

IISP 业务配置以及故障排除

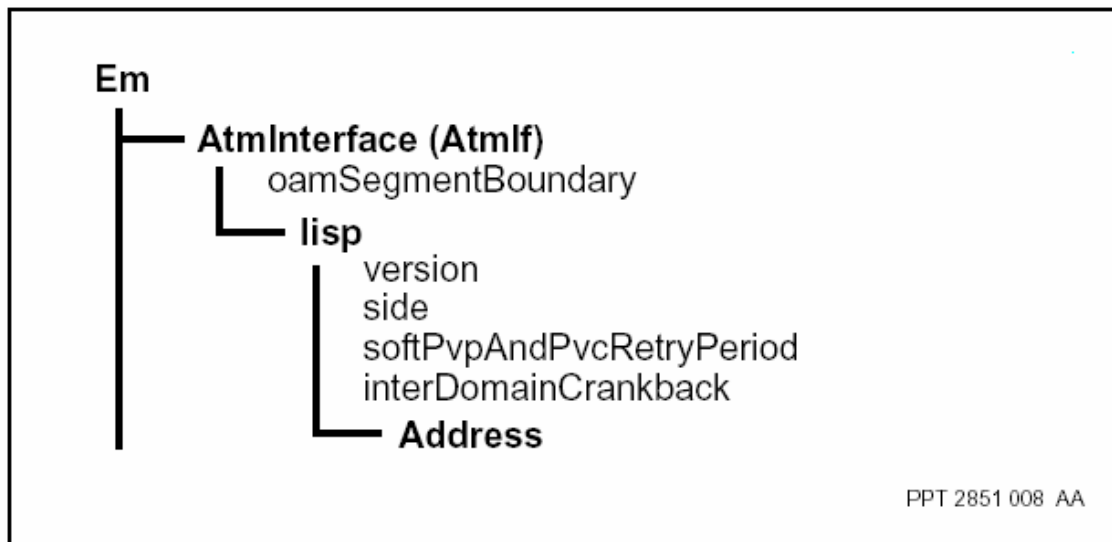
IISP (Interim inter-switch signaling interface) 信令协议支持MSS (原来称 Passport) ATM网络和其他ATM网络的连接。是基于ATM论坛标准的IISP。

每条IISP连接都要设置为用户端 (user side) 和网络端 (network side)。通常设定是，电信骨干节点的交换机上设置为网络端，各地市于骨干节点互连的交换机上设置为用户端。

IISP 的配置

1、IISP 接口的配置：

IISP 接口配置的部件树



2、配置 ATM 路由软件：

1) 设置包含 ATM 网络在内的可用软件

```
PROV> set Sw avList atmNetworking_<软件版本号>
```

2) 在运行 ATM 路由的 FP 板卡的逻辑处理协议中加载 PNNI 的属性

```
PROV> set Sw Lpt/ATM featureList atmiisp
```

3、配置 IISP：

1) 添加 ATMIF 部件

```
PROV> add atmif/xx
```

```
PROV> set atmif/xx inter Ip/x sdh/y pa/0 (MSS 7K) 或是 set atmif/xx inter Ip/x sdh/y vc4/0 (MSS 15K)
```

2) 添加 IISP 部件

```
PROV> add AtmIf/xx IISP
```

3) 设置 PNNI 的 OAM

PROV> **set AtmIf/xx oamSegmentBoundary no**

注意：如果相连接的其他网络设备对 oam 信源的检测有较大的要求时，可以设置其参数为 yes。此时不在经过改端口相相连的设备端口发送 oam 检测信源。如与朗讯 CBX500 互连时。

4) 设置 IISP 的属性

PROV> **set AtmIf/xx iisp version <forumVer>, side <ifSide>**

注意：forumVer 的参数为 iisp10Sig30 或 iisp10Sig31，通常默认的为 iisp10Sig31。

ifSide 的参数为 userSide 或 networkSide。

IISP 运行状态的检查：

> **d atmif/202 iisp sig**

AtmIf/202 Iisp Sig

adminState = unlocked
operationalState = enabled
usageState = active
lastTxCauseCode = 0
lastTxDiagCode = 00
lastRxCauseCode = 0
lastRxDiagCode = 00
currentConnections = 0
peakConnections = 0
successfulConnections = 0
failedConnections = 0
txPdus = 0
rxPdus = 0
currentPmpConnections = 0
peakPmpConnections = 0
successfulPmpConnections = 0
failedPmpConnections = 0

ok 2005-04-18 11:42:20.60

> **d atmif/202 vcc/0.5 ep**

AtmIf/202 Vcc/0.5 Ep

applicationName = AtmIf/202 Iisp Sig

ok 2005-04-18 11:43:41.45

查看端口下系统分配和认为添加的 ATM 地址

> **d -n atmif/23 iisp add/***

AtmIf/23 Iisp Addr/45861941010101000F000000000020480D 00C800,default

```
scope = -1
reachability = internal
ok      2005-04-18 11:45:03.31
```

IISP 的故障排除

IISP 的失效状态一：

```
> d atmif/* iisp sig
```

```
AtmIf/* Iisp Sig
```

Use -noTabular to see the many hidden attributes.

```
+=====+-----+-----+-----+-----+-----+-----+-----+-----+-----+
|AtmIf|osiAd|osiO|osiUs|lastT|last|lastR|last|currentConn|peakConnect
|      | min |per | age |xCaus|TxDi|xCaus|RxDi|  ections |   ions
|      |    |  |   |   |eCode|agCo|eCode|agCo|          |
|      |    |  |   |   |   | de |   | de |          |
+=====+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 201|unlck|dis |idle |   0| 00|   0| 00|          0|          0
ok      2005-04-18 11:46:30.72
```

```
> d atmif/201 iisp sig
```

```
AtmIf/201 Iisp Sig
```

```
adminState = unlocked
operationalState = disabled
usageState    = idle
lastTxCauseCode = 0
lastTxDiagCode = 00
lastRxCauseCode = 0
lastRxDiagCode = 00
currentConnections = 0
peakConnections   = 0
successfulConnections = 0
failedConnections = 0
txPdus            = 0
rxPdus            = 0
```

```
currentPmpConnections = 0
peakPmpConnections    = 0
successfulPmpConnections = 0
failedPmpConnections  = 0
ok                    2005-04-18 11:48:43.26
```

```
> | atmif/201 vcc/*
```

```
AtmIf/201 Vcc/0.32
```

```
ok                    2005-04-18 11:58:12.99
```

解释：本端的 ATM IISP 正常配置并加载，但是没有产生了 VCC/0.5 的信令 Sig (Signalling) 的电路。原因在于本端的 ATM 端口物理没有联通，ATMIF 没有被激活。

检查相关状态，如下：

```
> d Lp/2 Sdh/1
```

```
Lp/2 Sdh/1
```

```
snmpOperStatus = down
adminState     = unlocked
operationalState = disabled
usageState     = idle
availabilityStatus = depend
proceduralStatus =
controlStatus  =
alarmStatus    = crit
standbyStatus  = notSet
unknownStatus  = false
losAlarm       = on
lofAlarm       = off
rxAisAlarm     = off
rxRfiAlarm     = off
unusableTxClockRefAlarm = off
txAis          = off
txRdi          = on
s1Rx           = 15
s1Tx           = 15
runningTime    = 689574
errorFreeSec   = 0
sectCodeViolations = 0
sectErroredSec = 689574
```

```
sectSevErroredSec      = 689574
sectLosSec              = 689574
sectSevErroredFrmSec   = 0
sectFailures           = 1
lineCodeViolations     = 0
lineErroredSec         = 0
lineSevErroredSec     = 0
lineAisSec             = 0
lineUnavailSec        = 689574
lineFailures           = 0
farEndLineErrorFreeSec = 0 seconds
farEndLineCodeViolations = 0
farEndLineErroredSec   = 0
farEndLineSevErroredSec = 0
farEndLineAisSec       = 0
farEndLineUnavailSec   = 0
farEndLineFailures     = 0
ok                      2005-04-18 12:01:24.90
```

> d atmif/201

```
AtmIf/201
  adminState = unlocked
  operationalState = disabled
  usageState   = idle
  availabilityStatus =
  proceduralStatus =
```

ok 2005-04-18 12:04:51.23

IISP 的失效状态二：

> d atmif/11 iisp sig

```
AtmIf/11 Iisp Sig
  adminState = unlocked
  operationalState = disabled
  usageState   = idle
  lastTxCauseCode = 0
  lastTxDiagCode = 00
  lastRxCauseCode = 0
  lastRxDiagCode = 00
```

```
currentConnections = 48
peakConnections    = 52
successfulConnections = 119
failedConnections  = 669470
txPdus             = 0
rxPdus             = 0
currentPmpConnections = 0
peakPmpConnections = 0
successfulPmpConnections = 0
failedPmpConnections = 0
ok                 2006-04-18 14:11:37.10
```

```
> d atmif/11 vcc/0.5
```

```
AtmIf/11 Vcc/0.5
```

```
adminState = unlocked
operationalState = enabled
usageState   = busy
connectionPointType = connectionEndPoint
distributionType = pointToPoint
numLeaves    = 0
callDirection = notApplicable
operStatus   = unknown
localFailureCause = noFailure
troubled     = no
segLinkSideLoopbackState = unknown
segSwitchSideLoopbackState = notApplicable
endToEndLoopbackState = unknown
rxOamCellCongestionState = good
aisState         = good
rdiState         = good
txCell           = 2481244
txCellClp       = 0
txCellDiscard   = 0
txCellDiscardClp = 0
txFrameDiscard  = 0
txFrameDiscardClp = 0
rxCell          = 0
rxCellClp       = 0
```

```
rxCellDiscard          = 0
rxCellDiscardClp       = 0
rxFrameDiscard         = 0
rxFrameDiscardClp     = 0
rxUpcViolationOnEnforcer1 = 0 cells
rxUpcViolationOnEnforcer2 = 0 cells
rxAal5FrameError       = 0
rxAal5FrameAbort       = 0
lastMinimumCtd         = noMeasurement
lastMaximumCtd         = noMeasurement
lastAverageCtd         = noMeasurement
currentCtd             = noMeasurement
lastCtdSampleSize     = 0
ok                      2006-04-18 14:11:51.11
```

解释：本端的 ATM IISp 正常配置并加载，产生了 VCC/0.5 的信令 **Sig** (Signalling) 的电路。虽然 txCell 的值有增长，但是 rxCell 的值没有增长，原因在于与对端相连接的 ATM 端口没有配置加载 IISp，或是双方的参数设置不匹配。