

# SIP Trunk Call Manager

A Guide to Advanced Statistics & Push Reports



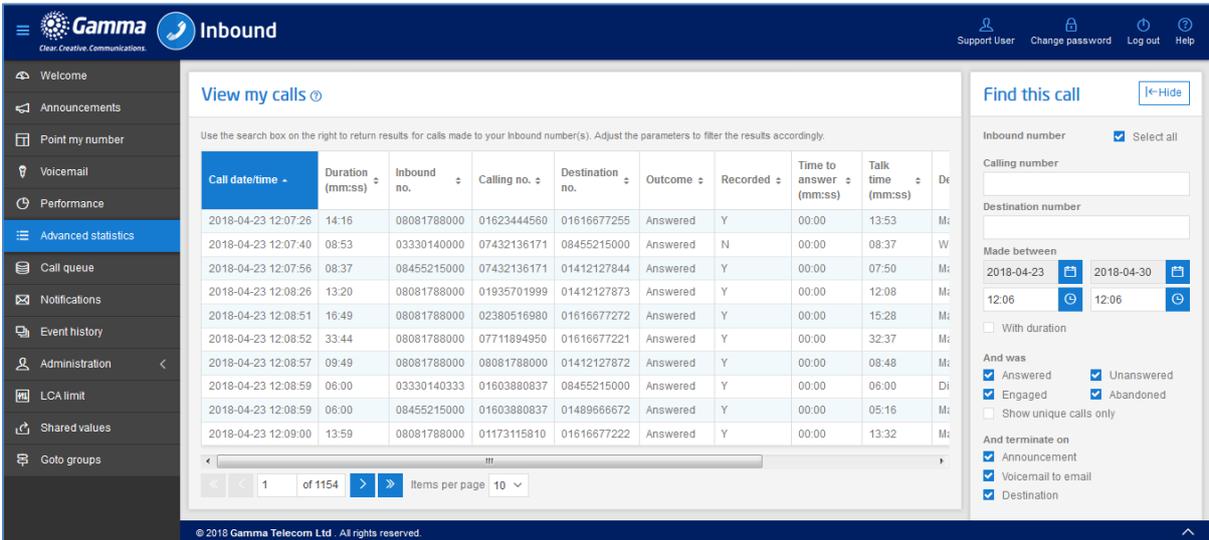
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# Advanced Statistics

Advanced Statistics is included as standard with SIP Trunk Call Manager (STCM). It enables the customer to fully interrogate the call performance, as well as identifying call trends or finding specific calls. Once subscribed the records will be automatically retained for up to 6 months. After this time older records are automatically deleted.

\*TIP! The Advanced Statistics are 'network level' call data records, so include every call attempt that reaches the Gamma network for the number in question, whether the call reaches the customer CPE or not.



The screenshot shows the 'View my calls' interface in the Gamma Inbound system. It features a table of call records and a 'Find this call' sidebar with various search and filter options.

Call date/time	Duration (mm:ss)	Inbound no.	Calling no.	Destination no.	Outcome	Recorded	Time to answer (mm:ss)	Talk time (mm:ss)	De
2018-04-23 12:07:26	14:16	08081788000	01623444560	01616677255	Answered	Y	00:00	13:53	M:
2018-04-23 12:07:40	08:53	03330140000	07432136171	08455215000	Answered	N	00:00	08:37	W
2018-04-23 12:07:56	08:37	08455215000	07432136171	01412127844	Answered	Y	00:00	07:50	M:
2018-04-23 12:08:26	13:20	08081788000	01935701999	01412127873	Answered	Y	00:00	12:08	M:
2018-04-23 12:08:51	16:49	08081788000	02380516980	01616677272	Answered	Y	00:00	15:28	M:
2018-04-23 12:08:52	33:44	08081788000	07711894950	01616677221	Answered	Y	00:00	32:37	M:
2018-04-23 12:08:57	09:49	08081788000	08081788000	01412127872	Answered	Y	00:00	08:48	M:
2018-04-23 12:08:59	06:00	03330140333	01603880837	08455215000	Answered	Y	00:00	06:00	Di
2018-04-23 12:08:59	06:00	08455215000	01603880837	01489666672	Answered	Y	00:00	05:16	M:
2018-04-23 12:09:00	13:59	08081788000	01173115810	01616677222	Answered	Y	00:00	13:32	M:

The 'Find this call' sidebar includes the following search and filter options:

- Inbound number:**  Select all
- Calling number:**
- Destination number:**
- Made between:** 2018-04-23 to 2018-04-30
- Time range:** 12:06 to 12:06
- With duration:**
- And was:**
  - Answered
  - Engaged
  - Unanswered
  - Abandoned
  - Show unique calls only
- And terminate on:**
  - Announcement
  - Voicemail to email
  - Destination

## Search Criteria – Find This Call

Once subscribed, calls can be searched or filtered with the following criteria:

- Number (the Inbound number caller dialled)
- Calling number (the Caller's CLI)
- Destination number (the number which answered the call)
- Time/date of call
- Call duration

Unique callers only

Call outcome: engaged/answered/unanswered/abandoned

Calls answered by voicemail/announcement

Custom Fields (under the 'Multiple number selection' option)

### Find this call ← Hide

**Inbound number**  Select all

**Calling number**

**Destination number**

**Made between**

2018-04-23  2018-04-30

12:06  12:06

With duration

**And was**

Answered  Unanswered

Engaged  Abandoned

Show unique calls only

**And terminate on**

Announcement

Voicemail to email

Destination

### Multiple number selection

**Inbound numbers**

Available

Search inbound numbers

- 01158965046 - GoTo Demo Cust Serv
- 01162168402 - Sales Blue Brand
- 01162168403 - Sales Green Brand
- 01339720096 - Sales Red Brand
- 02036671362 - TW Voicemail number - DO NOT RE...
- 03003038386 - Goto Receiver 2
- 03300582705 - Nigel's Test Number
- 03300582706 - GoTo Demo Main Number
- 08081683880 - Byker Community Trust Main Numbe...
- 08719642329 - Number 1

Assigned

All numbers

- 01158965046 - GoTo Demo Cust Serv
- 01162168402 - Sales Blue Brand
- 01162168403 - Sales Green Brand
- 01339720096 - Sales Red Brand

Items per page 10

**Custom fields**

And

Or

### Find this call ← Hide

**Inbound number**  Select all

**Multiple number selection**

01158965046 - GoTo Demo Cust Serv

**Calling number**

**Destination number**

**Made between**

2018-04-23  2018-04-30

12:18  12:18

With duration

**And was**

Answered  Unanswered

Engaged  Abandoned

Show unique calls only

**And terminate on**

Announcement

Search results are displayed in table format and list key call information.

The results can be downloaded in .csv file format for further reporting and manipulation.

## Results Analysis

Returned data will typically be no more than 10-15 minutes behind real time.

\*TIP! If you intend to download the results, then click 'Download' after setting your search criteria instead of 'Find'. This will speed up the download time. You can still download after clicking 'Find' if preferred.

**View my calls** 

Use the search box on the right to return results for calls made to your inbound number(s). Adjust the parameters to filter the results accordingly.

Call date/time	Duration (mm:ss)	Inbound no.	Calling no.	Destination no.	Outcome	Recorded	Time to answer (mm:ss)	Talk time (mm:ss)	Description
2018-04-23 12:07:26	14:16	08081788000	01623444560	01616677255	Answered	Y	00:00	13:53	Main IVR Wholesale Top Level
2018-04-23 12:07:40	08:53	03330140000	07432136171	08455215000	Answered	N	00:00	08:37	Website Tracking
2018-04-23 12:07:56	08:37	08455215000	07432136171	01412127844	Answered	Y	00:00	07:50	Main IVR Direct Support Top Le
2018-04-23 12:08:26	13:20	08081788000	01935701999	01412127873	Answered	Y	00:00	12:08	Main IVR Wholesale Top Level
2018-04-23 12:08:51	16:49	08081788000	02380516980	01616677272	Answered	Y	00:00	15:28	Main IVR Wholesale Top Level
2018-04-23 12:08:52	33:44	08081788000	07711894950	01616677221	Answered	Y	00:00	32:37	Main IVR Wholesale Top Level
2018-04-23 12:08:57	09:49	08081788000	08081788000	01412127872	Answered	Y	00:00	08:48	Main IVR Wholesale Top Level
2018-04-23 12:08:59	06:00	03330140333	01603880837	08455215000	Answered	Y	00:00	06:00	DirectSupport IVR - 0845 Mirror
2018-04-23 12:08:59	06:00	08455215000	01603880837	01489666672	Answered	Y	00:00	05:16	Main IVR Direct Support Top Le
2018-04-23 12:09:00	13:59	08081788000	01173115810	01616677222	Answered	Y	00:00	13:32	Main IVR Wholesale Top Level

## View my calls Headers

\*TIP! Call details can be sorted in ascending or descending order based on any of the column headings.

### Call Date/Time

The date and time the call occurred

### Duration

The total duration of the call, from answering the call, through to both parties ending the call.

### Inbound Number

The number dialled

## Calling Number

The Presented CLI of the caller. Where this was withheld, 'Withheld' will be displayed. Where nothing or non-standard formatting was presented by the calling or forwarding network, this may display as 'Unavailable'.

## Destination Number

The number which answered the call. Or the node where the call ended (if a media feature such as Announcement, Call Queue or IVR is configured).

## Outcome

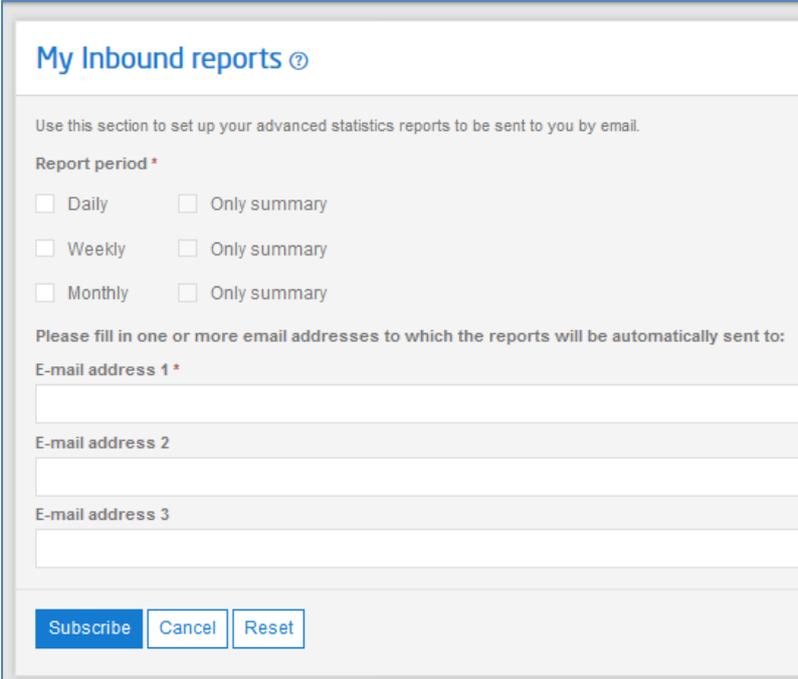
The outcome of the call once processed by STCM.

## Time to Answer

The time to answer shows the length of time from the call being presented to the destination until the call is answered by the destination. This value is given as a duration in minutes and seconds.

# Push Reports

This feature enables the customer to select to have automated Advanced Statistic reports email to up to 3 email addresses on a daily, weekly, or monthly basis. Access to set up the Push Reports will be via a the 'Reports' tab, which is only visible to subscribers.



The content details of the Daily/Weekly/Monthly) Push Reports will be the same as the Advanced Statistics data set.

## - Push Reports Summary

The format of the 'Only Summary' report will show the following information in table format:

Number

Description

Total Calls

Answered

Unanswered

Engaged

Abandoned

Minutes generated

Average duration (minutes)

Average time to answer (only if the call terminated in a proper destination number, not in IVR, announcement etc.)

A final sum of the relevant values (In the first column the total count of the numbers).

Inbound Number	Description	Answered	Unanswered	Engaged	Abandoned	Minutes generated	Average duration (mins)	Average time to answer (mins)
0800 000 000	Sales	43	3	7	2	12.34	0.45	0.05
0800 123 456	Service	12	2	4	5	4.45	1.02	0.12
<b>Total</b>		<b>55</b>	<b>5</b>	<b>11</b>	<b>7</b>	<b>17.09</b>		

## Push Reports Summary - Definitions of terms:

Average talk Time = average duration of the actual talk time excluding IVR, announcements, call queue etc.

Average duration = is always those greater than 0 secs. Those calls which didn't get to a destination or voicemail will not appear as they will have no talk time

Time to answer = actual ringing time (no IVR, announcements etc. included) time to answer is stored in minutes therefore, we round up to the nearest second. The time to answer includes any ringing time if the call has been diverted. For example, if there is a divert in the call plan and it rang for 10 seconds on the first destination and then rang for 4 seconds on the second it counts as 14 seconds in the time to answer column.

Minutes generated = sum of all talk time

Answered, unanswered, engaged, abandoned = these terms refer to what the platform has 'experienced' and not what the caller or receiver has experienced – e.g. abandoned cannot mean that the receiver of a call has put the phone down as the platform will see that call as 'answered'.

# Additional details

## Custom Fields output.

If the customer has utilised the Custom Fields to add their own data to any number, on the Point my Number tab, these columns and the associated data will also be visible in the Advanced Statistics and Push Reports, and can also be used to filter the report prior to running it:

View my calls →Find this call

Use the search box on the right to return results for calls made to your Inbound number(s). Adjust the parameters to filter the results accordingly.

Call date/time	Duration (mm:ss)	Inbound no.	Calling no.	Destination no.	Outcome	Recorded	Time to answer (mm:ss)	Talk time (mm:ss)	Description	Location	Site Name	Test
2017-11-02 16:53:51	00:00	03003038386	01903905946	03003038386	Unanswered Number Unavailable	N	00:00	00:00	Goto Receiver 2			sadgrasgar
2017-11-15 09:50:40	00:00	03003038386	07581031071	03003038386	Unanswered Number Unavailable	N	00:00	00:00	Goto Receiver 2			sadgrasgar
2017-12-01 10:10:01	01:04	01158965046	withheld	07848444981	Answered	N	00:06	01:04	GoTo Demo Cust Serv	London	Mike 1	sadgrasgar
2018-01-05 10:21:10	00:04	01158965046	03332403503	Announce	Abandoned Media	N	00:00	00:00	GoTo Demo Cust Serv	London	Mike 1	sadgrasgar
2018-01-05 10:21:43	00:06	01158965046	08081780820	Announce	Unanswered Media	N	00:00	00:00	GoTo Demo Cust Serv	London	Mike 1	sadgrasgar
2018-01-05 10:24:34	00:05	01158965046	07894704080	Announce	Abandoned Media	N	00:00	00:00	GoTo Demo Cust Serv	London	Mike 1	sadgrasgar
2018-01-05 10:26:09	00:06	01158965046	withheld	Announce	Unanswered Media	N	00:00	00:00	GoTo Demo Cust Serv	London	Mike 1	sadgrasgar
2018-01-05 10:27:50	00:06	01158965046	withheld	Announce	Unanswered Media	N	00:00	00:00	GoTo Demo Cust Serv	London	Mike 1	sadgrasgar
2018-01-05 10:29:14	00:04	01158965046	02037803952	Announce	Abandoned Media	N	00:00	00:00	GoTo Demo Cust Serv	London	Mike 1	sadgrasgar
2018-01-05 10:29:33	00:04	01158965046	withheld	Announce	Abandoned Media	N	00:00	00:00	GoTo Demo Cust Serv	London	Mike 1	sadgrasgar

# Call Outcome Definitions & Analysis

Below is an in-depth review of the outcome of Answered, Unanswered, Engaged & Abandoned Calls.

## Introduction

The definitions of the various call outcomes that could appear in the Advanced Statistics and Push Reports are broken down below.

Firstly, there are two scenarios of call outcome definitions:

### Single Stage Call

The first is a single stage call where a call is routed to a destination with no platform processing (other than routing the call). This may also be referred to as 'simple number translation' or a simple call plan.

### Two Stage Calls

The second is where we have a two-stage call that involves the platform in first answering the call and then carrying out some processing or treatment (e.g. where the call has to pass through an IVR, Announcement or a Call Queue) before being presented to the destination. See fig 1 & 2. For each of these cases there are various call scenarios where the outcome is reported in the Advanced Statistics.

Fig 1 One stage call plan examples (no media played to caller):

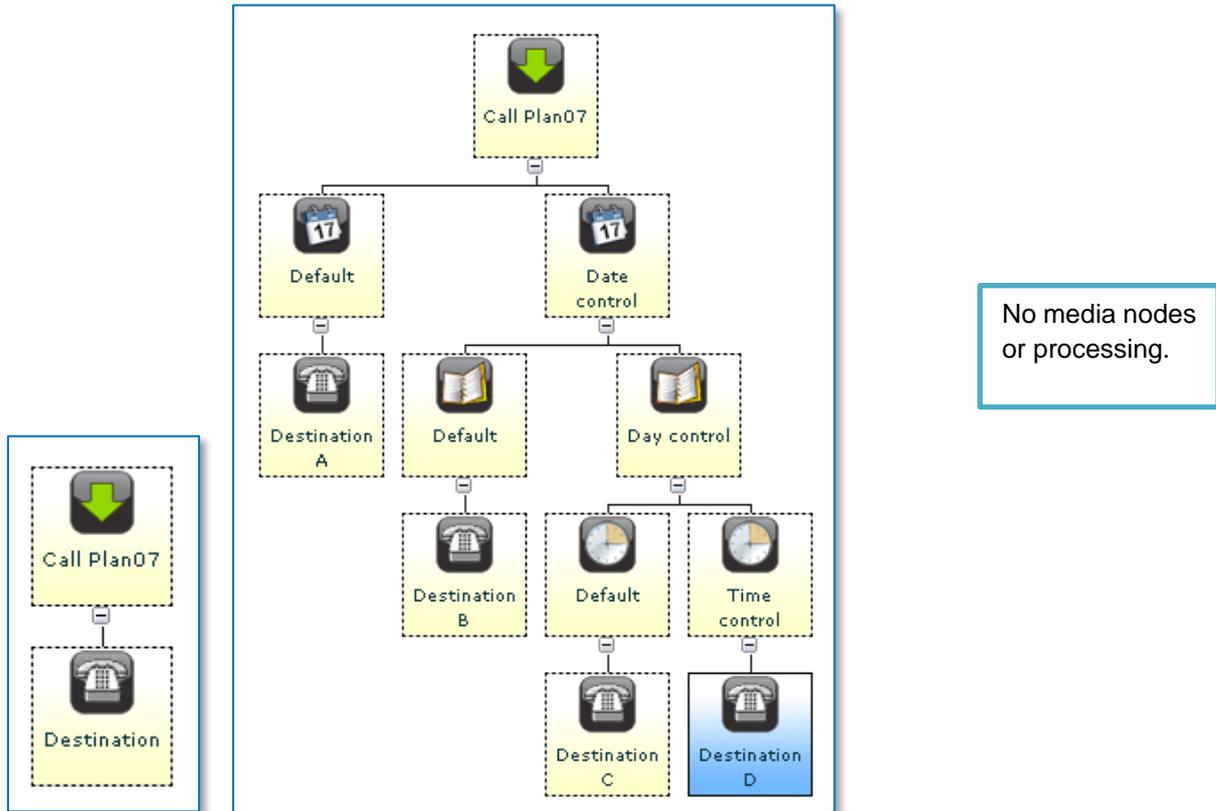
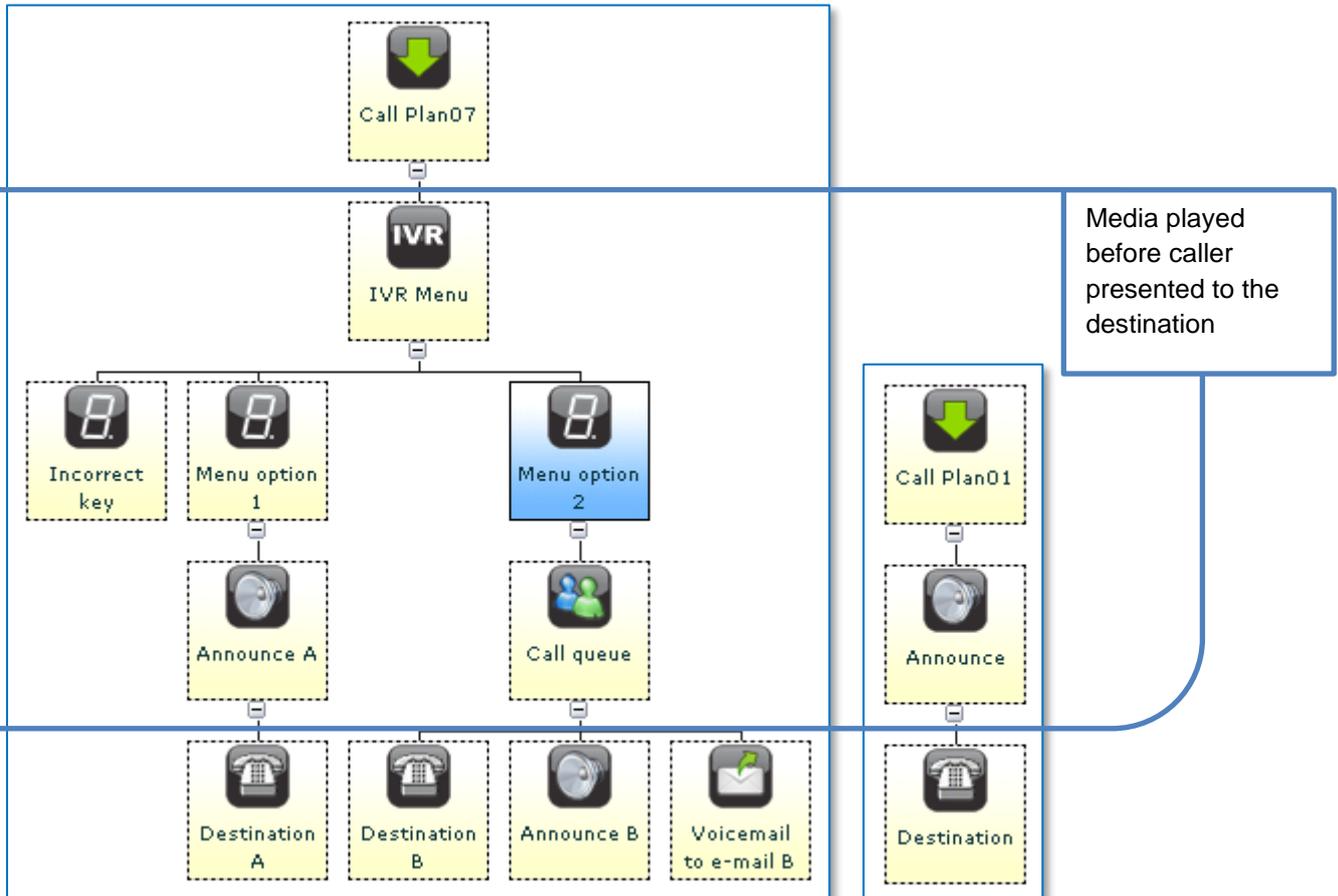


Fig 2 Two stage call plan examples (media played to caller):



## Call Outcome Definitions:

Category Names	SIP Message	&/or Inbound action	Types of calls	Divert when busy	Divert when no answer	Divert when network error
<b>Answered</b>	2xx received	successful	Caller makes call, listens to media if there is any, and call is connected to the recipient signalled by SIP 2xx (from			

		recipient or external voicemail system) or to the internal voicemail service Note: This is whether 'call whisper' applies or not			
<b>Engaged</b>	486 Busy Here, 600 Busy Everywhere - received	An engaged tone is heard by an individual or across all destinations	Y		
<b>Engaged Call Counting</b>	Clears the call due to Call Count being exceeded		Y		
<b>Abandoned Media</b>	BYE - received	A caller abandoned the call whilst listening to - an announcement - IVR - in queue music Or a caller abandoned the call after listening to - an announcement - IVR - in queue music			
<b>Abandoned Media</b>	CANCEL - received Note: "early media" announcement case only	A caller abandoned the call whilst listening to or after listening to an 'early media' announcement			
<b>Abandoned Whilst Connecting</b>	CANCEL - received	A caller abandoned the call whilst it was waiting to be connected to the destination and no Inbound announcement has been played			
<b>Unanswered Media</b>	BYE - sent	An announcement or IVR finishes and the call is cleared by INBOUND2			
<b>Unanswered Media</b>	480 Temporarily not available - sent Note: "early media" announcement case only	An "early media" announcement finishes, and the call is cleared by INBOUND2			
<b>Unanswered Temporarily Blocked</b>	480 Temporarily not available - received	For some reason the destination number was unavailable at that particular point in time			Y
<b>Unanswered Permanently Blocked</b>	403 Forbidden received	The destination number cannot be dialled for some reason e.g. call barring			Y

<b>Unanswered Number Unavailable</b>	404 Not Found - received	The destination number simply does not exist or cannot ever be called			Y
<b>Unanswered Timed out</b>	408 Request Timeout, 504 Server Time-out - received, INBOUND2 clears the call due to a service timeout	The destination number rang but then no-one answered, and after x seconds the call was dropped the call		INBOUND2 service diversion no answer timeout	Y except INBOUND2 service diversion no answer timeout Note 2
<b>Unanswered Other</b>	3xx,4xx except 403,404,408,480,486, 5xx except 504, 6xx except 600 - received Note: 487 is covered by handling CANCEL (abandoned whilst connected) / BYE (abandoned media) above	The call failed to connect to the destination			Y except 487

## Email Notification Definitions:

Email Notification for 'No answer' will be triggered by the same event as

'Divert when no answer' if applicable

'Abandoned Media' (Note: Only if routing to destination has taken place)

and 'Abandoned Whilst Connecting'

Email Notification for busy will be triggered by the same events as Divert when busy

Email Notification on Failover will be triggered by the same events as Divert when network error

# Contacts

Name

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Role

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