



LISP VPNs

LISP is good for you!

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Protégé of InTouch N.V., The Netherlands



What's InTouch NV?



- Managed Service provider
- Nice & decent network through West-Europe
- Sells technology independent products which we call “services”
- Example: Large private networks for multinationals in multi-tenant way



What is LISP?

- Location ID/Separation Protocol
- Abstraction layer
- Location independent prefixes
- IPv4 over IPv4, IPv6 over IPv4, IPv4 over IPv6, IPv6 over IPv6

Problem statement

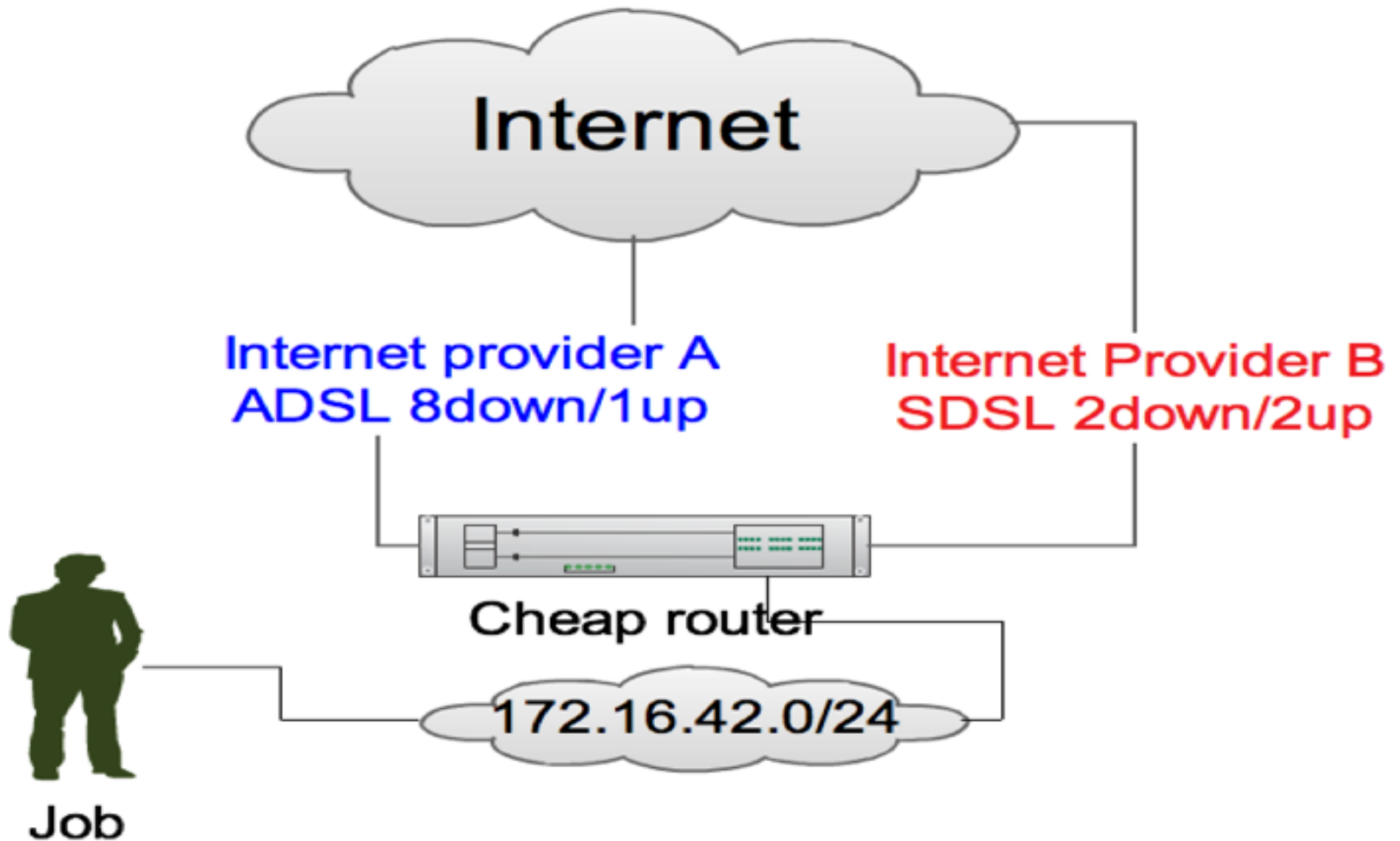


Dear Santa,

I'd like a manageable way of building large virtual private networks over the internet.

your friend,
Job

Our typical “Satellite” office



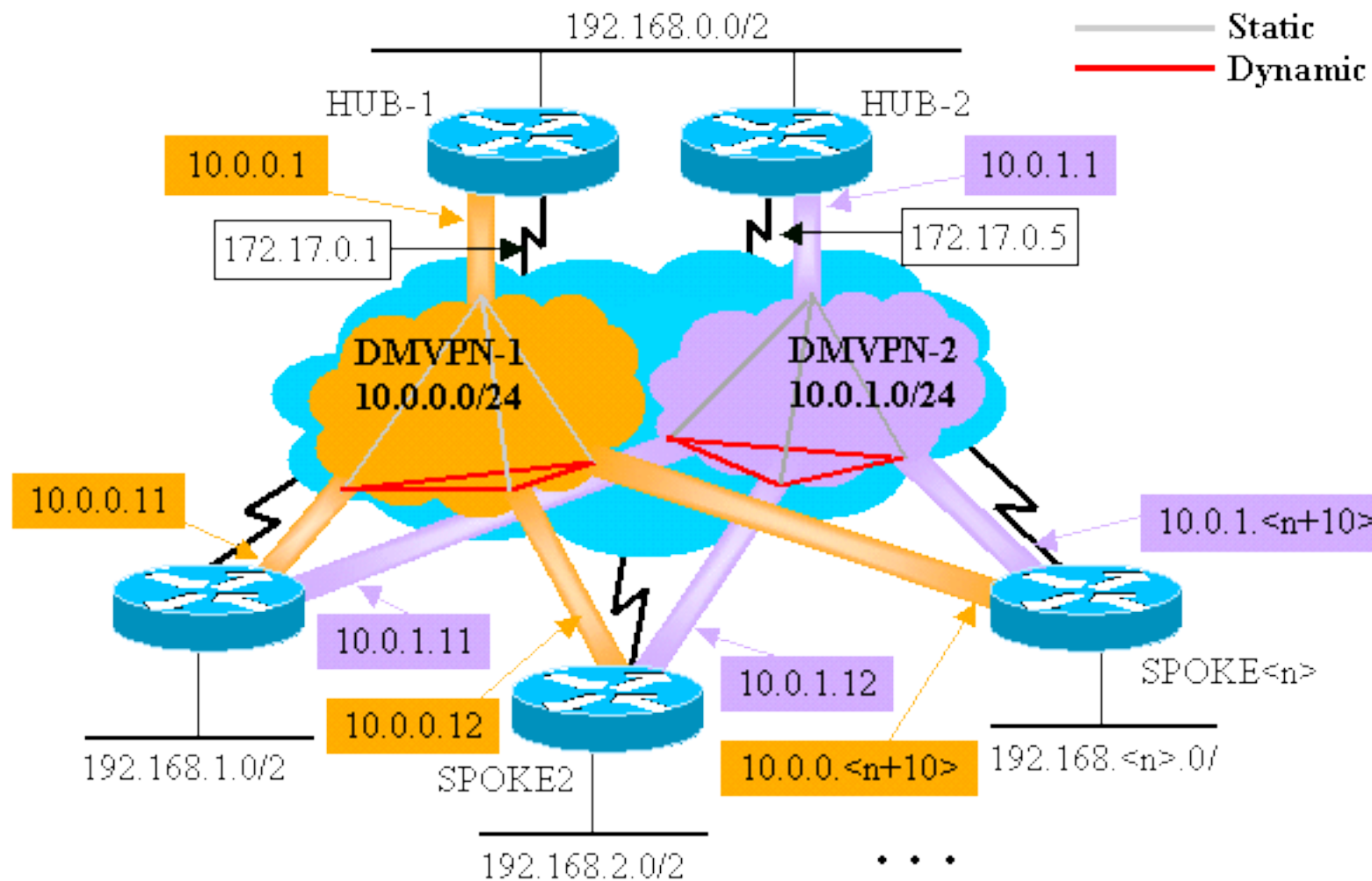
Current approach



**Remember: We don't own the last mile.
We have to deliver over the top.**

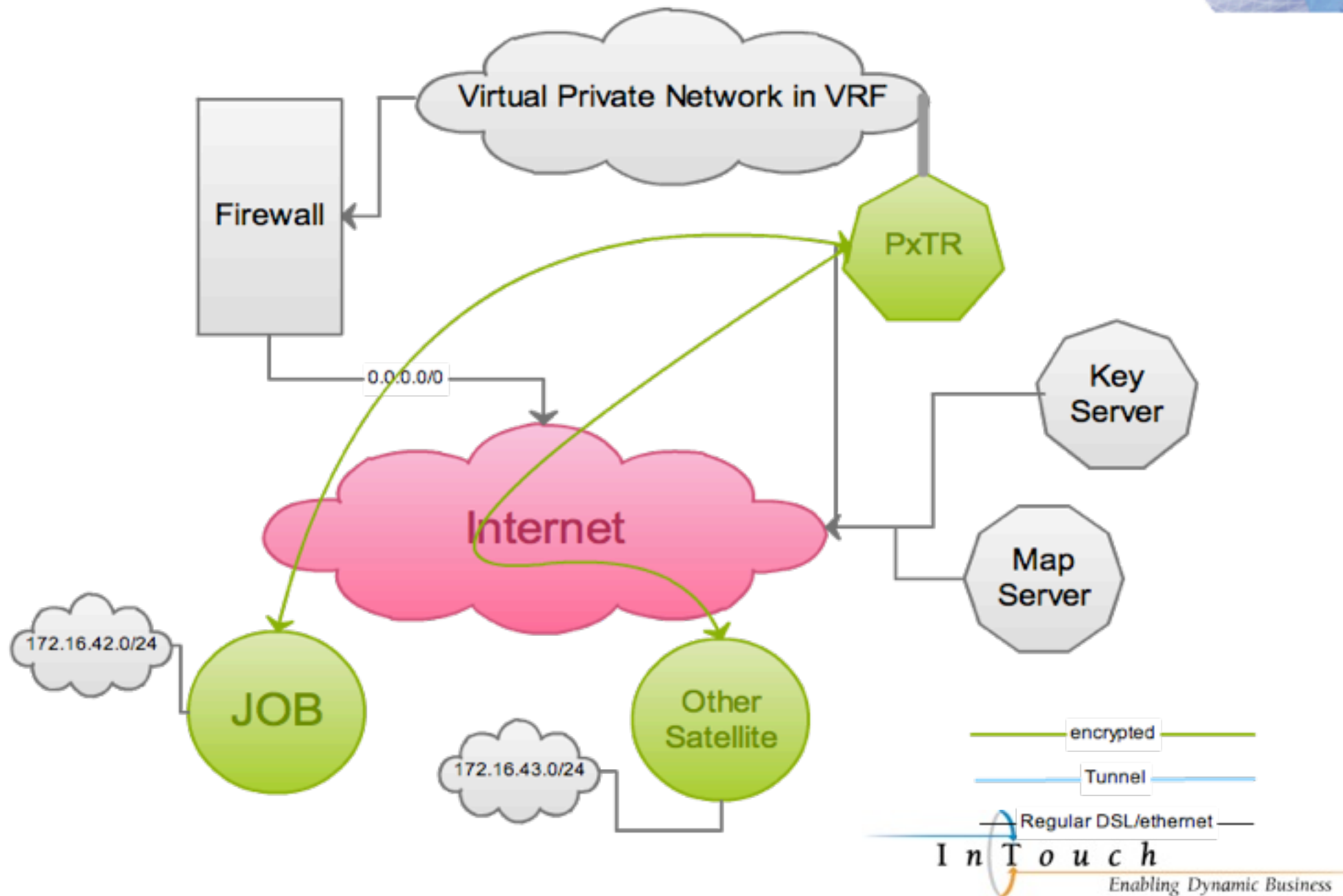
- Build 2 GRE or DMVPN tunnels
- Use plain IPSEC or GETVPN
- OSPF for tunnel/link failover

DMVPN is horrible:

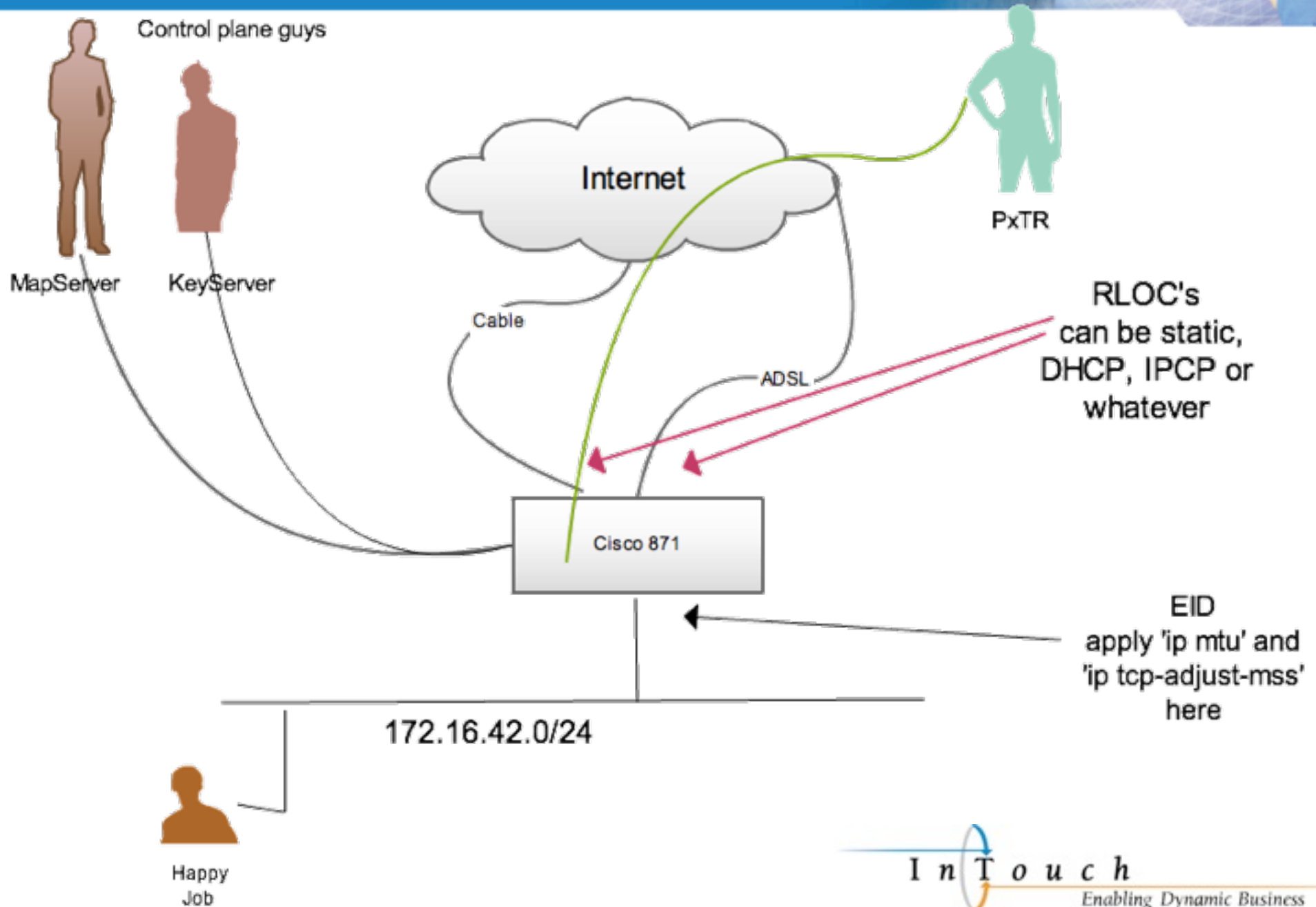




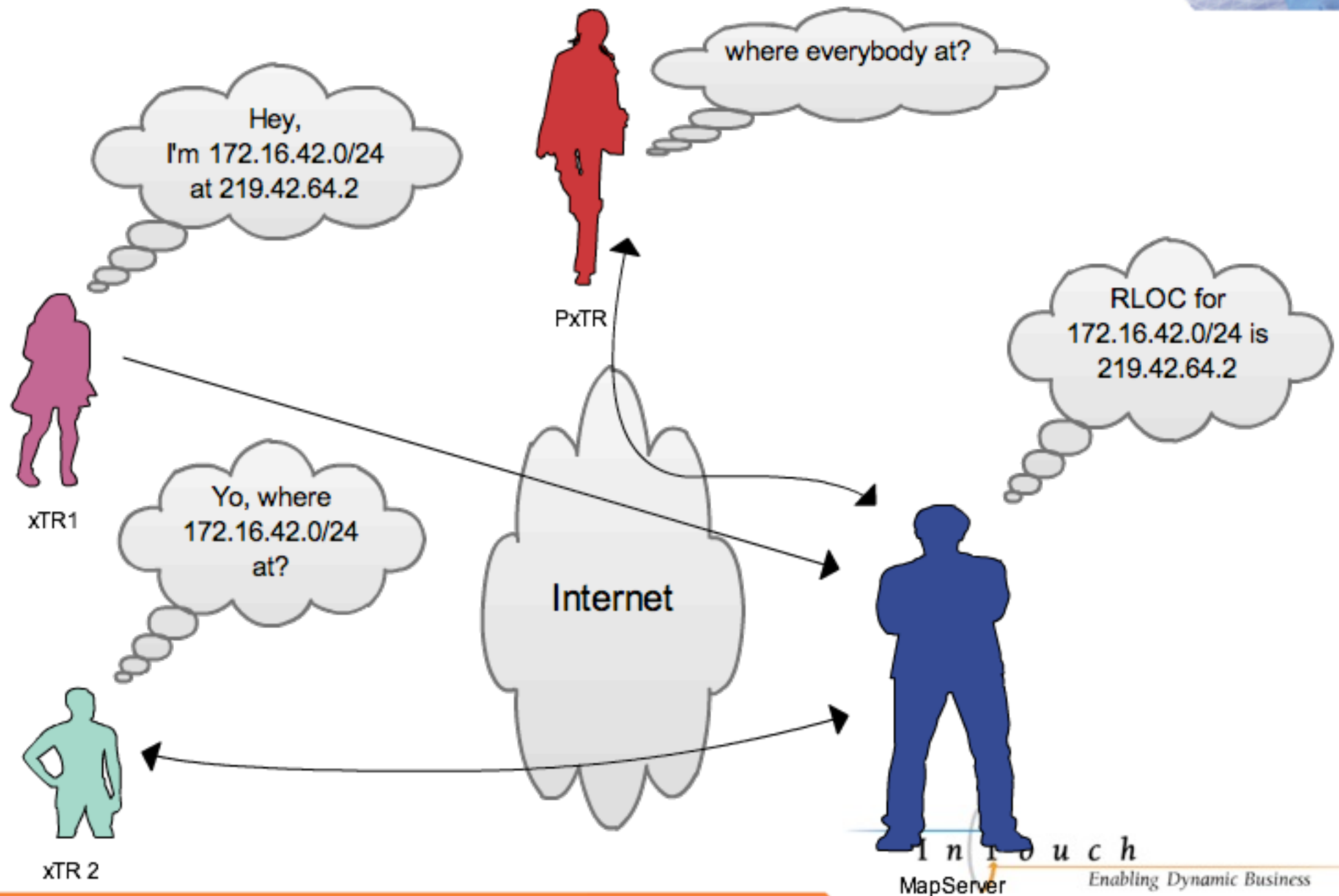
Component overview



xTR Picture



MapServer picture (think DNS!)



A Sample traceroute:



from satellite office to server behind the VRF

```
job@DennyCrane:~$ traceroute 172.16.4.202
```

```
traceroute to 172.16.4.202 (172.16.4.202), 30 hops max, 60 byte packets
```

```
1 172.16.42.253 (172.16.42.253) 6.102 ms 7.229 ms 7.212 ms
```

```
2 172.16.0.20 (172.16.0.20) 18.650 ms 18.651 ms 18.622 ms
```

```
3 172.16.0.1 (172.16.0.1) 13.968 ms 13.993 ms 14.020 ms
```

```
4 172.16.4.202 (172.16.4.202) 13.931 ms 13.899 ms 13.897 ms
```

```
job@DennyCrane:~$
```

Conclusion

LISP is good for you

- Multihoming
- Dual stack
- Easy
- Ingress traffic engineering
- Mobility
- Low OpEx

Any questions?

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