Zukünftige Möglichkeiten der VoIP-Technologie: Is VoIP-Spam (SPIT) a hazard for the SIP business?

Frankfurt, October 2004

Three categories of SIP Spam

• Call Spam
• Instant Message Spam
• Presence Spam

The majority of the information in this presentation is based on the IETF draft: „SIP and Spam“ (draft-rosenberg-sipping-spam-00)
Comparing telemarketing with SPIT

<table>
<thead>
<tr>
<th>For 10 seconds commercial</th>
<th>PSTN telemarketing (T1 line)</th>
<th>SPIT (500Kbps uplink)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simultaneous calls</td>
<td>24</td>
<td>90</td>
</tr>
<tr>
<td>Call attempts per second</td>
<td>2.4</td>
<td>62</td>
</tr>
<tr>
<td>Costs per (successful) call</td>
<td>250 000 microcents</td>
<td>215 microcents</td>
</tr>
</tbody>
</table>

SPIT will become a problem!

Possible solutions I

• Content Filtering
  How to filter something which is not delivered yet?

• Black & White Lists
  Black: Infinite address/domain space.
  White: Initial communication problem.

• Consent-Based Communication
  Combine with SIP Presence and B&W lists.
  How avoid „Consent Congestion“ (no content)?
### Possible solutions II

- **Touring Tests**  
  Can be extended for multimedia.

- **Computational Puzzle**  
  Today’s devices are too different.

- **Legal Action**  
  Probably their will always be “open” countries and open relays.

- **Payment at Risk**  
  Missing micropayment solutions.

### Possible solutions III

- **Trust Circle**  
  Does it scale?

- **VoIP Clearinghouses**  
  A centralized (monopolistic) approach.

- **Sender Checks**  
  No advantage, because TLS and certificates provide a better trust model.
Conclusion

• Use the built in Authentication
• Use TLS to enable trust networks
• Learn from Email: act now before it is too late!

The advantage of ENUM?!

• Don’t bill for the use of the PSTN breakout.
• Bill the user when he entered a PSTN number.
• Thus you participate in the progress of ENUM.
Any questions?

snom phones have ENUM support built in.

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