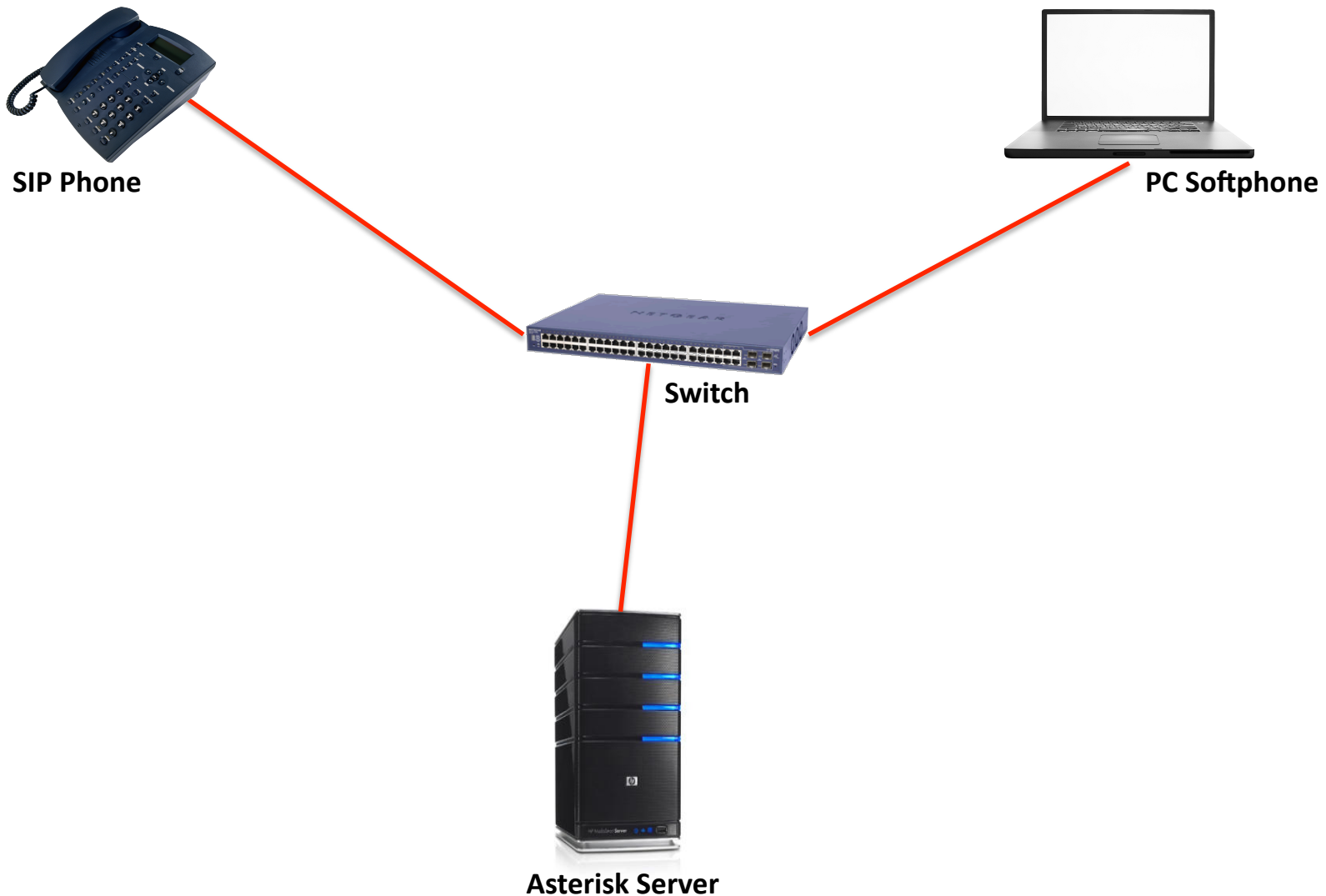


An Introduction to VoIP with Asterisk PBX

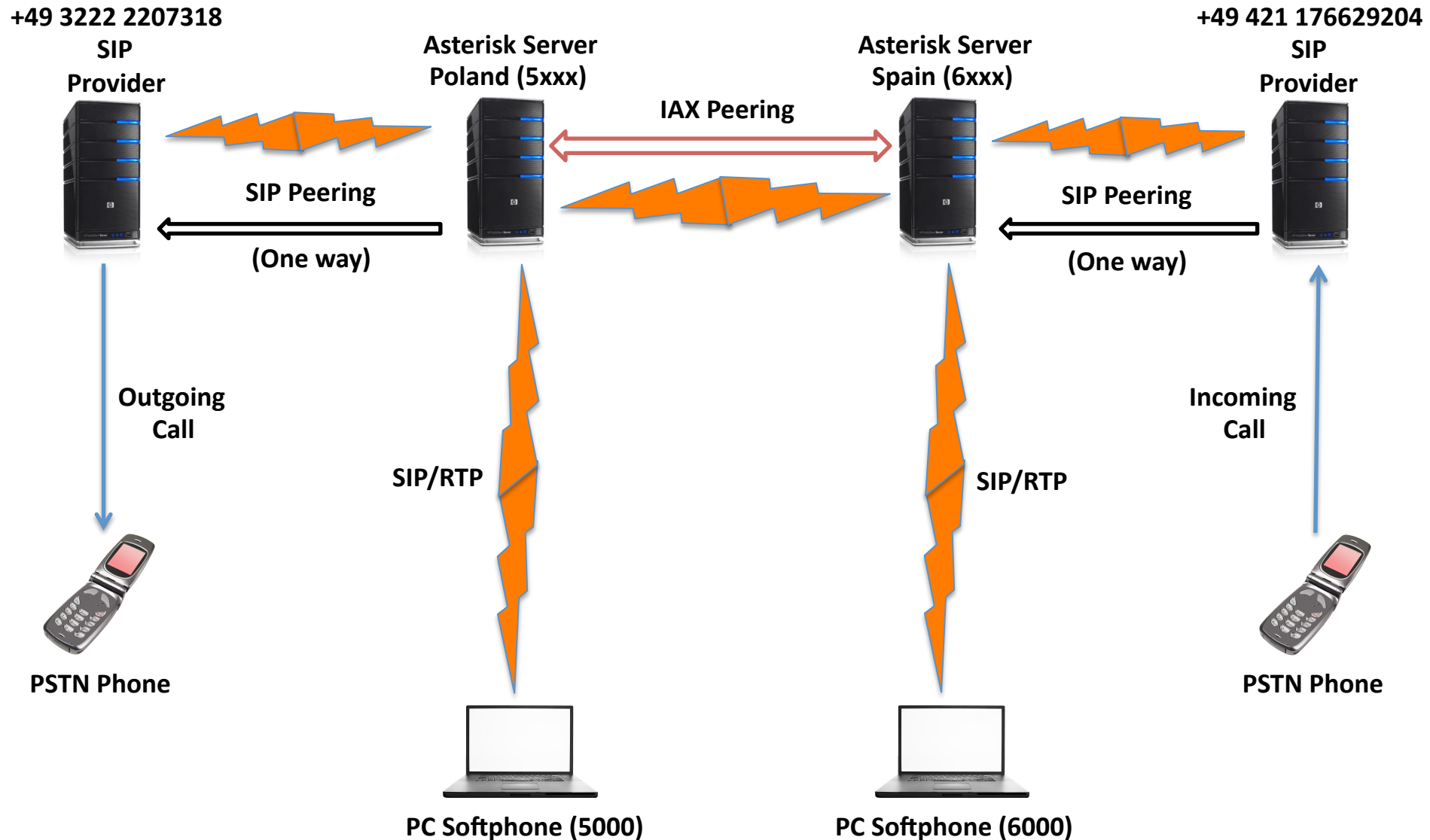
Advanced Networking Lab 2010

Anuj Sehgal

Sample Asterisk PBX Setup



Our Asterisk Setup



Register to Our Asterisk Servers

Name	Extension	Secret
Vitali Bashko	6000	1234
Vaibhav Bajpai	6001	1234
Catalin David	6002	1234
Mohammad Faisal	6003	1234
Hamid Reza Houshiar	6004	1234
Mihnea Iancu	6005	1234
Kevin Korte	6006	1234
Dimitar Misev	6007	1234
Vladislav Perelman	6008	1234
Johannes Schauer	6009	1234
Aygul Shugaeva	6010	1234

Server:

muro.upc.es

Spain

Protocol:

SIP

DID:

+49 421 176 629 204

Name	Extension
Anuj Sehgal	5000
Nikolay Melnikov	5001
Jürgen Schönwälder	5002

Server: emanicslab2.man.poznan.pl

(Poland)

Asterisk Setup at a Glance

- **users.conf** – setup the users for your PBX
- **sip.conf** – setup the SIP channels and register with SIP peers
- **extensions.conf** – setup incoming and outgoing dial plans
- **iax.conf** – configure IAX channels and peers

Users.conf – Create a PBX extension

[6000]	; extension number & username
type = friend	; to allow peer/user connections
host = dynamic	; to allow dynamic IP connections
fullname = Vitali Bashko	
email = v.bashko@jacobs-university.de	
secret = 1234	; the password
hasvoicemail = yes	; enable voicemail for user
vmsecret = 1234	; voicemail password
hassip = yes	; enable SIP for the extension
hasiax = no	; disable IAX for the extension
context = default	; extension exists in default context
nat = yes	; extension exists behind NAT

Sip.conf – Configure SIP channels

[general]

register => username:password@sip.mydivert.com

; Register with a SIP proxy/provider to enable incoming calls on a DID

[voipbuster]

; Create a SIP peer for outgoing calls

type = friend

username = myusername

secret = mypassword

fromuser = myusername

host = sip.voipbuster.com

dtmfmode = rfc2833

fromdomain = sip.voipbuster.com

context = default

Extensions.conf – Dial plans

[default]

exten => s,1,Wait(1)

exten => s,n,Answer()

exten => s,n(menu),Playback(acme/vm-brief-menu)

exten => s,n(exten),Background(vm-enter-num-to-call)

exten => s,n,WaitExten(5)

exten => s,n(goodbye),Playback(vm-goodbye)

exten => s,n(end),Hangup()

exten => 8500,1,VoicemailMain

exten => 8500,n,Hangup

exten => _00[1-9].,1,Dial(SIP/\${EXTEN}@voipbuster)

lax.conf – IAX Channels and Peers

[someIAXpeer] ; To authenticate with a remote IAX server

type = peer

host = some.iax.peer.com

username = myusername

secret = mypassword

[courseUser] ; For user to authenticate with your server

type = user

secret = coursePass

context = default

In extensions.conf:

exten => _2xxx,1,Dial(IAX2/someIAXpeer/\${EXTEN})