

# **A Core MPLS IP VPN Architecture**

draft-muthukrishnan-rfc2917bis-00.txt

Chandrasekar Kathivelu

Karthik Muthukrishnan

**IETF - San Diego, 12/00**

# I-D Authors

**Internet Engineering Task Force  
INTERNET-DRAFT  
Expires May 2001**

**Andrew Malis  
Vivace Networks, Inc.**

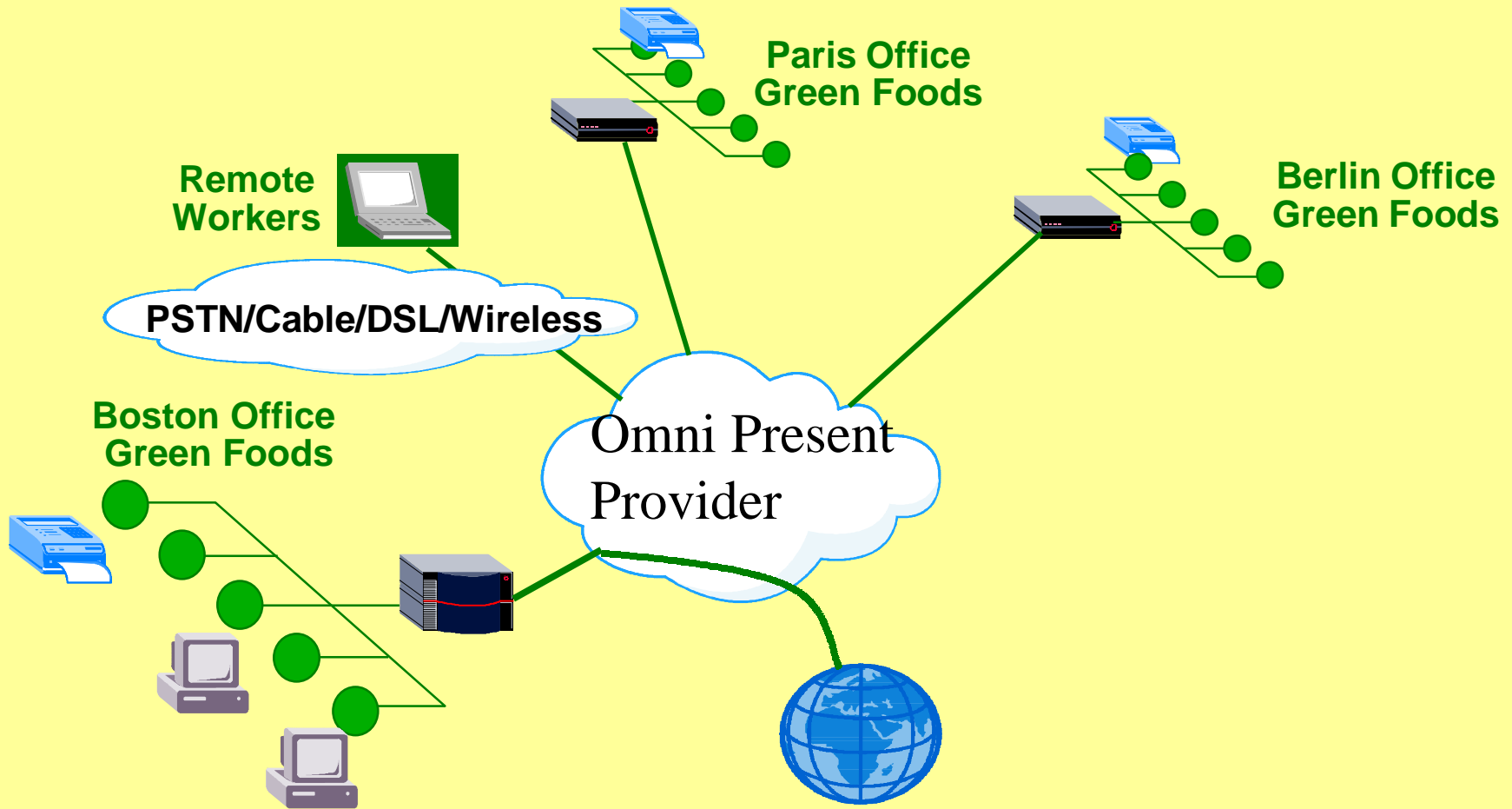
**Jing Ming Xiao  
China UNICOM**

**Karthik Muthukrishnan  
Chandrasekar Kathirvelu  
Lucent Technologies**

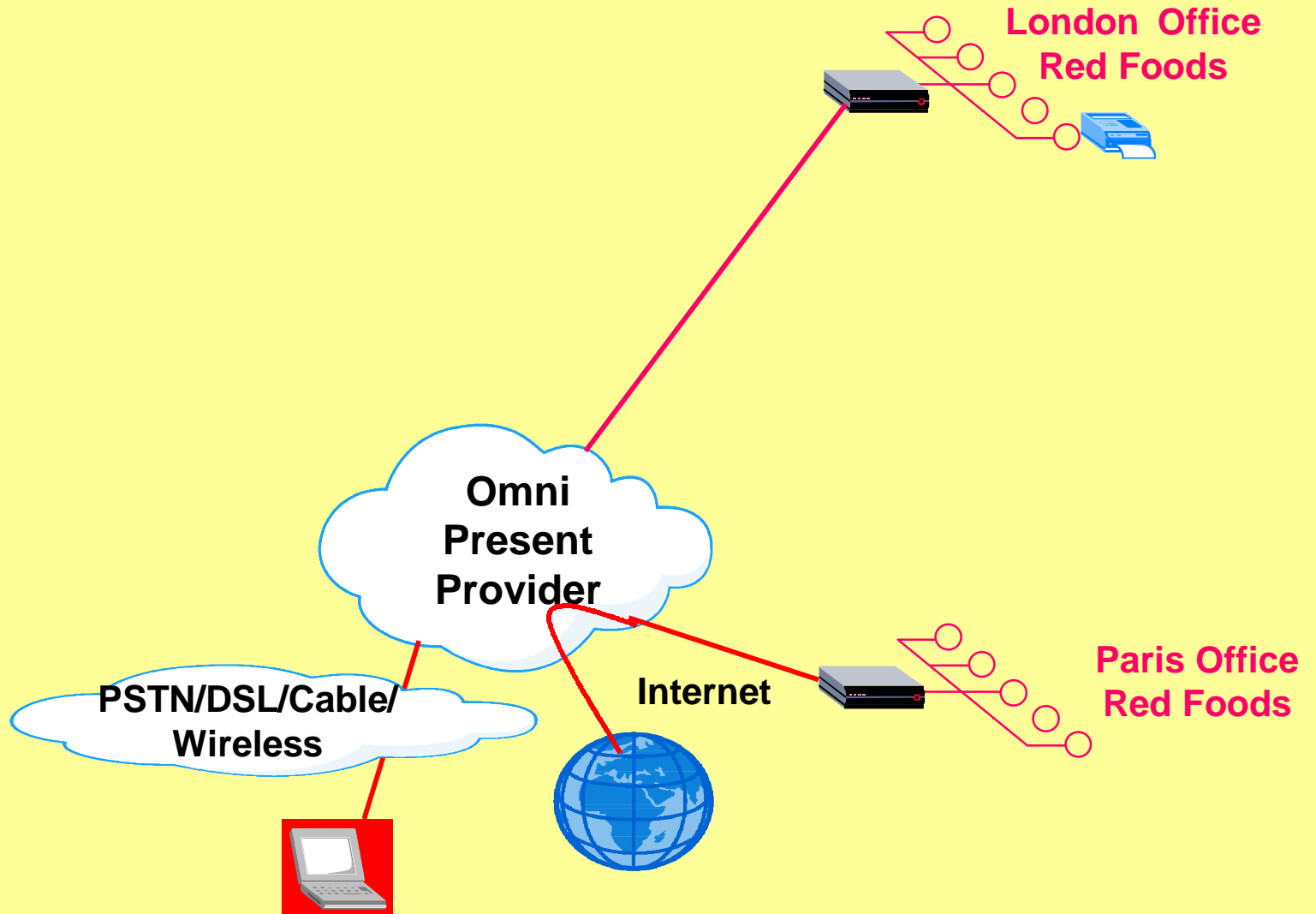
**Fred Ammann  
COMMCARE  
telecommunications**

**Junichi Sumimoto  
NTT**

# IP VPN - Green Foods



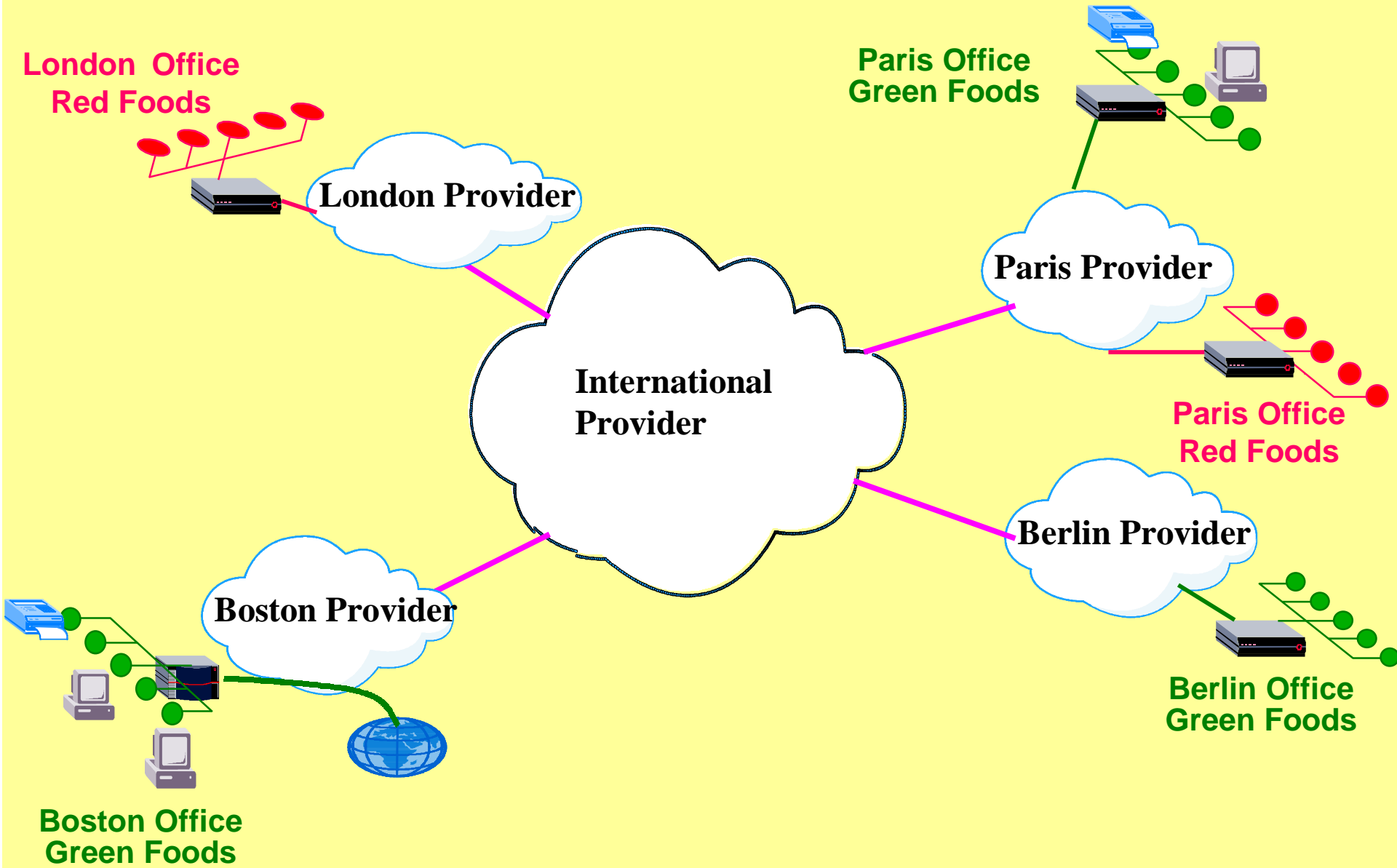
# IP VPN - Red Foods



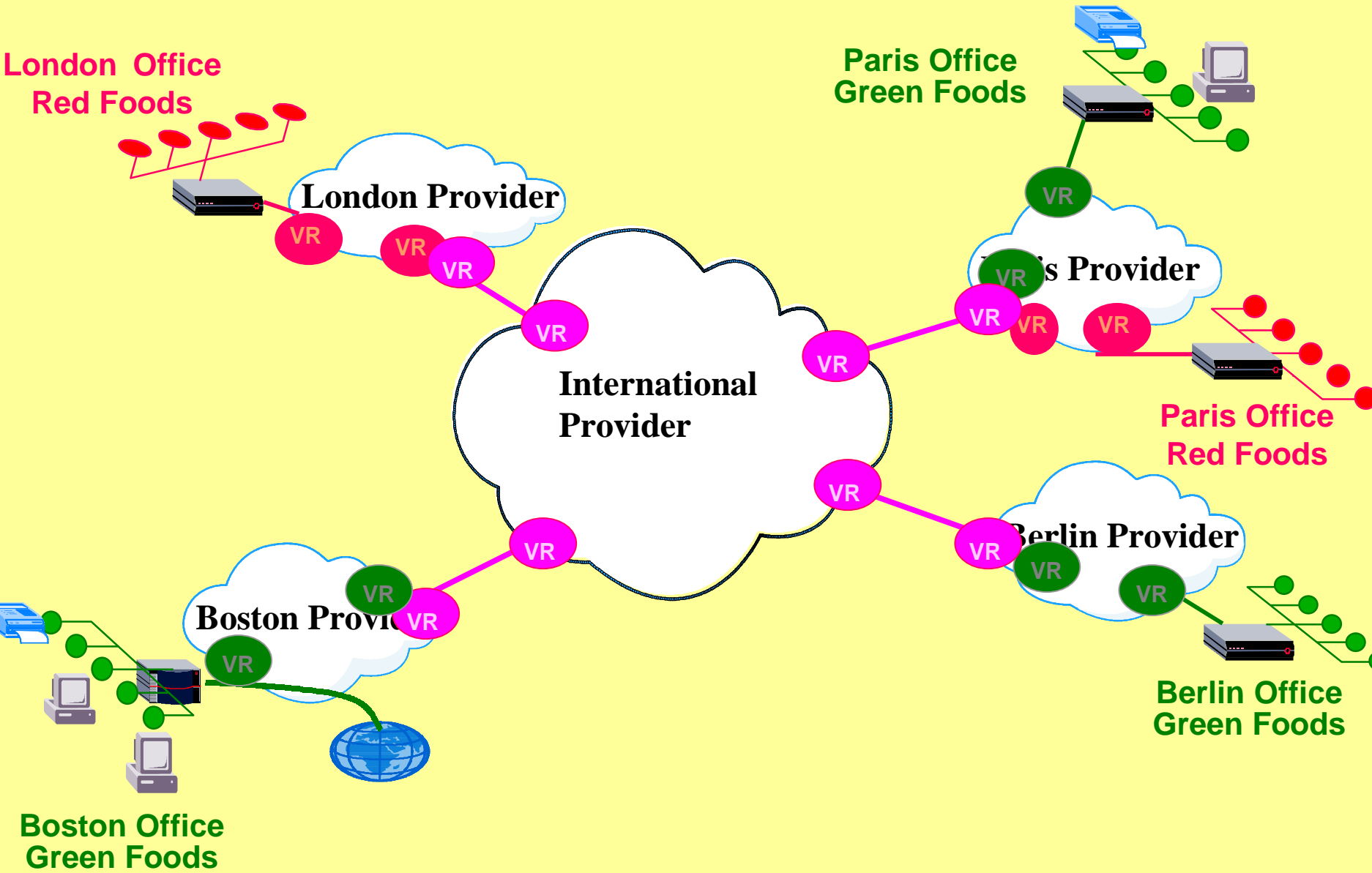
# Problem Statement

- Omni present provider rarely present..
- Regional providers provide last mile service
- National/International carriers provide global connectivity
- Need bridge to connect regional and global carriers

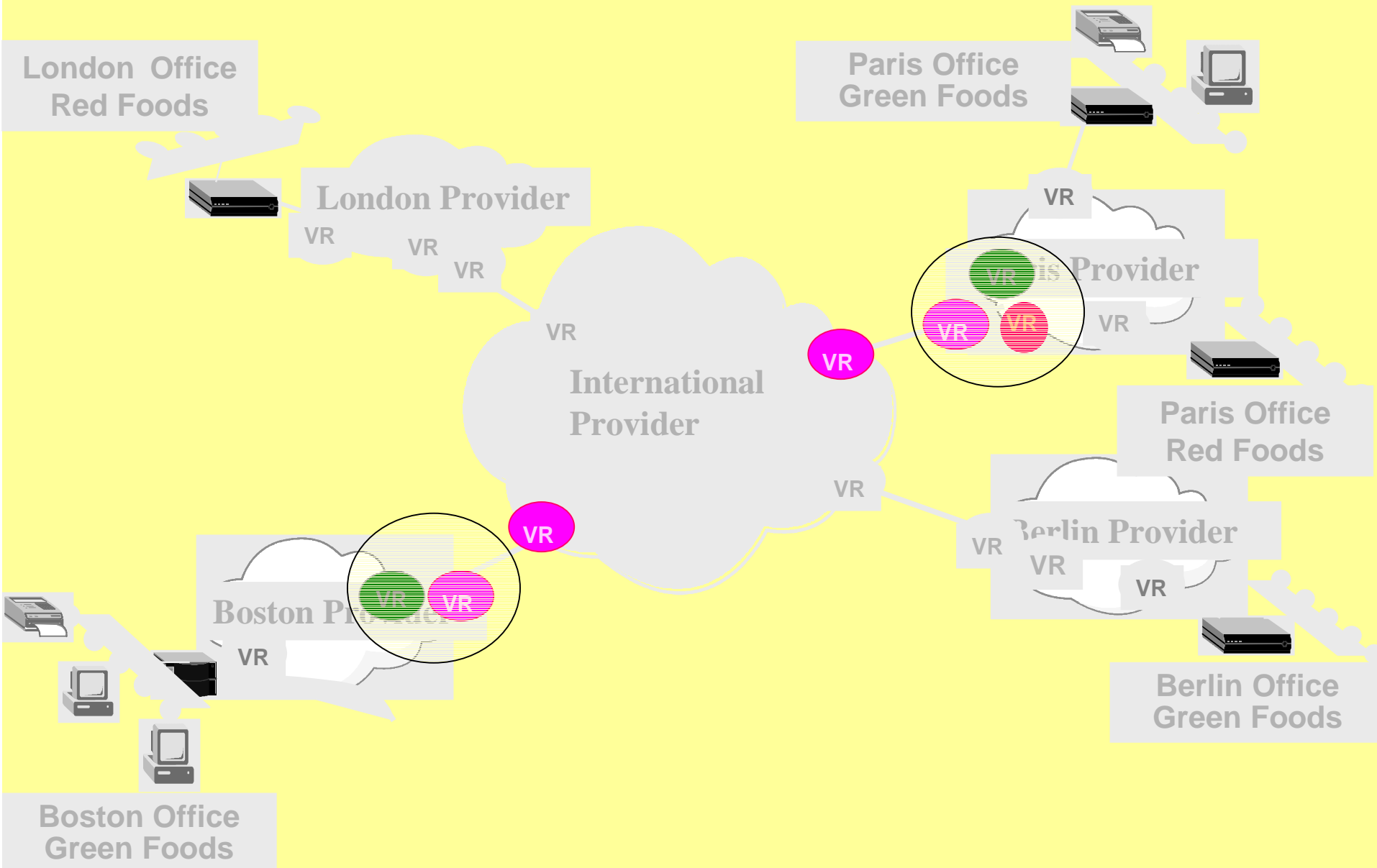
# Hierarchical VPNs - Business Model



# Hierarchical VPNs - Network Model

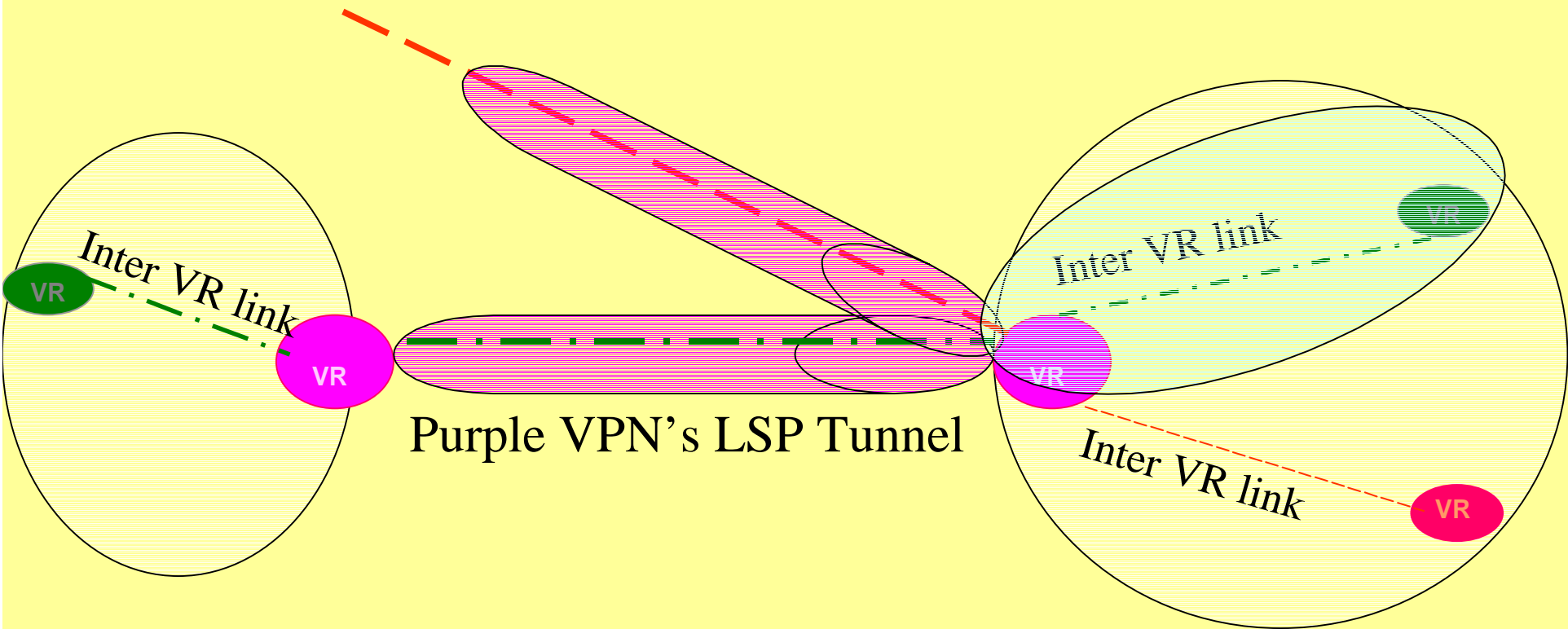


# Hierarchical VPNs

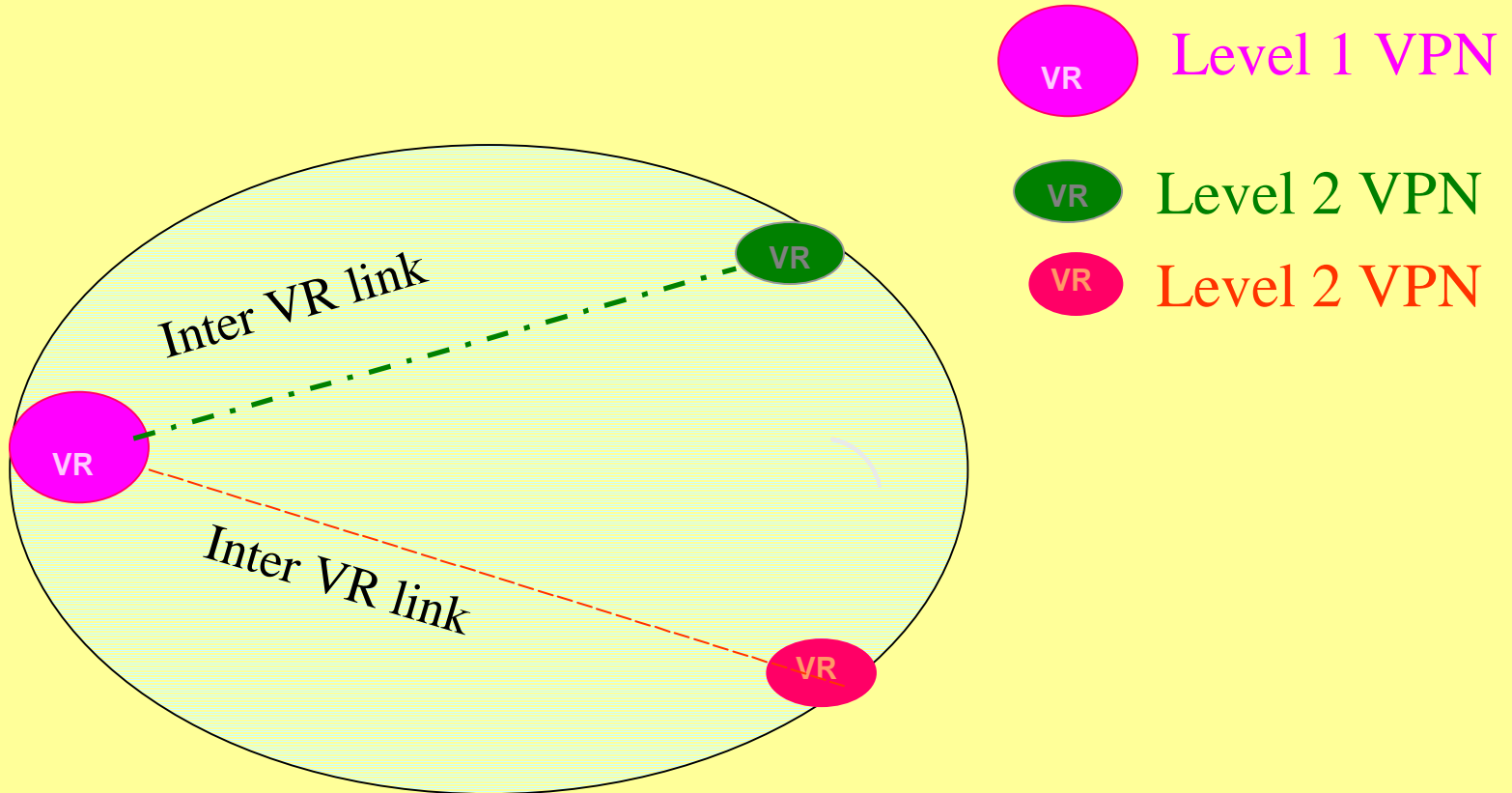




# VPN LSP Tunnels



# Inter VR Links



# Inter VR Links

- Supports hierarchical relationship
  - Level 1 .. Level 2 .. Level N VPNs
- Supports peering relationship
  - Internet connectivity
  - Inter VPN [controlled] connectivity
    - Controlled by standard routing policies at both ends
- More details coming soon in a draft