

# Resolução de erro PGW 2200 Softswitch ITP-SCTP

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## Introduction

Este documento descreve a solução de problemas do Protocolo de Transmissão de Controle de Fluxo (SCTP - Stream Control Transmission Protocol) para o Cisco Public Switched Telephone Network (PSTN) Gateway (PGW) 2200 Softswitch no modo de Controle de Chamada e Sinalização e no Cisco IP Transfer Point (ITP). O SCTP foi projetado para transportar mensagens de sinalização PSTN sobre redes IP. O protocolo é definido no [RFC 2960](#), e um RFC de texto introdutório é fornecido pelo [RFC 3286](#).

## Prerequisites

### Requirements

Os leitores deste documento devem estar cientes destes tópicos:

- [Software Cisco Media Gateway Controller versão 9](#)
- [SCTP para iniciantes](#)
- [RFC 2960](#)
- SCTP

### Componentes Utilizados

As informações neste documento são baseadas no Cisco PGW 2200 versões 9.4(1) e posteriores.

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

### Conventions

For more information on document conventions, refer to the [Cisco Technical Tips Conventions](#).

## Considerações do projeto

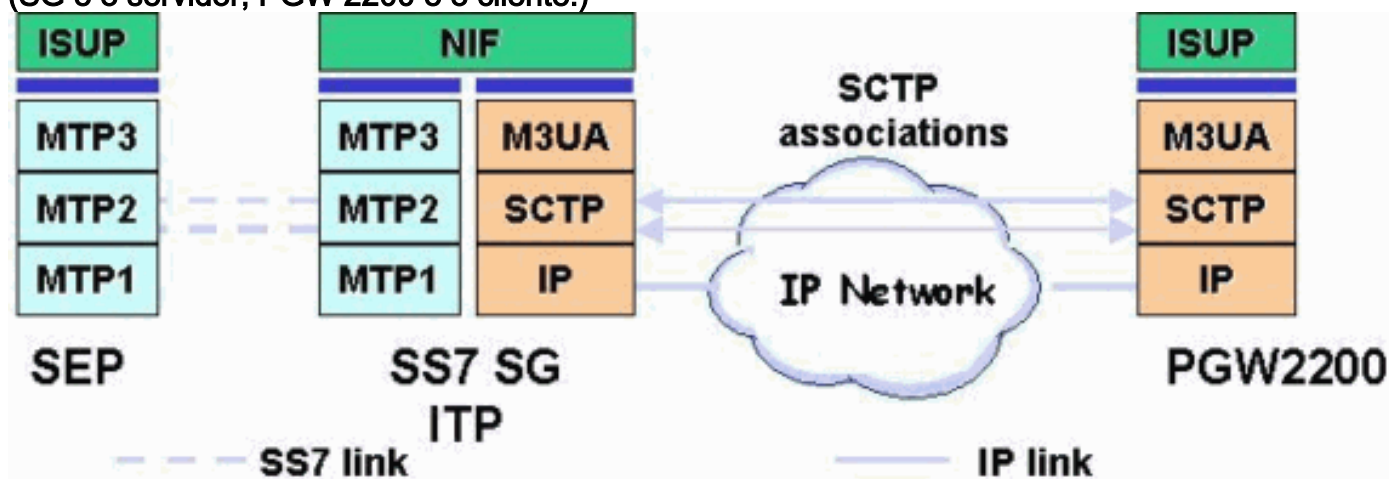
Geralmente, as redes do Sistema de Sinalização 7 (SS7 - Signaling System 7) são projetadas para um Nível de Serviço (GOS - Signaling System 7) específico. Para esse cenário, consulte a Especificação ITU E.723, que aborda algumas das considerações para garantir GOS de ponta a ponta ao projetar uma rede SS7.

O documento E.723 da Especificação ITU aborda o tempo de transmissão da mensagem de endereço inicial (IAM) fim-a-fim de 0,9 segundos e inclui outras informações detalhadas.

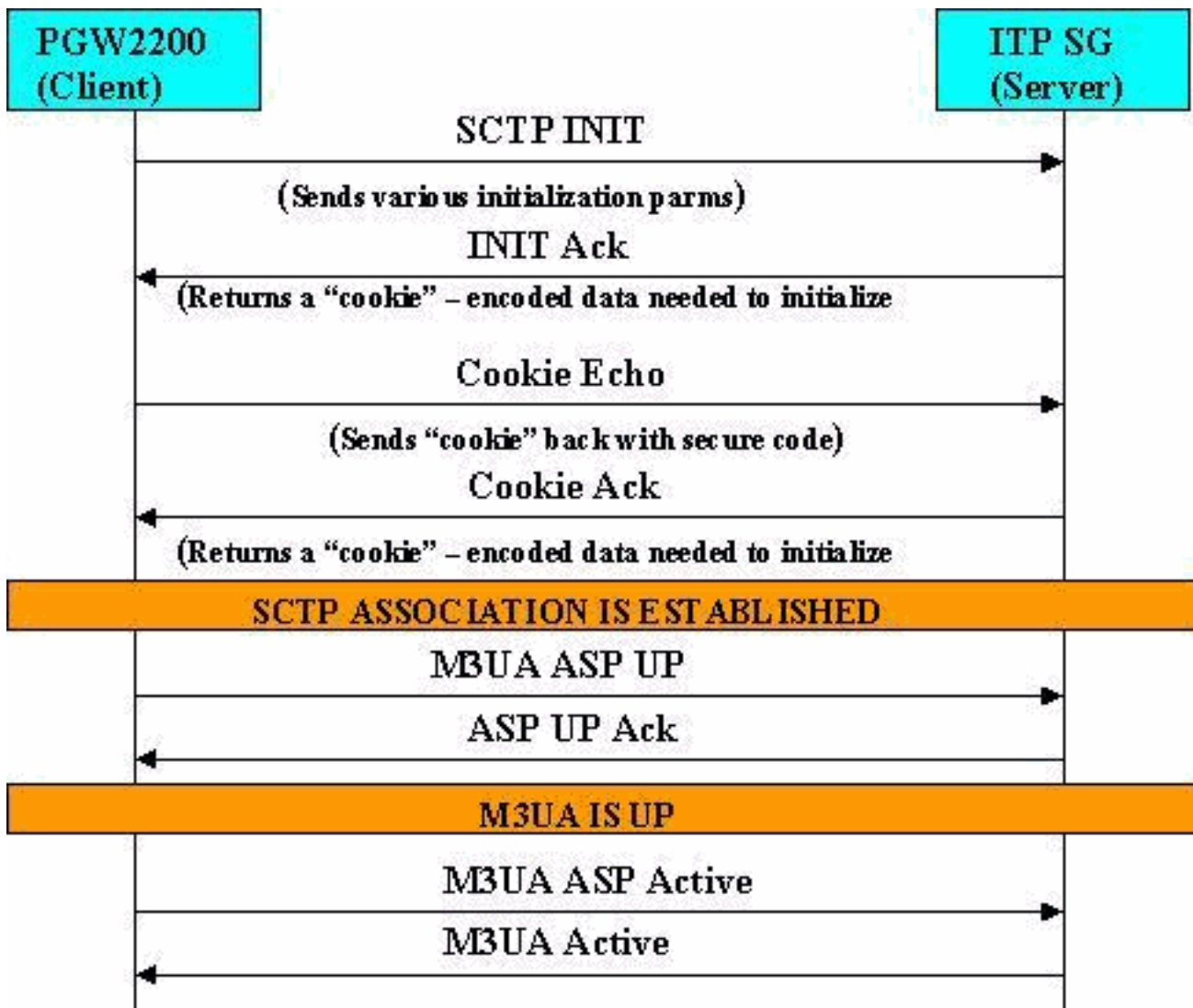
Como regra geral, os tempos de ida e volta (RTTs) inferiores a 200-300 ms entre dois nós SS7-over-IP (SS7oIP) colocam o desempenho bem dentro dos requisitos da maioria dos aplicativos SS7 de camada superior. O RTT pode exceder isso, mas o projeto geral da rede deve ser avaliado para garantir que vários saltos não excedam os temporizadores da camada de aplicação.

## Solucionar problemas do ITP-SCTP

Arquitetura do Gateway de Sinalização Cliente-Servidor (SG - Client-Server Signaling Gateway) (SG é o servidor; PGW 2200 é o cliente.)



Mensagem SCTP



No ITP, emita o comando **debug**:

```

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
  
```

No PGW 2200, uma associação está fora de serviço. Ative essa associação com o comando Man-Machine Language (MML) **set-Association:m3ua-assoc2:IS,confirm** e siga o **debug** no ITP para descobrir os diferentes status (mostrado em **negrito**).

```

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>
```

Para ajudar a solucionar problemas de adaptação de usuário (M3UA) de nível 3 do SCTP e da parte de transferência de mensagens (MTP - Message Transfer Part) no PGW 2200 e no ITP, abaixo há uma explicação (fornecida com itens **em negrito**) do fluxo de sinalização e das depurações.

**Observação:** o fluxo de sinalização é descrito no [SCTP para iniciantes](#) .

**Observação:** alguns dos códigos abaixo são exibidos em várias linhas devido a limitações de espaço.

```
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

## Tratamento de erros SCTP e M3UA

Tipo de mensagem	Descrição
Dados de payload	Contém os dados do protocolo de usuário MTP3 SS7, que é um primitivo  MTP-TRANSFER, incluindo o Rótulo de roteamento MTP3 completo.
Destino indisponível (DUNA)	Usado para sinalizar ao ASP (caminho de sinal auxiliar) que os destinos não estão disponíveis. Semelhante à transferência MTP proibida.
Destino disponível (DAVA)	Usado para sinalizar ao ASP que os destinos estão disponíveis. Semelhante à transferência MTP permitida.
Auditoria de destino (DAUD)	Usado para solicitar do status SG de disponibilidade ou congestionamento de rotas SS7.
Congestionamento de rede SS7 (SCON)	Usado para indicar congestionamento de um SG.
Peça de destino indisponível (DUPU)	Enviado pelo SG para indicar que o usuário MTP3 do peer remoto não está disponível.
Destino restrito (DRST)	Enviado ao ASP indicando que o destino SS7 é restrito. Semelhante ao MTP.
ASP para cima (ASPUP)	Essa mensagem é usada para indicar ao SG que o ASP está ativo, em execução e pronto para receber mensagens relacionadas à manutenção.
Ack ASP Up	Reconhece a mensagem ASP Up.
ASP desativado (ASPDN)	Indica ao SG que o ASP não está pronto para receber tráfego.

ASP Down Ack	Reconhece a mensagem ASP Down.
Solicitação de registro (REG REQ)	Enviado pelo ASP para SG e usado para registrar chaves de roteamento com o SG.
Resposta do registro	Usado para confirmar a solicitação de registro.
Solicitação de cancelamento de registro (DEREG REQ)	Usado para sinalizar o SG para cancelar o registro da chave de roteamento.
Resposta de cancelamento de registro (DREG RSP)	Usado para confirmar a solicitação de cancelamento de registro.
ASP Ativo (ASPAC)	Indica que o ASP agora está ativo e pronto para aceitar tráfego.
ASP Ative Ack	Usado para confirmar a mensagem ASP Ative.
ASP Inativo (ASPIA)	Usado para indicar que um ASP foi para o modo inativo.
Ack Inativo de ASP	Enviado pelo SG para confirmar ASP Inativo.
Batimento cardíaco (BEAT)	Mensagem de pulsação.
Conexão de pulsação (Beat-Ack)	Reconhece a mensagem Heartbeat.
Notificar (NTFY)	Fornecer indicação autônoma de eventos para um peer M3UA.

### Tratamento de Mensagens de Erro M3UA

Código de erro	Resposta	Causa	Ação
Versão inválida	ASP UP	Usado para notificar o ASP de que o SG não suporta a versão especificada. Este erro só deve ser recebido em resposta à solicitação ASP Up enviada ao SG.	Atualmente, há apenas uma única versão do M3UA.
Classe de Mensagem Não Suporta	TODOS	Indica ao SG ou ASP que uma mensagem foi recebida com uma classe de mensagem inválida.	Quando o ASP recebe uma mensagem com classe de mensagem

da			não suportada, ele ignora a mensagem, coloca o cabeçalho no parâmetro de diagnóstico de uma mensagem de erro e envia a mensagem de erro com esse código de erro. Ao receber essa mensagem de erro, ela é registrada.
Tipo de mensagem em não suportada	TOD OS	Indica ao SG ou ASP que uma mensagem foi recebida com um tipo de mensagem inválido.	Igual à classe de mensagem não suportada, acima.
Modo de Tratamento de Tráfego Não Suportado	ASP AC	Notifica o ASP que recebeu a mensagem de que continha um tipo de tratamento de tráfego inválido.	Ao receber essa mensagem de erro, o ASP deve gerar uma entrada de log e fornecer notificação de incompatibilidade de configuração por retorno de chamada de gerenciamento de camada.
Mensagem inesperada			Enviado quando uma mensagem é recebida inesperadamente (ou seja, o ASP não está no estado ativo ou o ASP está no estado Inativo e um ASP Ativo foi recebido).

Erro de protocolo			Registrado se recebido. Enviado para erros gerais de protocolo.
Identificador de Fluxo Inválido		Enviado por peer quando uma mensagem é recebida com um identificador de fluxo inválido. Isso ocorre quando uma mensagem de gerenciamento é enviada em um fluxo diferente de 0. O receptor da mensagem no fluxo inválido deve descartar a mensagem.	Quando esta mensagem é recebida, é muito provável que tenha ocorrido um erro de codificação. Quando esta mensagem é recebida, a mensagem deve ser enviada novamente, em um fluxo válido, e o erro deve ser registrado.
Recusa do — Bloqueio de gerenciamento	ASP Up ASP Act	Enviado pelo SG quando um ASP UP ou ASP Act é recebido e ocorre alguma forma de bloqueio de gerenciamento.	Registrado se recebido. Se o estado preferencial for UP, o ASP continuará a enviar a mensagem ASP UP ou ASP ACT periodicamente.
Identificador de ASP necessário	ASP UP	Enviado por processo de gateway de sinalização (SGP - Signaling Gateway Process) em resposta a um ASP UP sem um identificador de ASP.	Registrado se recebido. No entanto, isso não deve ser recebido porque a ID do ASP foi enviada.
Identificador de ASP inválido	ASP UP	Enviado em resposta à mensagem ASP UP com um Identificador ASP duplicado.	Registrado se recebido.
Contexto de roteamento	ASP AC ASP IA	Enviado quando uma mensagem contém um contexto de roteamento inválido.	Registrado se recebido. Além disso, a notificação de

inválido	NTFY		gerenciamento de camada é enviada para alarme de uma incompatibilidade na configuração entre o PGW 2200 e o SG.
Valor de parâmetro inválido	Todos	Enviado por peer quando uma mensagem é recebida com um valor de parâmetro inválido.	Registrado se recebido
Erro de campo de parâmetro	Todos		Registrado se recebido.
Parâmetro inesperado	Todos	Enviado quando um parâmetro inesperado é recebido em uma mensagem.	Registrado se recebido.
Status do destino desconhecido	DAUD	Enviado em resposta a DAUD para ASP indicando que o SG não deseja fornecer o status.	Registrado se recebido. Além disso, a notificação de gerenciamento de camada é enviada para gerar um alarme de configuração incorreta.
Aparência de rede inválida	DUN A DUN A DAUD SCON DUP U DRS T	O parâmetro de aparência da rede não é reconhecido pela entidade receptora (SG ou ASP).	

No exemplo abaixo, a associação é trazida para fora de serviço (oos), e o fluxo de sinalização é seguido. (Consulte as informações **em negrito**.)

**Observação:** alguns dos códigos abaixo são exibidos em várias linhas devido a limitações de espaço.

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

```

Em um certo momento, talvez seja necessário alterar o processo "m3ua-1" do nível de erro para o nível de depuração no PGW 2200 e coletar as informações de log com o arquivo /opt/CiscoMGC/var/log/platform.log.

```

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>

```

As informações do arquivo /opt/CiscoMGC/var/log/platform.log trazem a associação ao status de fora de serviço, como mostrado abaixo.



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>  
RECEIVED STATISTICS REQ FROM IOCM

## Informações Relacionadas

- [Notas técnicas do Softswitch Cisco PGW 2200](#)
- [Documentação técnica dos Cisco Signaling Controllers](#)
- [Suporte à Tecnologia de Voz](#)
- [Suporte aos produtos de Voz e Comunicação por IP](#)
- [Troubleshooting da Telefonia IP Cisco](#)
- [Suporte Técnico - Cisco Systems](#)