

Spacial Network Diagram

- Sebastian Tuchband

There are some major points and minor points for the diagram that has been created. I will begin with what is important to know for understanding the design of the diagram.

- 2 Main Divisions
 - Engineering
 - Manufacturing
 - both get additional support from admin department
 - thus the diagram shows two separate halves of the company
 - These halves are connected through a VPN
- Engineering
 - 20 engineers, draftsmen, and technicians (documentation)
 - interpreted as 20 each
 - draftsmen make engineering prints, thus each requires a printer.
 - The others don't necessarily need more than 2.
 - 1 since everyone needs a printer
 - 2 for backup
- Manufacturing
 - 50 assemblers, supervisors, and quality assurance personnel
 - assuming half computers as supervisors are needed. They supervise.
 - Assemblers report to supervisors for computer necessities
 - Each quality assurance personnel has a computer.
- Administration department
 - 30 executives, IT, accounting, marketing, and Admin staff
 - like earlier, assume 30 of each
 - Not each needs a printer, so one printer per switch should suffice as reference
 - more or less a few shouldn't matter too much.
 - IT and Admin staff are going to be mixed half and half in each department for faster local support when needed.
 - IT and Admin staff will also be mixed on networks as they will be working together for their tasks.
 - Executives will be in the engineering department, as they will most likely need to communicate plans with engineers more
 - Accounting and marketing will be in the manufacturing department, for the ability to see products that come in and out.

On to the more minor points of importance for the diagram:

- Current methodology in the diagram for switches
 - The amount of switches each team has can be handled redundantly, if the budget allows
 - The user's departments are segregated by servers, switches, and/or routers
 - There can be 1 switch per box on the diagram, or there can be as many switches as would be proper, numerically.
 - Point is: amount of switches can vary and that is up to creator
- If desired, a backup can be made to handle both of the main AD servers
- DHCP & DNS servers separate each department to prevent bottlenecking.