



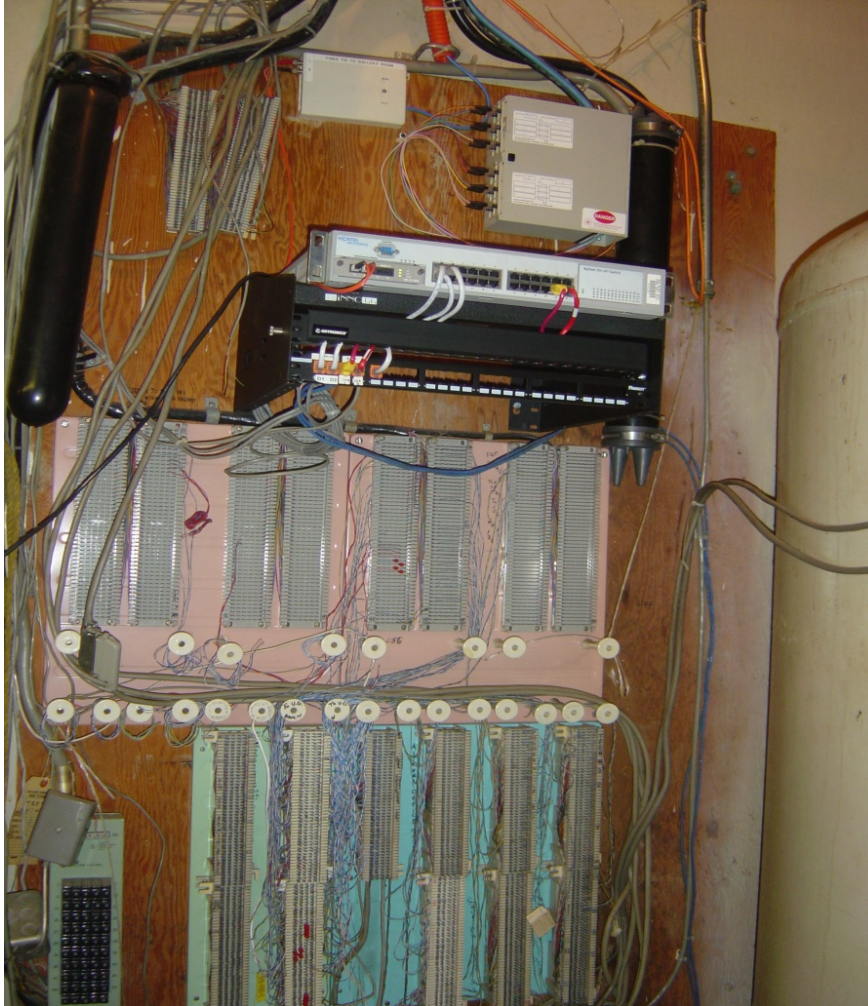
# **WEBINAR: Hotel Phone Systems VoIP + Cabling**

During this webinar we'll look at how implementing a VoIP phone system will impact your current set up.

With the innovations of VoIP telephone systems comes more functionality and features for your hotel. But, what does that mean for your existing phone cabling and technology infrastructure?

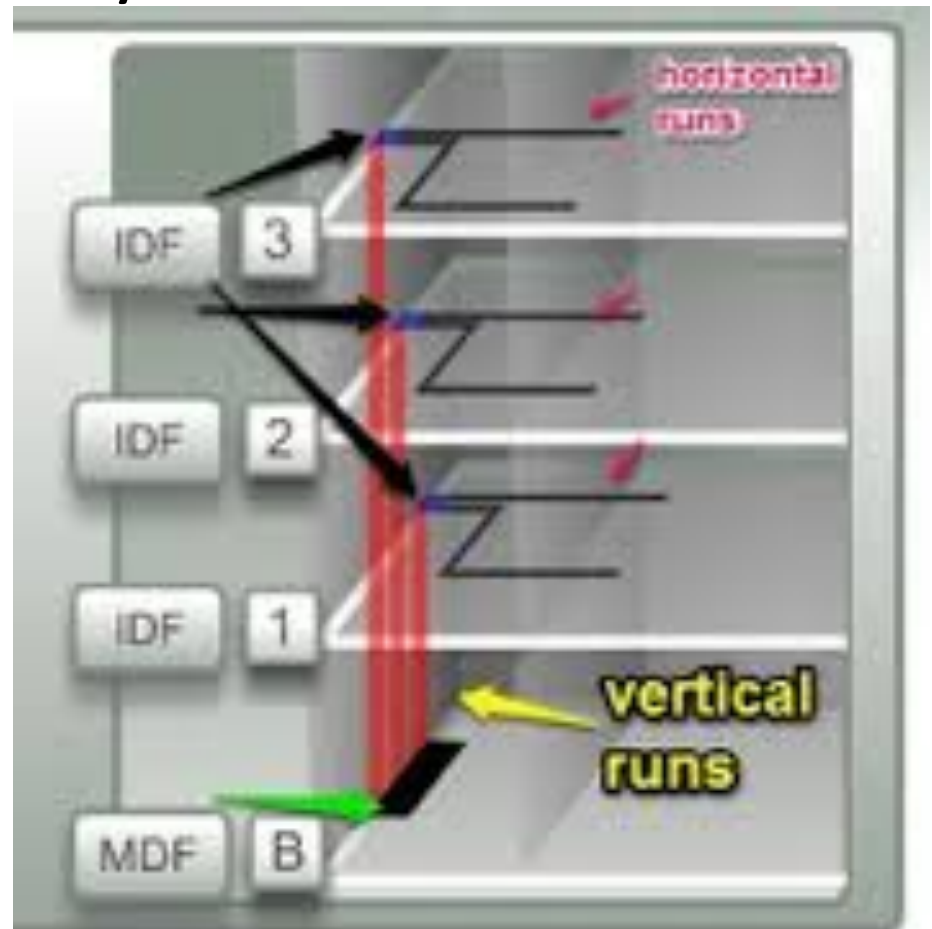
**Good Question!**

# Main Distribution Frame

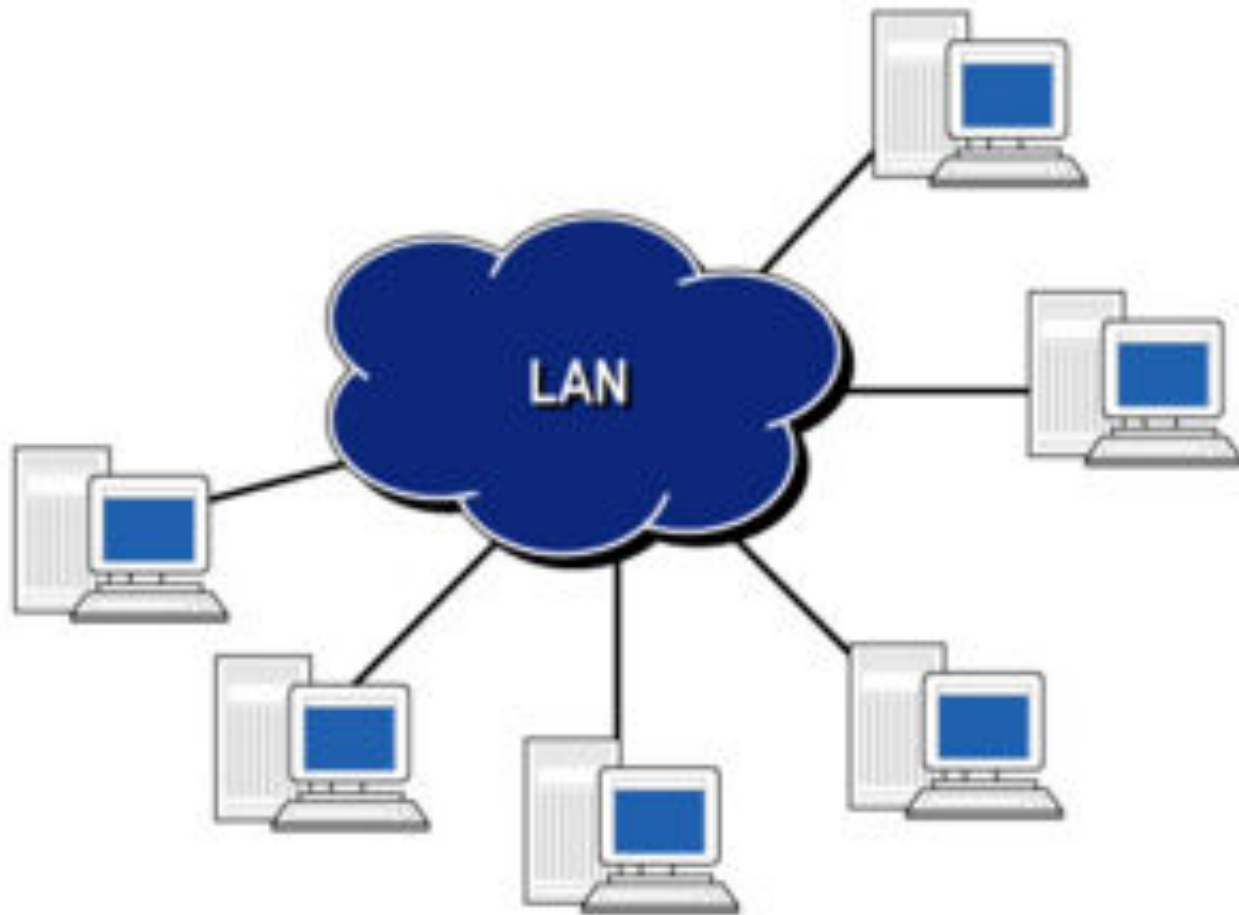


# If your hotel built before 1990

- Likely have CAT 3 everywhere



May have CAT 5 or 5e to admin positions or at least the front desk

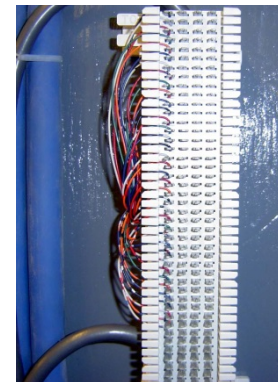


# Cont.

- Data cabling terminated on some type of Patch Panel in Equipment Room



- Cat 3 cabling to rooms and other phones terminated on 66 blocks at IDF and MDF



# What is CAT 3 Cable?

- Category 3 Standard for Telephone wiring

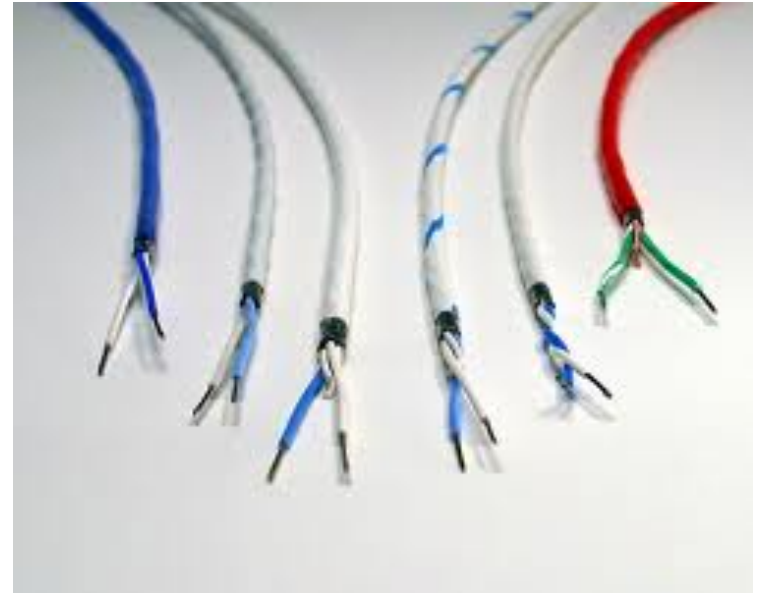


- OK for analog voice (standard phones) and fax and digital keysets
- Requires only single pair on the cable to drive the phone
- Not fast enough for data applications

# Other CAT's

- Cat 5
- Cat 5e
- Cat 6

All are data network  
Capable, required for  
IP devices including  
IP phones



<http://www.lifehacker.com.au/2013/04/ask-lh-whats-the-difference-between-cat5-cat5e-and-cat6-cables/>



# Delivering data to the Guest rooms

## Choices

- Installing new CAT 5e or CAT 6 cabling
    - Expensive to run cables, terminate and test
- Maybe impossible due to infrastructure (especially in old hotels)



# Adding new data cable

- Limitations
  - Distance 199 foot max distance
  - Quality of Installation
    - Must be tested for connectivity and speed
      - Confirmed by most cable contractors
- Distribution to workstations and rooms
  - Need Structured cabling plan and professional installation



# Data Cabling Alternatives

- Deliver Ethernet (data) over CAT 3 using DSL technology such as Phybridge System or VDSL modems

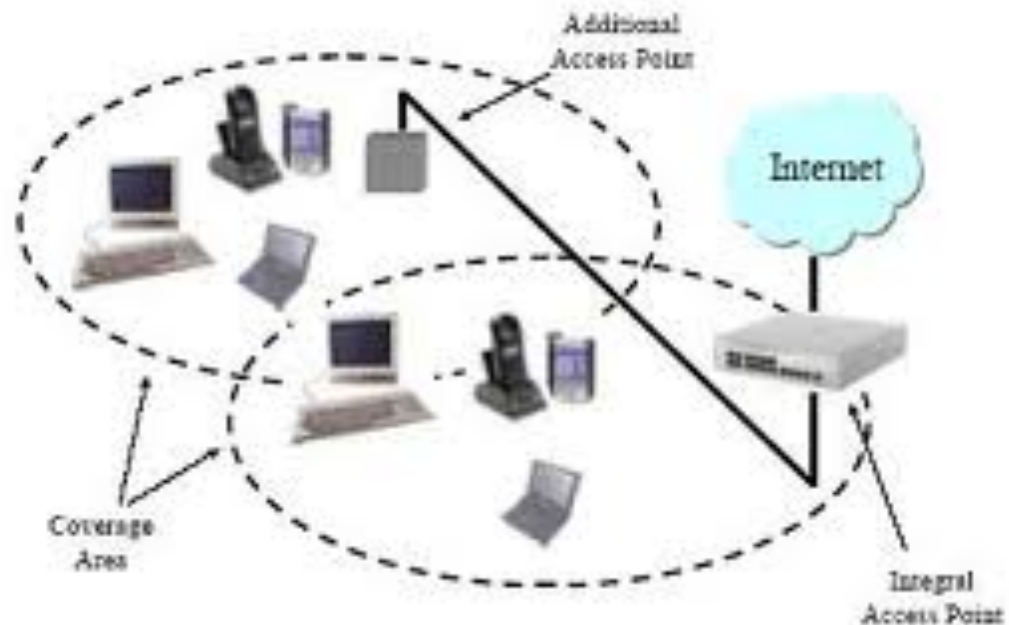


**Phybridge UniPhyer Support**  
Find the documentation you need  
and answers to your questions.

- Sends Data over existing cable plant, requires boxes on both ends
- May be viable alternative to complete re-wire

# Wireless Guest Network

- Add data cable to network access points only
- Useful anywhere on the property radio signals can reach



# Hybrid solution for hotels

- Supports CAT 3 analog devices and IP devices
- IP Phones where needed ,
  - Front Desk, Manager phone, Conference room, restaurant



Reduce the need to re-cable the hotel, only add new cable where needed for IP phones.

- Voiceware by PhoneSuite

# Hybrid Solution for hotels

- Continue using CAT 3 cable plant to existing Analog guest room and admin phones



# Wiring to Data/Admin/Phone positions

CAT 5e or better installed to each position

One for each device

TEST, TEST, TEST, and certify

Speed only as good as the weakest link



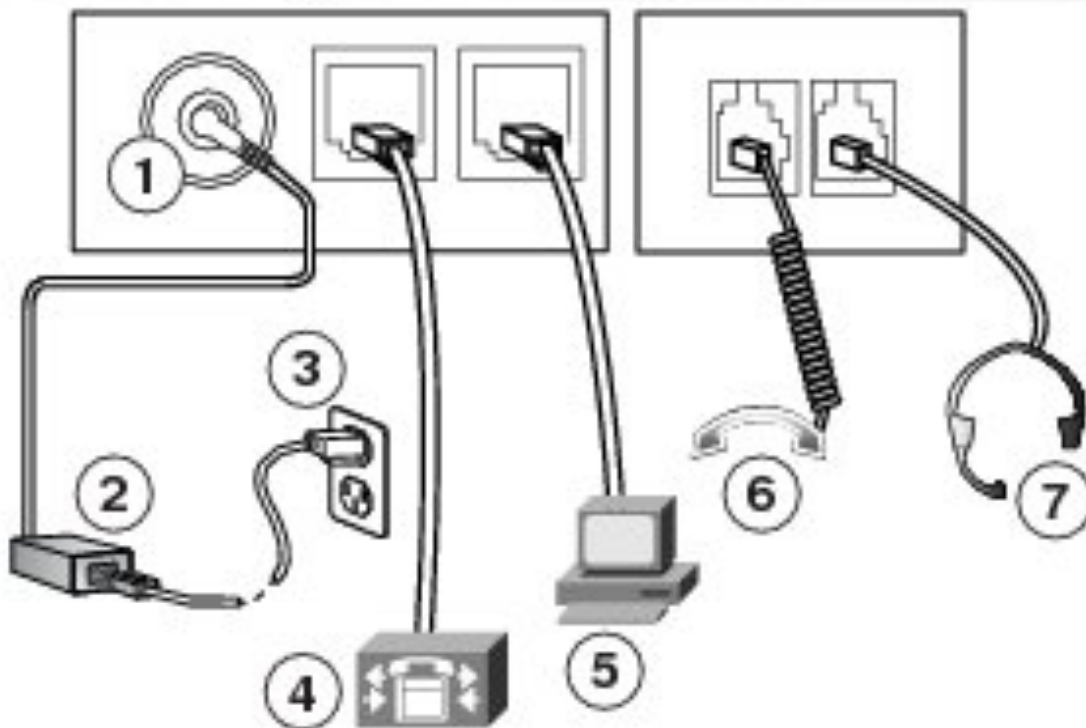
# SIP Phone Connections



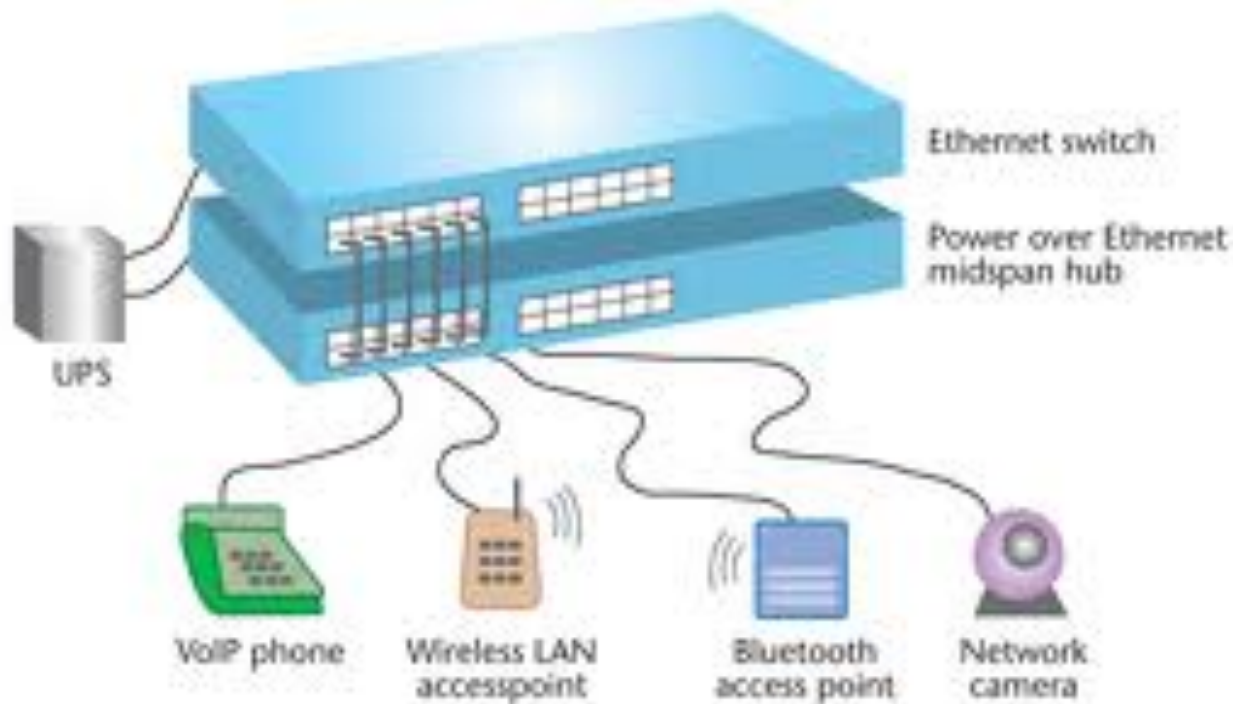


# Connections

- Wall to phone, phone to pc network pass-through.



# Power over Ethernet (PoE)



# PoE continued

- More costly than regular data gear
- Much easier installation and maintenance, no more power brick for every device





- Use a dedicated subnet and dedicated router. Reliance upon the host properties business or PMS subnet is problematic as you do not control key parts of the VoIP infrastructure.

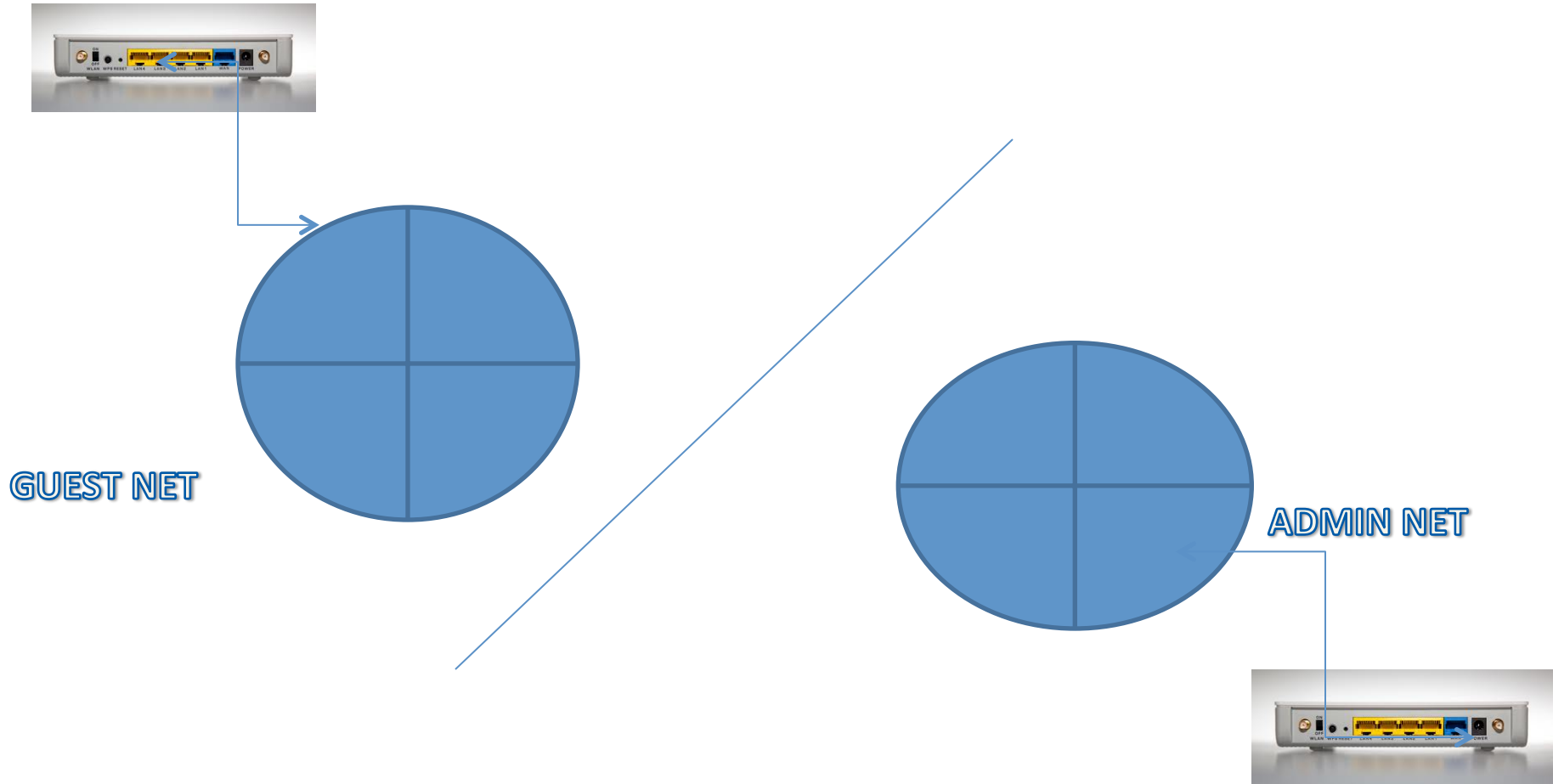
# Network Router



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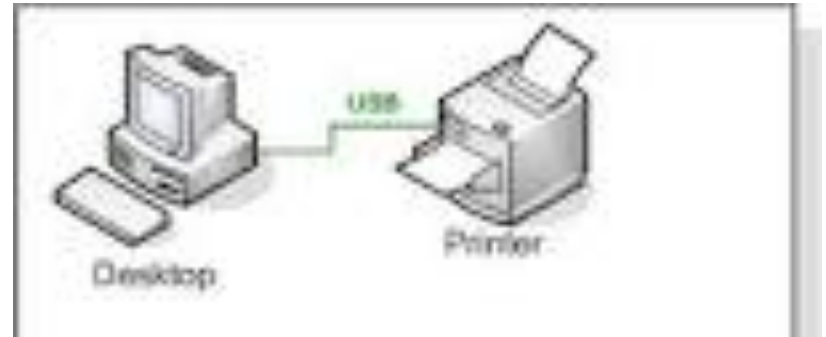
- Your IP phone system router should be on a public IP address. Do not route through any other routing device on property, plugging in directly to the modem or IAD (or through a network switch). Chaining routers will make remote access and SIP trunking difficult.

# Separate Networks



# Front Desk Extras

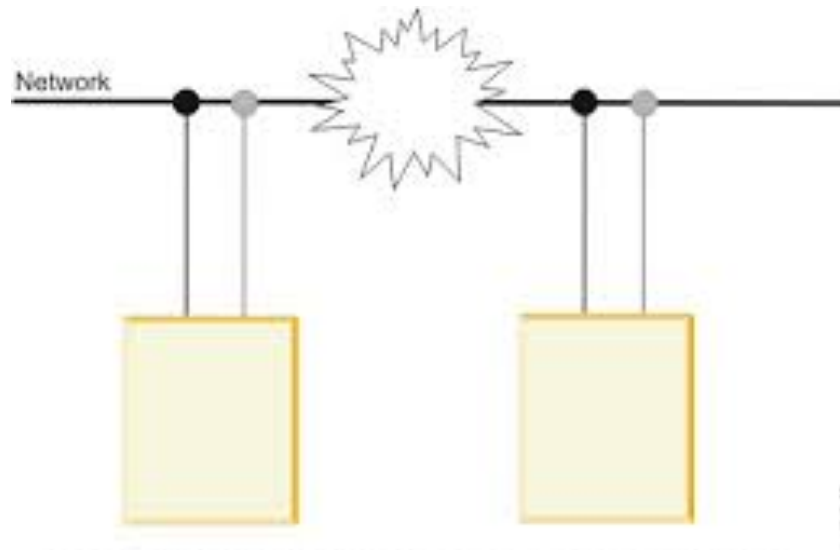
- PMS Computer/Server
- PMS to Printer cable
- PMS to PBX cable
  - Serial cable direct
  - IP connection through LAN
  - Separate networks for PMS net and Voice net?  
Add enough Cable for each device on each network



**Don't be shy about adding additional cables and spares, be prepared for future devices.**

# Failover Analog Connections

- IP network failure backup: Analog emergency phone on analog Telco line for backup of digital circuits and SIP (network) based trunks connected to the PBX (allows in/out, 911 calls)





# Failover Analog Connections

- Analog Operator phone connected to PBX (analog port for survivability) for Dial 0 during LAN outage



# Other Analog Connections

- FAX machines and older dial up modems including ATM's and Credit Card machines
  - Should move to IP network for efficiency and speed



# Summary

1. Deliver data to guest rooms by most practical method
2. Install data network/cable and SIP phones where useful. Take advantage of what IP phone systems can offer.
3. USE existing analog cabling and analog phones where practical with Hybrid PBX

# Thank you!

- Call us at PhoneSuite to see how Voiceware on our Series2 V.IP system can provide the right connectivity for your property
- [www.phonesuite.com](http://www.phonesuite.com) 1-800-245-9933

***Voiceware***<sup>TM</sup>

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