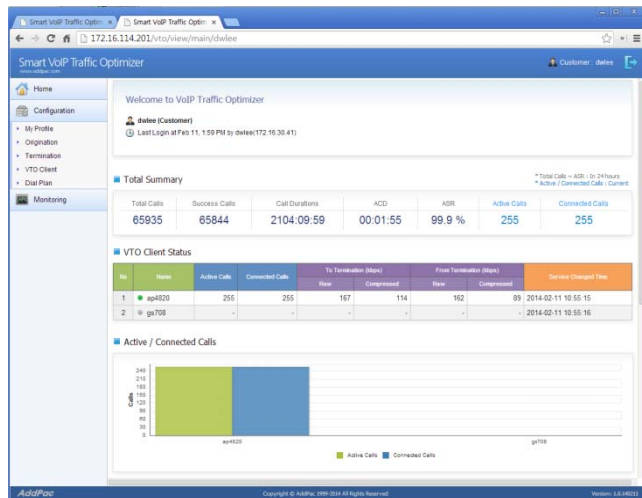


Call Routing Service Features in AddPac VTO + GSM Gateway Service



AddPac

AddPac Technology

2014, Sales and Marketing

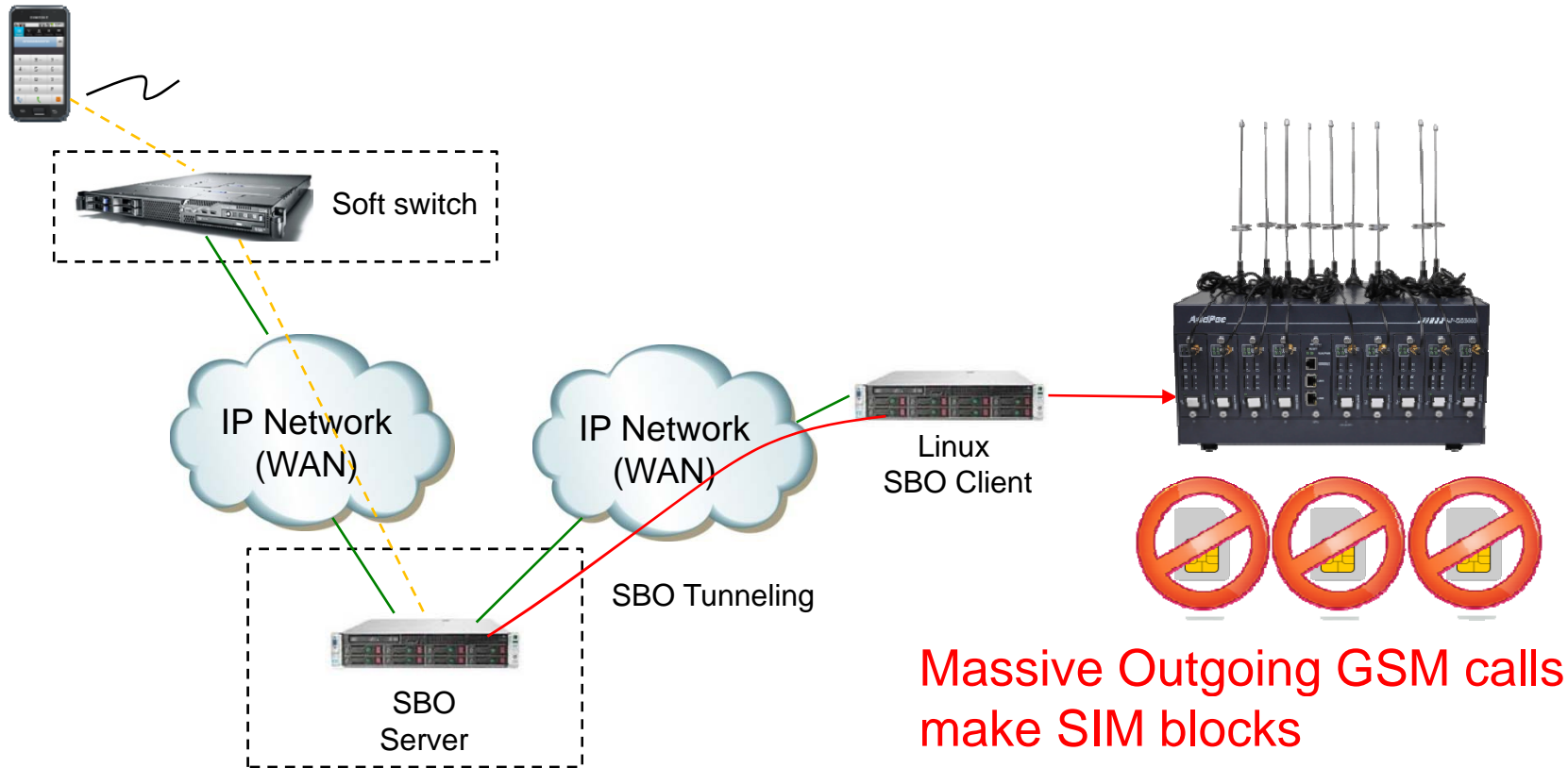
Contents

- Current SIM Block Problems
- Do you want Anti-SIM block?
 - Human Cellular Phone Call Pattern Modeling
- Human Cellular Phone Call Pattern Modeling Solution needs Large SIM Pool
- Multi-SIM GSM Gateway with Human Behavior Features
- Single-SIM GSM Gateway with Human Behavior Feature
- Who provides Smart Call Routing for GSM Gateways?
- Anti-SIM Block Function Roles
- Network Diagram

Current SIM Block Problems

Other Vendor SBO + normal GSM gateway

Site A (Call Origination)



Do you want Anti-SIM Block?

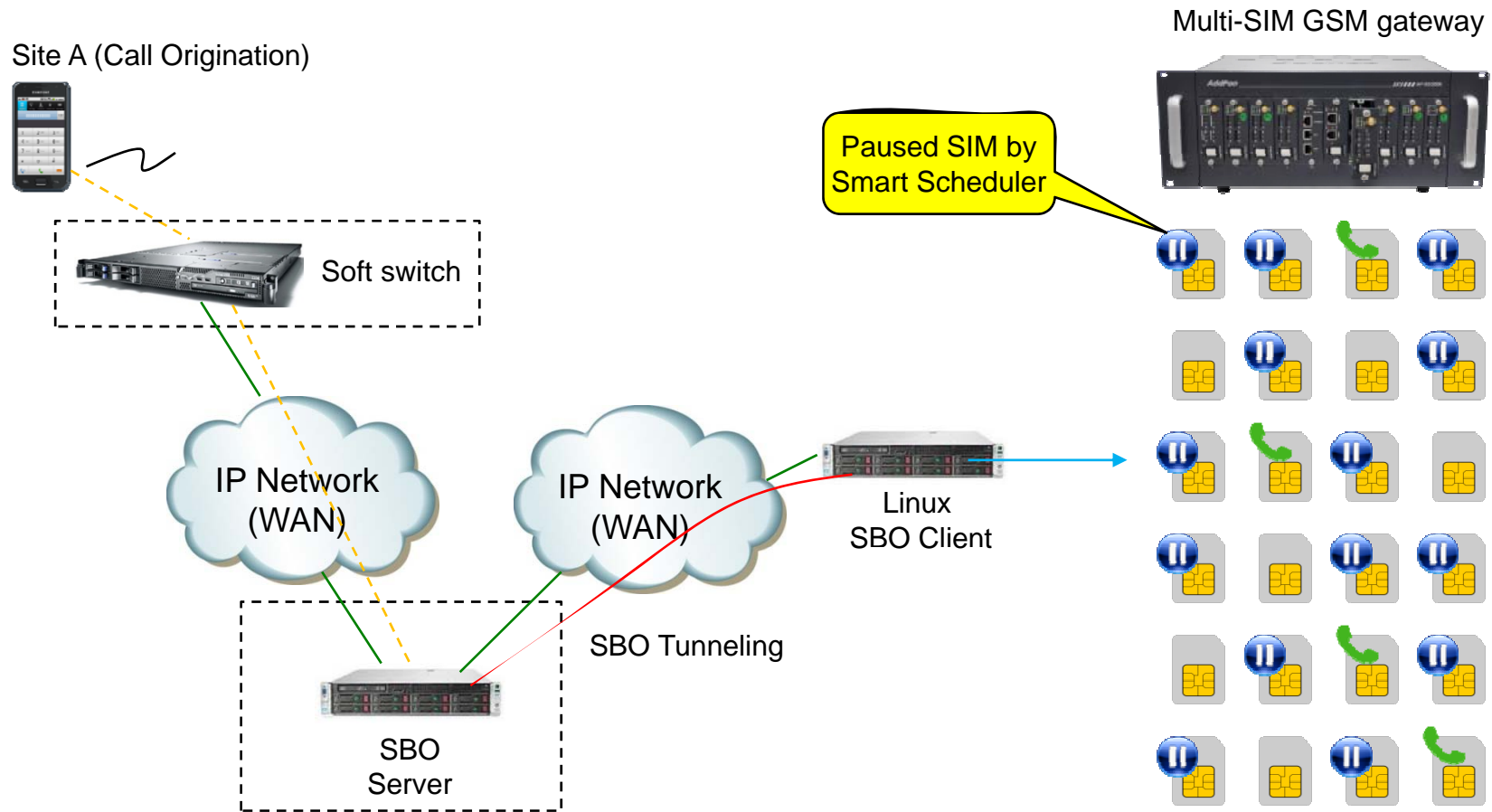
→ Human Cellular Phone Call Pattern Modeling

- Human Cellular Phone Call Pattern at GSM Gateway
 - Make Outgoing and incoming call
 - Real Call Connect for Incoming Call
 - Real Call Answer and Different Call Connected Time
 - Set Max Call Connection Time in day (Ex : 1 or 2 hour per SIM during 1 day)
 - Select the Most Idle(least usage) SIM Card for Termination Call
 - IMEI Auto Change (Using Registered IMEI not Fake)
 - Random Outbound Call Idle Interval
 - etc

Human Cellular Phone Call Pattern Modeling Solution needs Large SIM Pool

- By limited GSM call quota on gateway, we need lots of GSM ports and SIMs for handling massive calls.
- If you start new GSM call termination business,
 - (Solution) Choose Multi-SIM GSM gateway which has human behavior function.
- If you already have single SIM GSM gateways,
 - (Solution) Upgrade it to support human behavior function and operate more GSM gateways for massive calls.
 - (Problem) It is necessary to support smart call routing from softswitch to gateways.

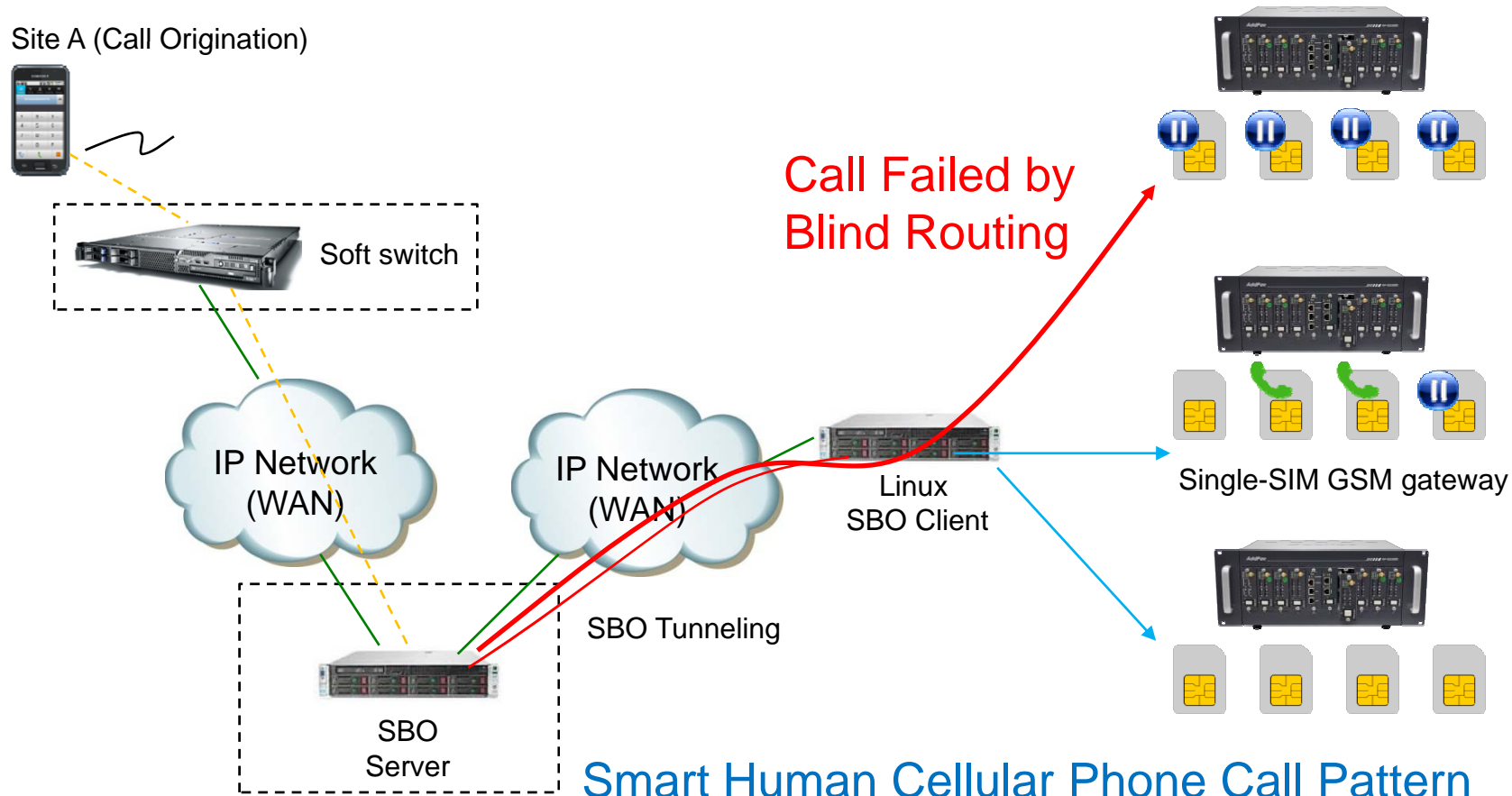
Multi-SIM GSM Gateway with Human Behavior Feature



Smart Human Cellular Phone Call Pattern Feature in Multi-SIM gateway provides Anti-SIM Block.

Single-SIM GSM Gateway with Human Cellular Phone Call Pattern Feature

Other Vendor SBO



Smart Human Cellular Phone Call Pattern Feature in Single-SIM gateway provides Anti-SIM Block also but needs Smart Call Routing.

Who provides Smart Call Routing for GSM Gateways?

- **AddPac VTO Service** provides the **Smart Call Routing** from Softswitch to GSM gateways.
- Without VTO service, terminating call to unavailable gateway by exhausted call quota will be failed and decrease ASR (Answer Seizure Ratio).
- VTO Server gathering port status from gateways for load balancing and routing to available gateways.
- Also, the VTO server controls incoming call traffic from Softswitch to increase ASR.

Anti-SIM Block Function Roles

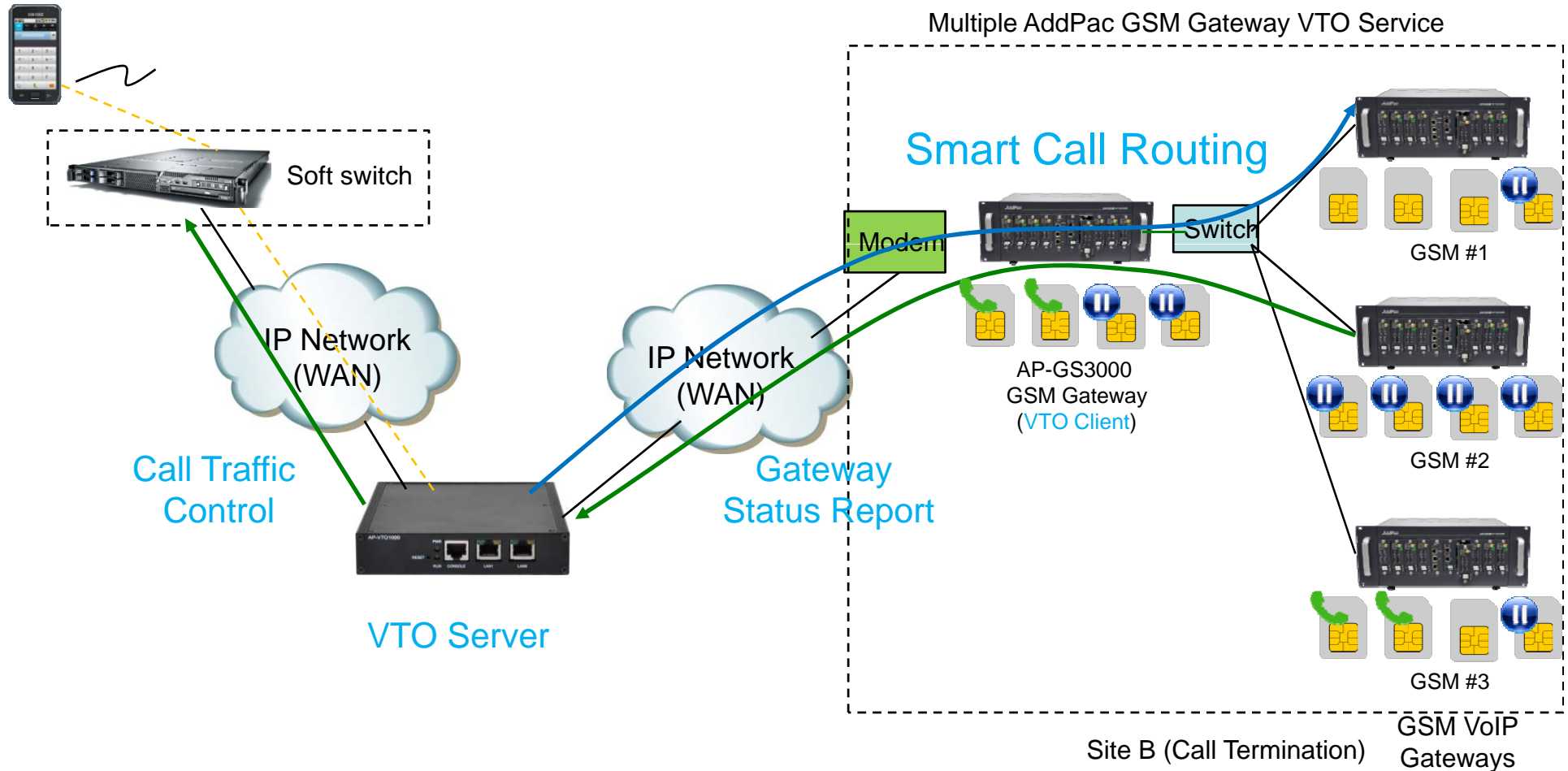
VTO (VoIP Traffic Optimizer) Service

- GSM Gateway
 - Use Human Cellular Phone Call Pattern Model
 - Report Service State to VTO Client
- VTO Client
 - Relay GSM Gateway Service State Information to VTO Server
- VTO Server
 - Act as SIP Proxy Role + VTO Server Role
 - Maintain GSM gateway Service State
 - Call Routing using dial-plan and GSM Service State

Anti-SIM Block Operation Network Diagram

VTO (VoIP Traffic Optimizer) Service

Site A (Call Origination)





Thank you!

AddPac Technology Co., Ltd.
Sales and Marketing

Phone +82.2.568.3848 (KOREA)

FAX +82.2.568.3847 (KOREA)

E-mail sales@addpac.com