排除VTR和VTRI的呼叫建立问题

目录

简介

背景信息

先决条件

- 要求
- 使用的组件

VTR(I)工具的使用

- 从CLI运行VTR(I)工具
- 从Web GUI运行VTR(I)工具

VTR(I)输出细分

- 参数或SIP邀请
- 发起人信息
- 始发呼叫信息
- 始发转换结果
- 终止呼叫信息
- 治疗信息
- 时间戳
- 结果

网络拓扑和呼叫流

呼叫方案

- 情形 1：成功的呼叫
- 方案 2：呼叫被选择性呼叫接受服务拒绝
- 情形 3：呼叫未分配的号码

简介

本文档介绍如何使用Application Server(AS)中的Verify Translation and Routing(VTR)工具排除常见的呼叫建立问题。

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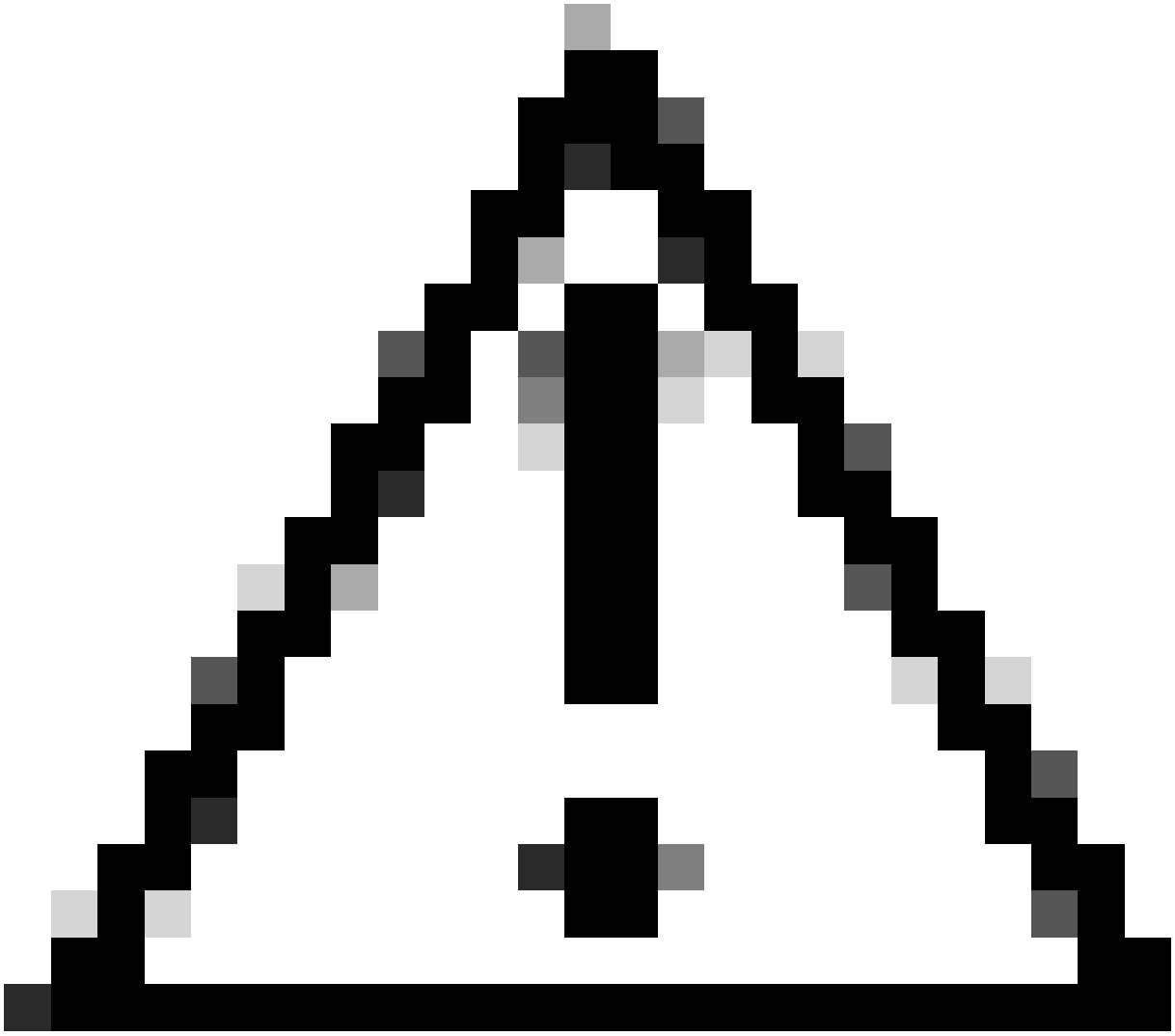
背景信息

BroadWorks Application Server有两个嵌入式工具，可用于解决呼叫建立问题：VTR并检验转换和路由邀请(VTRI)。 这两个工具的用途相同，不同之处在于输入的命令：

- VTR将呼叫方详细信息（如用户ID或电话号码）以及目标号码作为输入，
- VTRI将SIP INVITE消息作为输入。



警告：VTR和VTRI命令也可在网络服务器(NS)中使用，但输出结构与AS不同。本文档重点介绍AS VTR(I)，在与NS VTR(I)配合使用时不能用作参考。

Application Server VTR Administration Guide中提供了AS VTR的完整命令参考。

先决条件

要求

思科建议您了解以下内容：

- 会话初始协议(SIP)信令。
- 应用服务器的呼叫处理机制，以及可用的服务及其配置。

使用的组件

本文档中的信息基于BroadWorks AS版本R24。 但是，其他软件版本的行为是类似的。

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。如果您的网络处于活动状态，请确保您了解所有命令的潜在影响。

VTR(I)工具的使用

VTR分析可以从命令行界面(CLI)和Web界面触发。

从CLI运行VTR(I)工具

要从Web GUI运行VTR，请使用以下步骤：

步骤1.使用您的bwadmin凭证登录BroadWorks CLI。

步骤2.启动BroadWorks CLI并导航到AS_CLI/ASDiagnostic/Diag:

```
AS_CLI> cd ASDiagnostic/Diag
```

步骤3.要使用VTRI，请运行vtri命令，后跟SIP INVITE，在新行中运行句点字符。例如：

```
AS_CLI/ASDiagnostic/Diag> vtri
Enter a SIP message. When complete, enter a single period (.) on a line to start verifying the translat
INVITE sip:2012@mleus.lab SIP/2.0
Via: SIP/2.0/UDP 10.61.205.219:58300;rport;branch=z9hG4bKPjgINPvPUvoBT57iTOBPsgCfEqE5GX1aj7
Max-Forwards: 70
From: "Marek Leus"

        ;tag=6fU.VlLrWc6WI3JU8jWKS.25yeoWEhpc
To: sip:2012@mleus.lab
Contact: "Marek Leus"

Call-ID: dTUVBWON9UjmftpGCOoJzhLfbajBm11C
CSeq: 6492 INVITE
Route:
```

```
Allow: PRACK, INVITE, ACK, BYE, CANCEL, UPDATE, INFO, SUBSCRIBE, NOTIFY, REFER, MESSAGE, OPTIONS
Supported: replaces, 100rel, norefersub
User-Agent: Telephone 1.6
Content-Type: application/sdp
Content-Length:   480

v=0
o=- 3883737105 3883737105 IN IP4 10.61.205.219
s=pjmedia
b=AS:117
t=0 0
a=X-nat:0
m=audio 4012 RTP/AVP 96 9 8 0 101 102
c=IN IP4 10.61.205.219
b=TIAS:96000
a=rtcp:4013 IN IP4 10.61.205.219
a=sendrecv
a=rtpmap:96 opus/48000/2
a=fmtp:96 useinbandfec=1
a=rtpmap:9 G722/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/48000
a=fmtp:101 0-16
a=rtpmap:102 telephone-event/8000
a=fmtp:102 0-16
a=ssrc:2039250127 cname:43ec7f3b5b951d53
.
```

步骤4.要使用VTR，请运行vtr命令，后跟呼叫方和目标的详细信息。例如：

```
# Command reference:
AS_CLI/ASDiagnostic/Diag> h vtr
This command is used to perform a test call and see the routing results. Please
be careful when performing test calls, it may have an impact on existing real
calls or cause user migration.

Parameters description:
origType   : The type of origination used to trigger the VTR request.
linePort   : The lineport of the originating user.
bwphone    : The originating BroadWorks user phone number.
pstnphone  : The originating PSTN user phone number.
userId     : The originating BroadWorks user Id.
url        : The originating url.
destination: The called user, number or URI.
option     : Additional vtr options.
contact    : The contact URL to use for the test call.
diversion  : The diversion URL to use for the test call.

======================================================================
```

```
vtr

        , Choice = {linePort, bwphone, pstnphone, userId, url}

         , String {1 to 80 characters}

          , String {1 to 17 characters}

           , String {1 to 17 characters}

            , String {2 to 161 characters}

             , String {2 to 161 characters}

              , String {1 to 161 characters}
    [

, Multiple Choice = {contact, diversion}], String {1 to 80 characters}, String {1 to 80 characters}

# Usage example:
AS_CLI/ASDiagnostic/Diag> vtr userId ngnuserB1@mleus.lab 2012
```

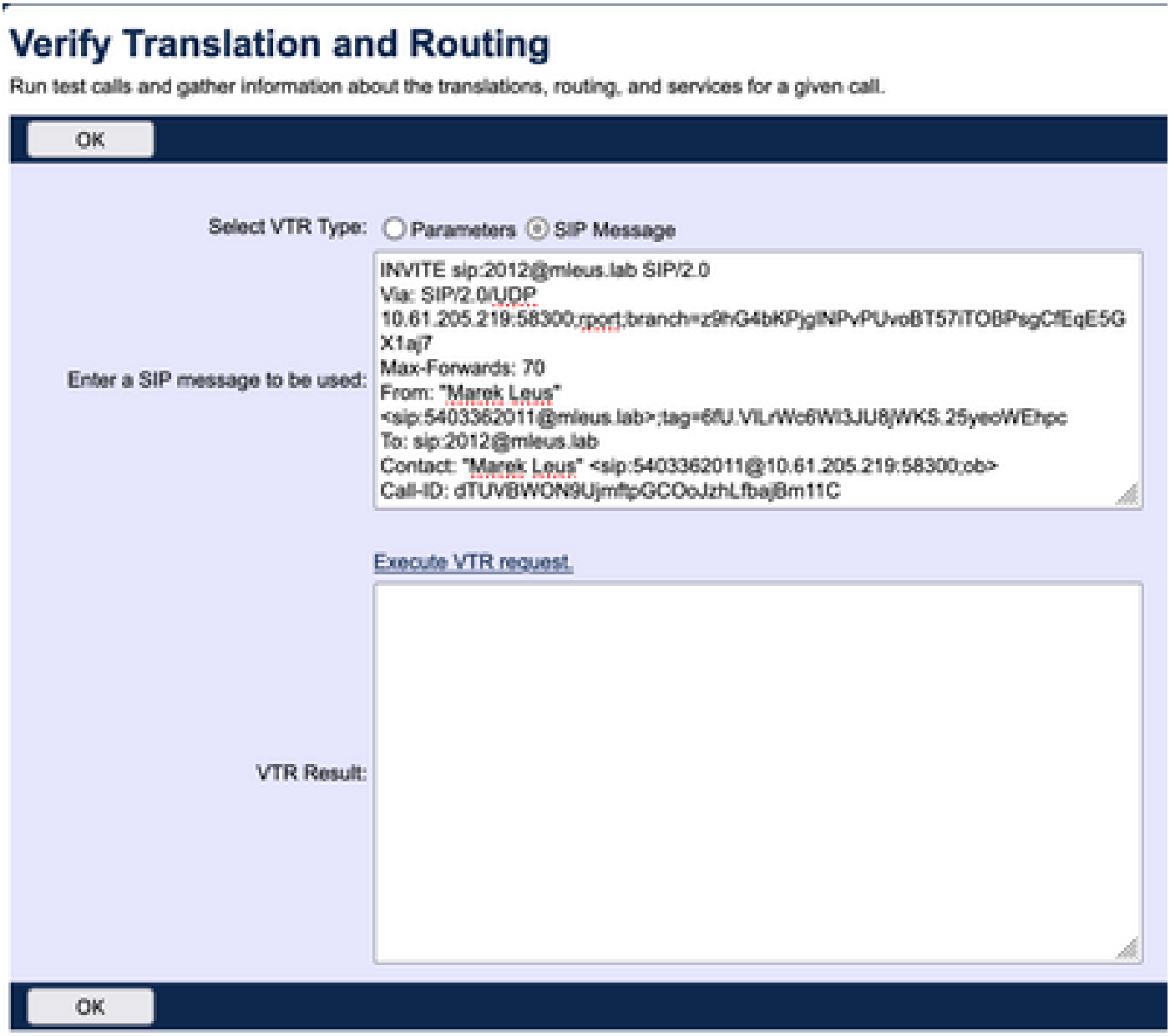
从Web GUI运行VTR(I)工具

要从Web GUI运行VTR，请使用以下步骤：

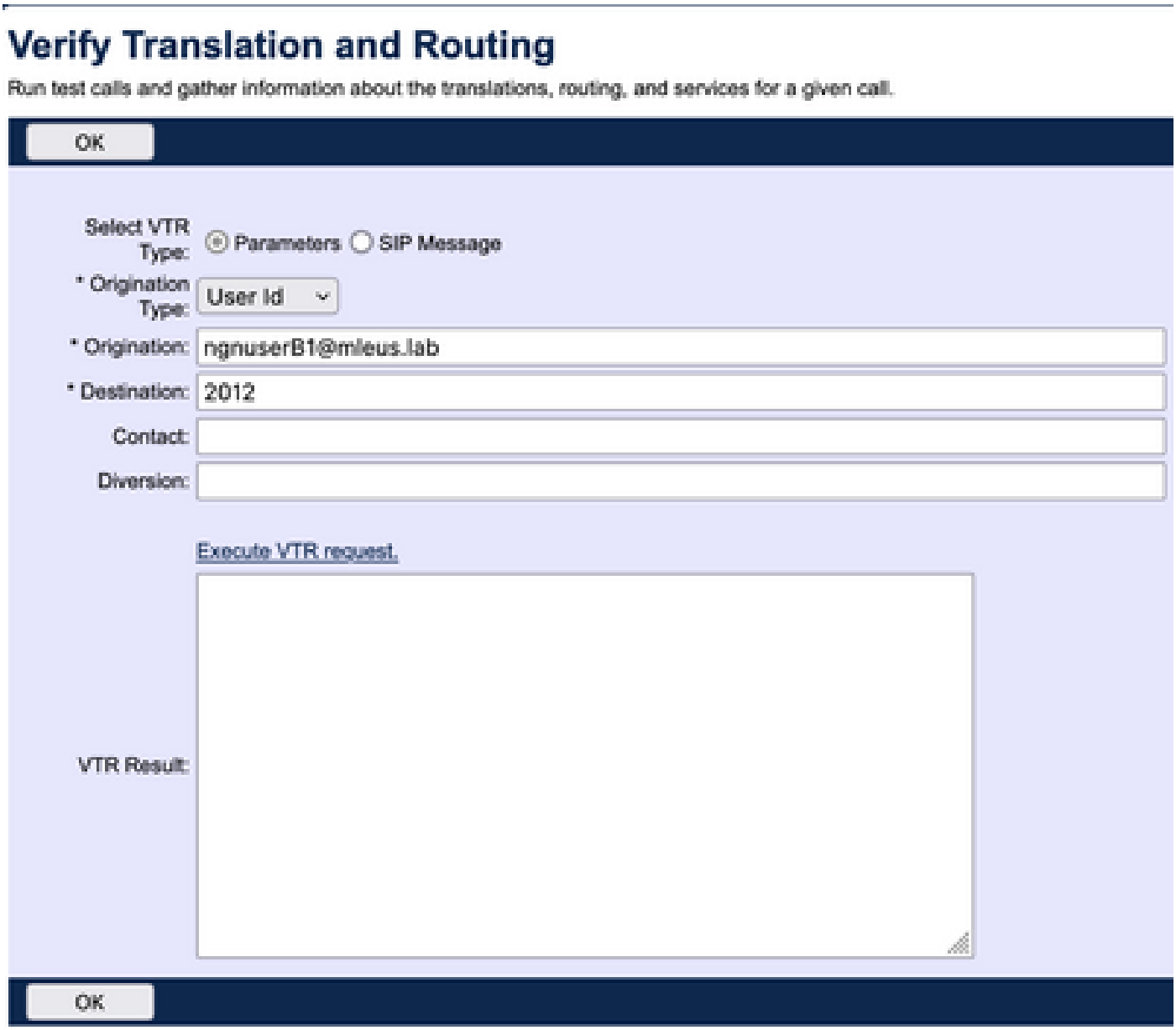
步骤1.导航到https://<AS_FQDN>/Login页面，并登录到AS Web界面。

步骤2.导航到系统>实用程序>验证转换和路由。

第3步：要使用VTRI，请点击SIP Message单选按钮，然后将SIP INVITE消息粘贴到输入字段中。然后，点击执行VTR请求链接：



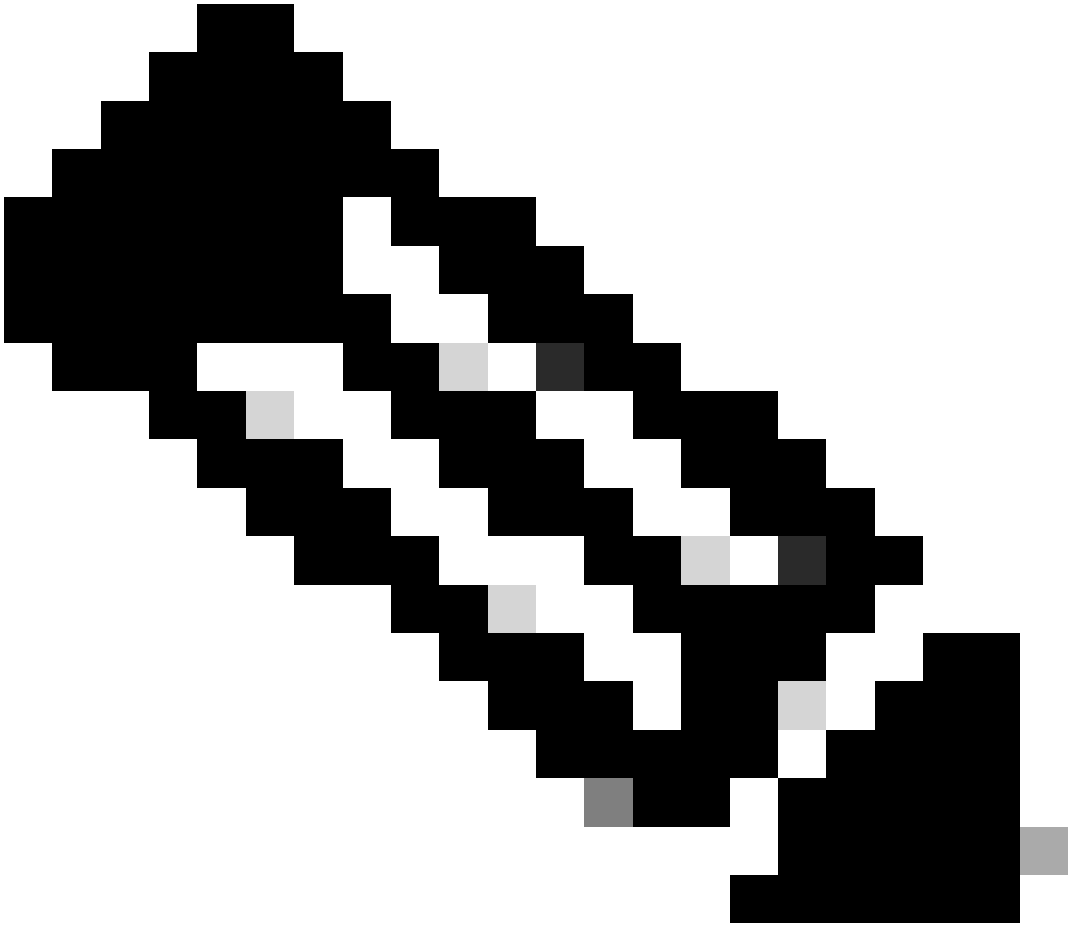
步骤4.要使用VTR，请点击参数单选按钮并填写所有必填字段。然后单击Execute VTR request链接：



VTR(I)输出细分

VTR和VTRI结果的格式类似。它包括八个部分：

1. 参数或SIP INVITE(仅存在于VTR中；在VTRI中不需要，因为它适用于实际SIP消息)。
2. 发起人信息。
3. 始发呼叫信息。
4. 始发转换结果。
5. 正在终止呼叫信息。
6. 治疗信息
7. 时间戳。
8. 结果.



注意：本文档中的所有VTR输出均基于vtr userId <user_id> <destination_number>命令输出，除非另有说明。

参数或SIP邀请

VTR结果的第一部分是SIP INVITE，即用于模拟呼叫的参数。如果您明确提供SIP INVITE（换句话说，如果您使用VTRI），则此部分不可见。

当源设置为URL或线路/端口时，生成SIP INVITE。例如：

```
AS_CLI/ASDiagnostic/Diag> vtr linePort 5403362011@mleus.lab 2012
VTR Result:
 -----------------------------------------------------
Using following SIP INVITE to run VTRI command with Lineport
 -----------------------------------------------------
INVITE sip:2012@10.48.93.126 SIP/2.0
Via:SIP/2.0/UDP 127.0.0.1:5061;branch=vtr-unique-via-branch-26
```

```
From:"VTR Calling Name"



        ;tag=26
To:"VTR Called Name"




Call-ID:26
CSeq:26 INVITE
Contact:



Allow:ACK,BYE,CANCEL,INFO,INVITE,OPTIONS,PRACK,REGISTER,UPDATE
Content-Type:application/sdp
Content-Length:410

v=0
o=- 123 123 IN IP4 127.0.0.1
s=-
c=IN IP4 127.0.0.1
t=0 0
m=audio 16428 RTP/AVP 0 2 4 8 18 96 97 98 100 101
a=rtpmap:0 PCMU/8000
a=rtpmap:2 G726-32/8000
a=rtpmap:4 G723/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729a/8000
a=rtpmap:96 G726-40/8000
a=rtpmap:97 G726-24/8000
a=rtpmap:98 G726-16/8000
a=rtpmap:100 NSE/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=ptime:20
a=sendrecv
```

如果来源设置为用户ID或电话（bwphone和pstnphone），则会显示参数。 例如：

```
AS_CLI/ASDiagnostic/Diag> vtr userId ngnuserB1@mleus.lab 2012
VTR Result:
 ------------------------------------------------------
Using following parameters to run short form VTR command
 ------------------------------------------------------
VtrOriginationEvent
vtrKey                  16
origUserId              ngnuserB1@mleus.lab
origUserUid             110439218
```

```
requestURI equivalent  2012@10.48.93.126:5060
dialedDigits (initial) 2012
deviceEnpoint          5403362011@mleus.lab
```

发起人信息

本节显示关于始发方（主叫方）的信息。 如果调用方是本地BroadWorks用户，则会显示有关该用户的详细信息。例如：

```
====================================================
===========     ORIGINATOR INFO   ==================
====================================================
[Orig-Id]    VTR Short form trigger.
[Orig-Id]    No Endpoint.
[Orig-Id]    Originating user type: BroadWorks
[Orig-Id]    User Info
[Orig-Id]    User Id                      = ngnuserB1@mleus.lab
[Orig-Id]    User Uid                     = 110439218
[Orig-Id]    Group Id                     = ngngroupB1
[Orig-Id]    Service Provider Id          = ngnentB1
[Orig-Id]    Reseller Id                  = null
[Orig-Id]    ASCII First Name             = Marek
[Orig-Id]    ASCII Last Name              = Leus
[Orig-Id]    Unicode First Name           = Marek
[Orig-Id]    Unicode Last Name            = Leus
[Orig-Id]    Country Code                 = 1
[Orig-Id]    User Type                    = User
[Orig-Id]    Trunk User Type              = BroadWorks Regular User
[Orig-Id]    (0) Address type             = main
[Orig-Id]    (0) dn                       = +15403362011
[Orig-Id]    (0) extension                = 2011
[Orig-Id]    activeAsComponentID          = [vnf=null,vnfc=1]
[Orig-Id]    beingRemoved                 = false
[Orig-Id]    configurable CLID            = 5403362010
[Orig-Id]    synchronizationASRSentToNS   = false
```

始发呼叫信息

本节按顺序列出了呼叫呼叫方端事件的过程。如果调用方是Cisco BroadWorks用户，则这是执行所分配服务的位置。例如：

```
====================================================
===========  ORIGINATING CALL INFO   ================
====================================================
[Orig/CallServiceBus]    CallId is callhalf-60507:0
[Orig/CallServiceBus]     === Routing InvitationEvent on the Originating Call bus ===

[Orig/CallServiceBus]    TranslationServiceOrigInstance has CONSUMED the event.
```

```
[Orig/CallServiceBus]    CallId is callhalf-60507:0
[Orig/CallServiceBus]     === Routing InvitationEvent on the Originating Call bus ===

[Orig/CallServiceBus]    Resuming event processing after TranslationServiceOrigInstance
[Orig/CallServiceBus]    SecurityClassificationServiceInstance has processed the event...continue
(...)
# Output omitted for clarity
(...)
[Orig/CallServiceBus]    EmergencyCallTimerServiceInstance has processed the event...continue
[Orig/ReleaseWithCauseHandler]    Post Processing RWC for Call.
```

始发转换结果

本节提供有关从Cisco BroadWorks网络服务器请求转换的信息。如果需要网络转换，则显示有关使用的拨号方案策略的信息。它还显示为此目的交换的SIP消息。例如：

```
=====================================================
===========  ORIGINATING TRANSLATION RESULT =========
=====================================================
[Orig-Xlation/DialPlanPolicy]    --Dial Plan Policy Information--
[Orig-Xlation/DialPlanPolicy]    requiresAccessCodeForPublicCalls = false
[Orig-Xlation/DialPlanPolicy]    allowE164PublicCalls             = false
[Orig-Xlation/DialPlanPolicy]    privateDigitMap                  =
[Orig-Xlation/DialPlanPolicy]    publicDigitMap                   = ([2-9]11|[0-1][2-9]11|0[#T]|00|01[2
[Orig-Xlation/DialPlanPolicy]    preferE164FormatForCallbackSvcs  = false

[Orig-Xlation/NetworkUsagePolicy]    Network Usage Policy is - do not force all calls to network -
[Orig-Xlation/NetworkServerINVITE]    Sending INVITE event to network server for Translation Service Or
[Orig-Xlation/NetworkServerINVITE]    Endpoint Id: callhalf-60487:0
    udp 1128 SIP Bytes OUT to 10.48.93.128:5060
    INVITE sip:2014@10.48.93.128;user=phone;transport=udp SIP/2.0
    Via:SIP/2.0/UDP 10.48.93.126;branch=z9hG4bKBroadWorks.-iom24c-10.48.93.128V5060-0-960997887-1152157
    From:"Marek Leus"



        ;tag=1152157837-1674811757564-
    To:




    Call-ID:BW1029175642701231892598132@10.48.93.126
    CSeq:960997887 INVITE
    Contact:



    P-Asserted-Identity:"Marek Leus"



    Privacy:none
```

```
    X-BroadWorks-Correlation-Info:be8fde53-9ba5-4fc4-a788-ee426ed1fe90
    Allow:ACK,BYE,CANCEL,INFO,INVITE,OPTIONS,PRACK,REFER,NOTIFY
    Supported:
    Max-Forwards:10
    Content-Type:application/sdp
    Content-Length:410

    v=0
    o=- 123 123 IN IP4 127.0.0.1
    s=-
    c=IN IP4 127.0.0.1
    t=0 0
    m=audio 16428 RTP/AVP 0 2 4 8 18 96 97 98 100 101
    a=rtpmap:0 PCMU/8000
    a=rtpmap:2 G726-32/8000
    a=rtpmap:4 G723/8000
    a=rtpmap:8 PCMA/8000
    a=rtpmap:18 G729a/8000
    a=rtpmap:96 G726-40/8000
    a=rtpmap:97 G726-24/8000
    a=rtpmap:98 G726-16/8000
    a=rtpmap:100 NSE/8000
    a=rtpmap:101 telephone-event/8000
    a=fmtp:101 0-15
    a=ptime:20
    a=sendrecv

[Orig-Xlation/NS-RESPONSE]    Got Network Server response for Translation Service Originating Side clie
    udp 394 SIP Bytes IN from 10.48.93.128:49109
    SIP/2.0 404 Not found
    Via:SIP/2.0/UDP 10.48.93.126;branch=z9hG4bKBroadWorks.-iom24c-10.48.93.128V5060-0-960997887-1152157
    From:"Marek Leus"



            ;tag=1152157837-1674811757564-
    To:



             ;tag=1006595920-1674811749882
    Call-ID:BW10291756427012318925981320@10.48.93.126
    CSeq:960997887 INVITE
    Content-Length:0

[Orig-Xlation/TranslationManager]    Translation Client: Translation Service Originating Side call Id i
[Orig-Xlation/TranslationManager]      === TranslationResult ===
[Orig-Xlation/TranslationManager]    callType             Network
[Orig-Xlation/TranslationManager]    address             2014
[Orig-Xlation/TranslationManager]    addressType          main
[Orig-Xlation/TranslationManager]    isServiceCode           false
[Orig-Xlation/TranslationManager]    sc8Translated           false
[Orig-Xlation/TranslationManager]    sc100Translated         false
[Orig-Xlation/TranslationManager]    oacTranslated           false
[Orig-Xlation/TranslationManager]    carrierPrefixTranslated false
[Orig-Xlation/TranslationManager]    intraSP                 false
[Orig-Xlation/TranslationManager]    alias                   false
[Orig-Xlation/TranslationManager]    preExtEmergencyRtgAK null
[Orig-Xlation/TranslationManager]      === Carrier Info ===
[Orig-Xlation/TranslationManager]    ;csel=noind
```

终止呼叫信息

如果呼叫具有有效的目的地，则会显示有关其身份和终止服务总线上的事件的信息。类似于始发呼叫信息部分，这是执行目标用户分配服务的位置。它还显示发送到目标的SIP INVITE。例如：

```
====================================================
===========  TERMINATING CALL INFO   ================
====================================================
[Term/CallManagerServiceBus]    CallManagerId is callhalf-60459
[Term/CallManagerServiceBus]     === Routing TerminationEvent on the Call Manager bus ===

[Term/Term-Id]    Terminating user type: BroadWorks
[Term/Term-Id]    User Info
[Term/Term-Id]    User Id                      = ngnuserB2@mleus.lab
[Term/Term-Id]    User Uid                     = 156778964
[Term/Term-Id]    Group Id                     = ngngroupB1
[Term/Term-Id]    Service Provider Id          = ngnentB1
[Term/Term-Id]    Reseller Id                  = null
[Term/Term-Id]    ASCII First Name             = John
[Term/Term-Id]    ASCII Last Name              = Doe
[Term/Term-Id]    Unicode First Name           = John
[Term/Term-Id]    Unicode Last Name            = Doe
[Term/Term-Id]    Country Code                 = 1
[Term/Term-Id]    User Type                    = User
[Term/Term-Id]    Trunk User Type              = BroadWorks Regular User
[Term/Term-Id]    (0) Address type             = main
[Term/Term-Id]    (0) dn                       = +15403362012
[Term/Term-Id]    (0) extension                = 2012
[Term/Term-Id]    activeAsComponentID          = [vnf=null,vnfc=1]
[Term/Term-Id]    beingRemoved                 = false
[Term/Term-Id]    configurable CLID            = 5403362010
[Term/Term-Id]    synchronizationASRSentToNS   = false

[Term/CallServiceBus]    CallId is callhalf-60459:0
[Term/CallServiceBus]     === Routing InvitationEvent on the Terminating Call bus ===

[Term/CallServiceBus]    TranslationServiceTermInstance has processed the event...continue
[Term/CallServiceBus]    NumberPortabilityQueryServiceTermInstance has processed the event...continue
(...)
# Output omitted for clarity
(...)
[Term/CallManagerServiceBus]    RingTimeoutServiceInstance has processed the event...continue
[Term/SipINVITE]     Outgoing resulting INVITE for Endpoint Id: callhalf-60459:0
    udp 1195 SIP Bytes OUT to 10.61.71.93:62388
```

```
INVITE sip:5403362012@10.61.71.93:62388;transport=UDP;rinstance=c71abb15b3ff5d4a SIP/2.0
Via:SIP/2.0/UDP 10.48.93.126;branch=z9hG4bKBroadWorks.-iom24c-10.61.71.93V62388-0-960978525-1694279
From:"Marek Leus"



    ;tag=1694279432-1674811718841-
To:"John Doe"




Call-ID:BW102838841270123-1135433227@10.48.93.126
CSeq:960978525 INVITE
Contact:




Supported:100rel
Allow:ACK,BYE,CANCEL,INFO,INVITE,OPTIONS,PRACK,REFER,NOTIFY,UPDATE
Call-Info:



       ;appearance-index=1
Recv-Info:x-broadworks-client-session-info
Accept:application/media_control+xml,application/sdp,multipart/mixed
Max-Forwards:10
Content-Type:application/sdp
Content-Length:410

v=0
o=- 123 123 IN IP4 127.0.0.1
s=-
c=IN IP4 127.0.0.1
t=0 0
m=audio 16428 RTP/AVP 0 2 4 8 18 96 97 98 100 101
a=rtpmap:0 PCMU/8000
a=rtpmap:2 G726-32/8000
a=rtpmap:4 G723/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729a/8000
a=rtpmap:96 G726-40/8000
a=rtpmap:97 G726-24/8000
a=rtpmap:98 G726-16/8000
a=rtpmap:100 NSE/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=ptime:20
a=sendrecv
```

治疗信息

此部分仅对不成功的呼叫显示。它提供了呼叫失败的详细原因。它还列出了如果呼叫因该原因而失败，媒体服务器会播放什么通告/声音。例如：

```
==================================================
===========  TREATMENT INFORMATION          =========
==================================================
[Treatment/TreatmentsService]    Treatment service processing RWC. Release Cause is FORBIDDEN
[Treatment/TreatmentsService]    defaultAnnouncement isTrtCallFailure.wav
[Treatment/TreatmentsService]    defaultTone is reorder-pcmu.wav

[Treatment/TreatmentsService]    Configurable Treatment NOT used but specific audio treatment files hav
[Treatment/TreatmentsService]    audioAnnouncement(s):
[Treatment/TreatmentsService]    https://10.48.93.126/media/en/TrtSelectCallReject.wav
[Treatment/TreatmentsService]    https://10.48.93.126/media/en/silence10s.wav
[Treatment/TreatmentsService]    https://10.48.93.126/media/en/TrtSelectCallReject.wav
```

时间戳

调用时间戳可用于将VTRI中的事件与XSLogs相关联。

结果

测试调用的最终结果，可能的值为：

- 允许 — 呼叫可以成功扩展到远程方。呼出INVITE显示在“终止呼叫信息”部分。
- 已阻止 — 由于某些策略或异常情况，呼叫设置被阻止。原因既可以在发起端，也可以在终止端（取决于原因）。
- 已重定向 — 呼叫被重定向且无条件。重定向目标已标识并在报告中显示。
- 超时 — 由于某种原因，测试呼叫无法正确终止，并且已达到10秒的内部时间限制。现有信息可用，但并未显示最终结果。
- 媒体 — 媒体组件在内部启动（通常为交互式语音应答[IVR]）以播放特定通告或收集数字。在此情况下，测试调用停止，但报告显示此时为止的事件。

网络拓扑和呼叫流

为简单起见，本文档中使用了一个基本呼叫方案：

- 软件电话应用直接注册到AS。

- 所有用户都位于同一个组中。
- 既未使用呼叫前转，也未使用重定向功能。

呼叫方案

本文档包含三个场景，其中分机号为2011的用户按顺序拨号：

1. 分机2012，该分机被分配给注册设备。
2. 分机2012，该分机被分配给一个注册设备，但是选择性呼叫接受服务被配置为拒绝来自2011的呼叫 如本屏幕截图所示：

3. 分机2014，未分配给任何用户。

情形 1：成功的呼叫

在这种情况下，一个本地用户按分机拨打另一个本地用户。让我们通过此呼叫的VTR输出了解更多信息：

```
AS_CLI/ASDiagnostic/Diag> vtr userId ngnuserB1@mleus.lab 2012
VTR Result:
 ------------------------------------------------------
Using following parameters to run short form VTR command
 ------------------------------------------------------
VtrOriginationEvent
vtrKey                  12
origUserId              ngnuserB1@mleus.lab
origUserUid             110439218
requestURI equivalent   2012@10.48.93.126:5060
dialedDigits (initial) 2012
deviceEnpoint           5403362011@mleus.lab
```

在VTR结果的第一部分，您可以看到AS如何将vtr命令中的参数映射到SIP URL:

- 主叫方：5403362011@mleus.lab
- 目的地：2012@10.48.93.126:5060

```
=====================================================
===========     ORIGINATOR INFO   ==================
=====================================================
[Orig-Id]    VTR Short form trigger.
[Orig-Id]    No Endpoint.
```

```
[Orig-Id]    Originating user type: BroadWorks
[Orig-Id]    User Info
[Orig-Id]    User Id                      = ngnuserB1@mleus.lab
[Orig-Id]    User Uid                     = 110439218
[Orig-Id]    Group Id                     = ngngroupB1
[Orig-Id]    Service Provider Id          = ngnentB1
[Orig-Id]    Reseller Id                  = null
[Orig-Id]    ASCII First Name             = Marek
[Orig-Id]    ASCII Last Name              = Leus
[Orig-Id]    Unicode First Name           = Marek
[Orig-Id]    Unicode Last Name            = Leus
[Orig-Id]    Country Code                 = 1
[Orig-Id]    User Type                    = User
[Orig-Id]    Trunk User Type              = BroadWorks Regular User
[Orig-Id]    (0) Address type             = main
[Orig-Id]    (0) dn                       = +15403362011
[Orig-Id]    (0) extension                = 2011
[Orig-Id]    activeAsComponentID          = [vnf=null,vnfc=1]
[Orig-Id]    beingRemoved                 = false
[Orig-Id]    configurable CLID            = 5403362010
[Orig-Id]    synchronizationASRSentToNS   = false
```

然后，由于主叫方是本地用户，因此会打印有关用户的所有详细信息。通过此部分，您可以了解用户的名字(Marek)和姓氏(Leus)，他们的分机号(2011)是什么，全号(+15403362011)是什么，以及他们属于哪个企业/组(ngnentB1/ngngroupB1)。

```
====================================================
===========  ORIGINATING CALL INFO   ================
====================================================
[Orig/CallServiceBus]    CallId is callhalf-60455:0
[Orig/CallServiceBus]     === Routing InvitationEvent on the Originating Call bus ===

[Orig/CallServiceBus]    TranslationServiceOrigInstance has CONSUMED the event.
[Orig/CallServiceBus]    CallId is callhalf-60455:0
[Orig/CallServiceBus]     === Routing InvitationEvent on the Originating Call bus ===

[Orig/CallServiceBus]    Resuming event processing after TranslationServiceOrigInstance
[Orig/CallServiceBus]    SecurityClassificationServiceInstance has processed the event...continue
[Orig/CallServiceBus]    CMServiceInstance has processed the event...continue
[Orig/CallServiceBus]    ReturnCallServiceInstance has processed the event...continue
[Orig/CallServiceBus]    LNDServiceInstance has processed the event...continue
[Orig/CallServiceBus]    GETSServiceInstance has processed the event...continue
[Orig/CallServiceBus]    EnhancedCallLogsServiceInstance has processed the event...continue
[Orig/CallServiceBus]    LocationControlServiceInstance has processed the event...continue
[Orig/CallServiceBus/OCPOriginatorServiceInstance]    OCPOriginatorServiceInstance has processed the ev
[Orig/CallServiceBus/OCPOriginatorServiceInstance]    Validating origination. Using call type Group
[Orig/CallServiceBus/OCPOriginatorServiceInstance]    Validation returned disposition Allow - OCP call

[Orig/CallServiceBus]    ACRFACServiceInstance has processed the event...continue
[Orig/CallServiceBus]    NPAnnouncementServiceInstance has processed the event...continue
[Orig/CallServiceBus]    CallCenterAgentCallServiceInstance has processed the event...continue
[Orig/CallServiceBus]    PTTOriginatorServiceInstance has processed the event...continue
[Orig/CallServiceBus]    LegacyACBServiceInstance has processed the event...continue
[Orig/CallServiceBus]    AutomaticCallbackServiceInstance has processed the event...continue
[Orig/CallServiceBus]    TreatmentsServiceInstance has processed the event...continue
[Orig/CallServiceBus]    CFAlwaysFACServiceInstance has processed the event...continue
[Orig/CallServiceBus]    SCFFACServiceInstance has processed the event...continue
```

```
[Orig/CallServiceBus]    CallWaitingFACServiceInstance has processed the event...continue
[Orig/CallServiceBus]    VMServiceInstance has processed the event...continue
[Orig/CallServiceBus]    AnswerTimerFACServiceInstance has processed the event...continue
[Orig/CallServiceBus]    DNDFACServiceInstance has processed the event...continue
[Orig/CallServiceBus]    CPCServiceInstance has processed the event...continue
[Orig/CallServiceBus]    ClassmarkServiceInstance has processed the event...continue
[Orig/CallServiceBus]    VAOCallServiceInstance has processed the event...continue
[Orig/CallServiceBus]    AoCServiceInstance has processed the event...continue
[Orig/CallServiceBus]    EmergencyCallTimerServiceInstance has processed the event...continue
[Orig/CallServiceBus]    SCRFACServiceInstance has processed the event...continue
[Orig/CallServiceBus]    ExecutiveAssistantOrigServiceInstance has processed the event...continue
[Orig/VTR_FINAL]    Triggering report.
```

由于它是一个没有启用服务的简单用户，因此Originating Call Information部分中的信息不多。AS逐个检查服务，最终转到VTR的下一部分。它还将此呼叫定义为组呼叫。如果要将此VTR分析与XSLogs相关联，则可以从此部分提取呼叫半ID(callhalf-60455)，然后使用它在日志文件中查找此呼叫。例如：

```
bwadmin@as1.mleus.lab$ less XSLog2023.01.27-00.00.00.txt | grep callhalf-60455
2023.01.27 10:28:38:819 CET | Info       | Sip | BCCT Worker #1 | 3104778 | +15403362011 | callhalf-604
    $ new CHSS > +15403362011 >  > callhalf-60455
2023.01.27 10:28:38:819 CET | FieldDebug | StateReplication | BCCT Worker #1 | 3104779 | +15403362011 |
2023.01.27 10:28:38:821 CET | Info       | CallP | Call Half Input Adapter 5 | 3104780 | Call Manager |
```

下一节是源转换结果：

```
=====================================================
===========  ORIGINATING TRANSLATION RESULT =========
=====================================================
[Orig-Xlation/DialPlanPolicy]    --Dial Plan Policy Information--
[Orig-Xlation/DialPlanPolicy]    requiresAccessCodeForPublicCalls = false
[Orig-Xlation/DialPlanPolicy]    allowE164PublicCalls             = false
[Orig-Xlation/DialPlanPolicy]    privateDigitMap                  =
[Orig-Xlation/DialPlanPolicy]    publicDigitMap                   = ([2-9]11|[0-1][2-9]11|0[#T]|00|01[2-
[Orig-Xlation/DialPlanPolicy]    preferE164FormatForCallbackSvcs  = false

[Orig-Xlation/NetworkUsagePolicy]    Network Usage Policy is - do not force all calls to network -
[Orig-Xlation/TranslationManager]    Translation Client: Translation Service Originating Side call Id i
[Orig-Xlation/TranslationManager]      === TranslationResult ===
[Orig-Xlation/TranslationManager]    callType             Group
[Orig-Xlation/TranslationManager]    address             2012
[Orig-Xlation/TranslationManager]    destination uid      156778964
[Orig-Xlation/TranslationManager]    destination user Id  ngnuserB2@mleus.lab
[Orig-Xlation/TranslationManager]    addressType          main
[Orig-Xlation/TranslationManager]    originalAddress      2012
[Orig-Xlation/TranslationManager]    dgcAlternateAddress  2012
[Orig-Xlation/TranslationManager]    isServiceCode           false
[Orig-Xlation/TranslationManager]    sc8Translated           false
[Orig-Xlation/TranslationManager]    sc1OOTranslated         false
[Orig-Xlation/TranslationManager]    oacTranslated           false
[Orig-Xlation/TranslationManager]    carrierPrefixTranslated false
[Orig-Xlation/TranslationManager]    intraSP                 false
```

```
[Orig-Xlation/TranslationManager]    alias                    false
[Orig-Xlation/TranslationManager]    preExtEmergencyRtgAK null
```

从此部分，您可以了解针对给定呼叫应用了什么拨号方案。对于此呼叫，输出会通知它是组内的呼叫，并定向至用户ngnuserB2@mleus.lab。下一部分将详细介绍此用户：

```
=====================================================
===========  TERMINATING CALL INFO   ================
=====================================================
[Term/CallManagerServiceBus]    CallManagerId is callhalf-60459
[Term/CallManagerServiceBus]     === Routing TerminationEvent on the Call Manager bus ===

[Term/Term-Id]    Terminating user type: BroadWorks
[Term/Term-Id]    User Info
[Term/Term-Id]    User Id                      = ngnuserB2@mleus.lab
[Term/Term-Id]    User Uid                     = 156778964
[Term/Term-Id]    Group Id                     = ngngroupB1
[Term/Term-Id]    Service Provider Id          = ngnentB1
[Term/Term-Id]    Reseller Id                  = null
[Term/Term-Id]    ASCII First Name             = John
[Term/Term-Id]    ASCII Last Name              = Doe
[Term/Term-Id]    Unicode First Name           = John
[Term/Term-Id]    Unicode Last Name            = Doe
[Term/Term-Id]    Country Code                 = 1
[Term/Term-Id]    User Type                    = User
[Term/Term-Id]    Trunk User Type              = BroadWorks Regular User
[Term/Term-Id]    (0) Address type             = main
[Term/Term-Id]    (0) dn                       = +15403362012
[Term/Term-Id]    (0) extension                = 2012
[Term/Term-Id]    activeAsComponentID          = [vnf=null,vnfc=1]
[Term/Term-Id]    beingRemoved                 = false
[Term/Term-Id]    configurable CLID            = 5403362010
[Term/Term-Id]    synchronizationASRSentToNS   = false
```

通过此部分，您可以了解与之前呼叫者相同的呼叫目标详细信息：名字和姓氏(John Doe)、分机号(2012)和全号码(+15403362012)，以及企业/组(ngnentB1/ngngroupB1)。

```
[Term/CallServiceBus]    CallId is callhalf-60459:0
[Term/CallServiceBus]     === Routing InvitationEvent on the Terminating Call bus ===

[Term/CallServiceBus]    TranslationServiceTermInstance has processed the event...continue
[Term/CallServiceBus]    NumberPortabilityQueryServiceTermInstance has processed the event...continue
[Term/CallServiceBus]    CMServiceInstance has processed the event...continue
[Term/CallServiceBus]    GETSServiceInstance has processed the event...continue
[Term/CallServiceBus]    CallCenterAgentCallServiceInstance has processed the event...continue
[Term/CallServiceBus]    OCPTerminatorServiceInstance has processed the event...continue
[Term/CallServiceBus]    ICPServiceInstance has processed the event...continue
[Term/CallServiceBus]    ACRServiceInstance has processed the event...continue
[Term/CallServiceBus/SCRServiceInstance]    Criteria Set(s) evaluated but not triggered:
[Term/CallServiceBus/SCRServiceInstance]
[Term/CallServiceBus/SCRServiceInstance]    Criteria Set:
[Term/CallServiceBus/SCRServiceInstance]    description: Reject_all
[Term/CallServiceBus/SCRServiceInstance]    active: false
```

```
[Term/CallServiceBus/SCRServiceInstance]    blackListFlag: false
[Term/CallServiceBus/SCRServiceInstance]    ScheduleCriteria
[Term/CallServiceBus/SCRServiceInstance]    - No Schedule associated
[Term/CallServiceBus/SCRServiceInstance]    - inScheduleRightNow: true
[Term/CallServiceBus/SCRServiceInstance]    CallingPartyAddressCriteria
[Term/CallServiceBus/SCRServiceInstance]    Any Address
[Term/CallServiceBus/SCRServiceInstance]    CallToCriteria
[Term/CallServiceBus/SCRServiceInstance]    CallTo matches ANY

[Term/CallServiceBus]    SCRServiceInstance has processed the event...continue
[Term/CallServiceBus]    PTTTerminatorServiceInstance has processed the event...continue
[Term/CallServiceBus]    LNRServiceInstance has processed the event...continue
[Term/CallServiceBus]    EnhancedCallLogsServiceInstance has processed the event...continue
[Term/CallServiceBus]    GroupNightForwardingServiceInstance has processed the event...continue
[Term/CallServiceBus]    FaxMessagingServiceInstance has processed the event...continue
[Term/CallServiceBus]    SCFServiceInstance has processed the event...continue
[Term/CallServiceBus]    CFAlwaysTerminatorServiceInstance has processed the event...continue
[Term/CallServiceBus]    DNDServiceInstance has processed the event...continue
[Term/CallServiceBus]    PersonalAssistantServiceInstance has processed the event...continue
[Term/CallServiceBus]    CallWaitingTerminatorServiceInstance has processed the event...continue
[Term/CallServiceBus]    PreAlertingAnnouncementServiceInstance has processed the event...continue
[Term/CallServiceBus]    AnswerTimerServiceInstance has processed the event...continue
[Term/CallServiceBus]    VMServiceInstance has processed the event...continue
[Term/CallServiceBus]    RedirectionServiceInstance has processed the event...continue
[Term/CallServiceBus]    SecurityClassificationServiceInstance has processed the event...continue
[Term/CallServiceBus]    ExecutiveTermServiceInstance has processed the event...continue
[Term/CallServiceBus]    ExecutiveAssistantTermServiceInstance has processed the event...continue
```

此外，在此部分中，还会检查所有服务。只有一项服务分配给此用户（选择性呼叫接受），但唯一的条件集(Reject_2011)处于非活动状态。因此，它不会触发，并且VTR分析将进入“终止呼叫信息”部分的下一阶段，该阶段显示分析的最终结果。

```
[Term/CallManagerServiceBus]    CallManagerId is callhalf-60459
[Term/CallManagerServiceBus]     === Routing InvitationEvent on the Call Manager bus ===

[Term/CallManagerServiceBus]    AccessRoutingServiceInstance has processed the event...continue
[Term/CallManagerServiceBus]    VAOServiceInstance has processed the event...continue
[Term/CallManagerServiceBus]    TSDServiceInstance has processed the event...continue
[Term/CallManagerServiceBus]    SCAPServiceInstance has processed the event...continue
[Term/CallManagerServiceBus]    CallCenterAgentServiceInstance has processed the event...continue
[Term/CallManagerServiceBus]    FlashServiceInstance has processed the event...continue
[Term/CallManagerServiceBus]    RingTimeoutServiceInstance has processed the event...continue
[Term/SipINVITE]     Outgoing resulting INVITE for Endpoint Id: callhalf-60459:0
    udp 1195 SIP Bytes OUT to 10.61.71.93:62388
    INVITE sip:5403362012@10.61.71.93:62388;transport=UDP;rinstance=c71abb15b3ff5d4a SIP/2.0
    Via:SIP/2.0/UDP 10.48.93.126;branch=z9hG4bKBroadWorks.-iom24c-10.61.71.93V62388-0-960978525-1694279
    From:"Marek Leus"



        ;tag=1694279432-1674811718841-
    To:"John Doe"



    Call-ID:BW102838841270123-1135433227@10.48.93.126
```

```
CSeq:960978525 INVITE
Contact:



Supported:100rel
Allow:ACK,BYE,CANCEL,INFO,INVITE,OPTIONS,PRACK,REFER,NOTIFY,UPDATE
Call-Info:



       ;appearance-index=1
Recv-Info:x-broadworks-client-session-info
Accept:application/media_control+xml,application/sdp,multipart/mixed
Max-Forwards:10
Content-Type:application/sdp
Content-Length:410

v=0
o=- 123 123 IN IP4 127.0.0.1
s=-
c=IN IP4 127.0.0.1
t=0 0
m=audio 16428 RTP/AVP 0 2 4 8 18 96 97 98 100 101
a=rtpmap:0 PCMU/8000
a=rtpmap:2 G726-32/8000
a=rtpmap:4 G723/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729a/8000
a=rtpmap:96 G726-40/8000
a=rtpmap:97 G726-24/8000
a=rtpmap:98 G726-16/8000
a=rtpmap:100 NSE/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15
a=ptime:20
a=sendrecv
```

在此部分中，您将看到如果呼叫是真实呼叫，则会扩展到最终目的地的INVITE消息。还可以提取用于在日志文件中跟踪此呼叫的callhalf ID(callhalf-60459):

```
bwadmin@as1.mleus.lab$ less XSLog2023.01.27-00.00.00.txt | grep callhalf-60459
2023.01.27 10:28:38:827 CET | Info       | Sip | Call Half Input Adapter 5 | 3104796 | +15403362012 | c
    $ new CHSS > +15403362012 > callhalf-60455:0 > callhalf-60459
2023.01.27 10:28:38:827 CET | FieldDebug | StateReplication | Call Half Input Adapter 5 | 3104797 | +15
2023.01.27 10:28:38:827 CET | Info       | CallP | Call Half Input Adapter 0 | 3104798 | Call Manager |
```

最后两部分显示此分析的最终结果和时间戳：

```
=====================================================
==========           TIMESTAMPS            =========
=====================================================
[Timestamps]    Start time = 2023.01.27 10:28:38:819 CET
[Timestamps]    End time   = 2023.01.27 10:28:38:846 CET

=====================================================
==========   RESULT: ALLOWED         ===============
=====================================================
```

方案 2：呼叫被选择性呼叫接受服务拒绝

在这种情况下，一个本地用户通过分机再次拨打另一个本地用户；但是，这次将选择性呼叫接受配置为拒绝此呼叫。让我们通过此呼叫的VTR输出了解更多信息：

```
AS_CLI/ASDiagnostic/Diag> vtr userId ngnuserB1@mleus.lab 2012
VTR Result:
 ------------------------------------------------------
Using following parameters to run short form VTR command
 ------------------------------------------------------
VtrOriginationEvent
vtrKey                  16
origUserId              ngnuserB1@mleus.lab
origUserUid             110439218
requestURI equivalent   2012@10.48.93.126:5060
dialedDigits (initial) 2012
deviceEnpoint           5403362011@mleus.lab
```

I在VTR结果的第一部分，您可以看到AS如何将vtr命令中的参数映射到SIP URL:

- 主叫方：5403362011@mleus.lab
- 目的地：2012@10.48.93.126:5060

由于呼叫方与第一种场景中的呼叫方完全相同，因此此呼叫方的“呼叫方信息”部分也完全相同。因此，为了清楚起始Call Information部分会跳过此部分，并继续对其进行分析：

```
=====================================================
==========  ORIGINATING CALL INFO   ================
=====================================================
[Orig/CallServiceBus]    CallId is callhalf-60507:0
[Orig/CallServiceBus]     === Routing InvitationEvent on the Originating Call bus ===
```

```
[Orig/CallServiceBus]    TranslationServiceOrigInstance has CONSUMED the event.
[Orig/CallServiceBus]    CallId is callhalf-60507:0
[Orig/CallServiceBus]     === Routing InvitationEvent on the Originating Call bus ===

[Orig/CallServiceBus]    Resuming event processing after TranslationServiceOrigInstance
[Orig/CallServiceBus]    SecurityClassificationServiceInstance has processed the event...continue
[Orig/CallServiceBus]    CMServiceInstance has processed the event...continue
[Orig/CallServiceBus]    ReturnCallServiceInstance has processed the event...continue
[Orig/CallServiceBus]    LNDServiceInstance has processed the event...continue
[Orig/CallServiceBus]    GETSServiceInstance has processed the event...continue
[Orig/CallServiceBus]    EnhancedCallLogsServiceInstance has processed the event...continue
[Orig/CallServiceBus]    LocationControlServiceInstance has processed the event...continue
[Orig/CallServiceBus/OCPOriginatorServiceInstance]    OCPOriginatorServiceInstance has processed the ev
[Orig/CallServiceBus/OCPOriginatorServiceInstance]    Validating origination. Using call type Group
[Orig/CallServiceBus/OCPOriginatorServiceInstance]    Validation returned disposition Allow - OCP call

[Orig/CallServiceBus]    ACRFACServiceInstance has processed the event...continue
[Orig/CallServiceBus]    NPAnnouncementServiceInstance has processed the event...continue
[Orig/CallServiceBus]    CallCenterAgentCallServiceInstance has processed the event...continue
[Orig/CallServiceBus]    PTTOriginatorServiceInstance has processed the event...continue
[Orig/CallServiceBus]    LegacyACBServiceInstance has processed the event...continue
[Orig/CallServiceBus]    AutomaticCallbackServiceInstance has processed the event...continue
[Orig/CallServiceBus]    TreatmentsServiceInstance has processed the event...continue
[Orig/CallServiceBus]    CFAlwaysFACServiceInstance has processed the event...continue
[Orig/CallServiceBus]    SCFFACServiceInstance has processed the event...continue
[Orig/CallServiceBus]    CallWaitingFACServiceInstance has processed the event...continue
[Orig/CallServiceBus]    VMServiceInstance has processed the event...continue
[Orig/CallServiceBus]    AnswerTimerFACServiceInstance has processed the event...continue
[Orig/CallServiceBus]    DNDFACServiceInstance has processed the event...continue
[Orig/CallServiceBus]    CPCServiceInstance has processed the event...continue
[Orig/CallServiceBus]    ClassmarkServiceInstance has processed the event...continue
[Orig/CallServiceBus]    VAOCallServiceInstance has processed the event...continue
[Orig/CallServiceBus]    AoCServiceInstance has processed the event...continue
[Orig/CallServiceBus]    EmergencyCallTimerServiceInstance has processed the event...continue
[Orig/CallServiceBus]    SCRFACServiceInstance has processed the event...continue
[Orig/CallServiceBus]    ExecutiveAssistantOrigServiceInstance has processed the event...continue
[Orig/CallServiceBus]    CallId is callhalf-60507:0
[Orig/CallServiceBus]     === Routing ReleaseWithCauseEvent on the Originating Call bus ===

[Orig/CallServiceBus]    TranslationServiceOrigInstance has processed the event...continue
[Orig/CallServiceBus]    CallTransferRecallServiceInstance has processed the event...continue
[Orig/CallServiceBus]    CMServiceInstance has processed the event...continue
[Orig/CallServiceBus]    GETSServiceInstance has processed the event...continue
[Orig/CallServiceBus]    EnhancedCallLogsServiceInstance has processed the event...continue
[Orig/CallServiceBus]    OCPOriginatorServiceInstance has processed the event...continue
[Orig/CallServiceBus]    CallCenterAgentCallServiceInstance has processed the event...continue
[Orig/CallServiceBus]    PTTOriginatorServiceInstance has processed the event...continue
[Orig/CallServiceBus]    CallParkServiceInstance has processed the event...continue
[Orig/CallServiceBus]    LegacyACBServiceInstance has processed the event...continue
[Orig/CallServiceBus]    AutomaticCallbackServiceInstance has processed the event...continue
[Orig/CallServiceBus/TreatmentsServiceInstance]    TreatmentsServiceInstance has processed the event...
[Orig/CallServiceBus/TreatmentsServiceInstance]    Treatments Service would have started the announceme
[Orig/CallServiceBus/TreatmentsServiceInstance]    Letting event continue to release test call resource

[Orig/CallServiceBus]    CallWaitingFACServiceInstance has processed the event...continue
[Orig/CallServiceBus]    CFBusyFACServiceInstance has processed the event...continue
[Orig/CallServiceBus]    CFNoAnswerFACServiceInstance has processed the event...continue
[Orig/CallServiceBus]    VMServiceInstance has processed the event...continue
[Orig/CallServiceBus]    CFNotReachableFACServiceInstance has processed the event...continue
[Orig/CallServiceBus]    DirectedCallPickupServiceInstance has processed the event...continue
[Orig/CallServiceBus]    DPUBIServiceInstance has processed the event...continue
[Orig/CallServiceBus]    AnswerTimerFACServiceInstance has processed the event...continue
```

```
[Orig/CallServiceBus]    MusicOnHoldServiceInstance has processed the event...continue
[Orig/CallServiceBus]    AoCServiceInstance has processed the event...continue
[Orig/CallServiceBus]    EmergencyCallTimerServiceInstance has processed the event...continue
[Orig/ReleaseWithCauseHandler]    Post Processing RWC for Call.
```

此部分显示AS知道目标号码，并将呼叫定义为组呼叫。但是，您还可以确定是否有问题。首先，涉及“始发呼叫总线上的Routing ReleaseWithCauseEvent”语句和TreatmentServiceInstance。同样，此部分以ReleaseWithCauseHandler结尾。

下一节是Originating Translation Result（始发转换结果），它与场景1中的部分相同，因为呼叫被定向到同一用户。因此，为了清楚起见，省略了此部分。差异显示在“终止呼叫信息”部分：

```
=====================================================
===========  TERMINATING CALL INFO   ================
=====================================================
[Term/CallManagerServiceBus]    CallManagerId is callhalf-60511
[Term/CallManagerServiceBus]     === Routing TerminationEvent on the Call Manager bus ===

[Term/Term-Id]    Terminating user type: BroadWorks
[Term/Term-Id]    User Info
[Term/Term-Id]    User Id                      = ngnuserB2@mleus.lab
[Term/Term-Id]    User Uid                     = 156778964
[Term/Term-Id]    Group Id                     = ngngroupB1
[Term/Term-Id]    Service Provider Id          = ngnentB1
[Term/Term-Id]    Reseller Id                  = null
[Term/Term-Id]    ASCII First Name             = John
[Term/Term-Id]    ASCII Last Name              = Doe
[Term/Term-Id]    Unicode First Name           = John
[Term/Term-Id]    Unicode Last Name            = Doe
[Term/Term-Id]    Country Code                 = 1
[Term/Term-Id]    User Type                    = User
[Term/Term-Id]    Trunk User Type              = BroadWorks Regular User
[Term/Term-Id]    (0) Address type             = main
[Term/Term-Id]    (0) dn                       = +15403362012
[Term/Term-Id]    (0) extension                = 2012
[Term/Term-Id]    activeAsComponentID          = [vnf=null,vnfc=1]
[Term/Term-Id]    beingRemoved                 = false
[Term/Term-Id]    configurable CLID            = 5403362010
[Term/Term-Id]    synchronizationASRSentToNS   = false

[Term/CallServiceBus]    CallId is callhalf-60511:0
[Term/CallServiceBus]     === Routing InvitationEvent on the Terminating Call bus ===

[Term/CallServiceBus]    TranslationServiceTermInstance has processed the event...continue
[Term/CallServiceBus]    NumberPortabilityQueryServiceTermInstance has processed the event...continue
[Term/CallServiceBus]    CMServiceInstance has processed the event...continue
[Term/CallServiceBus]    GETSServiceInstance has processed the event...continue
[Term/CallServiceBus]    CallCenterAgentCallServiceInstance has processed the event...continue
[Term/CallServiceBus]    OCPTerminatorServiceInstance has processed the event...continue
[Term/CallServiceBus]    ICPServiceInstance has processed the event...continue
[Term/CallServiceBus]    ACRServiceInstance has processed the event...continue
[Term/CallServiceBus/SCAServiceInstance]    Criteria Set evaluated and triggered:
[Term/CallServiceBus/SCAServiceInstance]
[Term/CallServiceBus/SCAServiceInstance]    Criteria Set:
[Term/CallServiceBus/SCAServiceInstance]    description: Reject_2011
```

```
[Term/CallServiceBus/SCAServiceInstance]    active: true
[Term/CallServiceBus/SCAServiceInstance]    blackListFlag: true
[Term/CallServiceBus/SCAServiceInstance]    ScheduleCriteria
[Term/CallServiceBus/SCAServiceInstance]    - No Schedule associated
[Term/CallServiceBus/SCAServiceInstance]    - inScheduleRightNow: true
[Term/CallServiceBus/SCAServiceInstance]    CallingPartyAddressCriteria
[Term/CallServiceBus/SCAServiceInstance]    +15403362011
[Term/CallServiceBus/SCAServiceInstance]    CallToCriteria
[Term/CallServiceBus/SCAServiceInstance]    CallTo matches ANY

[Term/CallServiceBus]    SCAServiceInstance has CONSUMED the event.
[Term/CallServiceBus]    CallId is callhalf-60511:0
[Term/CallServiceBus]     === Routing ReleaseWithCauseEvent on the Terminating Call bus ===
[Term/CallServiceBus]    TranslationServiceTermInstance has processed the event...continue
[Term/CallServiceBus]    CMServiceInstance has processed the event...continue
[Term/CallServiceBus]    CallParkServiceInstance has processed the event...continue
[Term/CallServiceBus]    GETSServiceInstance has processed the event...continue
[Term/CallServiceBus]    CallCenterAgentCallServiceInstance has processed the event...continue
[Term/CallServiceBus]    OCPTerminatorServiceInstance has processed the event...continue
[Term/CallServiceBus]    PTTTerminatorServiceInstance has processed the event...continue
[Term/CallServiceBus]    LNRServiceInstance has processed the event...continue
[Term/CallServiceBus]    EnhancedCallLogsServiceInstance has processed the event...continue
[Term/CallServiceBus]    PersonalAssistantServiceInstance has processed the event...continue
[Term/CallServiceBus]    CallWaitingTerminatorServiceInstance has processed the event...continue
[Term/CallServiceBus]    CFBusyTerminatorServiceInstance has processed the event...continue
[Term/CallServiceBus]    AnswerTimerServiceInstance has processed the event...continue
[Term/CallServiceBus]    CFNotReachableTerminatorServiceInstance has processed the event...continue
[Term/CallServiceBus]    CFNoAnswerTerminatorServiceInstance has processed the event...continue
[Term/CallServiceBus]    VMServiceInstance has processed the event...continue
[Term/CallServiceBus]    DirectedCallPickupServiceInstance has processed the event...continue
[Term/CallServiceBus]    DPUBIServiceInstance has processed the event...continue
[Term/CallServiceBus]    RedirectionServiceInstance has processed the event...continue
[Term/CallServiceBus]    MusicOnHoldServiceInstance has processed the event...continue
```

您可以看到这次Reject_2011条件集处于活动状态。因此，会触发选择性呼叫接受服务。因此，在终止呼叫总线上引发ReleaseWithCauseEvent。AS检查其余服务并转到“处理信息”部分：

```
=====================================================
==========  TREATMENT INFORMATION          =========
=====================================================
[Treatment/TreatmentsService]    Treatment service processing RWC. Release Cause is FORBIDDEN
[Treatment/TreatmentsService]    defaultAnnouncement isTrtCallFailure.wav
[Treatment/TreatmentsService]    defaultTone is reorder-pcmu.wav

[Treatment/TreatmentsService]    Configurable Treatment NOT used but specific audio treatment files hav
[Treatment/TreatmentsService]    audioAnnouncement(s):
[Treatment/TreatmentsService]    https://10.48.93.126/media/en/TrtSelectCallReject.wav
[Treatment/TreatmentsService]    https://10.48.93.126/media/en/silence10s.wav
[Treatment/TreatmentsService]    https://10.48.93.126/media/en/TrtSelectCallReject.wav
```

通过此部分，您可以了解呼叫失败（已禁止）的原因以及要播放TrtSelectCallReject.wav通告。

最后两部分显示此分析的最终结果和时间戳：

```
=====================================================
===========            TIMESTAMPS            =========
=====================================================
[Timestamps]    Start time = 2023.01.27 10:31:29:425 CET
[Timestamps]    End time   = 2023.01.27 10:31:29:466 CET

=====================================================
===========   RESULT: BLOCKED         ===============
=====================================================
```

情形 3：呼叫未分配的号码

在这种情况下，一个本地用户拨打另一个未分配的分机。让我们通过此呼叫的VTR输出了解更多信息：

```
AS_CLI/ASDiagnostic/Diag> vtr userId ngnuserB1@mleus.lab 2014
VTR Result:
 ------------------------------------------------------
Using following parameters to run short form VTR command
 ------------------------------------------------------
VtrOriginationEvent
vtrKey                  14
origUserId              ngnuserB1@mleus.lab
origUserUid             110439218
requestURI equivalent   2014@10.48.93.126:5060
dialedDigits (initial) 2014
deviceEnpoint           5403362011@mleus.lab
```

在VTR结果的第一部分，您可以看到AS如何将vtr命令中的参数映射到SIP URL:

- 主叫方：5403362011@mleus.lab
- 目的地：2014@10.48.93.126:5060

由于呼叫方与第一种场景中的呼叫方完全相同，因此此呼叫方的“呼叫方信息”部分也完全相同。因此，为了清楚起始Call Information部分会跳过此部分，并继续对其进行分析：

```
=====================================================
===========  ORIGINATING CALL INFO   ================
=====================================================
[Orig/CallServiceBus]    CallId is callhalf-60487:0
[Orig/CallServiceBus]     === Routing InvitationEvent on the Originating Call bus ===

[Orig/CallServiceBus]    TranslationServiceOrigInstance has CONSUMED the event.
[Orig/CallServiceBus]    CallId is callhalf-60487:0
[Orig/CallServiceBus]     === Routing ReleaseWithCauseEvent on the Originating Call bus ===

[Orig/CallServiceBus]    TranslationServiceOrigInstance has processed the event...continue
```

```
[Orig/CallServiceBus]    CallTransferRecallServiceInstance has processed the event...continue
[Orig/CallServiceBus]    CMServiceInstance has processed the event...continue
[Orig/CallServiceBus]    GETSServiceInstance has processed the event...continue
[Orig/CallServiceBus]    EnhancedCallLogsServiceInstance has processed the event...continue
[Orig/CallServiceBus]    OCPOriginatorServiceInstance has processed the event...continue
[Orig/CallServiceBus]    CallCenterAgentCallServiceInstance has processed the event...continue
[Orig/CallServiceBus]    PTTOriginatorServiceInstance has processed the event...continue
[Orig/CallServiceBus]    CallParkServiceInstance has processed the event...continue
[Orig/CallServiceBus]    LegacyACBServiceInstance has processed the event...continue
[Orig/CallServiceBus]    AutomaticCallbackServiceInstance has processed the event...continue
[Orig/CallServiceBus/TreatmentsServiceInstance]    TreatmentsServiceInstance has processed the event...
[Orig/CallServiceBus/TreatmentsServiceInstance]    Treatments Service would have started the announceme
[Orig/CallServiceBus/TreatmentsServiceInstance]    Letting event continue to release test call resource

[Orig/CallServiceBus]    CallWaitingFACServiceInstance has processed the event...continue
[Orig/CallServiceBus]    CFBusyFACServiceInstance has processed the event...continue
[Orig/CallServiceBus]    CFNoAnswerFACServiceInstance has processed the event...continue
[Orig/CallServiceBus]    VMServiceInstance has processed the event...continue
[Orig/CallServiceBus]    CFNotReachableFACServiceInstance has processed the event...continue
[Orig/CallServiceBus]    DirectedCallPickupServiceInstance has processed the event...continue
[Orig/CallServiceBus]    DPUBIServiceInstance has processed the event...continue
[Orig/CallServiceBus]    AnswerTimerFACServiceInstance has processed the event...continue
[Orig/CallServiceBus]    MusicOnHoldServiceInstance has processed the event...continue
[Orig/CallServiceBus]    AoCServiceInstance has processed the event...continue
[Orig/CallServiceBus]    EmergencyCallTimerServiceInstance has processed the event...continue
[Orig/ReleaseWithCauseHandler]    Post Processing RWC for Call.
```

从本节中，您已经可以了解问题出在哪里。首先，使用“始发呼叫总线上的路由发布WithCauseEvent”语句代替“始发呼叫总线上的路由邀请事件”语句。然后，会涉及TreatmentServiceInstance语句。最后，该部分以ReleaseWithCauseHandler语句结尾。

```
=====================================================
==========  ORIGINATING TRANSLATION RESULT =========
=====================================================
[Orig-Xlation/DialPlanPolicy]    --Dial Plan Policy Information--
[Orig-Xlation/DialPlanPolicy]    requiresAccessCodeForPublicCalls = false
[Orig-Xlation/DialPlanPolicy]    allowE164PublicCalls             = false
[Orig-Xlation/DialPlanPolicy]    privateDigitMap                  =
[Orig-Xlation/DialPlanPolicy]    publicDigitMap                   = ([2-9]11|[0-1][2-9]11|0[#T]|00|01[2
[Orig-Xlation/DialPlanPolicy]    preferE164FormatForCallbackSvcs  = false

[Orig-Xlation/NetworkUsagePolicy]    Network Usage Policy is - do not force all calls to network -
[Orig-Xlation/NetworkServerINVITE]    Sending INVITE event to network server for Translation Service Or
[Orig-Xlation/NetworkServerINVITE]    Endpoint Id: callhalf-60487:0
    udp 1128 SIP Bytes OUT to 10.48.93.128:5060
    INVITE sip:2014@10.48.93.128;user=phone;transport=udp SIP/2.0
    Via:SIP/2.0/UDP 10.48.93.126;branch=z9hG4bKBroadWorks.-iom24c-10.48.93.128V5060-0-960997887-1152157
    From:"Marek Leus"



        ;tag=1152157837-1674811757564-
    To:
```

```
    Call-ID:BW1029175642701231892598132@10.48.93.126
    CSeq:960997887 INVITE
    Contact:



    P-Asserted-Identity:"Marek Leus"



    Privacy:none
    X-BroadWorks-Correlation-Info:be8fde53-9ba5-4fc4-a788-ee426ed1fe90
    Allow:ACK,BYE,CANCEL,INFO,INVITE,OPTIONS,PRACK,REFER,NOTIFY
    Supported:
    Max-Forwards:10
    Content-Type:application/sdp
    Content-Length:410

    v=0
    o=- 123 123 IN IP4 127.0.0.1
    s=-
    c=IN IP4 127.0.0.1
    t=0 0
    m=audio 16428 RTP/AVP 0 2 4 8 18 96 97 98 100 101
    a=rtpmap:0 PCMU/8000
    a=rtpmap:2 G726-32/8000
    a=rtpmap:4 G723/8000
    a=rtpmap:8 PCMA/8000
    a=rtpmap:18 G729a/8000
    a=rtpmap:96 G726-40/8000
    a=rtpmap:97 G726-24/8000
    a=rtpmap:98 G726-16/8000
    a=rtpmap:100 NSE/8000
    a=rtpmap:101 telephone-event/8000
    a=fmtp:101 0-15
    a=ptime:20
    a=sendrecv


[Orig-Xlation/NS-RESPONSE]    Got Network Server response for Translation Service Originating Side clie
    udp 394 SIP Bytes IN from 10.48.93.128:49109
    SIP/2.0 404 Not found
    Via:SIP/2.0/UDP 10.48.93.126;branch=z9hG4bKBroadWorks.-iom24c-10.48.93.128V5060-0-960997887-1152157
    From:"Marek Leus"



            ;tag=1152157837-1674811757564-
    To:



             ;tag=1006595920-1674811749882
    Call-ID:BW1029175642701231892598132@10.48.93.126
    CSeq:960997887 INVITE
    Content-Length:0
[Orig-Xlation/TranslationManager]    Translation Client: Translation Service Originating Side call Id i
[Orig-Xlation/TranslationManager]      === TranslationResult ===
[Orig-Xlation/TranslationManager]    callType             Network
[Orig-Xlation/TranslationManager]    address             2014
```

```
[Orig-Xlation/TranslationManager]    addressType          main
[Orig-Xlation/TranslationManager]    isServiceCode           false
[Orig-Xlation/TranslationManager]    sc8Translated           false
[Orig-Xlation/TranslationManager]    sc100Translated         false
[Orig-Xlation/TranslationManager]    oacTranslated           false
[Orig-Xlation/TranslationManager]    carrierPrefixTranslated false
[Orig-Xlation/TranslationManager]    intraSP                 false
[Orig-Xlation/TranslationManager]    alias                   false
[Orig-Xlation/TranslationManager]    preExtEmergencyRtgAK null
[Orig-Xlation/TranslationManager]      === Carrier Info ===
[Orig-Xlation/TranslationManager]    ;csel=noind
```

“始发转换结果”部分提供了呼叫不成功的原因信息。从输出中可以清楚地看到，AS尝试使用NS解析2014号码，但它返回404 Not Found错误响应。

由于呼叫无法扩展至其目标，因此“终止呼叫信息”部分非常简短：

```
====================================================
===========  TERMINATING CALL INFO   ================
====================================================
[Term]    Terminating call processing information has not been populated
```

相反，会出现“处理信息”部分，其中包含有关如何处理失败呼叫的信息：

```
====================================================
===========  TREATMENT INFORMATION          =========
====================================================
[Treatment/TreatmentsService]    Treatment service processing RWC. Release Cause is USER_NOT_FOUND
[Treatment/TreatmentsService]    defaultAnnouncement isTrtUnknownUser.wav
[Treatment/TreatmentsService]    defaultTone is reorder-pcmu.wav

[Treatment/TreatmentsService]    Treatment playing default announcement https://10.48.93.126/media/en/T
```

本节提供呼叫失败的原因(USER_NOT_FOUND)，并通知要播放TrtUnknownUser.wav通知和/或重新排序pcmu.wav音。它还指向用于与媒体服务器对话以指示其播放正确公告的路径。

最后两部分显示此分析的最终结果和时间戳：

```
=====================================================
===========           TIMESTAMPS            =========
=====================================================
[Timestamps]    Start time = 2023.01.27 10:29:17:525 CET
[Timestamps]    End time   = 2023.01.27 10:29:17:669 CET

=====================================================
===========   RESULT: BLOCKED         ===============
=====================================================
```

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