TTU Telecom Review Process for Integrator Installed Systems

The following information and requirements apply to any work carried out at TTU locations that involves network cabling or digital communications as part of an integrator installed system:

Step-by-Step Process

1. Determine system category (see Categories and Requirements below).
2. Prepare system integrator’s installation plan. To speed review, include connection diagram.
3. Submit TTU Telecom Network Service Request with details and integrator’s installation plan.
4. Review system details with TTU Telecom.
5. Upon approval by TTU Telecom, system installation work may commence.

Definitions

- **Cable, Cables, or Cabling**: Any UTP, STP or fiber-optic cabling used for digital networking (e.g., Ethernet, HDBaseT, AVB, Dante, Audio over Ethernet, etc.).
- **Facility Cable Plant**: The permanent building infrastructure for data communications. Includes main- and intermediate-distribution facilities (comm rooms), racks, patch panels, raceways, chases, faceplates, cables and any related equipment or mounts.
- **Integrator**: An organization which designs, installs, maintains, and supports a specialized multi-component system. Typically, these systems include environmental, security, audio/video, or media related applications.
- **Integrator System**: The system installed by an Integrator.
- **Integrator LAN**: Integrator-managed layer 2 Ethernet network containing only the Integrator System components.
- **Building LAN**: TTU-managed layer 2 Ethernet network within the building for communications within the building and TTU intranet. This LAN is generally the building’s A/V LAN which is dedicated to A/V equipment and has access to communicate with other systems on campus. If granted exceptions by TTU Security, this LAN can also access Internet-based resources.
- **Isolated Room Installation**: Cabling within a single room, with network communications only within the Integrator LAN.
- **Building Cable Installation**: Cabling spans beyond a single room, with network communications only within the Integrator LAN. Facility Cable Plant is used to span rooms.
- **Building Network Installation**: Communications largely fit the definition of either an Isolated Room or Building Cable Installation, but some communication with the Building LAN is required for broader control, media transmission or system monitoring.
- **TTU Telecom Network Service Request**: Online submittal form for requesting the involvement of TTU Telecommunications in the review or installation of an Integrator System. Online form located at [https://www.net.ttu.edu/](https://www.net.ttu.edu/).
Categories and Requirements

Integrator Systems fall into several generalized categories. Consider which of these categories fits your situation and include that category in any submitted information.

Isolated Room Installation

- Integrator System only connects and communicates between components in the Integrator LAN and those components do not communicate with other devices beyond the Integrator LAN (i.e., a closed system).
- No cable interconnections exist with the Facility Cable Plant infrastructure or the University-managed network equipment.
- Integrator LAN equipment must only include wired layer-2 switch equipment (no Wi-Fi equipment is permitted).
- IP addressing within the Integrator LAN is the responsibility of the system integrator.
Building Cable Installation

- Integrator System communicates between components within the Integrator LAN beyond a single room.
- Any cabling spanning rooms must make use of the Facility Cable Plant.
- Any cabling not spanning rooms must adhere to Isolated Room Installation requirements.
- Facility Cable Plant installation must be carried out by TTU Telecom in conjunction with a TTU Telecom Network Service Request.

Private addressing within integrator LAN.
No communication outside integrator LAN.
Building Network Installation

- Pertains to an Integrator System which communicates with the Building LAN.
- The Integrator System must provide layer 3 routing between the Integrator LAN and the Building LAN (i.e., the Integrator LAN may not bridge or switch to the Building LAN).
- The Integrator System must use port address translation (PAT) in order to communicate between the Integrator LAN and the TTU Building LAN.
- IP addressing within the Integrator LAN is the responsibility of the integrator.
- Building LAN must not be impacted by any Integrator LAN service (e.g., DHCP).
- IP addressing within the Building LAN is the responsibility of TTU and handled exclusively by DHCP (i.e., no manual IP configurations for integrator equipment in the Building LAN).
- Coordination of Building LAN communication must be carried out by TTU Telecommunications in conjunction with a TTU Telecom Network Service Request.