

The Big SLP – Integrating a Multi-Vendor Communications Environment at UBC

Gee Yip | UBC IT
Liza Jose | UBC IT
Michael LeBlanc | UBC IT

Today's presentation



A tale of total telecommunications system replacement in four acts (and an epilogue):

- i) Crisis in the comm room (circa 2010)
- ii) Developing the roadmap
- iii) The part where we replaced **everything**
- iv) Big SIP successes and challenges (the things we learned)
- v) **THE FUTURE!**



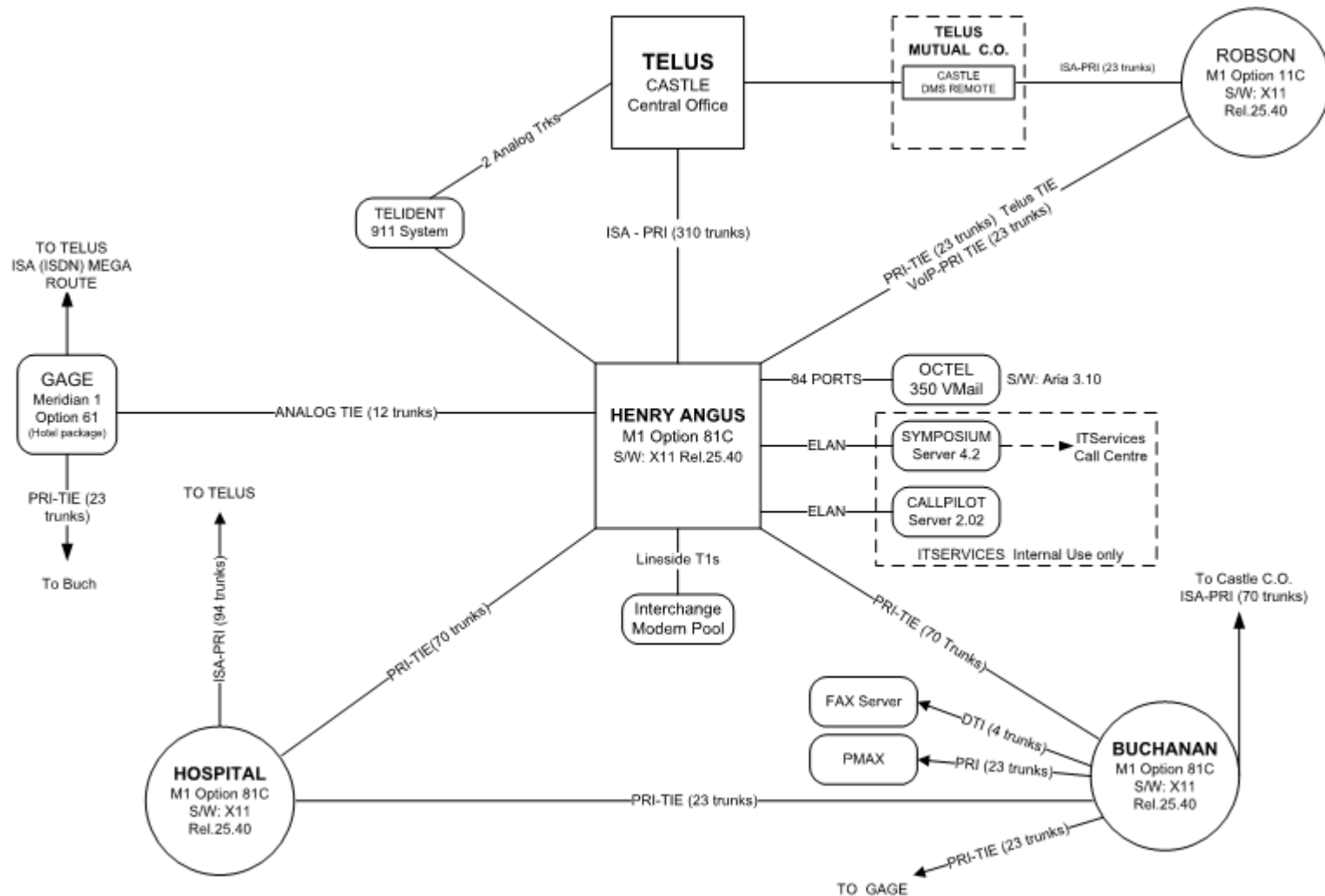
ACT ONE

Crisis in the comm room (circa 2010)

Feeling (Nortel) blue



Risky business



Double jeopardy





ACT TWO

~~Escape to Mexico~~ Developing the roadmap

Drivers

We've got
unsupported
old and dying
thingamajig?



Drivers

Oh ya it's ok
because we're
spending \$\$\$\$
to keep this
thingamajig
breathin' !!!



Drivers



Ahhh... thank
you Bob for
tearing down
the old
buildings and
putting in new
switches!!!

Drivers



Ahhh... thank
you vendor(s)
for pushing us
away from
you!

Drivers



What are you
waiting for?
Get to work
Liza!

2015 Roadmap



Endpoints

SIP-VoIP
desk
phones

Mobile
device
(phones /
tablets)

Softphone
desktop

Digital
Signage/
Video
conferencing

Other

Operations

Operations Management

Provisioning / Authentication/
authorization

Crisis communications

Emergency Notification System

Presentation

Sharepoint, Office Communicator, MS Office, Web Services, Mobile app

Docs
management

Application

Presence

IM

Video
conference

Web
conference

UM

SIP
Telephony

Client care

Contact
Centre

Emergency Response

E 911

Email

TDM, SIP-VoIP

Telephone Infrastructure

BCNET

Conference 2016

CONFERENCE 2016

2018 Roadmap



Crisis communications

Emergency Notification System, EOC support, Alarm lines, Blue Phones

Endpoints

SIP-VoIP
desk
phones

Mobile
device
(phones /
tablets)

Softphone
desktop

Digital
Signage/
Video
conferencing

Other

Presentation

Websites (Intra/Extra/Public), SFB, MS Office, Web Services, Mobile app

Operations

Operations Management

Provisioning / Authentication/
authorization

UM

Client care

Contact Centre

Application

Email
Relay
List
Mailout

VoIP-
SIP
Telephony

Virtual
Collaboration
video, bridge, voice,
web audio/ screen/ apps

IM

P
R
E
S
E
N
C
E

Solutions

About
me
@UBC

ECM
Doc
manage
ment

Signage
Stream,
broadcast,
interactive

SIP-VoIP + UC
Infrastructure

Telephone Infrastructure

Sharepoint
SaaS platform

Platform

Protection

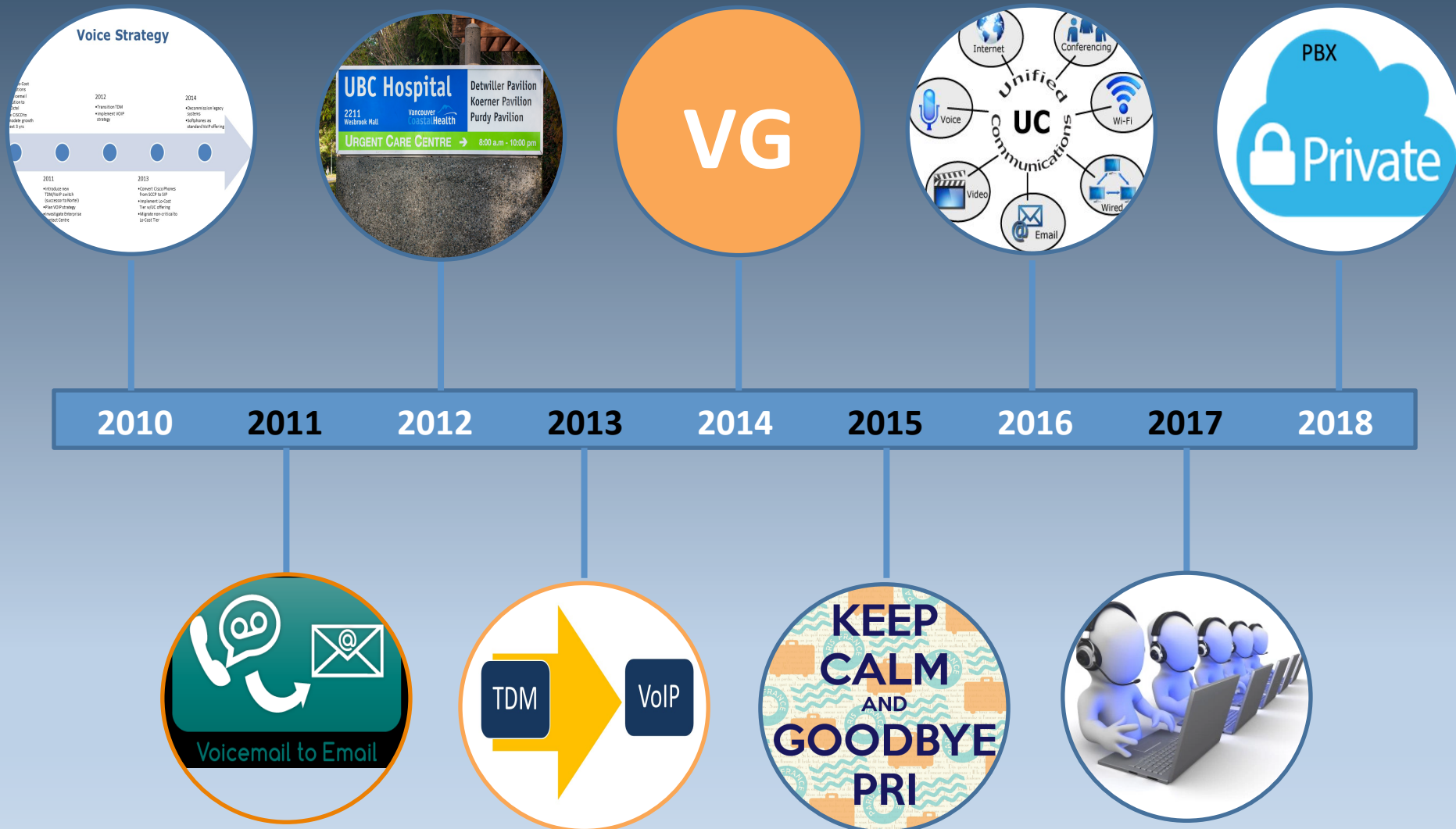
E911, Security, Privacy, Backup, HA/DR

BCNET

Conference 2016

CONFERENCE 2016

The Decline and Fall of the PBX

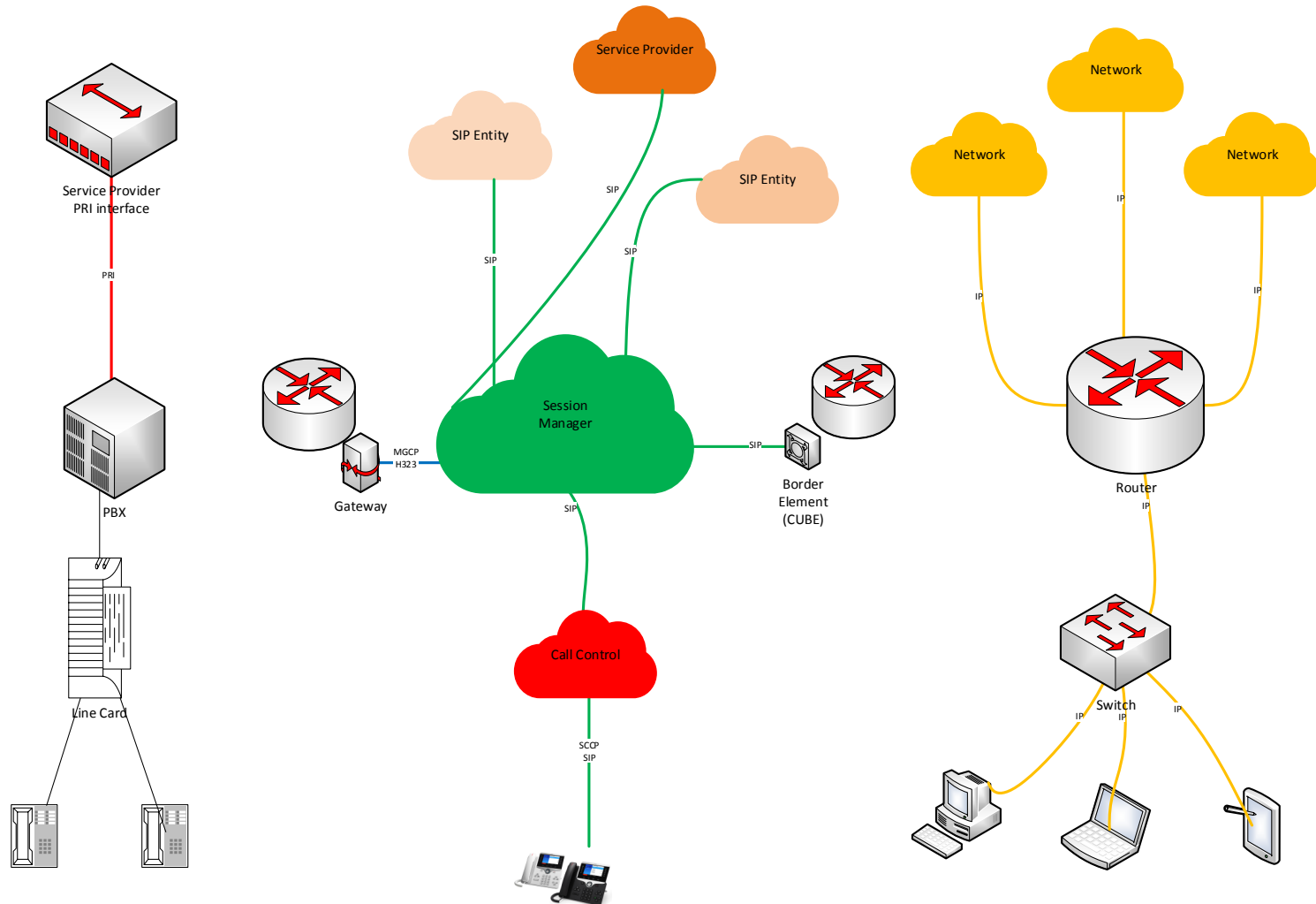




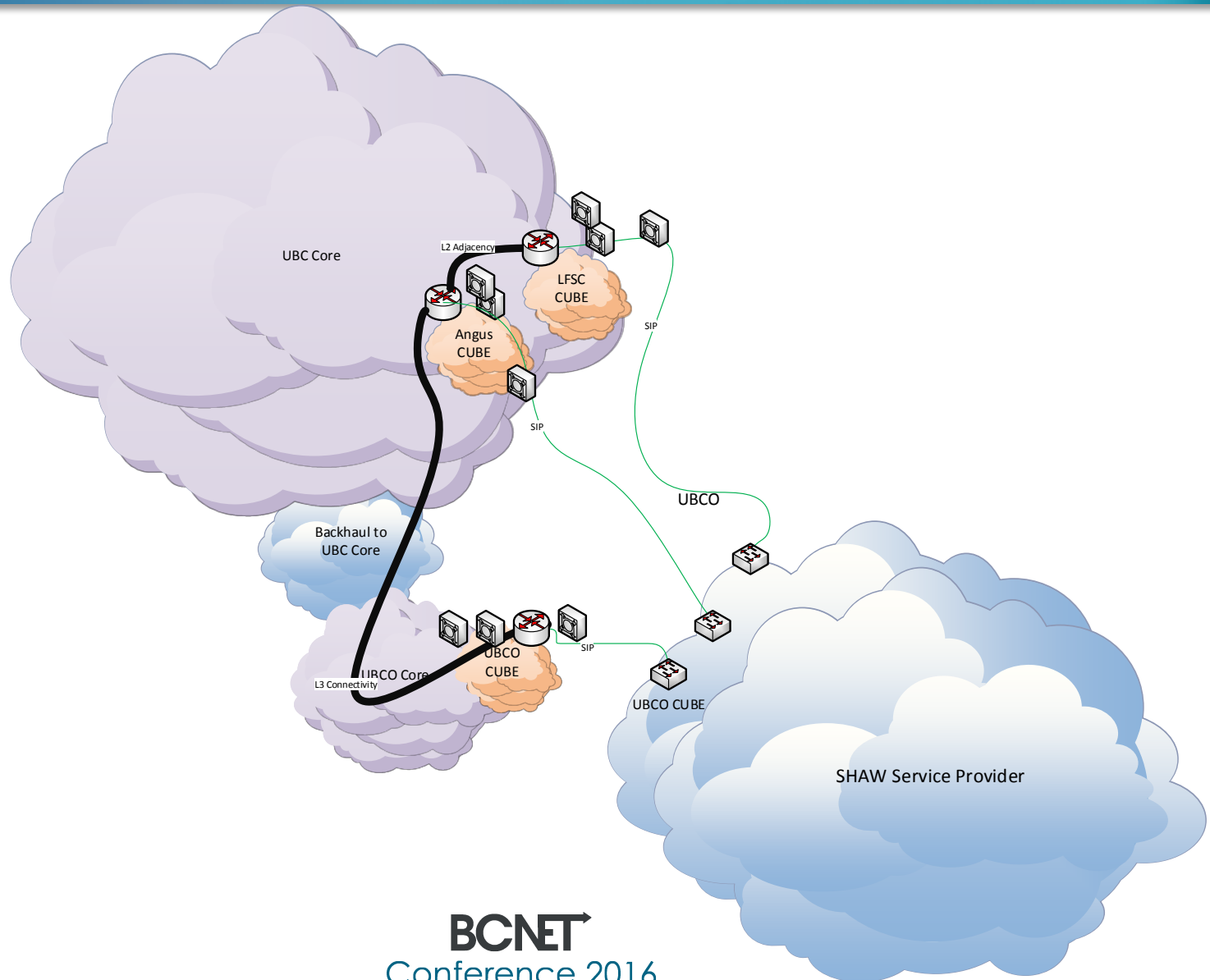
ACT THREE

The part where we replaced **everything**

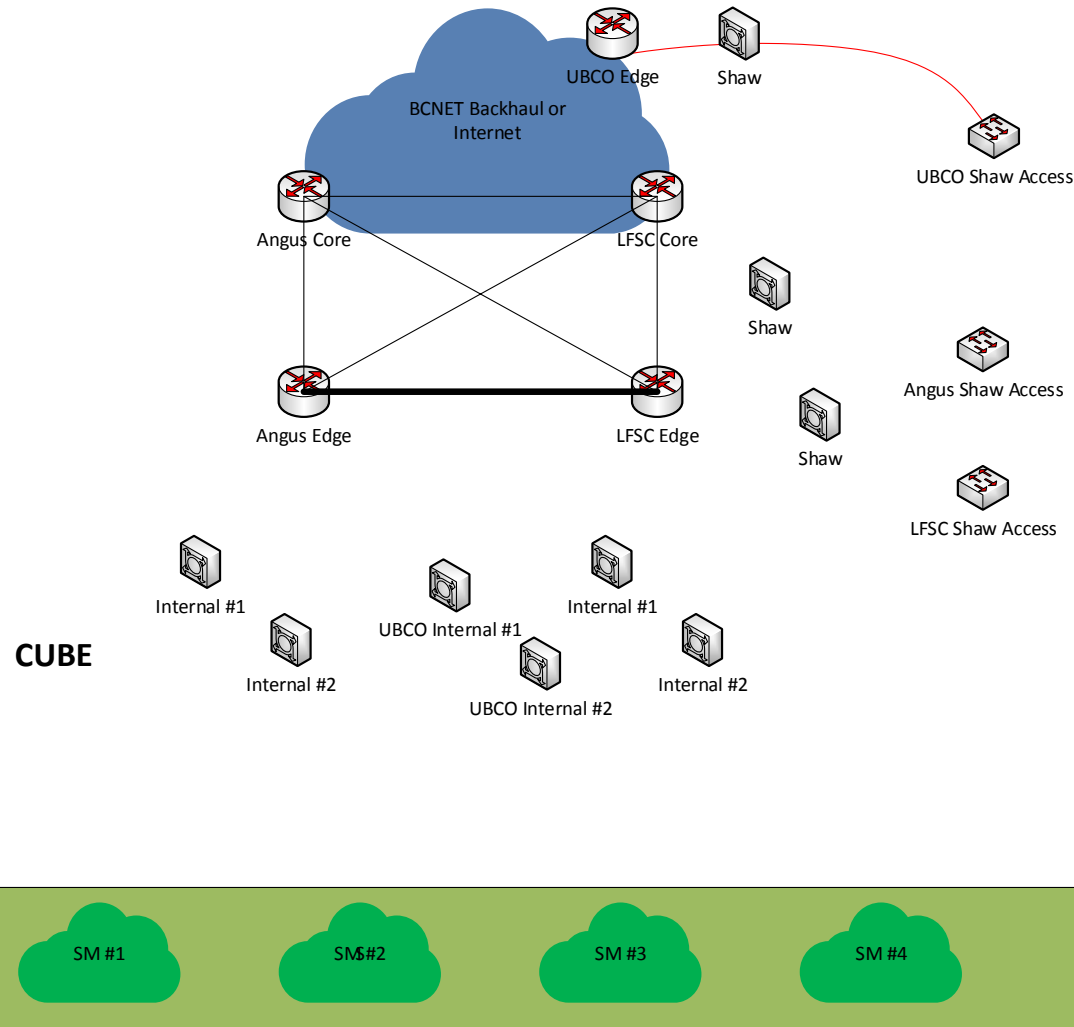
SBCs and SMEs (conceptually)



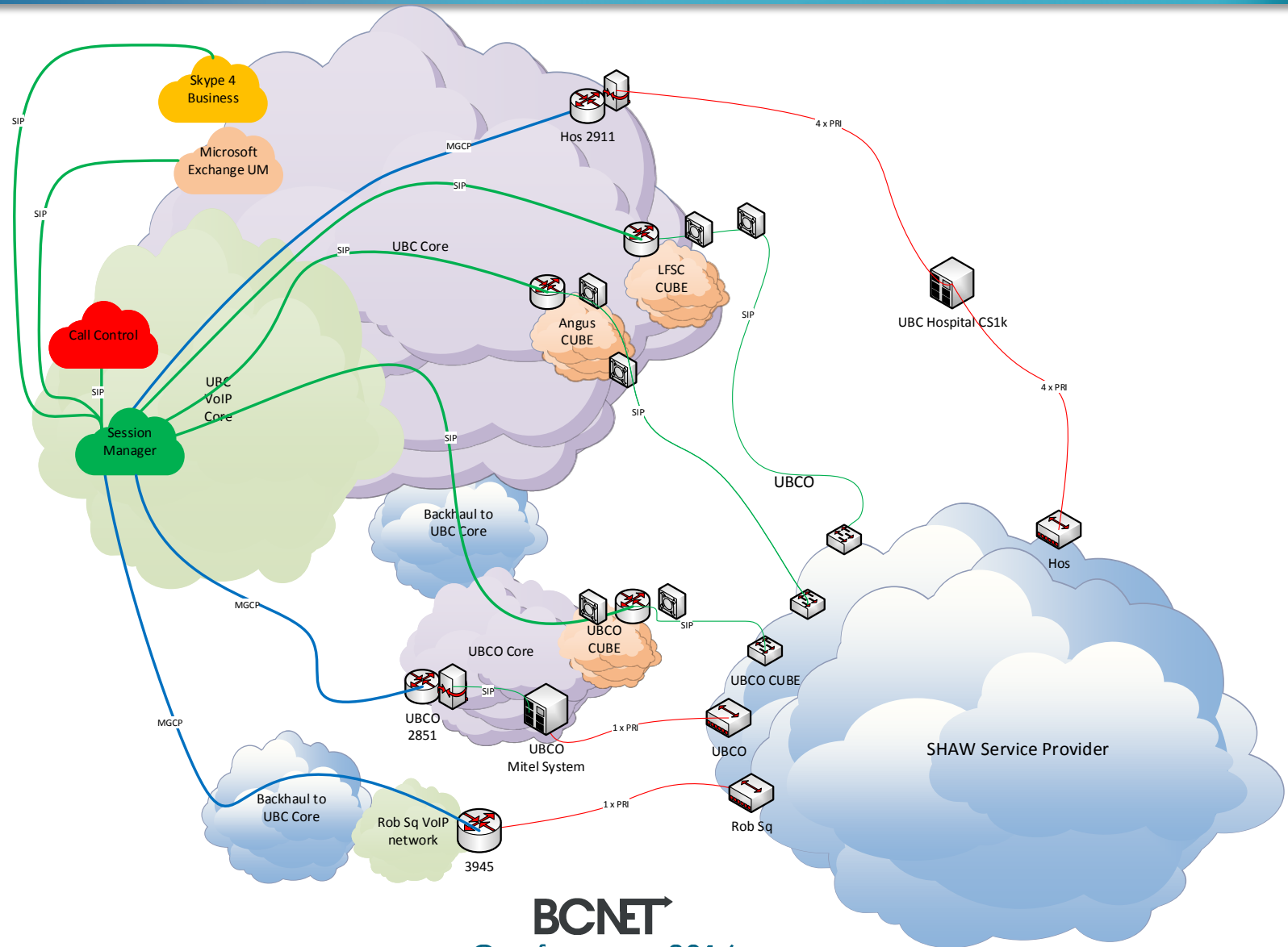
UBC's CUBE deployment



BCNET redundancy



CUBE and SME (in detail)





ACT FOUR

Big SIP successes and challenges (the things we learned)

What required some thought



- System integration
- DTMF and codec issues
- Homogenous internal network requirements
- Complex call routing scenarios
- Call feature availability

Big improvements



- PSTN resiliency and elasticity
- Simplified dial plan management
- Support for additional voice applications
- Economics



EPOLOGUE

THE FUTURE! (and other possibilities)

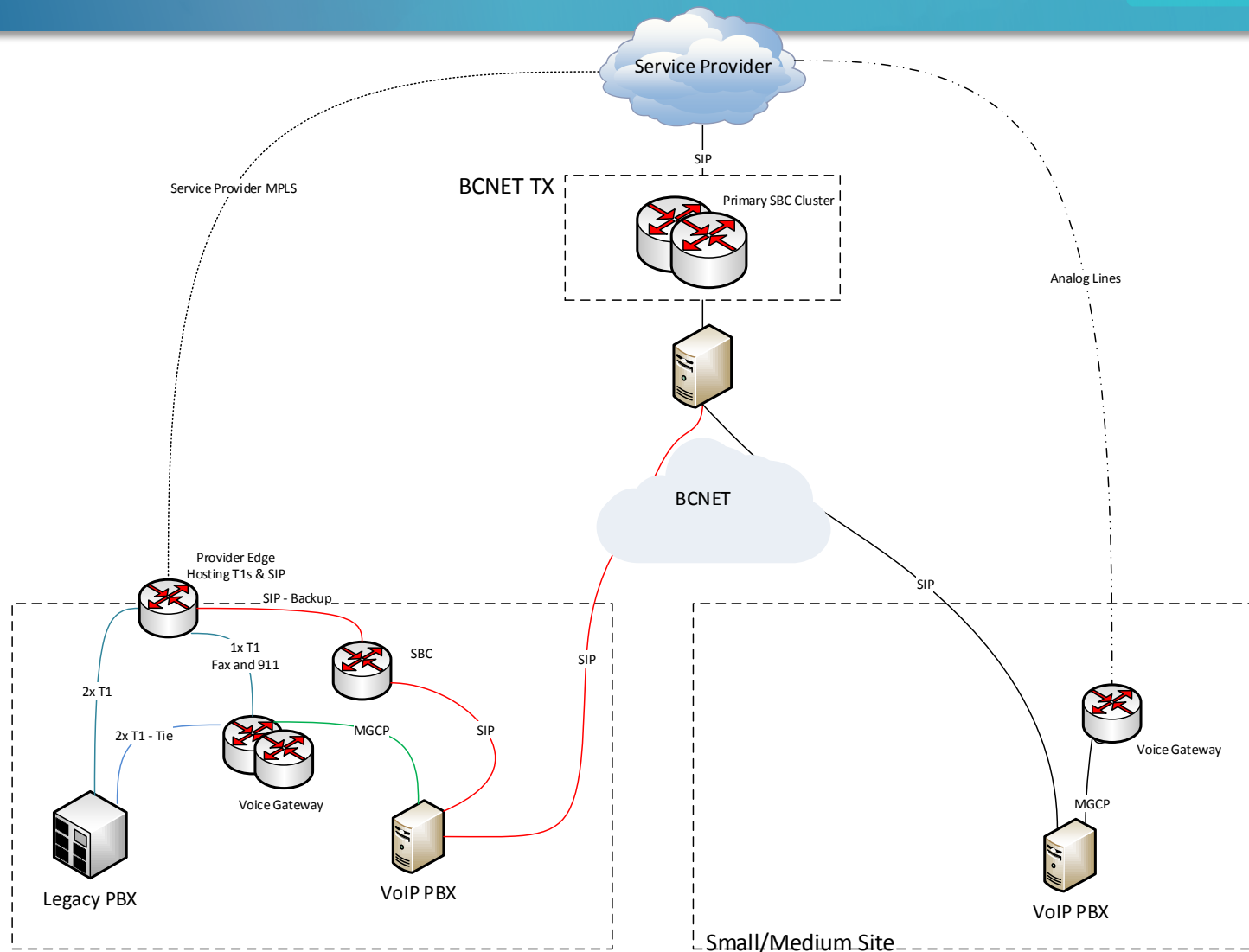
Possible BCNET universes



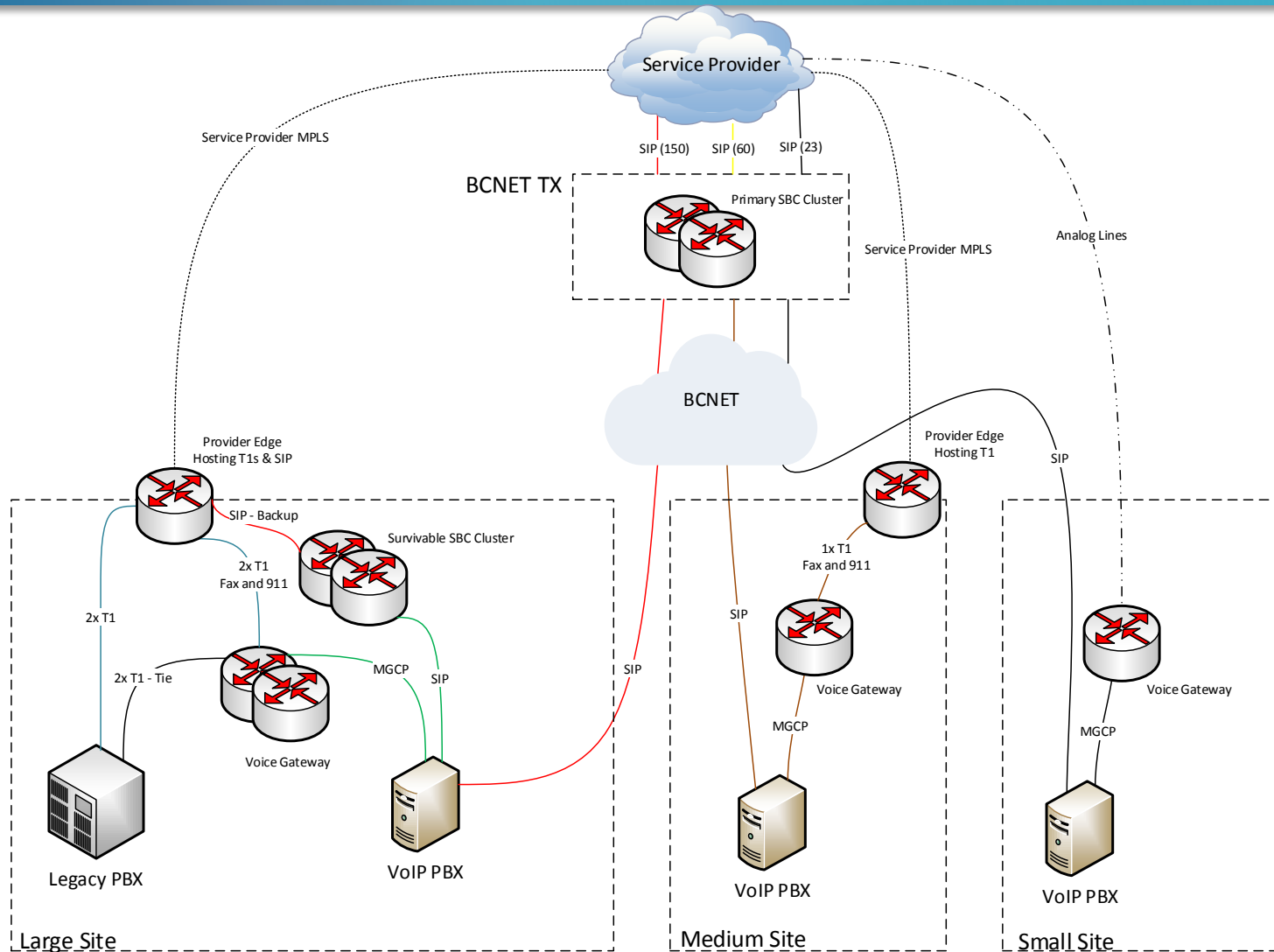
A similar BCNET architecture could enable:

- Trunking between campuses
- Consolidated PSTN trunking
- Cloud Skype for Business Enterprise Voice
- Shared infrastructure management

The converged network



Shared border elements



Q&A



Liza Jose

liza.jose@ubc.ca

Gee Yip

gee.yip@ubc.ca

Michael LeBlanc

michael.leblanc@ubc.ca

All Nortel... all the time

