Southwest Allen County Schools: A Comprehensive Communications Infrastructure Solution

GSTech partnered with Southwest Allen County Schools (SACS) to deliver a fully integrated, future-proof solution for managing the district’s communications infrastructure. The objective was to provide accurate, real-time documentation of every active communication port, trace patch cords in data racks, and generate electronic rack elevation files for each Telecom Room across all district schools.

Challenges Identified:

* SACS relied on outdated hard copy as-built prints and multiple spreadsheets, leading to inconsistent, scattered, and unreliable data.
* A centralized repository did not exist to manage network infrastructure data, making system management inefficient.
* Existing electronic floor plans lacked a methodology to track moves, adds, and changes (MACs).
* Although most faceplates were labeled, the documentation had not been updated since installation, making the information unreliable.

GSTech engineered enhanced electronic floor plans through infrastructure discovery and upgraded the existing electronic floor plans to ensure every communication location was precisely mapped and documented. We conducted a comprehensive, room-by-room walkthrough to notate the exact location of every faceplate and jack whether on walls, floors, or ceilings.

Documented every Telecom Room rack layout and created detailed electronic rack elevation files tracing patch cords, mapping each patch panel port to its corresponding switch port, ensuring a clear, traceable pathway from PC to wall plate to patch panel to switch.

Built a comprehensive, centralized database integrating existing nomenclature while aligning all documentation with TIA 606-B industry standards.

Linked all data to the enhanced floor plans, creating an intuitive, searchable, and fully manageable system.

Results & Long-Term Benefits:

* Real-Time Infrastructure Visibility – IT staff can now instantly locate, manage, and troubleshoot any network connection.
* Seamless MAC Documentation – Every add, move, and change is accurately recorded and integrated into the floor plan database.
* End-to-End Connectivity Mapping – A clear, structured infrastructure pathway from PC to switch port ensures faster diagnostics and repairs.
* Future-Proof Network Management – SACS now has a sustainable, uniform system for ongoing network updates and maintenance.

With GSTech’s advanced documentation solutions, Southwest Allen County Schools now benefit from streamlined IT operations, reduced downtime, and a fully scalable infrastructure management system, ensuring long-term efficiency and reliability across all district schools.