Cases for PowerRadius

RADIUS for VoIP

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1.Introduction

- There are 5 devices in the VoIP network:
- PSTN phone
- Internet Phone: Such as *IP Phone*.
- VoIP Gateway: Such as *Cisco AS5300*.
- GateKeeper: Here is *gnugk*.
- RADIUS Server: Here is *PowerRadius*.

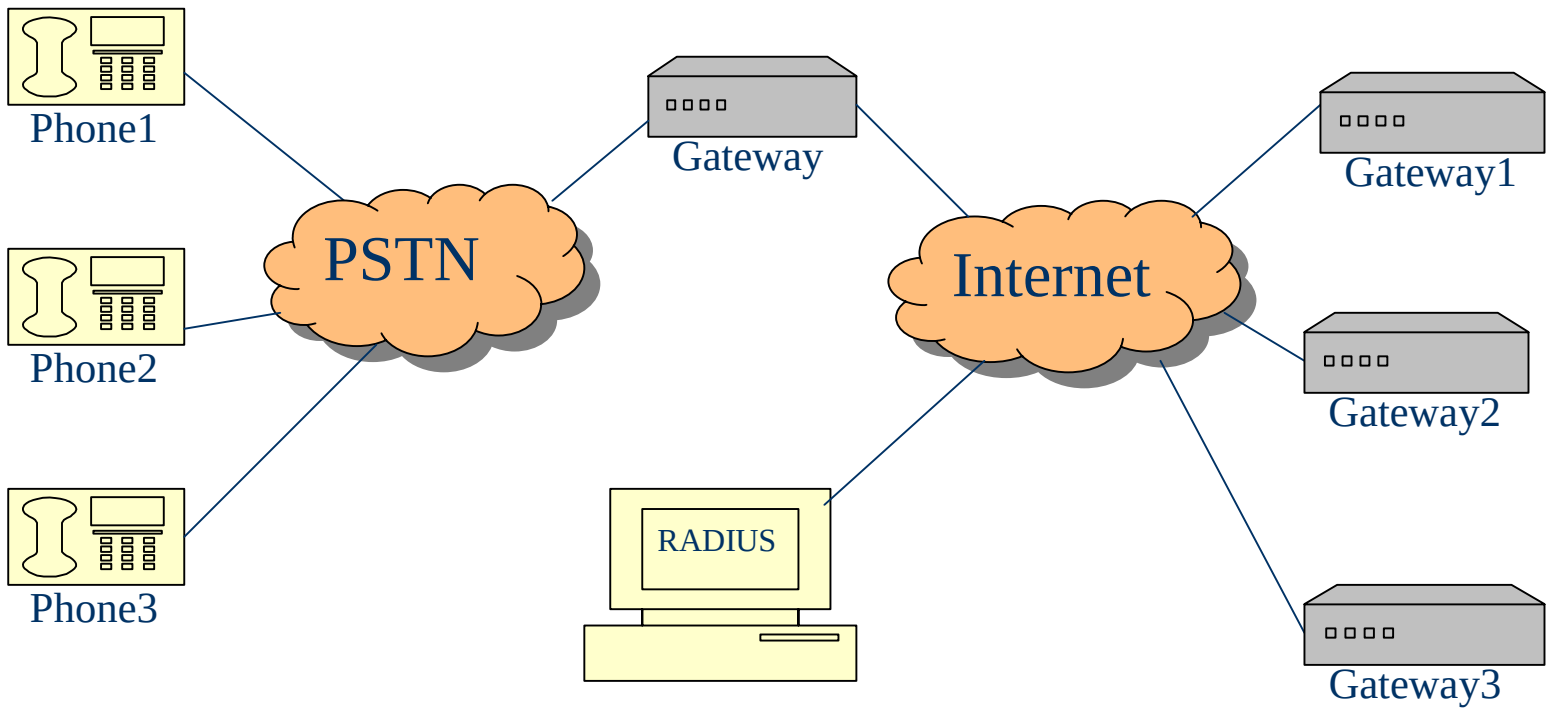
2.Solution for PSTN Carrier

- 2.1.Introduction
- 2.2.Network Architecture
- 2.3.Sample Procedure of the phone

2.1.Introduction

- PSTN carrier’s clients is the users of PSTN phone.
- PSTN carrier shall build a VoIP gateway to construct VoIP service for PSTN clients.
- PSTN carrier shall get access rights for other carriers’ gateways to access their PSTN users.

2.2.Network Architecture



2.3.Sample Procedure of the phone

- PSTN phone dials the access number of your gateway.
- Your gateway asks PSTN phone to input his username and password. And PSTN phone inputs them.
- Your gateway asks PSTN phone to input the called number. And PSTN phone inputs them.
- Now, the PSTN phone users start to talk.

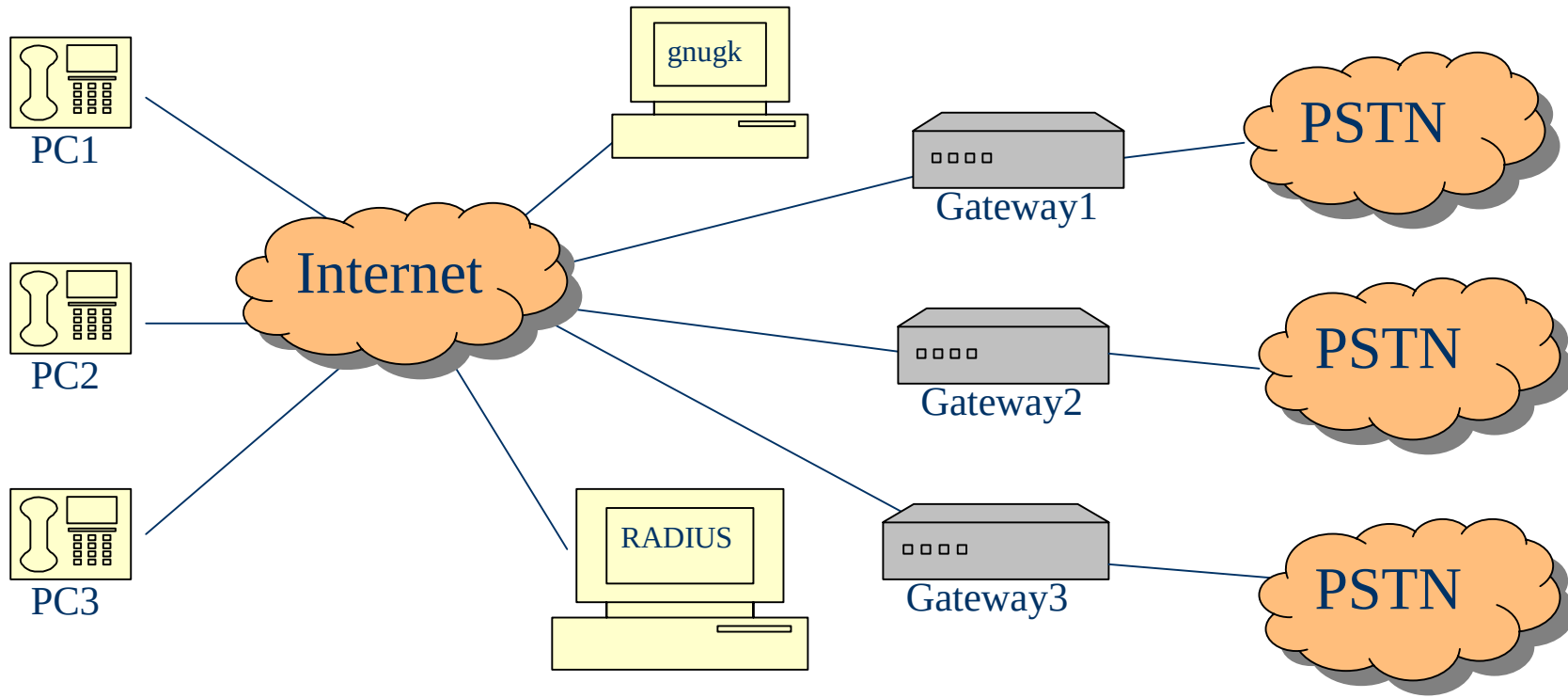
3.Solution for Internet Carrier

- 3.1.Introduction
- 3.2.Network Architecture
- 3.3.H323 ID Plan
- 3.4.E.164 Plan
- 3.5.Configuration for Server
- 3.6. Configuration for Users
- 3.7.Configuration for RADIUS

3.1.Introduction

- Internet carrier’s clients are the users of Internet phone.
- Internet carrier shall build a VoIP gatekeeper to construct VoIP service for Internet clients.
- Internet carrier shall get access rights for other carriers’ gateways to access their PSTN users.

3.2.Network Architecture



3.3.H323 ID Plan

- Please assign *H323 ID* for *IP phone* and *Gateways* as the below:

ID	Device	H323 ID	Username	Password
PC1	*IP phone*	*5001123*	*5001*	*123*
PC2	*IP phone*	*5002456*	*5002*	*456*
PC3	*IP phone*	*5003789*	*5003*	*789*
Gateways1	*Gateways*	*60011234*	*6001*	*1234*
Gateways2	*Gateways*	*60025678*	*6002*	*5678*
Gateways3	*Gateways*	*60039012*	*6003*	*9012*

3.4.E.164 Plan

- Please assign E.164 number for *IP phones* and *PSTN phones behind the Gateways* as the below:

E.164 Number	Device	Type
500x	*IP phone*	*Your Clients*
001785xxx	*Gateway1*	*Phone behind Local PSTN*
001xxx	*Gateway2*	*Phone behind Remote PSTN*
0086xxx	*Gateway3*	*Phone behind Remote PSTN*

3.5.Configuration for Server

- Please choose *RadAliasAuth* as authentication method for *gnugk*.
- Please set *passwordInUsername=4* in *PowerRadius.conf* for *PowerRadius*. (Here, the length of *username* is 4.)

3.6.Configuration for Users

- Please configure *H323 ID* as *H323 ID* and *Username* as *E.164 number* for your PC phones and Gateways.

- There are 2 groups in *PowerRadius*: *Phones* and *Gateways*. All IP phones belong to group *Phones* and all gateways belong to group *Gateways*.
- Add all phones and all gateways as *users* into *PowerRadius* with their *username*/*password*.

- Here, *H323 ID* = *Username* + *Password*.

3.7.Configuration for RADIUS

- Add billing rules into *PowerRadius* like the below:

Group	Called Number	Rate	Description
Phones	*500*	*0.0/60*	*PC to PC*
	001785	*0.1/60*	*PC to PSTN*
	001	*0.2/60*	*PC to PSTN*
	0086	*0.3/60*	*PC to PSTN*
Gateways	*500*	*0.0/60*	*PSTN to PC*

4.Get it now

- Please go to http://www.new-saga.com/ to get *PowerRadius* and have a try now.

- Hope you can have a successful business now.

The End

Thanks!