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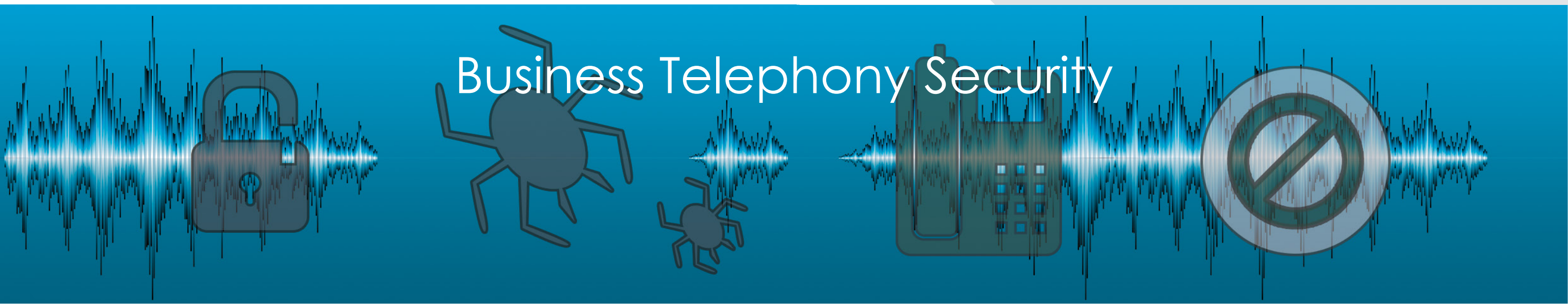
# Business Telecoms Security - Toll Fraud



## Business Telephony Security

## Toll Fraud - What is it?

Toll Fraud or 'Phreaking' is the process of illegal hacking of telecoms systems for the purpose of exploiting phone numbers to profit from premium rate numbers.

## How Big A Problem Is It?

- **Global Telecoms Hacking Fraud**

  Is estimated at costing business **£25bn** annually.

- **The UK is the 3rd most hacked country in the world**

  Is estimated at costing businesses over **£1bn** annually.

- **Approximately 84% of businesses are threat in the UK**

  Due to insufficient security measures

- **69% of UK businesses last year reported security breaches**

  Compared to 59% global average

- **Average cost to a UK business effected from toll fraud**

  **£10k**

- **Phone fraud is FOUR times bigger than credit card fraud globally.**

x4

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## How the Hacking is Done

The hackers/phreakers can strike any system, and at any time. However, they usually mount an attack outside of office hours on public holidays, evenings or weekends as the likelihood of detection is lower.

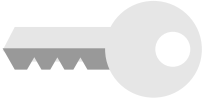
Even before they carry out an attack by dialling the expensive numbers, the hackers will have already penetrated your telephone system without your knowledge. This is usually done via the programming ports or your voicemail boxes, as access codes are easily cracked no matter how often they are changed. Hackers then configure your system for their own use so they can use it for their own traffic at any time.

### ○ SIP Scripts

Add a trunk to a PBX and use it dial out and call Premuim Rate Numbers

### ○ Voicemail Hacking

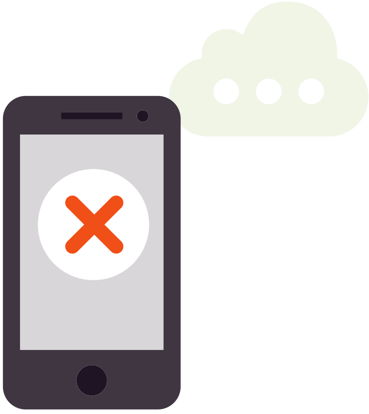
Compromise PIN numbers to exploit voicemail outcalling



### ○ Softphone Attack

Intercept Wi-Fi traffic to clone a softphone

## Hosted Phone System Security Measures



### Call Barring

Customers have the ability to set flexible call barring rules themselves via our customer portal, or we can add them on their behalf. Calls can be barred to any number prefix and from any number of individual extensions (or from all of them).

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## Hosted Phone System Security Measures

### Credit Limits

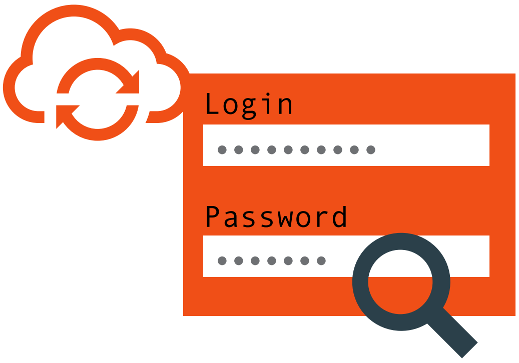
Normally, calling credits are added on a pre-paid basis, so calls can only be made to the value of the credits purchased. However, in the case of post-paid accounts, a monthly call limit is agreed and if this is reached, no more calls can be made until we have agreed with the customer to increase the limit.

### Calling Pattern Analysis

We have a very effective fraud management system in place which monitors all traffic and prevents (and immediately alerts us to) calls which reach pre-defined limits based around:

Cost
Duration
Volume
Call Rate
Destination

incovo's hosted system also monitors the usage patterns (such as time of day, average call length, frequency of calls etc.) of each account and alerts us to any exceptional conditions.



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## Basic Security Measures

○ Restrict certain numbers or destinations (e.g. premium rate and international calls)

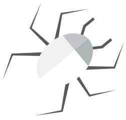
○ Analyse PBX call logs and reports for anomalies, out of hours calls, etc.

○ Change voicemail passwords on a regular basis and avoid obvious combinations (e.g. 1234 or the extension number)

○ Lock surplus mailboxes and de-activate all unnecessary system functionality

○ Remove voicemail outcalling

○ Restrict access to equipment (e.g. comms room)



○ Safeguard internal directories, call logs reports, etc. to prevent unauthorised access

○ Review procedures for leavers and for vetting new recruits

○ Review and update system security, with action plans for any weak areas identified

## Want to Discuss Your Security with One of incovo's Security Experts?

**Interested? To find out more information on telephony security, call 0845 450 8400**

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# Business Telecoms Security - Toll Fraud

## Featured Solution: Avaya Session Border Controller

Beyond your enterprise data network firewall, a critical component in delivering SIP-based communications is the device that secures your SIP and VoIP connectivity. Data network firewalls protect a variety of traffic types, however they are not application aware for SIP-based communications.

The Avaya Session Border Controller for Enterprise provides a secure interface for SIP trunking and remote worker connectivity. With secure SIP connectivity you gain trunk and client protection, VPN-less remote worker integration, and easy-to-provision enterprise access management.

○ Avaya SBCE 6.2 brings a new level of SIP security Avaya SIP-based Unified Communications solutions for both Enterprise and SME. Features:

○ Element Management System (EMS): well-constructed ‘craft’ interfaces for simplicity of implementation and administration of the Avaya SBCE 6.2 product.

○ Advanced UC Security including protections against Toll Fraud, Call Walking, etc.

○ Deep Packet Inspection for both signaling and media.

## About incovo

incovo is a communications technology integrator of category leading unified communications, infrastructure, integrated network solutions and document management solutions to small and mid-sized organisations throughout the UK. Our focus is creating dependable, cost effective business communications solutions for businesses that ensure a variety of methods of collaboration to meet the ever changing market conditions.

At incovo, we provide fast and effective support to all of our customers through our multichannel support network – allowing our customers to feel the benefits of compelling solutions that will enable their businesses to grow, tailored to their needs.

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