排除SMF错误日志故障"；所有对等体都为Dead"

目录

简介

本文档介绍如何排除与以下内容相关的会话管理功能(SMF)日志警报的故障： **All Peers are Dead, Setting status code to 0.**

问题

已报告SMF上的会话影响。

分析

记录所有对等体已停用

日志指示SelectedProfileName:CHF-OFF中的所有对等体已停用。

日志涵盖SMF上配置的所有终端，当您看到所有对等体在配置文件中停止时，会始终导致会话影响。

<#root>

```
master-1 b26897bce81a[2516]:
master-1 c77834f772f7[2516]: ************* TRANSACTION: 2475167152 *************
master-1 c77834f772f7[2516]: ************* TRANSACTION: 2475167152 *************
master-1 c77834f772f7[2516]: TRANSACTION SUCCESS:
master-1 c77834f772f7[2516]: TRANSACTION SUCCESS:
master-1 c77834f772f7[2516]: GR Instance ID : 1
master-1 c77834f772f7[2516]: GR Instance ID : 1
master-1 c77834f772f7[2516]: Txn Type : N4OChargingDataReq(3585)
master-1 c77834f772f7[2516]: Txn Type : N4OChargingDataReq(3585)
master-1 c77834f772f7[2516]: Priority : 1
master-1 c77834f772f7[2516]: Priority : 1
master-1 c77834f772f7[2516]: Session Namespace : smf(1)
master-1 c77834f772f7[2516]: Session Namespace : smf(1)
```

```
master-1 c77834f772f7[2516]: CDL Slice Name : smf
master-1 c77834f772f7[2516]: CDL Slice Name : smf
master-1 c77834f772f7[2516]: LOG MESSAGES:
master-1 c77834f772f7[2516]: LOG MESSAGES:
master-1 c77834f772f7[2516]: 2023/09/10 15:00:00.007 [ERROR] [nrfClient.Discovery.nrf]

All Peers are Dead, Setting status code to 0

 (timeout)
master-1 c77834f772f7[2516]: 2023/09/10 15:00:00.007 [ERROR] [nrfClient.Discovery.nrf]

All Peers are Dead, Setting status code to 0

 (timeout)
master-1 c77834f772f7[2516]: 2023/09/10 15:00:00.007 [ERROR] [nrfClient.Discovery.nrf] Message send fai
master-1 c77834f772f7[2516]: 2023/09/10 15:00:00.007 [ERROR] [nrfClient.Discovery.nrf] Message send fai
master-1 c77834f772f7[2516]: **********************************************
master-1 c77834f772f7[2516]: **********************************************
```

根据配置，如果HTTP代码为504（超时）系统，SMF将尝试访问优先级较高的主服务器，然后SMF尝试访问辅助服务器。如果失败，那么系统也会将会话设置为继续模式。

在本例中，Offline的辅助计费功能(CHF)是10.10.10.2。SMF收到504错误，操作为FailureContinueAction。

<#root>

```
master-2 42013075464a[2621]: 2023/09/10 15:00:00.063 rest-ep [ERROR] [RestClient.go:175] [infra.rest_cl
master-2 42013075464a[2621]: 2023/09/10 15:00:00.063 rest-ep [ERROR] [Config.go:1721] [nrfClient.Discov
master-2 42013075464a[2621]: ************* TRANSACTION: 2252879781 *************
master-2 42013075464a[2621]: TRANSACTION SUCCESS:
master-2 42013075464a[2621]: GR Instance ID : 1
master-2 42013075464a[2621]: Txn Type : N40ChargingDataReq(3521)
master-2 42013075464a[2621]: Priority : 1
master-2 42013075464a[2621]: Session Namespace : smf(1)
master-2 42013075464a[2621]: CDL Slice Name : smf
master-2 42013075464a[2621]: LOG MESSAGES:
master-2 42013075464a[2621]: 2023/09/10 15:00:00.063 [ERROR] [rest_ep.app.ChargingIntf] {imsi-123456789
master-2 42013075464a[2621]: 2023/09/10 15:00:00.063 [ERROR] [nrfClient.SendMesg.NRF] FHI status

504

 timediff 1000332537, Uri: http://10.10.10.2:1090/OFFLINE/nchf-convergedcharging/v2, retryCount = 0 loo
master-2 42013075464a[2621]: 2023/09/10 15:00:00.063 [ERROR] [nrfClient.Discovery.nrf] Message send fai
master-2 42013075464a[2621]: **********************************************
```

SMF检查

在SMF上，检查与报告问题的终端相关的对等体及其连接时间。

```
smf# show peers
GR                                                                                  POD              CONN
INSTANCE  ENDPOINT        LOCAL ADDRESS         PEER ADDRESS           DIRECTION  INSTANCE   TYPE  TIME
-------------------------------------------------------------------------------------------------------
```

```
1         <none>          192.168.1.1          10.10.10.2:1090      Outbound   rest-ep-0  Rest  4 hour
1         <none>          192.168.1.2          10.10.10.2:1090      Outbound   rest-ep-1  Rest  4 hour
1         <none>          192.168.1.3          10.10.10.1:1090     Outbound   rest-ep-2  Rest  4 hours
1         <none>          192.168.1.3          10.10.10.2:1090      Outbound   rest-ep-2  Rest  4 hour
1         <none>          192.168.1.4          10.10.10.1:1090     Outbound   rest-ep-3  Rest  4 hours
1         <none>          192.168.1.2          10.10.10.1:1090     Outbound   rest-ep-1  Rest  4 hours
1         <none>          192.168.1.4          10.10.10.2:1090      Outbound   rest-ep-3  Rest  2 hour
1         <none>          192.168.1.1          10.10.10.1:1090     Outbound   rest-ep-0  Rest  4 hours
```

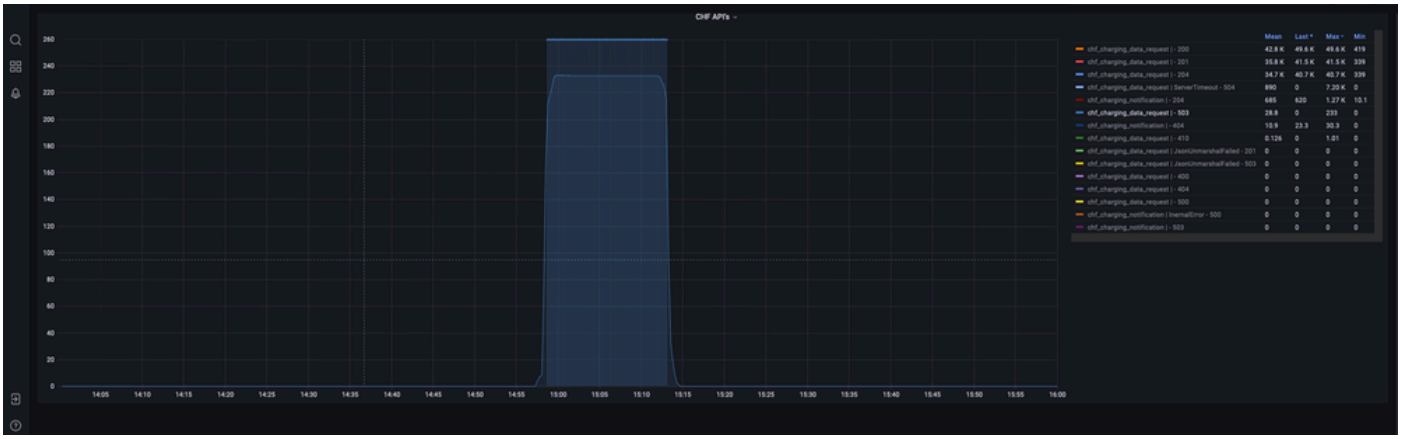
```
// CHF related profiles

profile network-element chf CHF-OFFLINE
 nf-client-profile        CHF-OFF
 failure-handling-profile Fail-H-CHF-OFF
 discovery local
exit

// Here is configuration for CHF profile where all peers are dead

profile nf-client nf-type chf
 chf-profile CHF-OFF
  locality LOC1
   priority 1
   service name type nchf-convergedcharging
    responsetimeout 1000
    endpoint-profile epprof
     capacity   10
     api-root   OFFLINE
     uri-scheme http
     version
      uri-version v2
      exit
     exit
     endpoint-name ep1
      priority 1
      capacity 10
      primary ip-address ipv4 10.10.10.1
      primary ip-address port 1090
     exit
     endpoint-name ep2
      priority 2
      capacity 10
      primary ip-address ipv4 10.10.10.2
      primary ip-address port 1090
     exit
    exit
   exit
  exit
 exit

// Failure handling that in case of timeout (HTTP code 504) then try secondary server one time and then

profile nf-client-failure nf-type chf
 profile failure-handling Fail-H-CHF-OFF
  service name type nchf-convergedcharging
   responsetimeout 1000
   message type ChfConvergedchargingCreate
    status-code httpv2 504
     retry  1
```

```
    action continue
   exit
  exit
  message type ChfConvergedchargingUpdate
   status-code httpv2 504
    retry  1
    action continue
   exit
  exit
  message type ChfConvergedchargingDelete
   status-code httpv2 504
    retry  1
    action continue
   exit
  exit
 exit
```

Grafana检查

已观察HTTP 504超时与问题时间之间的直接关联。

```
query: sum(increase(smf_restep_http_msg_total{nf_type="chf", namespace=~"$namespace"}[15m])) by (api_na
```



Nexus检查

检查是否发生任何摆动。

```
Nexus# show logging last 500 | include BFD
```

解决方案

此问题的解决方案在本例中有所不同，因为SMF是客户端，而CHF是服务器。

连接丢失不是由SMF导致的。

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