SW3-BR19: Message: Class =
MGMT, **Type = NTFY**, Length = 24
Mar 18 17:41:34.356: Parameter: Tag = STATUS, Length = 8
Mar 18 17:41:34.356: Value = 0x00010004
Mar 18 17:41:34.356: Parameter: Tag = ROUTING CONTEXT, Length = 8
Mar 18 17:41:34.356: Value = 0x0000000A
Mar 18 17:41:34.356: xuaSctpAssocTerminate(Entry): InstanceId = 1, AssocId = 64
Mar 18 17:41:34.356: xuaSctpAssocTerminate: TERMINATE signal for M3UA
Association (1100) context=81AD75BC
Mar 18 17:41:34.356: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId =
64, pAspCb = 0x0
Mar 18 17:41:34.356: CS7 XUA ERROR: aspm_assoc_closed: ASP not found for
assocId 64
Mar 18 17:41:34.889: SCTP: **Assoc 65: Sent TERMINATE_PENDING signal**
Mar 18 17:41:34.889: **SCTP: Assoc 65: Send Shutdown**
Mar 18 17:41:34.889: **SCTP: SHUTDOWN_ACK_CHUNK**
Mar 18 17:41:34.893: **SCTP: Assoc 41: snmpID:65 state ESTABLISHED ->
SHUTDOWN_ACKSENT currEstab=2**
Mar 18 17:41:34.893: SCTP: Assoc 41: tCurrEstab=-1 currEstab=1
Mar 18 17:41:34.893: xuaSctpAssocTerminate(Entry): InstanceId = 1, AssocId = 65
Mar 18 17:41:34.893: xuaSctpAssocTerminate: TERMINATE signal for M3UA
Association (65) context=81AF2DB0
Mar 18 17:41:34.893: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId =
65, pAspCb = 0x81AF2DB0
Mar 18 17:41:34.893: CS7 XUA MGMT API: aspm_asp_cong_notify: ASP = PGW-SW3-BR19
Mar 18 17:41:34.893: CS7 XUA MGMT STATE: asp_state_chg_event: ASP PGW-SW3-BR19:
old state = ASP_INACTIVE, new state = ASP_DOWN, AS = PGW-SW3
Mar 18 17:41:34.893: CS7 XUA MGMT API: aspm_find_dpc_node: dpc = 1.6.1,
pointCode = 0x8184E4F4

```

Mar 18 17:41:34.893: CS7 XUA MGMT API: aspm_assoc_closed: assocId = 65, success
Mar 18 17:41:34.893: SCTP: Assoc 65: Sent ASSOC_TERMINATE signal
Mar 18 17:41:34.893: SCTP: Assoc 41: snmpID:65 state SHUTDOWN_ACKSENT -> CLOSED
currEstab=1
Mar 18 17:41:34.893: SCTP: Assoc 41: tCurrEstab=0 currEstab=1
Mar 18 17:41:34.897: xuaSctpAssocTerminate(Entry): InstanceId = 1, AssocId = 65
Mar 18 17:41:34.897: xuaSctpAssocTerminate: TERMINATE signal for M3UA
Association (1100) context=81AF2DB0
Mar 18 17:41:34.897: CS7 XUA MGMT API: aspm_find_aspCb_by_assocId: assocId = 65,
  pAspCb = 0x0
Mar 18 17:41:34.897: CS7 XUA ERROR: aspm_assoc_closed: ASP not found for assocId 65
Mar 18 17:41:36.356: CS7 XUA MGMT API: aspm_find_asCb_by_routingContext:
  routingContext = 10, pAsCb = 0x81AE18B8
Mar 18 17:41:36.356: CS7 XUA TIMER: handle_timer_event: recovery timer expired
  for AS PGW-SW3
Mar 18 17:41:36.356: CS7 XUA TIMER: update_as_state: stopped recovery timer
  for AS PGW-SW3
Mar 18 17:41:36.356: CS7 XUA TIMER: flush_recoveryQ: flushing recovery queue
  for AS PGW-SW3, queue depth = 0
Mar 18 17:41:36.356: CS7 XUA MGMT STATE: update_as_state: AS PGW-SW3:
old state = AS_PENDING, new state = AS_DOWN
Mar 18 17:41:36: %CS7XUA-5-ASSTATE: AS PGW-SW3 is inactive
Mar 18 17:41:36.356: CS7 XUA MGMT API: aspm_find_dpc_node: dpc = 1.6.1,
  pointCode = 0x8184E4F4
Mar 18 17:41:36.356: xua_dpc_notify: dpc=1.6.1, oldStatus=M3UA active,
newStatus=M3UA inactive
Mar 18 17:41:36.356: xua_dpc_notify: Sending TFP for dpc=1.6.1
Mar 18 17:41:36.356: cs7_xua_process_L3_dest_inaccessible: Destination
  prohibited received for destination 1.6.1
Mar 18 17:41:36.356: CS7 XUA MGMT POINTCODE: update_dpc_status: called
  xua_dpc_notify() for dpc 1.6.1 status change, newStatus =
  DPC_M3UA_INACTIVE, retcode = 1
Mar 18 17:41:36.356: CS7 XUA MGMT POINTCODE: update_dpc_status: dpc 1.6.1
  status change: old status = DPC_M3UA_ACTIVE, new status =
DPC_M3UA_INACTIVE
Mar 18 17:41:36: %CS7XUA-5-XUAPCSTATUS: XUA PC 1.6.1 is M3UA inactive
Mar 18 17:41:36.360: xuaProcessMgmtQ (Entry)
Mar 18 17:41:36.360: xua_process_mgmt_event: Event DUNA for 1.6.1
Mar 18 17:41:36.360: CS7 XUA MGMT API: aspm_get_active_aspCb: protocol = 1,
  pPreviousAspCb = 0x0, pAspCb = 0x0
Mar 18 17:41:36.360: xua_process_mgmt_event: Event DUNA for 1.6.1
!--- Output suppressed. Mar 18 17:43:00.878: CS7 XUA MGMT API: cs7_aspm_xua_dpc: dpc = 1.1.2,
  dpcStatus = 0 Mar 18 17:43:06.379: cs7_xua_is_available_xua_dpc: dpc=80A Mar 18 17:43:06.379:
  CS7 XUA MGMT API: cs7_aspm_xua_dpc: dpc = 1.1.2, dpcStatus = 0 Mar 18 17:43:06.379:
  cs7_xua_is_active_xua_dpc: dpc=831 Mar 18 17:43:06.379: CS7 XUA MGMT POINTCODE:
  cs7_aspm_xua_dpc: dpc 1.6.1 matched: status = DPC_M3UA_INACTIVE
Mar 18 17:43:06.379: CS7 XUA MGMT API: cs7_aspm_xua_dpc: dpc = 1.6.1,
  dpcStatus = 2
Mar 18 17:43:06.383: cs7_xua_is_restricted_xua_dpc: dpc=831
Mar 18 17:43:06.383: CS7 XUA MGMT POINTCODE: cs7_aspm_xua_dpc: dpc 1.6.1
  matched: status = DPC_M3UA_INACTIVE
Mar 18 17:43:06.383: CS7 XUA MGMT API: cs7_aspm_xua_dpc: dpc = 1.6.1,
  dpcStatus = 2
Mar 18 17:43:06.383: cs7_xua_is_prohibited_xua_dpc: dpc=831

```

특정 시점에 PGW 2200에서 "m3ua-1" 프로세스를 오류 수준에서 디버그 레벨로 변경하고 로그 정보를 /opt/CiscoMGC/var/log/platform.log 파일로 수집해야 할 수 있습니다.

```

mgc-bru-14 mml> rtrv-log:all
MGC-01 - Media Gateway Controller 2004-03-18 19:07:22.774 MET
M RTRV
"CFM-01:ERR"
"ALM-01:ERR"

```

```

"MM-01:ERR"
"AMDMPR-01:ERR"
"CDRDMPR-01:ERR"
"DSKM-01:ERR"
"MMDB-01:ERR"
"POM-01:ERR"
"MEASAGT:ERR"
"OPERSAGT:ERR"
"mgcp-1:ERR"
"Replic-01:ERR"
"ENG-01:ERR"
"IOCM-01:ERR"
"TCAP-01:ERR"
"m3ua-1:ERR"
"FOD-01:ERR"
;
mgc-bru-14 mml> set-log:m3ua-1:debug,confirm
MGC-01 - Media Gateway Controller 2004-03-18 19:07:46.434 MET
M COMPLD
"m3ua-1"
;
mgc-bru-14 mml>

```

/opt/CiscoMGC/var/log/platform.log 파일의 정보는 아래 그림과 같이 서비스 중단 상태로 연결됩니다.

```

Thu Mar 18 20:32:55:903 2004 MET | m3ua-1 (PID 18243) <Debug>
procIpcMsg myCcMOO 3

Thu Mar 18 20:32:55:903 2004 MET | m3ua-1 (PID 18243) <Debug>
actvProcIpc, Got Event Type 4098

Thu Mar 18 20:32:55:903 2004 MET | m3ua-1 (PID 18243) <Debug>
ID:4a0003 STATE TRANS:4 desiredMOO:3

Thu Mar 18 20:32:55:903 2004 MET | m3ua-1 (PID 18243) <Info>
PROT_INFO_Q921_LNK_CNTL: Q921 channel 4a0003 state change Commanded OOS cause
N/A

Thu Mar 18 20:32:55:903 2004 MET | m3ua-1 (PID 18243) <Debug>
M3UA/SCTP: M3UA: term assoc 301

Thu Mar 18 20:32:55:903 2004 MET | m3ua-1 (PID 18243) <Info>
4a0003, state change Out-of-service cause Commanded OOS

Thu Mar 18 20:32:55:903 2004 MET | m3ua-1 (PID 18243) <Debug>
SSC List size = 1

Thu Mar 18 20:32:55:904 2004 MET | m3ua-1 (PID 18243) <Debug>
004a0003, send SSC trans Out-of-service cause Commanded OOS

Thu Mar 18 20:32:55:905 2004 MET | m3ua-1 (PID 18243) <Debug>
M3UA/SCTP: SCTP: Assoc (004a0003) 1: Sent TERMINATE_PENDING signal

Thu Mar 18 20:32:55:905 2004 MET | m3ua-1 (PID 18243) <Debug>
M3UA/SCTP: SCTP: Assoc (004a0003) 1: Send Shutdown

Thu Mar 18 20:32:55:905 2004 MET | m3ua-1 (PID 18243) <Debug>
M3UA/SCTP: SCTP: TSN ack: (0x446e8ea5)

Thu Mar 18 20:32:55:905 2004 MET | m3ua-1 (PID 18243) <Debug>

```


M3UA/SCTP: SCTP: **SHUTDOWN_CHUNK**,

Thu Mar 18 20:32:55:906 2004 MET | m3ua-1 (PID 18243) <Debug>
M3UA/SCTP: SCTP: Assoc (004a0003) 1: state **ESTABLISHED -> SHUTDOWN_SENT**

Thu Mar 18 20:32:55:907 2004 MET | m3ua-1 (PID 18243) <Debug>
M3UA/SCTP: SCTP: Assoc (004a0003) 1: **Shutdown Ack Chunk**

Thu Mar 18 20:32:55:907 2004 MET | m3ua-1 (PID 18243) <Debug>
M3UA/SCTP: SCTP: Assoc (004a0003) 1: Send Shutdown

Thu Mar 18 20:32:55:907 2004 MET | m3ua-1 (PID 18243) <Debug>
M3UA/SCTP: SCTP: SHUTDOWN_COMP_CHUNK

Thu Mar 18 20:32:55:908 2004 MET | m3ua-1 (PID 18243) <Debug>
M3UA/SCTP: SCTP: Assoc (004a0003) 1: Sent ASSOC_TERMINATE signal

Thu Mar 18 20:32:55:908 2004 MET | m3ua-1 (PID 18243) <Debug>
M3UA/SCTP: SCTP: Assoc (004a0003) 1: **state SHUTDOWN_SENT -> CLOSED**

Thu Mar 18 20:32:55:912 2004 MET | m3ua-1 (PID 18243) <Debug>
M3UA/SCTP: xua_proc_sctpsig - SG 3001 Transition to Down

Thu Mar 18 20:32:55:923 2004 MET | m3ua-1 (PID 18243) <Error>
Routing Key 0 not found in the MAP, RK layer mgmt event 6 from SG 160005

Thu Mar 18 20:32:55:923 2004 MET | m3ua-1 (PID 18243) <Error>
Received SGP_FAILED_DOWN for 4d0002

Thu Mar 18 20:32:55:923 2004 MET | m3ua-1 (PID 18243) <Info>
4d0002, state change Out-of-service cause N/A

Thu Mar 18 20:32:55:923 2004 MET | m3ua-1 (PID 18243) <Debug>
SSC List size = 2

Thu Mar 18 20:32:55:923 2004 MET | m3ua-1 (PID 18243) <Debug>
004d0002, send SSC trans Out-of-service cause N/A

Thu Mar 18 20:32:55:923 2004 MET | m3ua-1 (PID 18243) <Error>
Received **SG_DOWN** for 160005

Thu Mar 18 20:32:55:923 2004 MET | m3ua-1 (PID 18243) <Debug>
4f0001, set SG 160005 RKey State to 2

Thu Mar 18 20:32:55:923 2004 MET | m3ua-1 (PID 18243) <Warning>
4f0001, SG 160004 Key in Ack State 3

Thu Mar 18 20:32:55:923 2004 MET | m3ua-1 (PID 18243) <Debug>
4f0001, Key is active

Thu Mar 18 20:32:55:923 2004 MET | m3ua-1 (PID 18243) <Warning>
4f0001, SG 160005 Key in Pending State 2

Thu Mar 18 20:32:55:924 2004 MET | m3ua-1 (PID 18243) <Debug>
4f0001, one or more SGpending

Thu Mar 18 20:32:55:924 2004 MET | m3ua-1 (PID 18243) <Info>
150001, Send iopFaultMsg 700d of 0 to chanmgr

Thu Mar 18 20:32:55:924 2004 MET | m3ua-1 (PID 18243) <Info>
150001, Send iopFaultMsg 700b of 1 to chanmgr

Thu Mar 18 20:32:55:924 2004 MET | m3ua-1 (PID 18243) <Error>

4a0003: Received **SCTP_ASSOC_FAIL**

Thu Mar 18 20:32:55:924 2004 MET | m3ua-1 (PID 18243) <Debug>
Sent 2 SSCs in a Group

Thu Mar 18 20:32:56:416 2004 MET | m3ua-1 (PID 18243) <Debug>
M3UA/SCTP: SCTP: Assoc (004a0001) 0: Heartbeat Ack Chunk from destaddr
10.48.84.179

Thu Mar 18 20:32:58:532 2004 MET | foverd (MM)(mgc-bru-14) (PID 18245) <Warning>
Received msg from invalid host (10.48.84.67):
'H9425MM0012819864mgc-bru-5a DA'

Thu Mar 18 20:32:58:934 2004 MET | m3ua-1 (PID 18243) <Debug>
M3UA/SCTP: SCTP: Assoc (004a0001) 0: Heartbeat Ack Chunk from destaddr
10.48.84.179

Thu Mar 18 20:33:01:273 2004 MET | m3ua-1 (PID 18243) <Debug>
procIpcMsg myCcMOO 3

Thu Mar 18 20:33:01:273 2004 MET | m3ua-1 (PID 18243) <Debug>
actvProcIpc, Got Event Type 4099

Thu Mar 18 20:33:01:273 2004 MET | m3ua-1 (PID 18243) <Debug>
RECEIVED STATISTICS REQ FROM IOCM

관련 정보

- [Cisco PGW 2200 Softswitch 기술 노트](#)
- [Cisco Signaling Controller 기술 문서](#)
- [음성 기술 지원](#)
- [음성 및 IP 커뮤니케이션 제품 지원](#)
- [Cisco IP 텔레포니 문제 해결](#)
- [Technical Support - Cisco Systems](#)