

# PGW2200软交换机ITP-SCTP纠错方案

## 目录

[简介](#)

[先决条件](#)

[要求](#)

[使用的组件](#)

[规则](#)

[设计注意事项](#)

[排除ITP-SCTP故障](#)

[相关信息](#)

## 简介

本文档介绍在呼叫控制和信令模式下以及在思科IP传输点(ITP)上为思科公共交换电话网(PSTN)网关(PGW)2200软交换进行的流控制传输协议(SCTP)故障排除。SCTP旨在通过IP网络传输PSTN信令消息。协议在RFC 2960[中定义](#) ,RFC 3286提供了介绍性文[本RFC](#) 。

## 先决条件

### 要求

本文档的读者应掌握以下这些主题的相关知识：

- [Cisco Media Gateway Controller Software版本9](#)
- [初学者SCTP](#)
- [RFC 2960](#)
- SCTP

### 使用的组件

本文档中的信息基于Cisco PGW 2200 9.4(1)及更高版本。

本文档中的信息都是基于特定实验室环境中的设备编写的。本文档中使用的所有设备最初均采用原始（默认）配置。如果您使用的是真实网络，请确保您已经了解所有命令的潜在影响。

### 规则

有关文件规则的更多信息请参见“Cisco技术提示规则”。

## 设计注意事项

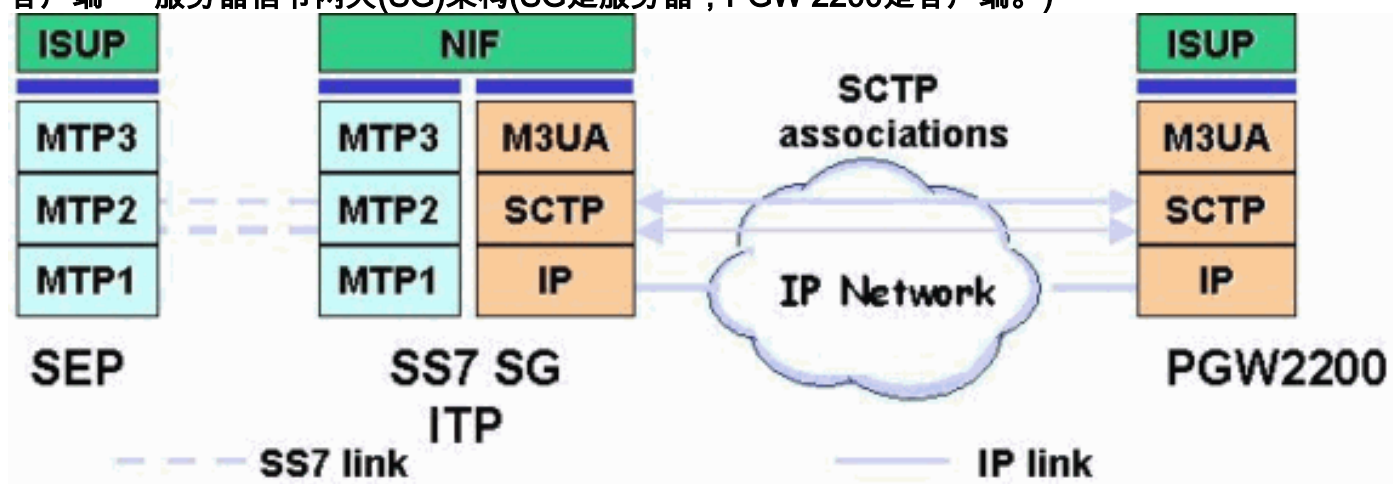
通常，信令系统7(SS7)网络是为特定服务等级(GOS)设计的。对于此场景，请参阅ITU规范E.723，该规范解决了在设计SS7网络时确保端到端GOS的一些注意事项。

ITU规范E.723文档将目标端到端初始地址消息(IAM)传输时间(单向)确定为0.9秒,并包含其他详细信息。

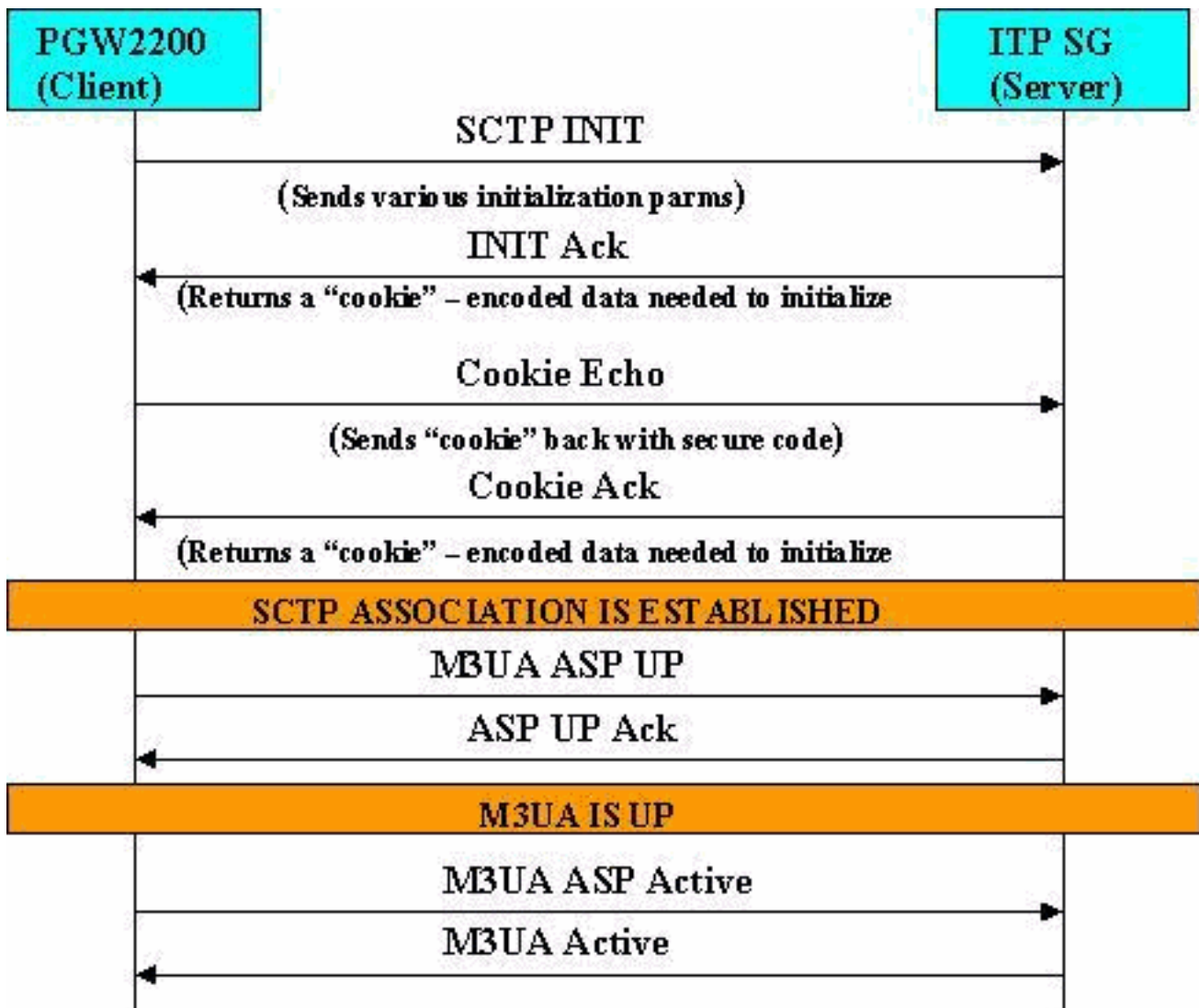
通常,两个SS7-over-IP(SS7oIP)节点之间的往返时间(RTT)小于200-300毫秒,使性能很好地满足大多数上层SS7应用的要求。RTT可能超出此值,但应评估网络的总体设计,以确保多跳不会超过应用层计时器。

## 排除ITP-SCTP故障

客户端 — 服务器信令网关(SG)架构(SG是服务器;PGW 2200是客户端。)



SCTP消息



在ITP上，发出debug命令：

```

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
  
```

在PGW 2200上，一个关联已停止服务。使用人机语言(MML)命令set-association:m3ua-**assoc2:IS**，confirm使此关联生效，然后按照ITP上的debug发现不同状态（以粗体显示）。

```

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>

为帮助排除PGW 2200和ITP上的SCTP和消息传输部分(MTP)第3级用户适配(M3UA)问题，下面是信令流和调试的说明(随带粗体项提供)。

**注意：**初学者的SCTP中介绍了[信令流](#)。

**注：**由于空间限制，以下某些代码会显示在多行上。

```
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, remoteIpAddress = 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: xuaSctpSetAddrParams: tos = 0, maxPathRexmit = 4  
Mar 18 18:05:11.463: **xuaSctpSetAddrParams: 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和M3UA错误处理

| 消息类型              | 描述  |
|-------------------|---|
| 负载数据              | 包含SS7 MTP3-User协议数据，该数据是MTP-◆TRANSFER基元，包括完整的MTP3路由标签。  |
| 目标不可用(DUNA)       | 用于向辅助信号路径(ASP)发出信号，指示目的地不可用。类似于MTP Transfer Prohibited。 |
| 可用目标(DAVA)        | 用于向ASP发出目标可用的信号。类似于允许的MTP传输。                            |
| 目标审计(DAUD)        | 用于从SG状态请求SS7路由的可用性或拥塞。                                  |
| SS7网络拥塞(SCON)     | 用于指示SG的拥塞。  |
| 目标部件不可用(DUPU)     | 由SG发送，以指示远程对等MTP3用户不可用。                                 |
| 目标受限(DRST)        | 发送到ASP，表示SS7目标受限。类似于MTP。                                |
| ASP Up(ASPUP)     | 此消息用于向SG指示ASP已启动、正在运行并准备接收与维护相关的消息。                     |
| ASP上确认            | 确认ASP Up消息。   |
| ASP关闭(ASPDN)      | 向SG表示ASP未准备好接收流量。                                       |
| ASP向下确认           | 确认ASP关闭消息。  |
| 注册请求(REG REQ)     | 由ASP发送到SG，用于向SG注册路由密钥。                                  |
| 注册响应              | 用于确认注册请求。   |
| 取消注册请求(DEREG REQ) | 用于向SG发出信号以取消注册路由密钥。                                     |
| 取消注册响应(DREG RSP)  | 用于确认取消注册请求。   |

|                 |                       |
|-----------------|-----------------------|
| ASP活动 (ASPAC)   | 表示ASP现在处于活动状态并准备接受流量。 |
| ASP活动确认         | 用于确认ASP活动消息。          |
| ASP非活动 (ASPIA)  | 用于指示ASP已进入非活动模式。      |
| ASP非活动确认        | 由SG发送以确认ASP处于非活动状态。   |
| 心跳 (BEAT)       | 心跳消息。                 |
| 心跳确认 (Beat-Ack) | 确认心跳消息。               |
| 通知 (NTFY)       | 为M3UA对等体提供事件的自主指示。    |

### M3UA错误消息处理

| 错误代码       | 响应原因   | 操作  |
|------------|--|---|
| 版本无效       | ASP<br>UP<br>用于通知ASP SG不支持指定版本。仅当向SG发送ASP Up请求时，才应收到此错误。 | 目前，只有一个M3UA版本。  |
| 不支持的消息类    | 全向SG或ASP表示收到消息时消息类无效。                                    | 当ASP收到消息类不受支持时，它会忽略该消息，将报头置于错误消息的诊断参数中，并发送包含此错误代码的错误消息。收到此错误消息后，将记录该消息。 |
| 不支持的消息类型   | 全向SG或ASP表示收到的消息类型无效。                                     | 与上述不支持的消息类相同。   |
| 不支持的流量处理模式 | ASP<br>AC<br>通知收到消息的ASP其包含无效的流量处理类型。                     | 收到此错误消息后，ASP应生成日志条目并通过层管理回调提供配置不匹配通知。                                   |

|          |                |  |
|----------|----------------|--|
| 式        |                |  |
| 意外消息     |                | 当意外收到消息时发送 ( 即, ASP不处于活动状态或ASP处于关闭状态, 并且收到ASP活动 )。   |
| 协议错误     |                | 已记录 ( 如果收到 )。因一般协议错误而发送。   |
| 流标识符无效   |                | 当收到具有无效流标识符的消息时, 对等体发送。当管理消息在流0之外的流上发送时, 就会发生这种情况。无效流上消息的接收方应丢弃该消息。<br><br>收到此消息时, 很可能出现编码错误。收到此消息后, 应在有效流中再次发送该消息, 并记录错误。 |
| 拒绝—管理阻止  | ASP UP或ASP Act | SG在收到ASP UP或ASP Act时发送, 并出现某种形式的管理阻塞。<br><br>已记录 ( 如果收到 )。如果首选状态为UP, ASP会继续定期发送ASP UP或ASP ACT消息。                           |
| 需要ASP标识符 | ASP UP         | 由信令网关进程 (SGP)发送, 以响应没有ASP标识符的ASP UP。<br><br>已记录 ( 如果收到 )。但是, 由于已发送ASP ID, 因此不应收到此消息。                                       |
| ASP标识符无效 | ASP UP         | 为响应ASP UP消息而发送, ASP标识符重复。<br><br>已记录 ( 如果收到 )。   |
| 无效的路由上下文 | ASP Act        | 当邮件包含无效的路由上下文时发送。<br><br>已记录 ( 如果收到 )。此外, 会发送层管理通知, 以警告PGW 2200和SG之间的配置不匹配。  |

|        |  |                           |                                  |
|--------|--|---------------------------|----------------------------------|
|        | A<br>A<br>N<br>T<br>F<br>Y   |                           |                                  |
| 参数值无效  | a<br>i<br>l  | 收到消息时，对等设备发送的消息的参数值无效。    | 已记录（如果已接收）                       |
| 参数字段错误 | a<br>i<br>l  |                           | 已记录（如果收到）。                       |
| 意外参数   | a<br>i<br>l  | 在消息中收到意外参数时发送。            | 已记录（如果收到）。                       |
| 目标状态未知 | D<br>A<br>U<br>D   | 发送以响应DAUD到ASP，指示SG不想提供状态。 | 已记录（如果收到）。此外，还会发送层管理通知以生成错误配置警报。 |
| 网络外观无效 | 数<br>据<br>D<br>U<br>N<br>A<br>D<br>A<br>V<br>A<br>D<br>A<br>U<br>D<br>S<br>C<br>O<br>N<br>D<br>U<br>P<br>U<br>R<br>S | 接收实体（SG或ASP）无法识别网络外观参数。   |                                  |



在以下示例中，关联变为Out-of-Service(OOS)，并遵循信令流。(请参阅**粗体**信息。)

**注：**由于空间限制，以下某些代码会显示在多行上。

```
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

```

在某个时间，您可能需要将PGW 2200上的进程“m3ua-1”从错误级别更改为调试级别，并使用文件 /opt/CiscoMGC/var/log/platform.log 收集日志信息。

```

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>

```

来自文件/opt/CiscoMGC/var/log/platform.log的信息使关联进入服务中断状态，如下所示。

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)(m3c-bru-14) (PID 18245) <Warning>  
Received msg from invalid host (10.48.84.67):  
'H9425MM0012819864m3c-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>

## 相关信息

- [Cisco PGW 2200 Softswitch技术说明](#)
- [Cisco 信令控制器技术文档](#)
- [语音技术支持](#)
- [语音和 IP 通信产品支持](#)
- [Cisco IP 电话故障排除](#)
- [技术支持 - Cisco Systems](#)