

Structured Cabling Guidelines

1. **Closed/Structured cabling** will make our office more **organized and beautiful**.

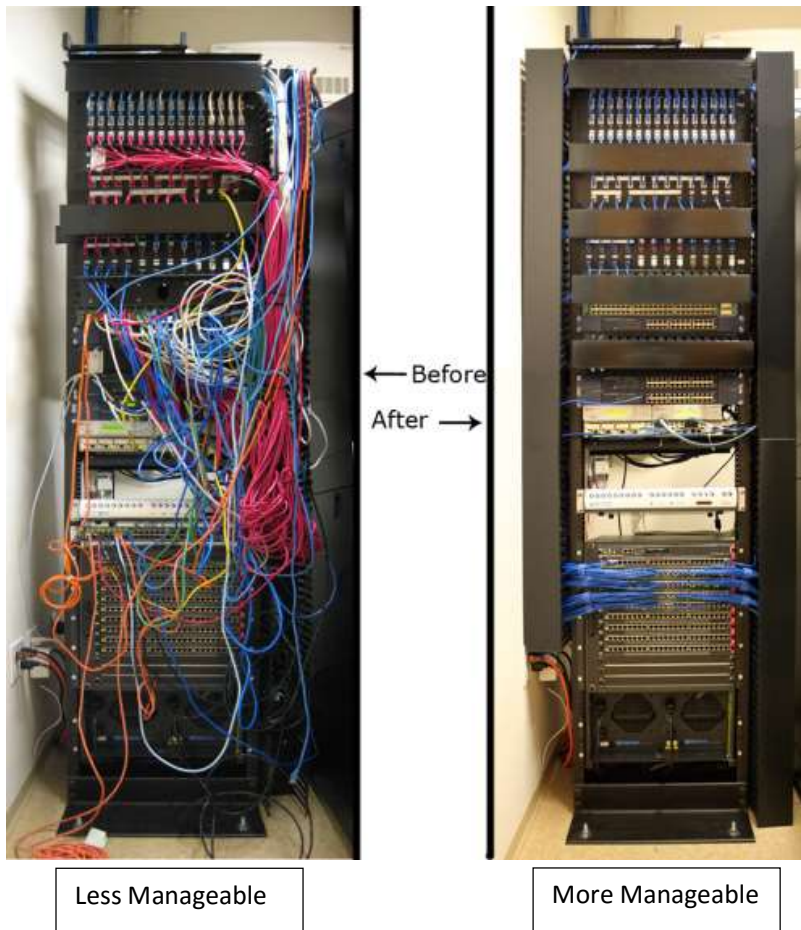
Before: Has Open Wires/Lose Cabling **After:** Has Closed wires/Structured Cabling.



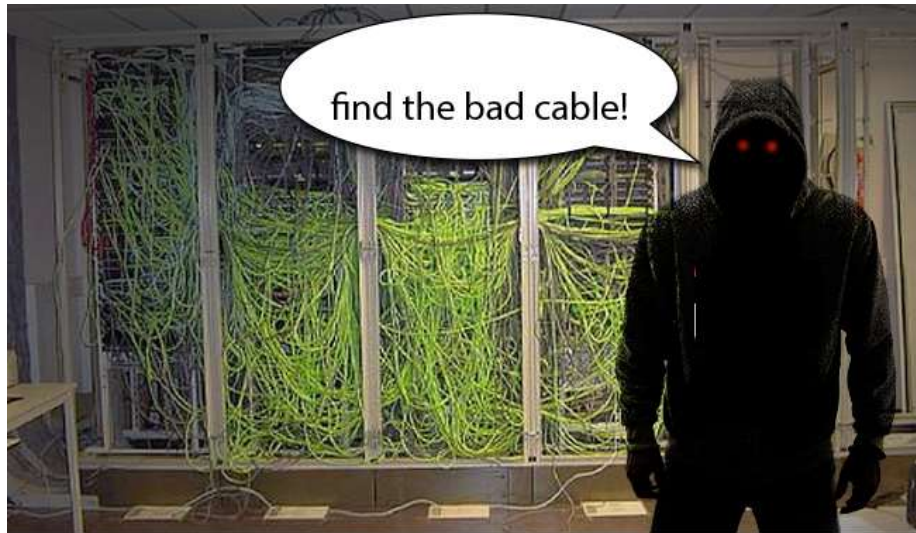
2. Structured cabling will help us to **manage our networks** in a better way.

Before: Has Unmanaged Cables

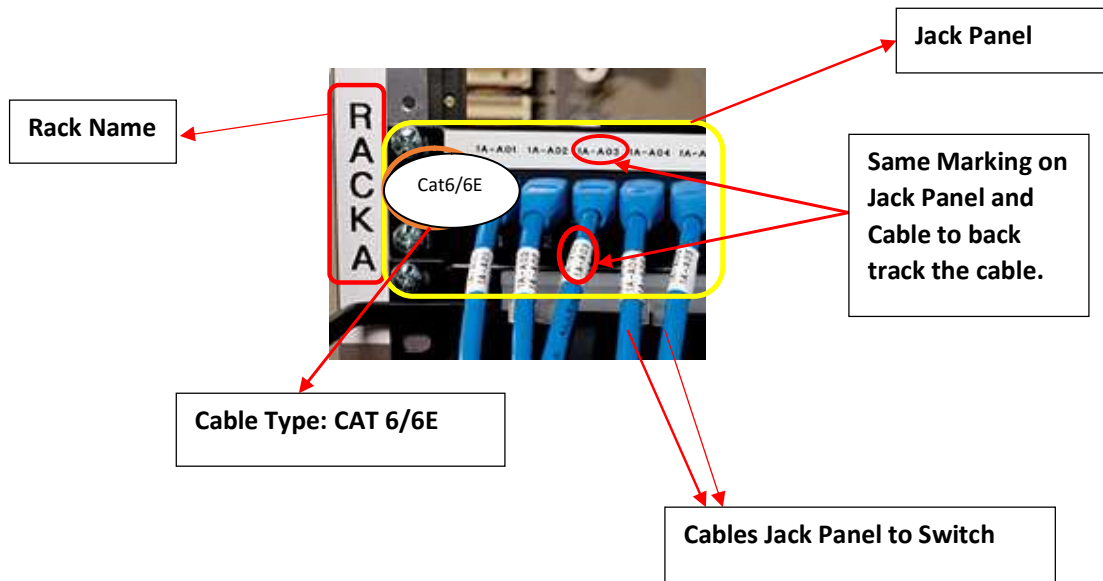
After: Has managed cables



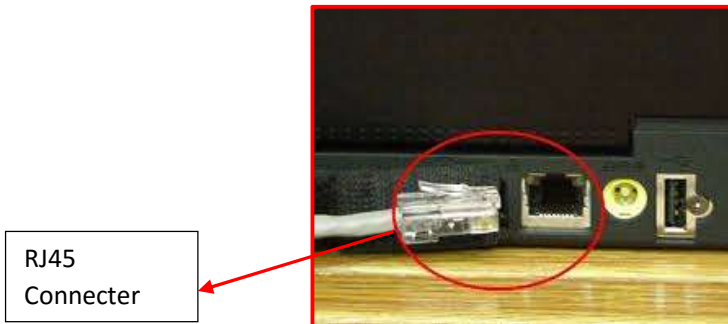
3. Finding a faulty cable and fixing the issue is easier in a managed cable (Structured cable) system than in unmanaged cable (unstructured cable) system as shown below.



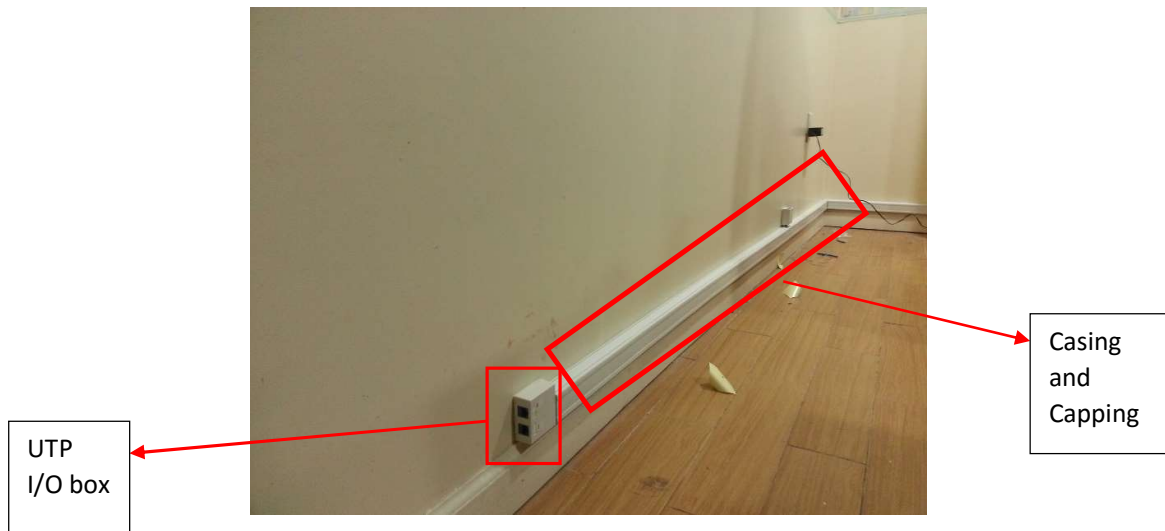
4. Use of Jack Panel with the switch makes the cable system more **informative & structured**.



5. **Branded RJ45 Connectors and Cables** like Schneider/Tyco/Awaya/Dlink may be used



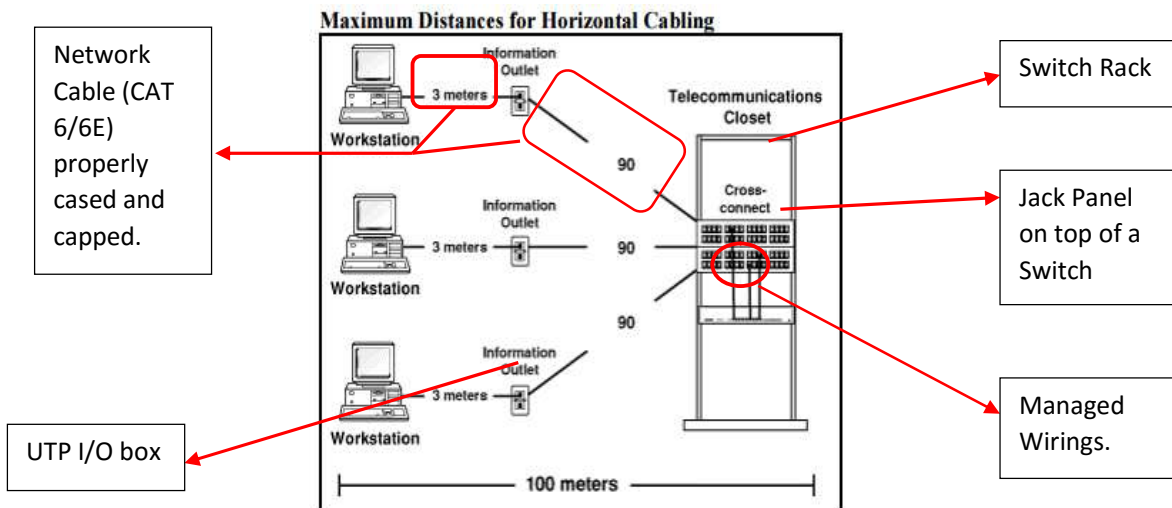
6. Proper **Casing and Capping of Cables** is required (for outside the room use conduit pipes and for inside the room use casing) so that cable can be protected from damage. UTP I/O box is needed to back track the cable to Jack Panel and then to Network Switch.





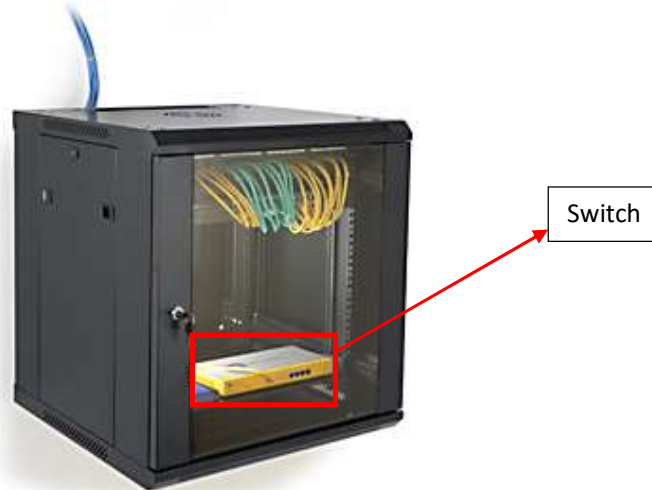
Sample UTP I/O box

7. Length of UTP Cable from Switch to your desktop/laptop should be less than 100 meters.



8. Rack Space requirements:

Typically a wall mounted rack space look like:



OR



- For 24 port switch we need 1 RU or 1 U rack space.
- For every 24 port increment we will be needing 1 RU or 1 U additional space. So for 48 port switch we need 2 RU or 2 U rack space.
- Typical sizes of Rack Space used are 6U/9U/12U/19U/36U/42U. **In Aligarh Muslim University we generally use 6U/9U/12U/19U/27U/36U/42U rack space, as each rack has the following accessories along with the switch that needs to be a part of the rack space:**
 - **Switch**
 - **Cables**
 - **Cable Manager**
 - **Fibre LIU**
 - **UTP Jack Panel**
 - **Fan Housing Unit**

[For any further queries on network cabling, please contact at nwadmin.cc@amu.ac.in](mailto:nwadmin.cc@amu.ac.in)