

了解尖顶术语和路由逻辑

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简介

本文如何解释Cisco Unified SIP代理(尖顶)呼叫路由逻辑。

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Prerequisites

Requirements

Cisco建议您有这些题目知识：

- 会话初始化协议(SIP)常识
- 对语音网络配置的尖顶的概念性了解

术语

定义

术语 定义

SIP网络是可以为一般路由选择目的的被对待同样本地接口的一个逻辑集合。

从http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cusp/rel9_1/gui_configuration/en_US网络逻辑上定义了网络的区域。使用在尖顶设备的接口网络可以被定义，或者特定端口可以用于(示例：监听端口14.50.245.9 : 5060，14.50.245.9 : 5062，14.50.245.9 : 使用单个尖顶第一一旦网络逻辑上被定义，他们可以使用到根据网络的被配置的触发器。

网络

Note:如果设置侦听端口，请保证发送数据流到尖顶使用正确的端口的设备。如果设置侦听CUCM发送数据流到端口5065，不是默认值5060。

触发器

可以设置触发器识别流入的消息。

触发器能识别入站网络、本地端口、远程网络等等。

服务器组定义了Cisco Unified SIP代理系统为每网络呼应的元素。

服务器组

从http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cusp/rel9_1/gui_configuration/en_US服务器组和路由组可以使用作为目的地在路由表里。服务器组通常会使用同一种类型的冗余设置。路由组允许您选定网关和Trunk选择的命令。它允许您优先安排网关和端口列表流出的中继线边。

路由组

从http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cusp/rel9_1/gui_configuration/en_US服务器组和路由组可以使用作为目的地在路由表里。路由组通常定义了一个被衡量的组目的地。对CUCM的一个直接SIP Trunk和对到达CUCM的PSTN网关的一个SIP Trunk是路由组的一个好PSTN路由是备份。

您配置路由表指向SIP请求到他们适当的目的地。每个路由表包括根据查找策略被匹配的一套键。

从http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cusp/rel9_1/gui_configuration/en_US路由表在尖顶类似于第3层路由表。尖顶路由表在第3层路由表里包括键类似于网络。路由表目的地在尖顶路由表里键可以被映射到以下路由类型路由SIP消息：

路由表

目的地：一台特定主机或一个本地配置的服务器组可以被配置作为目的地

路由组：有一个或更多元素的一个本地配置的路由组

路由策略：路由策略可以用于移动在路由表之间类似于在CUCM的转换模式

回应：而不是路由SIP消息，尖顶能发送一种特定回应终止呼叫尝试

默认值SIP：简单的路由根据RFC 3263。

Note:如果映射键对路由策略，请是认知的逻辑循环。

路由策略在该路由表里指向一个路由表并且定义了如何使用键。

示例：

路由表名字："FromCUCM105-RT"

路由策略

查询关键字匹配："前缀长匹配"

查询关键字："SIP报头：'到'电话"

通过分离键的定义从键的配置的值同一个路由表可以用于不同的方式。例如，一个路由策略能定义路由表的键作为a的前缀从：报头。

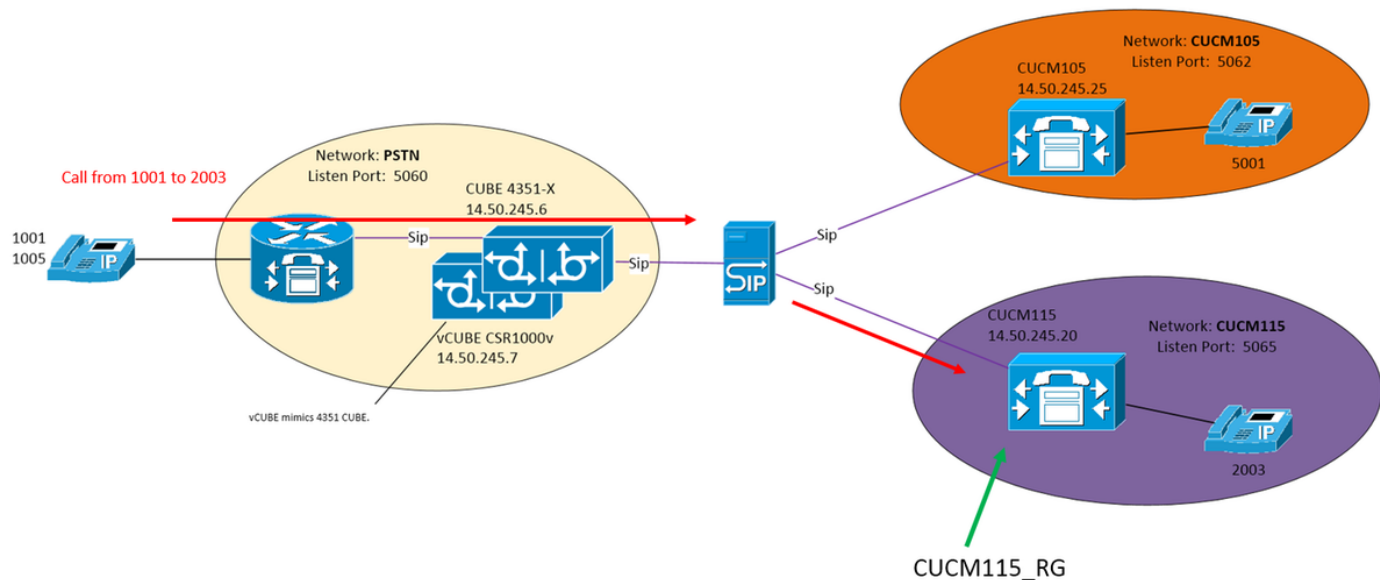
路由触发器

路由触发器与路由策略请连接触发器。

逻辑上它陈述SIP消息是否匹配触发器，然后使用被配置的路由策略。

在总和，SIP消息用根据SIP侦听端口的网络标记。网络可以用于匹配触发器。路由策略在哪里然后识别哪个路由表使用根据触发器并且定义了寻找键。路由表在哪里然后将使用键发现路由SIP消息(路由类型)。路由类型(主机、服务器组、路由组等等)将用于传送SIP信息到被配置的目的地(元素)。

网络拓扑



呼叫示例

从PSTN 1001的呼叫到2003年在CUCM115

基本的呼叫路由

流入网络：“PSTN”

触发器：“从PSTN触发器”

触发器，如果流入的消息匹配了网络“PSTN”

路由触发器：“FromPSTN-RPolicy” “从PSTN触发器”

链路“从PSTN触发器”的“FromPSTN-RPolicy”

路由策略：“FromPSTN-RPolicy”

指定路由表“PSTN-RT”

指定查询关键字匹配“前缀长匹配”

指定查询关键字是“SIP报头：‘到’电话”

路由表：“PSTN-RT”

包含键“2”去路由组“CUCM115_RG”

路由组(或服务组)：“CUCM115_RG”

包含元素14.50.245.20:5065

这些配置结合发表逻辑语句：

对于从PSTN的一次呼叫，电话号码前缀是2，请路由到14.50.245.20:5065

配置

PSTN - 2XXX和5XXX呼叫被发送到尖顶通过多维数据集和vCUBE

CUCM 10.5 - 1XXX和2XXX被发送到尖顶通过SIP Trunk

CUCM 11.5 - 1XXX和5XXX被发送到尖顶通过SIP Trunk

Note:当曾经GUI时，必须提交一些配置，在他们是可用的在其他配置部分前。这些标记用###Commit配置

关键配置元素

CLI 配置

创建网络

GUI 配置

配置>>网络>>添加

The screenshot shows the 'Network' configuration page in a GUI. The 'Name' field is set to 'PSTN' and the 'Type' is set to 'standard'. Under 'Allow Outbound Connections', 'Disable' is selected. 'SIP Header Hiding' has 'Hide VIA' unchecked. 'UDP Settings' shows 'Maximum Packet Size' as 1500. 'TCP Settings' shows 'TCP Connection Setup Timeout (ms)' as 1000. 'TLS Certificate Verification Setting' has both 'Verify Client Certificate' and 'Verify Server Certificate' checked. 'Add' and 'Cancel' buttons are at the bottom.

啜饮网络PSTN标准

识别网络的Define监听端口'PSTN'

配置>>网络>> [Network Name] >> SIP监听点>>添

The screenshot shows the 'Network 'PSTN' Listen Point' configuration page. The 'Listen Point' section has 'IP Address' set to 14.50.245.9, 'Port' set to 5060, and 'Transport Type' set to udp. 'Add' and 'Cancel' buttons are at the bottom.

饮者监听PSTN udp 14.50.245.9 5060

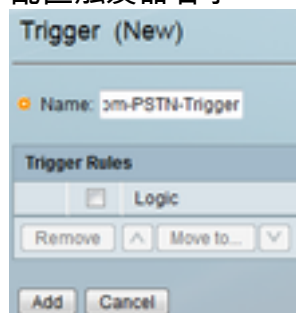
入站网络的'PSTN'触发器

配置>>触发器>>添加

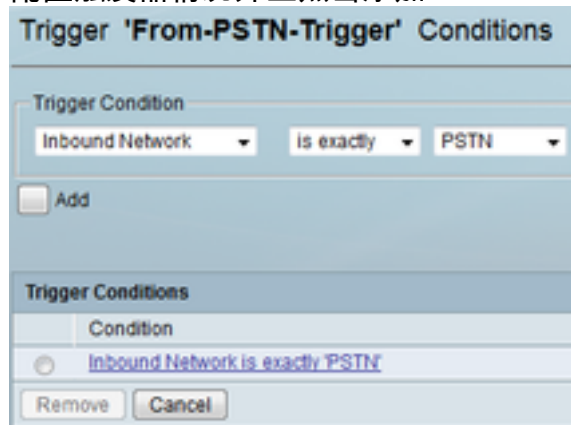
触发器情况从PSTN触发器

顺序1
网络^\QPSTN\E\$\n结尾顺序\n结尾触发器情况

配置触发器名字



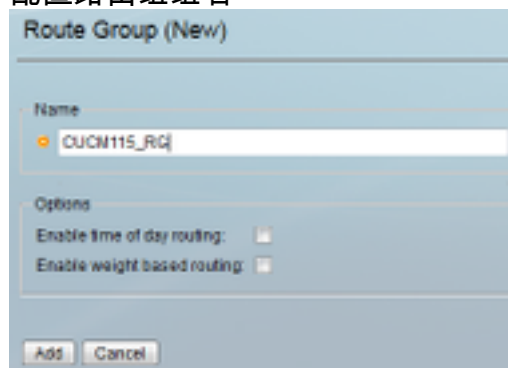
配置触发器情况并且点击添加



为'CUCM115_RG指定目的地

配置>>路由组>>添加(###Commit配置)

配置路由组组名



点击"Click Here"在元素列下，然后点击添加\n输入元素目的地

路由组CUCM115_RG\n元素目标目的地14.50.245.20:5065:udp CUCM115\nq值0.0\n故障切换代码502 - 503\n重量50\n末端元素\n末端路由

Route Group 'CUCM115_RG' Element (New)

Target Destination Next Hop

Target Destination

- Host / Server Group: 14.50.245.20
- Port: 5060
- Transport Type: udp

Next Hop

SIP URI:

Options

- Network: CUCM115
- Q-Value: 1
- Weight: 50
- Time Policy: None
- Fallover Response Codes: 502,503

Add Cancel

定义路由表并且关联键对目的地
配置>>路由表>>添加(###Commit配置)
配置一个路由表名字
Route Tables

Route Table

Name: PSTN-RT

Add Cancel

输入键和目的地

Route Table 'PSTN-RT' Route (New)

Candidate Value

- Key 2
- Route Type: route-group
- Route Group: CUCM115_RG

Add Cancel

当配置路由组作为一个目的地在路由表里时，请勿为键输入端口并且传输类型。通过添加端口和传输请键入，告诉尖顶寻找DNS主机条目Cubestack:5060:UDP而不是在局部重要的服务器组配置。

路由表PSTN-RT
键2组CUCM115_RG
键5组CUCM105_RG
末端路由表

定义'FromPSTN-RPolicy'的'键

配置>>路由策略>>添加(###Commit配置)
配置一路由策略名称

点击添加添加策略步骤

策略步骤将定义如何使用键。在这种情况下，策略在的最长的电话号码匹配对：在SIP报头的字段

与'FromPSTN-RPolicy'连接'从PSTN触发器'

配置>>路由触发器>>添加
选择一项路由策略与触发器连接

策略查询FromPSTN-RPolicy

对URI组件电话的顺序100 PSTN-RT报头
规则前缀
结尾顺序
结尾策略

触发路由顺序2策略FromPSTN-RPolicy情况从
PSTN触发器

完全配置

Note:show configuration活动冗长将显示整个配置包括路由表。

```
josmeado-CUSP(cusp)# show configuration active verbose
Building CUSP configuration...
!
server-group sip global-load-balance weight
server-group sip retry-after 250
server-group sip element-retries udp 2
server-group sip element-retries tls 1
server-group sip element-retries tcp 1
sip dns-srv
  enable
  no naptr
end dns
!
no sip header-compaction
no sip logging
!
sip max-forwards 70
sip network CUCM105 standard
  no non-invite-provisional
  allow-connections
  no tls verify
  retransmit-count invite-client-transaction 3
  retransmit-count invite-server-transaction 5
  retransmit-count non-invite-client-transaction 3
  retransmit-timer T1 500
  retransmit-timer T2 4000
  retransmit-timer T4 5000
  retransmit-timer TU1 5000
  retransmit-timer TU2 32000
  retransmit-timer clientTn 64000
  retransmit-timer serverTn 64000
  tcp connection-setup-timeout 1000
  tls handshake-timeout 3000
  udp max-datagram-size 1500
end network
!
sip network CUCM115 standard
  no non-invite-provisional
  allow-connections
  no tls verify
  retransmit-count invite-client-transaction 3
  retransmit-count invite-server-transaction 5
  retransmit-count non-invite-client-transaction 3
  retransmit-timer T1 500
  retransmit-timer T2 4000
  retransmit-timer T4 5000
  retransmit-timer TU1 5000
  retransmit-timer TU2 32000
  retransmit-timer clientTn 64000
  retransmit-timer serverTn 64000
  tcp connection-setup-timeout 1000
  tls handshake-timeout 3000
  udp max-datagram-size 1500
end network
!
sip network PSTN standard
```



```
no non-invite-provisional
allow-connections
no tls verify
retransmit-count invite-client-transaction 3
retransmit-count invite-server-transaction 5
retransmit-count non-invite-client-transaction 3
retransmit-timer T1 500
retransmit-timer T2 4000
retransmit-timer T4 5000
retransmit-timer TU1 5000
retransmit-timer TU2 32000
retransmit-timer clientTn 64000
retransmit-timer serverTn 64000
tcp connection-setup-timeout 1000
tls handshake-timeout 3000
udp max-datagram-size 1500
end network
!
sip overload reject retry-after 0
!
no sip peg-counting
!
sip privacy service
sip queue message
  drop-policy head
  low-threshold 80
  size 2000
  thread-count 20
end queue
!
sip queue radius
  drop-policy head
  low-threshold 80
  size 2000
  thread-count 20
end queue
!
sip queue request
  drop-policy head
  low-threshold 80
  size 2000
  thread-count 20
end queue
!
sip queue response
  drop-policy head
  low-threshold 80
  size 2000
  thread-count 20
end queue
!
sip queue st-callback
  drop-policy head
  low-threshold 80
  size 2000
  thread-count 10
end queue
!
sip queue timer
  drop-policy none
  low-threshold 80
  size 2500
  thread-count 8
end queue
```

```
!  
sip queue xcl  
  drop-policy head  
  low-threshold 80  
  size 2000  
  thread-count 2  
end queue  
!  
route recursion  
!  
sip tcp connection-timeout 30  
sip tcp max-connections 256  
!  
no sip tls  
!  
sip tls connection-setup-timeout 1  
!  
trigger condition From-CUCM105-Trigger  
  sequence 1  
  in-network ^\QCUCM105\E$  
  end sequence  
end trigger condition  
!  
trigger condition From-CUCM115-Trigger  
  sequence 1  
  in-network ^\QCUCM115\E$  
  end sequence  
end trigger condition  
!  
trigger condition From-PSTN-Trigger  
  sequence 1  
  in-network ^\QPSTN\E$  
  end sequence  
end trigger condition  
!  
trigger condition mid-dialog  
  sequence 1  
  mid-dialog  
  end sequence  
end trigger condition  
!  
accounting  
  no enable  
  no client-side  
  no server-side  
end accounting  
!  
server-group sip group Cubestack PSTN  
  element ip-address 14.50.245.6 5060 udp q-value 0.0 weight 1  
  element ip-address 14.50.245.7 5060 udp q-value 0.0 weight 1  
  failover-resp-codes 503  
  lbtype weight  
  ping  
end server-group  
!  
route group CUCM105_RG  
  element target-destination 14.50.245.25:5062:udp CUCM105 q-value 0.0  
  failover-codes 510  
  weight 50  
  end element  
end route  
!  
route group CUCM115_RG  
  element target-destination 14.50.245.20:5065:udp CUCM115 q-value 0.0
```

```

    failover-codes 502 - 503
    weight 50
    end element
end route
!
route table FromCUCM105-RT
key * target-destination Cubestack PSTN
key 2 group CUCM115_RG
end route table
!
route table FromCUCM115-RT
key 1 target-destination Cubestack PSTN
key 5 group CUCM105_RG
end route table
!
route table PSTN-RT
key 2 group CUCM115_RG
key 5 group CUCM105_RG
end route table
!
policy lookup FromCUCM105-RPolicy
sequence 100 FromCUCM105-RT header to uri-component phone
rule prefix
end sequence
end policy
!
policy lookup FromCUCM115-RPolicy
sequence 100 FromCUCM115-RT header to uri-component phone
rule prefix
end sequence
end policy
!
policy lookup FromPSTN-RPolicy
sequence 100 PSTN-RT header to uri-component phone
rule prefix
end sequence
end policy
!
trigger routing sequence 1 by-pass condition mid-dialog
trigger routing sequence 2 policy FromPSTN-RPolicy condition From-PSTN-Trigger
trigger routing sequence 3 policy FromCUCM115-RPolicy condition From-CUCM115-Trigger
trigger routing sequence 4 policy FromCUCM105-RPolicy condition From-CUCM105-Trigger
!
server-group sip global-ping
!
no server-group sip ping-503
!
sip cac session-timeout 720
sip cac PSTN 14.50.245.6 5060 udp limit -1
sip cac PSTN 14.50.245.7 5060 udp limit -1
!
no sip cac
!
sip listen CUCM105 udp 14.50.245.9 5062
sip listen CUCM115 udp 14.50.245.9 5065
sip listen PSTN udp 14.50.245.9 5060
!
call-rate-limit 100
!
end

```

Troubleshoot

跟踪级别配置

在尖顶GUI中，请连接**排除故障>> Cisco Unified SIP代理>>跟踪**

触发器状况-级别：调试：这将显示哪些触发器是起动作叫路由的匹配。

路由-级别：调试：这将显示在呼叫路由期间，什么执行。哪个键的被匹配了，什么目的地被选择了等等。

SIP电线LOG -级别：调试：这将表示收到和传送的SIP信息。

跟踪收集

通过GUI

在尖顶GUI中，请连接**排除故障>> Cisco Unified SIP代理>>跟踪**

选择下载日志文件

您也能清楚的日志

通过FTP客户端

默认情况下没有与FTP privileges的帐户。对enable (event)与FTP privileges的一个帐户添加用户到PFS组。

```
josmeado-CUSP# user platformadmin group ?
Administrators      System administrators group
pfs-privusers      PFS privileged users group
pfs-readonly       PFS read only group
josmeado-CUSP# user platformadmin group pfs
```

通过FTP客户端，请连接到尖顶。 **文件路径**：尖顶>>日志>>跟踪>> trace.log

跟踪顺序

1. **SIP电线LOG** -流入SIP邀请
2. **SIP电线LOG** -尝试的回归100
3. **触发器状况**-了解网络和触发器路由具体政策
4. **路由**-请参阅路由下面跟踪部分关于详细资料
5. **SIP电线LOG** -发送邀请往目的地
6. **SIP电线LOG** -请继续正常SIP处理，直到有每个呼叫段的一个200 Ok消息

触发器状况跟踪示例

```
13:24:36:987 08:17:2017 vCUSP,9.1.5,josmeado-CUSP,14.50.245.9,trace.log
[REQUESTI.7] DEBUG 2017.08.17 13:25:03:006 conditions.RegexCondition - inNetwork='PSTN'
[REQUESTI.7] DEBUG 2017.08.17 13:25:03:006 conditions.RegexCondition - IN_NETWORK: PSTN
[REQUESTI.7] DEBUG 2017.08.17 13:25:03:006 conditions.AbstractRegexCondition -
pattern(^\\QPSTN\\E$), toMatch(PSTN) returning true
```

```
[REQUESTI.7] DEBUG 2017.08.17 13:25:03:006 triggers.ModuleTrigger - ModuleTrigger.eval()  
action<FromPSTN-RPolicy> actionParameter<>  
[REQUESTI.7] DEBUG 2017.08.17 13:25:03:006 triggers.ModuleTrigger - ModuleTrigger.eval() got the  
policy, executing it ...
```

在上述示例，我们看到网络被匹配作为PSTN，用于路由策略“FromPSTN-RPolicy”。

路由跟踪示例

```
13:29:13:453 08:17:2017 vCUSP,9.1.5,josmeado-CUSP,14.50.245.9,trace.log  
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:987 nrs.XCLNRSShiftRoutes - Entering  
ShiftAlgorithms.execute()  
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:987 nrs.XCLNRSShiftRoutes - Leaving  
ShiftAlgorithms.execute()  
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:987 modules.XCLLookup - Entering execute()  
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:987 nrs.XCLPrefix - Entering getKeyValue()  
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:987 nrs.FieldSelector - getToUri: To header obtained -  
To: <sip:2003@14.50.245.9>  
  
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:987 nrs.FieldSelector - getUriPart: URI -  
sip:2003@14.50.245.9 part 1  
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:987 nrs.FieldSelector - Requested field 52  
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:987 nrs.FieldSelector - Returning key 2003  
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:987 nrs.XCLPrefix - Leaving getKeyValue()  
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:987 modules.XCLLookup - table=PSTN-RT, key=2003  
[REQUESTI.7] INFO 2017.08.17 13:29:33:987 modules.XCLLookup - table is PSTN-RT  
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:987 routingtables.RoutingTable - Entering lookup()  
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:987 routingtables.RoutingTable - Looking up 2003 in table  
PSTN-RT with rule prefix and modifiers=none  
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:987 routingtables.RoutingTable - Entering  
applyModifiers()  
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:987 routingtables.RoutingTable - Leaving  
applyModifiers(), returning 2003  
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 routingtables.RoutingTable - Leaving lookup()  
[REQUESTI.7] INFO 2017.08.17 13:29:33:988 nrs.XCLPrefix - NRS Routing decision is:  
RouteTable:PSTN-RT, RouteKey:2, RouteGroup:CUCM115_RG  
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 loadbalancer.LBFactory - Entering  
createLoadBalancer()  
[REQUESTI.7] INFO 2017.08.17 13:29:33:988 loadbalancer.LBFactory - lbtype is 3(call-id)  
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 loadbalancer.LBFactory - Leaving createLoadBalancer()  
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 nrs.XCLPrefix - Stored NRSAlgResult=isFound=true,  
isFailure=false, Response=-1, Routes=[Ruri: 14.50.245.20:5065:udp, Route: null, Network:  
CUCM115, q-value=0.0radvance=[502, 503]], PolicyAdvance=null [REQUESTI.7] DEBUG 2017.08.17  
13:29:33:988 nrs.NRSAlgResult - set policyAdvance as specified in route=RouteTable:PSTN-RT,  
RouteKey:2, RouteGroup:CUCM115_RG  
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 nrs.NRSAlgResult - no policyAdvance specified in  
route  
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 nrs.NRSAlgResult - set policyAdvance as specified in  
algorithm={lookuprule=1, lookupfield=52, lookuplenght=-1, lookuptable=PSTN-RT, sequence=100,  
algorithm=1}  
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 nrs.NRSAlgResult - no policyAdvance specified in  
algorithm  
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 modules.XCLLookup - Leaving execute()  
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 nrs.XCLNRSShiftRoutes - Entering  
ShiftRoutes.execute()  
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 loadbalancer.LBBase - Entering getServer()  
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 loadbalancer.LBBase - Entering initializeDomains()  
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 nrs.NRSRoutes - routes before applying time policies:  
[Ruri: 14.50.245.20:5065:udp, Route: null, Network: CUCM115, q-value=0.0radvance=[502, 503]]  
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 nrs.NRSRoutes -routes after applying time policies:  
[Ruri: 14.50.245.20:5065:udp, Route: null, Network: CUCM115, q-value=0.0radvance=[502, 503]]  
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 loadbalancer.LBBase - Leaving initializeDomains()
```

```
[REQUESTI.7] INFO 2017.08.17 13:29:33:988 loadbalancer.LBHashBased - list of elements in order
on which load balancing is done : Ruri: 14.50.245.20:5065:udp, Route: null, Network: CUCM115, q-
value=0.0radvance=[502, 503],
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 loadbalancer.LBBase - Server group route-sg selected
Ruri: 14.50.245.20:5065:udp, Route: null, Network: CUCM115, q-value=0.0radvance=[502, 503]
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 loadbalancer.LBBase - Leaving getServer()
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 nrs.XCLNRSShiftRoutes - Leaving ShiftRoutes.execute()
```

1.尖顶获得在的关键值对：报头

2.尖顶识别键作为2003年

3.尖顶在路由表里查寻键

4.尖顶在路由表里匹配一个条目并且识别目的地RouteGroup:CUCM115_RG

5.尖顶适用在teh RouteGroup内的负载均衡

6.尖顶识别在将传送SIP信息的RouteGroup的特定元素

7.尖顶如果适用运用时间策略

8.尖顶确定将传送SIP信息的元素

SIP电线LOG跟踪示例

```
13:29:13:453 08:17:2017 vCUSP,9.1.5,josmeado-CUSP,14.50.245.9,trace.log
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:987 nrs.XCLNRSShiftRoutes - Entering
ShiftAlgorithms.execute()
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:987 nrs.XCLNRSShiftRoutes - Leaving
ShiftAlgorithms.execute()
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:987 modules.XCLLookup - Entering execute()
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:987 nrs.XCLPrefix - Entering getKeyValue()
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:987 nrs.FieldSelector - getToUri: To header obtained -
To: <sip:2003@14.50.245.9>

[REQUESTI.7] DEBUG 2017.08.17 13:29:33:987 nrs.FieldSelector - getUriPart: URI -
sip:2003@14.50.245.9 part 1
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:987 nrs.FieldSelector - Requested field 52
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:987 nrs.FieldSelector - Returning key 2003
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:987 nrs.XCLPrefix - Leaving getKeyValue()
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:987 modules.XCLLookup - table=PSTN-RT, key=2003
[REQUESTI.7] INFO 2017.08.17 13:29:33:987 modules.XCLLookup - table is PSTN-RT
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:987 routingtables.RoutingTable - Entering lookup()
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:987 routingtables.RoutingTable - Looking up 2003 in table
PSTN-RT with rule prefix and modifiers=none
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:987 routingtables.RoutingTable - Entering
applyModifiers()
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:987 routingtables.RoutingTable - Leaving
applyModifiers(), returning 2003
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 routingtables.RoutingTable - Leaving lookup()
[REQUESTI.7] INFO 2017.08.17 13:29:33:988 nrs.XCLPrefix - NRS Routing decision is:
RouteTable:PSTN-RT, RouteKey:2, RouteGroup:CUCM115_RG
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 loadbalancer.LBFactory - Entering
createLoadBalancer()
[REQUESTI.7] INFO 2017.08.17 13:29:33:988 loadbalancer.LBFactory - lbtype is 3(call-id)
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 loadbalancer.LBFactory - Leaving createLoadBalancer()
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 nrs.XCLPrefix - Stored NRSAlgResult=isFound=true,
isFailure=false, Response=-1, Routes=[Ruri: 14.50.245.20:5065:udp, Route: null, Network:
```

```
CUCM115, q-value=0.0radvance=[502, 503]], PolicyAdvance=null [REQUESTI.7] DEBUG 2017.08.17
13:29:33:988 nrs.NRSAlgResult - set policyAdvance as specified in route=RouteTable:PSTN-RT,
RouteKey:2, RouteGroup:CUCM115_RG
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 nrs.NRSAlgResult - no policyAdvance specified in
route
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 nrs.NRSAlgResult - set policyAdvance as specified in
algorithm={lookuprule=1, lookupfield=52, lookuplength=-1, lookuptable=PSTN-RT, sequence=100,
algorithm=1}
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 nrs.NRSAlgResult - no policyAdvance specified in
algorithm
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 modules.XCLLookup - Leaving execute()
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 nrs.XCLNRSShiftRoutes - Entering
ShiftRoutes.execute()
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 loadbalancer.LBBase - Entering getServer()
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 loadbalancer.LBBase - Entering initializeDomains()
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 nrs.NRSRoutes - routes before applying time policies:
[Ruri: 14.50.245.20:5065:udp, Route: null, Network: CUCM115, q-value=0.0radvance=[502, 503]]
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 nrs.NRSRoutes -routes after applying time policies:
[Ruri: 14.50.245.20:5065:udp, Route: null, Network: CUCM115, q-value=0.0radvance=[502, 503]]
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 loadbalancer.LBBase - Leaving initializeDomains()
[REQUESTI.7] INFO 2017.08.17 13:29:33:988 loadbalancer.LBHashBased - list of elements in order
on which load balancing is done : Ruri: 14.50.245.20:5065:udp, Route: null, Network: CUCM115, q-
value=0.0radvance=[502, 503],
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 loadbalancer.LBBase - Server group route-sg selected
Ruri: 14.50.245.20:5065:udp, Route: null, Network: CUCM115, q-value=0.0radvance=[502, 503]
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 loadbalancer.LBBase - Leaving getServer()
[REQUESTI.7] DEBUG 2017.08.17 13:29:33:988 nrs.XCLNRSShiftRoutes - Leaving ShiftRoutes.execute()
SIP电线LOG显示正常SIP消息传送至两个呼叫段的200 Okay。
```

结构上参考

