Case | Silent Calls

Can you hear me?
## Starting Point | Major client escalation

<table>
<thead>
<tr>
<th>Date</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec 10</td>
<td>1x</td>
</tr>
<tr>
<td>Dec 11</td>
<td>2x</td>
</tr>
<tr>
<td>Dec 12</td>
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<tr>
<td>Dec 13</td>
<td>1x</td>
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<tr>
<td>Dec 16</td>
<td>4x</td>
</tr>
<tr>
<td>Dec 17</td>
<td>1x</td>
</tr>
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<td>3x</td>
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<td>Dec 19</td>
<td>1x</td>
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<tr>
<td>Dec 20</td>
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</tbody>
</table>

/excerpt of a 3 months log

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**VOIPFUTURE /// SILENT CALLS**
Triggered Activities

1. Task force established
2. Software checked
3. Hardware checked

4. 4 Months of work

> No results!
Next try | “Couldn’t we use the Voipfuture stuff?”

Time required to understand the problem

4h
Voipfuture monitoring revealed | Receiver chooses to play a zombie stream

Cause:
- Two RTP streams arrive
- Streams from previous calls were closed improperly
- Open streams carrying silence remain in the network for weeks or months

Reason behind: Bug in call manager
Two different streams simultaneously arrive at one receiver
Another example | Multi-national VoIP service for global clients

Call setup with two call legs
- Many tickets for silent calls and dropped calls.
- Linkage between problems not understood.
Voipfuture monitoring insight | Burst loss of 20 RTP packets

Impact:
- Packet loss triggers termination of one call leg.
- The other call leg remains active.
Required monitoring capabilities

- All RTP streams
- Full traffic
- Both call directions
- 5-second time slices
- Network segmentation
Thank you for your attention