# Problemen met oproepinstellingen oplossen met VTR en VTRI

## Inhoud



## Inleiding

In dit document wordt beschreven hoe u VTR (Verify Translation and Routing) kunt gebruiken in de toepassingsserver (AS) om veelvoorkomende problemen met de installatie van oproepen op te lossen.

.

## Achtergrondinformatie

BroadWorks Application Server heeft twee geïntegreerde tools die kunnen worden gebruikt om problemen met de installatie van oproepen op te lossen: VTR en Verify Translation and Routing INVITE (VTRI). Het doel van deze twee gereedschappen is hetzelfde, het verschil zit in de

commando-invoer:

- VTR neemt de gegevens van de beller (zoals userId of telefoonnummer), evenals het bestemmingsnummer als invoer,
- VTRI neemt het SIP INVITE-bericht als invoer.

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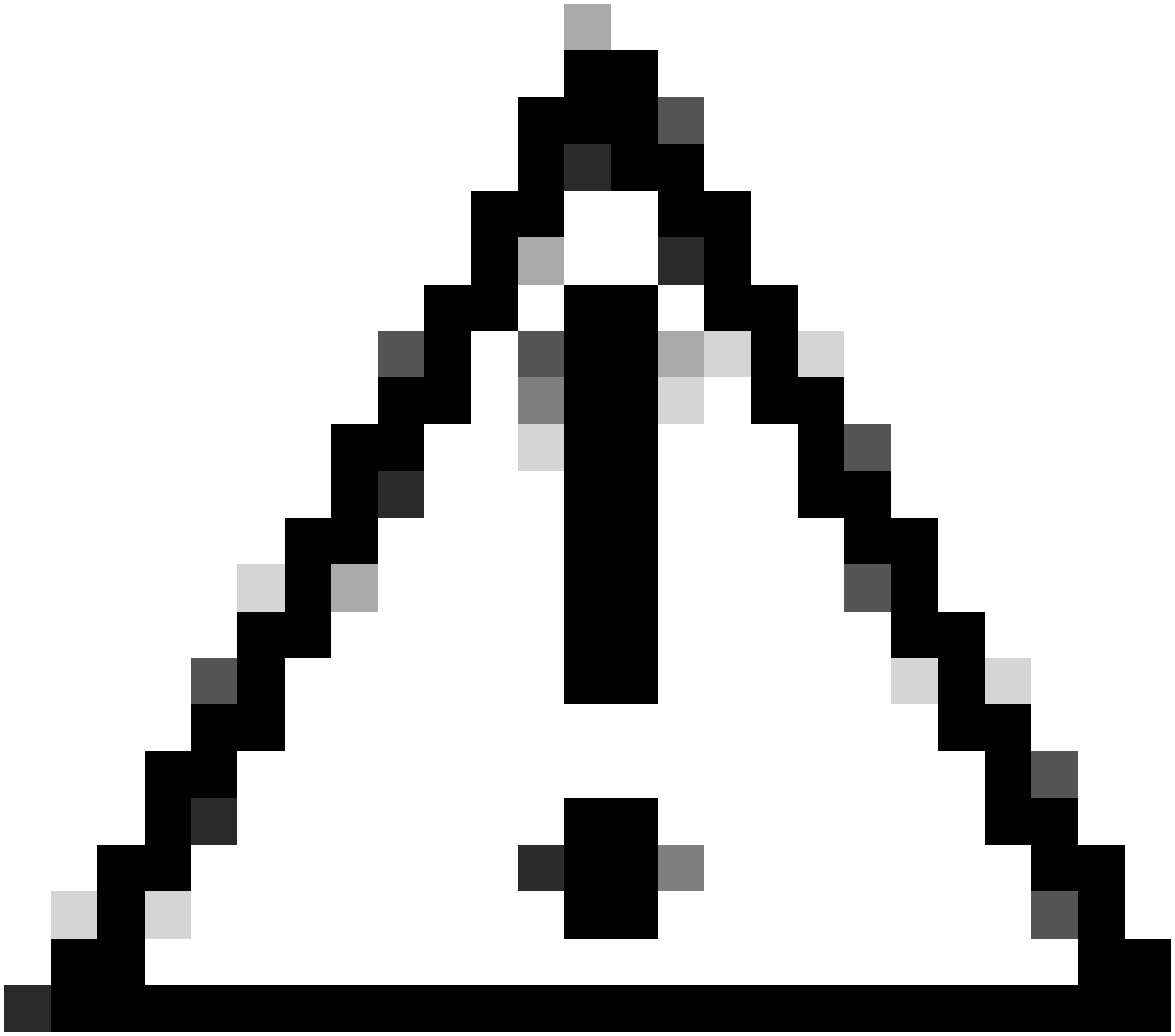

Let op: VTR- en VTRI-opdrachten zijn ook beschikbaar in de netwerkserver (NS), maar de uitvoerstructuur verschilt van de AS. Dit document richt zich op AS VTR(I) en kan niet worden gebruikt als referentie tijdens het werk met NS VTR(I).

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De volledige opdrachtverwijzing voor AS VTR is beschikbaar in de Application Server VTR Administration Guide.

# Voorwaarden

## Vereisten

Cisco raadt u aan om deze te kennen:

- Signalering van het Session Initiation Protocol (SIP).
- Oproepverwerkingsmechanisme van de toepassingsserver, samen met de beschikbare services en hun configuratie.

### Gebruikte componenten

De informatie in dit document is gebaseerd op BroadWorks AS versie R24. Het gedrag van andere softwareversies is echter vergelijkbaar.

De informatie in dit document is gebaseerd op de apparaten in een specifieke laboratoriumomgeving. Alle apparaten die in dit document worden beschreven, hadden een opgeschoonde (standaard)configuratie. Als uw netwerk live is, moet u zorgen dat u de potentiële impact van elke opdracht begrijpt.

## Gebruik van VTR(I) Tool

VTR-analyse kan zowel worden geactiveerd vanuit de Command Line Interface (CLI) als vanuit de webinterface.

### VTR(I) Tool uitvoeren vanuit CLI

Voer de volgende stappen uit om VTR uit te voeren vanaf Web GUI:

Stap 1. Meld u aan bij de CLI van BroadWorks met uw badmin-referenties.

Stap 2. Start BroadWorks CLI en navigeer naar AS_CLI/ASDagnostic/Diag:

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

Stap 3. Voer voor het gebruik van VTRI de opdracht vtri uit, gevolgd door SIP INVITE en het periodeteken in de nieuwe regel. Voorbeeld:

```
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
.
```

Stap 4. Als u VTR wilt gebruiken, voert u de opdracht vtr uit, gevolgd door details over de beller en de bestemming. Voorbeeld:

```
# 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
```

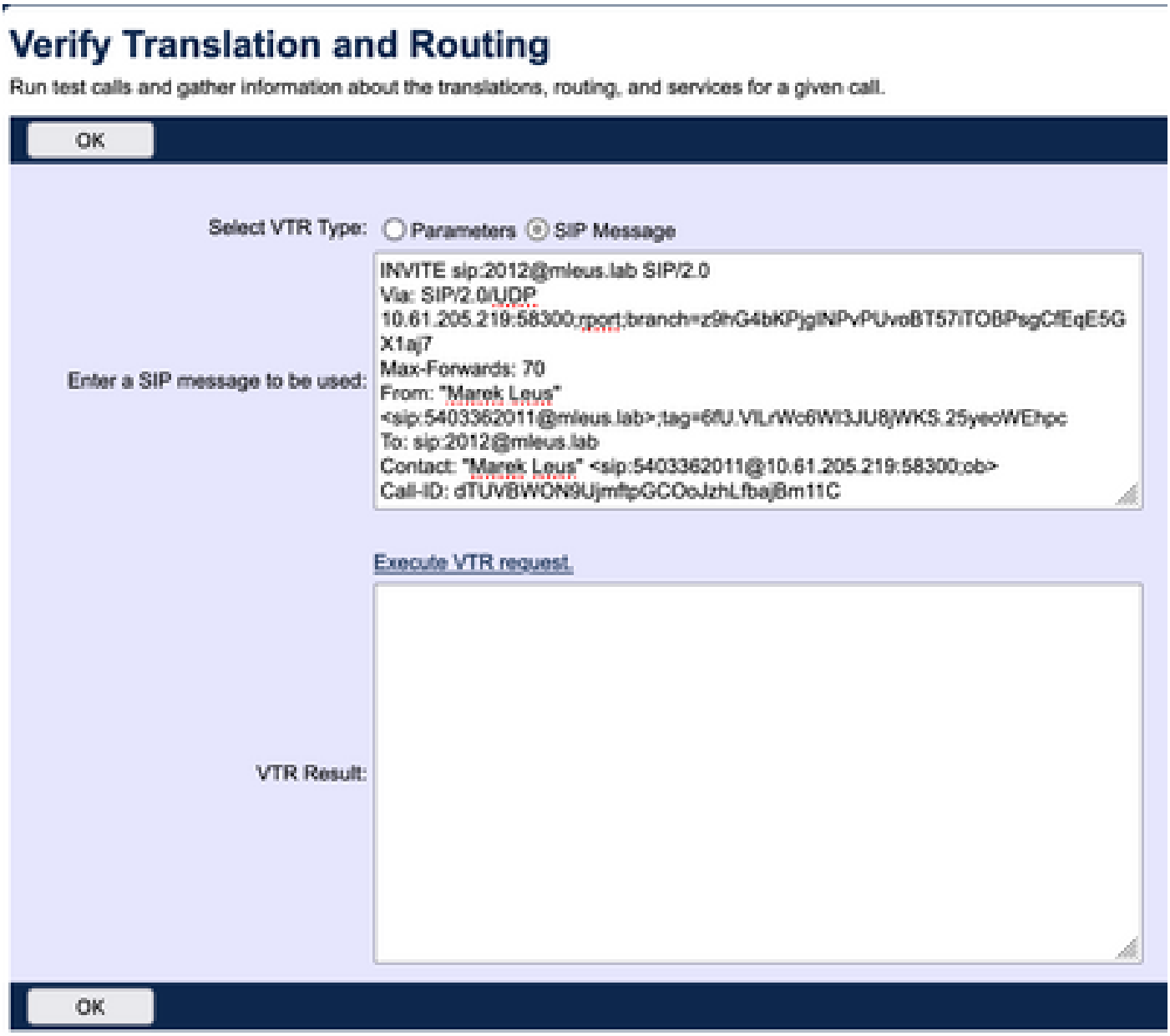
## VTR(I) Tool uitvoeren vanuit de Web GUI

Voer de volgende stappen uit om VTR uit te voeren vanaf de Web GUI:

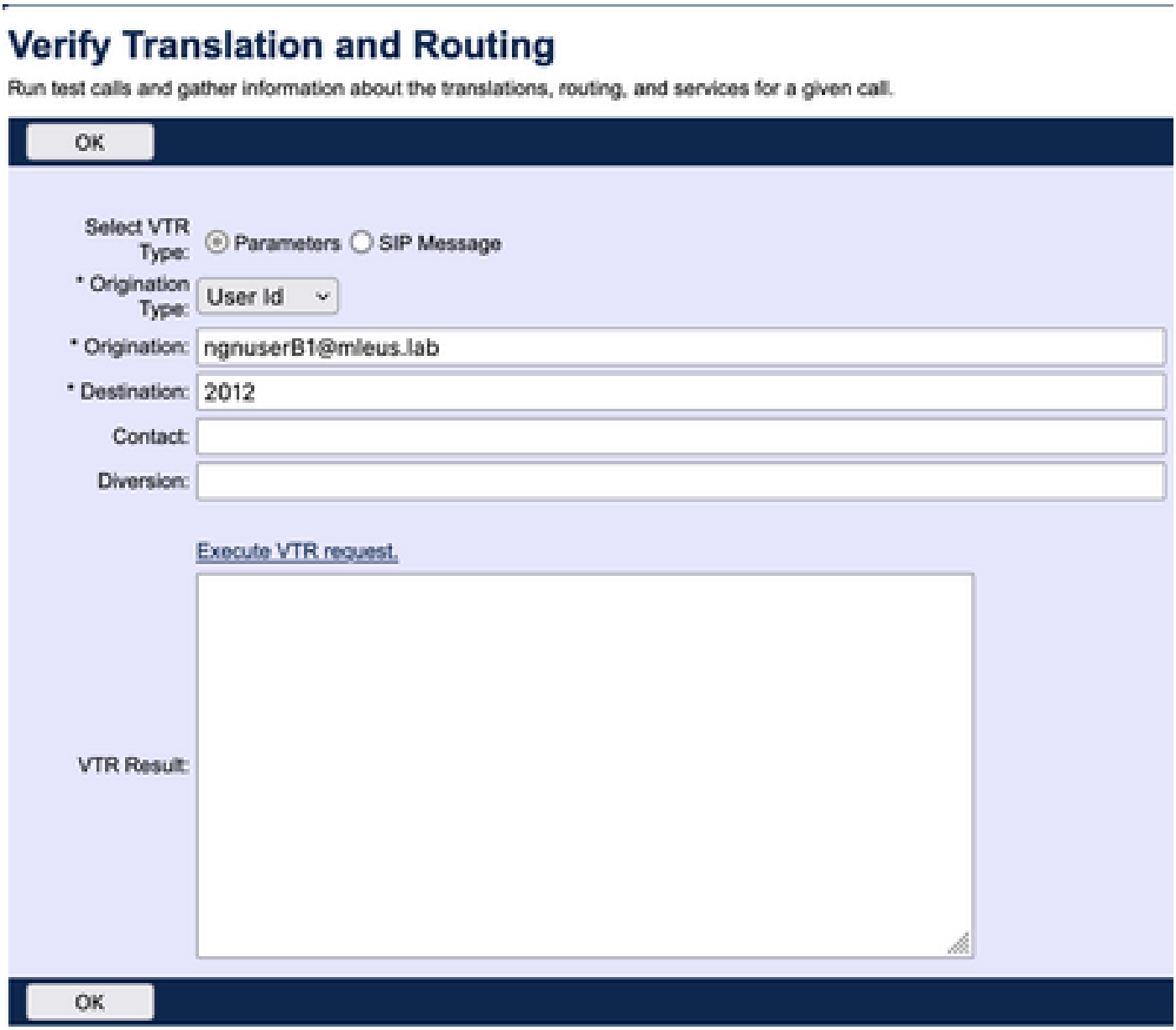
Stap 1. Navigeer naar https://<AS_FQDN>/Login pagina en log in op de AS Web interface.

Stap 2. Navigeer naar Systeem > Hulpprogramma's > Vertaling en routering controleren.

Stap 3. Als u VTRI wilt gebruiken, klikt u op het keuzerondje SIP-bericht en plakt u het bericht SIP INVITE in het invoerveld. Klik vervolgens op de link VTR-aanvraag uitvoeren:



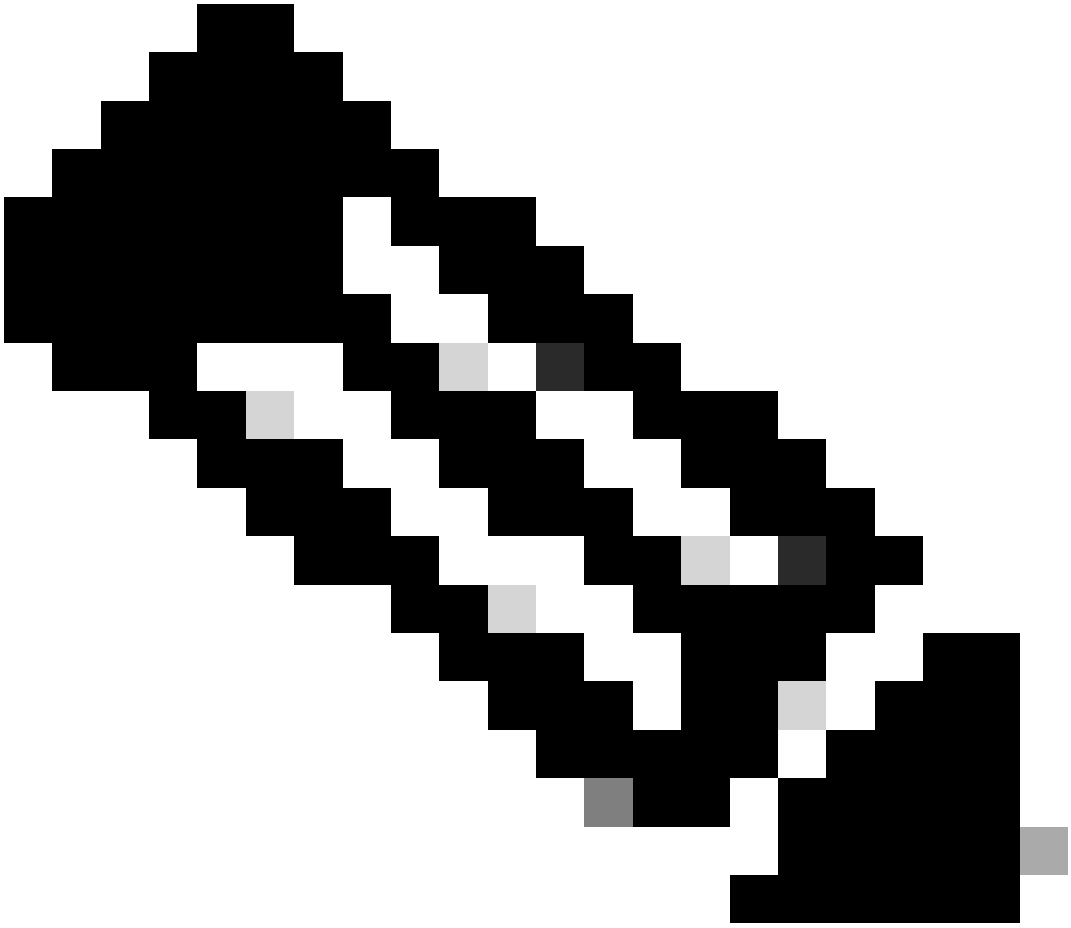

Stap 4. Als u VTR wilt gebruiken, klikt u op het keuzerondje Parameters en vult u alle vereiste velden in. Klik vervolgens op de link VTR-aanvraag uitvoeren:




## Uitsplitsing VTR(I)-uitgang

Het formaat van de VTR- en VTRI-resultaten is vergelijkbaar. Het bestaat uit acht delen:

1. Parameters of SIP INVITE (alleen aanwezig in VTR; niet nodig in VTRI omdat het werkt op een echt SIP-bericht).
2. Informatie over de initiator.
3. Originele gespreksinformatie.
4. Oorspronkelijk vertaalresultaat.
5. Gespreksinformatie wordt beëindigd.
6. Behandelingsinformatie
7. Tijdstempel.
8. Resultaat.



Opmerking: Alle VTR-uitgangen in dit document zijn gebaseerd op de vtr userId <user_id> <destination_number> opdrachtuitvoer, tenzij anders vermeld.

## Parameters of SIP-uitnodiging

Het eerste deel van het VTR-resultaat is SIP INVITE, of de parameters die worden gebruikt om het gesprek te simuleren. Dit gedeelte is niet zichtbaar als u SIP INVITE expliciet opgeeft (met andere woorden, als u VTRI gebruikt).

Een SIP INVITE wordt gegenereerd wanneer de oorsprong is ingesteld op een URL of lijn / poort. Voorbeeld:

```
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
```

Parameters worden weergegeven als de oorsprong is ingesteld op de gebruikersnaam of telefoon (zowel bwphone als pstnphone). Voorbeeld:

```
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
```

## initiatorinformatie

Dit gedeelte bevat informatie over de oorspronkelijke partij (beller). Als de beller een lokale BroadWorks-gebruiker is, wordt gedetailleerde informatie over de gebruiker weergegeven. Voorbeeld:

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

## oorspronkelijke oproepinformatie

In deze sectie wordt de progressie van gebeurtenissen aan de beller kant van het gesprek in volgorde weergegeven. Als de beller een Cisco BroadWorks-gebruiker is, is dit een plaats waar de toegewezen services worden uitgevoerd. Voorbeeld:

```
=====================================================
===========  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.
```

## Resultaat van oorspronkelijke vertaling

Informatie over een vertaling die is aangevraagd bij de Cisco BroadWorks Network Server wordt in deze sectie verstrekt. Als een netwerkvertaling vereist is, wordt informatie weergegeven over het gebruikte kiesplanbeleid. Het toont ook de SIP-berichten die voor dit doel worden uitgewisseld. Voorbeeld:

```
=====================================================
===========  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:BW10291756427012318925981320@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
```

## gespreksinformatie beëindigen

Als het gesprek een geldige bestemming heeft, wordt informatie getoond over de identiteit en de gebeurtenissen in de beëindigende servicebus. Vergelijkbaar met het gedeelte met informatie over de oorspronkelijke oproep, is dit een plaats waar de toegewezen services van de bestemmingsgebruiker worden uitgevoerd. Het toont ook de SIP INVITE die naar de bestemming wordt verzonden. Voorbeeld:

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

## Behandelingsinformatie

Deze sectie is alleen beschikbaar voor mislukte oproepen. Het geeft een gedetailleerde reden voor de oproep mislukking. Het geeft ook aan welke aankondiging / toon wordt afgespeeld door de mediaserver als de oproep om die reden mislukt. Voorbeeld:

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

## tijdstempels

Oproeptijdstempels kunnen worden gebruikt om gebeurtenissen in VTRI te correleren met XSLogs.

## resultaat

Het eindresultaat van de testoproep, De mogelijke waarden zijn:

- Toegestaan – Het gesprek kan met succes worden uitgebreid naar de externe partij. De uitgaande UITNODIGING wordt weergegeven in het gedeelte Informatie over beëindigende oproep.
- Geblokkeerd - De belinstelling is geblokkeerd vanwege een beleid of een abnormale

toestand. De reden kan aan de oorsprong- of aan de beëindigingszijde zijn (afhankelijk van de reden).
- Omgeleid - De oproep werd omgeleid zonder een voorwaarde. De omleidingsbestemming wordt geïdentificeerd en in het rapport weergegeven.
- Time-out – Iets verhinderde dat de testoproep correct werd beëindigd en de interne tijdslimiet van 10 seconden werd bereikt. De beschikbare informatie kan worden gebruikt, maar het eindresultaat wordt niet getoond.
- Media – Een mediacomponent werd intern gestart (meestal een Interactive Voice Response [IVR]) om een specifieke aankondiging af te spelen of cijfers te verzamelen. Testoproepen worden in dit geval gestopt, maar het rapport toont de gebeurtenissen tot nu toe.

# Netwerktopologie en gespreksstroom

Voor eenvoud wordt in dit document een basisscenario voor oproepen gebruikt:

- Softphone-applicaties worden rechtstreeks geregistreerd bij AS.
- Alle gebruikers zitten in dezelfde groep.
- Er wordt geen call forward of redirect gebruikt.

# Oproepscenario's

Dit document behandelt drie scenario's waarbij een gebruiker met extensie 2011 achter elkaar kiest:

1. Uitbreiding 2012, die is toegewezen aan een geregistreerd apparaat.
2. Uitbreiding 2012, die is toegewezen aan een geregistreerd apparaat, maar de Selective Call Acceptance-service is geconfigureerd om de oproep uit 2011 af te wijzen Zoals wordt getoond in deze schermopname:


3. Uitbreiding 2014, die niet is toegewezen aan een gebruiker.

## Scenario 1: Geslaagde oproep

In dit scenario kiest een lokale gebruiker een andere lokale gebruiker met hun extensie. Laten we de VTR-uitvoer voor deze oproep doorlopen om er meer over te weten te komen:

```
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
```

In het eerste deel van de VTR-resultaten kunt u zien hoe AS parameters toewijst van de opdracht vtr aan SIP-URL's:

- Beller: 5403362011@mleus.lab
- Bestemming: 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
```

Omdat de beller lokaal is, worden alle gegevens over de gebruiker afgedrukt. In deze sectie kunt u zien wat de eerste (Marek) en laatste (Leus) naam van de gebruiker zijn, wat hun extensie (2011) is, en wat het volledige nummer (+15403362011) is, en tot welke onderneming/groep (ngnentB1/ngngroupB1) ze behoren.

```
=====================================================
===========  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.
```

Omdat het een eenvoudige gebruiker is zonder dat services zijn ingeschakeld, is er niet veel informatie in het gedeelte Informatie over uitgaande oproep. De AS controleert de ene service na de andere en gaat uiteindelijk naar het volgende gedeelte van de VTR. Het definieert deze oproep ook als een groepsoproep. Als u deze VTR-analyse wilt correleren met XSLogs, kunt u de callhalf-ID (callhalf-60455) uit deze sectie extraheren en deze vervolgens gebruiken om deze oproep in de logbestanden te vinden. Voorbeeld:

```
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 |
```

Het volgende gedeelte is Resultaat van oorspronkelijke vertaling:

```
=====================================================
===========  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]    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
```

In deze sectie kunt u leren welk kiesplan wordt toegepast voor een bepaald gesprek. Voor deze oproep geeft de uitvoer aan dat het een oproep binnen de groep is en dat deze wordt doorgestuurd naar gebruiker ngnuserB2@mleus.lab. In het volgende gedeelte wordt meer over deze gebruiker verteld:

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

Uit dit deel leer je dezelfde details over het gespreksdoel als voorheen voor beller: voor- en achternaam (John Doe), extensie (2012) en volledig nummer (+15403362012), evenals de onderneming / groep (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
```

Verder in dit gedeelte worden alle services gecontroleerd. Er is slechts één service toegewezen aan deze gebruiker (Selective Call Acceptance), maar de enige set criteria (Reject_2011) is inactief. Daarom wordt deze niet geactiveerd en gaat de VTR-analyse naar de volgende fase van de sectie Informatie over gesprekken beëindigen, die het eindresultaat van de analyse toont.

```
[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
```

Vanuit dit gedeelte ziet u het INVITE-bericht dat zou worden uitgebreid naar de eindbestemming als het een echt gesprek was. U kunt ook call half ID (call half-60459) uitpakken die kan worden gebruikt om deze oproep in de logbestanden te traceren:

```
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 | ca
    $ new CHSS > +15403362012 > callhalf-60455:0 > callhalf-60459
2023.01.27 10:28:38:827 CET | FieldDebug | StateReplication | Call Half Input Adapter 5 | 3104797 | +154
2023.01.27 10:28:38:827 CET | Info       | CallP | Call Half Input Adapter 0 | 3104798 | Call Manager |
```

De laatste twee secties tonen het eindresultaat en de tijdstempels van deze analyse:

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

## Scenario 2: Oproep afgewezen door de Selective Call Acceptance Service

In dit scenario belt een lokale gebruiker opnieuw een andere lokale gebruiker met hun extensie; deze keer is de Selective Call Acceptance echter geconfigureerd om deze oproep af te wijzen. Laten we de VTR-uitvoer voor deze oproep doorlopen om er meer over te weten te komen:

```
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
```

IIn het eerste gedeelte van de VTR-resultaten kunt u zien hoe de AS parameters toewijst van de opdracht vtr aan SIP-URL's:

- Beller: 5403362011@mleus.lab
- Bestemming: 2012@10.48.93.126:5060

Omdat het precies dezelfde beller is als in het eerste scenario, is de sectie Originator-informatie hiervoor ook precies hetzelfde. Daarom wordt het overgeslagen voor duidelijkheid en gaat de analyse verder naar de sectie Informatie over uitgaande oproep:

```
=====================================================
===========  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.
```

Dit gedeelte laat zien dat het bestemmingsnummer bekend is bij het AS en definieert de oproep als een groepsgesprek. Maar je kunt ook bepalen of er iets mis gaat. Ten eerste is er de verklaring "Routing ReleaseWithCauseEvent on the Originating Call bus" en is TreatmentServiceInstance betrokken. Ook wordt de sectie afgesloten met ReleaseWithCauseHandler.

Het volgende gedeelte is het resultaat van het initiëren van een vertaling, dat identiek is aan het gedeelte uit scenario 1 omdat de oproep naar dezelfde gebruiker wordt geleid. Daarom wordt het weggelaten voor de duidelijkheid. Het verschil wordt weergegeven in het gedeelte Informatie over beëindigende oproep:

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

Je kunt zien dat deze keer de Reject_2011 criteria set actief is. Als gevolg hiervan wordt de Selective Call Acceptance-service geactiveerd. Als gevolg hiervan wordt ReleaseWithCauseEvent verhoogd op de Terminating Call-bus. De AS controleert de rest van de services en gaat naar het gedeelte Informatie over behandeling:

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

In deze sectie kunt u de reden van de mislukte oproep (VERBODEN) leren en dat de TrtSelectCallReject.wav aankondiging moet worden afgespeeld.

De laatste twee secties tonen het eindresultaat en de tijdstempels van deze analyse:

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

## Scenario 3: Oproep naar niet-toegewezen nummer

In dit scenario kiest een lokale gebruiker een andere extensie die niet is toegewezen. Laten we de VTR-uitvoer voor deze oproep doorlopen om er meer over te weten te komen:

```
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
```

In het eerste gedeelte van VTR-resultaten kunt u zien hoe de AS parameters toewijst van de opdracht vtr aan SIP-URL's:

- Beller: 5403362011@mleus.lab
- Bestemming: 2014@10.48.93.126:5060

Omdat het precies dezelfde beller is als in het eerste scenario, is de sectie Originator-informatie hiervoor ook precies hetzelfde. Daarom wordt het overgeslagen voor duidelijkheid en gaat de analyse verder naar de sectie Informatie over uitgaande oproep:

```
=====================================================
===========  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.
```

Vanuit dit gedeelte kun je al uitzoeken dat er iets mis is. Ten eerste is er een "Routing ReleaseWithCauseEvent op de Originating Call bus" verklaring in plaats van de "Routing Invitation Event op de Originating Call bus" verklaring. Dan is er een TreatmentServiceInstance verklaring betrokken. Ten slotte eindigt het gedeelte met de verklaring ReleaseWithCauseHandler.

```
=====================================================
===========  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:BW10291756427012318925981320@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
```

De sectie Resultaat van oorspronkelijke vertaling geeft inzicht in de reden waarom de oproep niet succesvol is. Uit de output blijkt duidelijk dat de AS met de NS probeert het 2014-nummer op te lossen, maar de AS retourneert de 404 Not Found-foutrespons.

Omdat de oproep niet kan worden uitgebreid naar de bestemming, is het gedeelte Informatie over beëindigende oproep erg kort:

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

In plaats daarvan is er een sectie Behandelingsinformatie aanwezig met informatie over hoe de mislukte oproep moet worden afgehandeld:

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

Deze sectie geeft de reden voor de oproep mislukking (USER_NOT_FOUND) en informeert dat TrtUnknownUser.wav aankondiging en/of reorder-pcmu.wav toon moet worden afgespeeld. Het wijst ook het pad aan dat moet worden gebruikt in dialoog met de mediaserver om deze te instrueren de juiste aankondiging af te spelen.

De laatste twee secties tonen het eindresultaat en de tijdstempels van deze analyse:

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

Over deze vertaling

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