



## **NETWORK DESIGN QUESTIONNAIRE**

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### Scoping of the network

#### **General questions**

- What type of organization is requiring the network?
- Is the network pat of the primary process? Is revenue going to be generated by this network?
- Is there a floor plan available?
- Is there a base network design available?
- Who is responsible for design and implementation?
- How is service and maintenance intended after installation?

# What processes will run over the network? Which of these services require segmentation?

- Internet access?
- Guest internet Access?
- POS systems?
- Business servers?
- Security cameras?
- Physical access?
- Web cams?
- Video over IP? What Brand?
- Audio distribution?
  - o Dante?
  - o AVB?
  - o Q-SYS?
- Digital signage?
- Building Automation?
- Control systems? What brand?
- Lighting Control? What brand?
- Conferencing Systems? Telepresence?
- IP-Telephony?
- Does the network need to be scalable for future extension and speeds?

#### Physical infrastructure

- Is this project Green field or retrofit?
- Is in house cabling part of the scope?
- Is there a single Main Equipment Room or are there other Equipment rooms as well?
  - o What is the distance between these rooms?
  - o What is the required bandwidth between these rooms?





- What is the longest run of cable in the building, including runs trough walls, floors and ceilings?
- What cabling is requested/available:
- Copper: Cat 5/5E/6/6A; Shielded/non shielded?
- Fibre: Single-mode/multi-mode; ohm 3/4?
- Does the infrastructure need to be designed for future expansion or bandwidth?

Will there be business servers installed in the network? If so, what type?

#### Will there be data storage on the network? If so, what type? SAN? DAS? NAS?

Will data storage be part of the scope?

#### **Scaling of the project:**

- How many nodes?
- How many simultaneous users?
  - o Employees? Including BYOD, Laptops, tablets etc
  - o Visitors? Including BYOD, Laptops, tablets etc
- How many hard-wired connections to the network are needed?
  - o For workstations?
  - o For IP Phones?
  - o for cameras?
  - o POS stations?
  - o Video? Audio?
  - o Building Automation?
- How many wireless connections to the network are needed?
  - o For Employees? Including workstations, Laptops, Tablets, BYOD?
  - Visitors? Including BYOD, Laptops, tablets etc
  - o WIFI camera's?
  - o Light control?
  - o Building Control?

#### **Power over Ethernet:**

- How many devices require POE-power?
- What type of devices are being powered with POE?
- What is their power consumption?
- What is the total power budget required
- What level of cooling is available in the equipment rooms?

#### **WAN** connections:

- How many internet connections are there to the building? What speeds?
- What level of availability is required? Failover/backup required? Dual routed? Dual homed?
- What services run over the internet connection?
  - o Branch office connections?
  - o Remote access?





- o Security services?
- o POS/ERP synchronisation?
- o Video/Audio streaming?
- o Web access?
- What level of security is required? Firewall, Encryption? VPN tunnelling?
- Is remote management needed of certain systems? Which?

