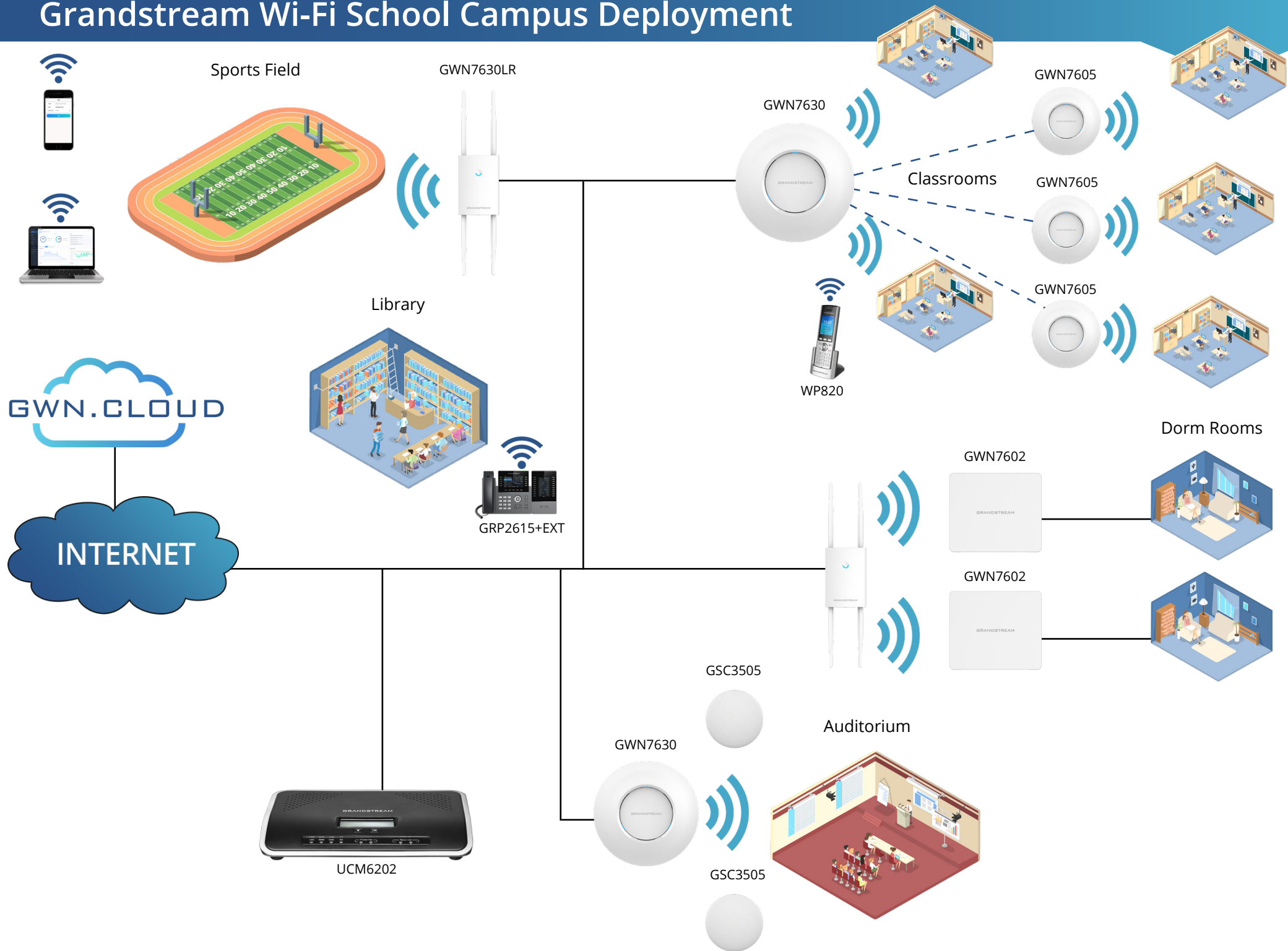# Grandstream Wi-Fi School Campus Deployment

School Deployment Scenario Explained

Deployment Strategy:

The Problem:

In this deployment scenario, a local private boarding school with over 2000 students were seeing an increasing need for a new Wi-Fi network solution. With new modern tools for teachers and students there was also a need for a Wi-Fi solution that could handle the upkeep of devices on the network. This would allow teachers to stay more connected not only for communication purposes but also for educational and security purposes.

The Solution:

The school was granted a budget from the school board to implement a new Wi-Fi network that would allow for increased productivity. The school received a bid from a local installer who used Grandstream's GWN series of Wi-Fi access points.

- A MESH network was built for the system of classroom access points using the GWN7630 as the Master, and GWN7605s for each room. Teachers to use modern tools such as class designated laptops/tablets to present information such as digital textbooks and interactive materials such as question polls.

- Providing GWN7602s in the dorm rooms allow students to continue studying from the comfort of their bedroom after classroom hours.

- A GWN7630 was installed to power Wi-Fi devices for the auditorium including the GSC3505, 1-way public address speakers that were spread throughout so that any announcements could be heard by the whole crowd

- The GWN7630LR allows for outdoor Wi-Fi in area's such as a football field which allows coaches and spectators to gain access to the schools network.
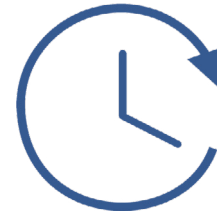
The Result:

The result of deploying GWN series of Wi-Fi Access Points allowed the school to implement new teaching techniques, they saw an increase in student productivity and improvement of grades. Teachers were happy with this new system and found that students not only enjoyed the tools but participated more. Once the school board was able to see these changes they provided a budget to increase spending and scale the network as needed.
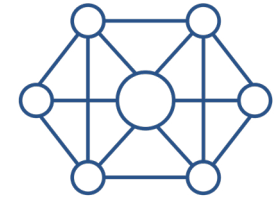
Key Features

Wi-Fi Scheduling

The main usage of Wi-Fi scheduler is to schedule the times when the Wi-Fi is ON or OFF, this will give the administrator a flexible way to control the AP. A k-12 school may have strict policies with allowing students access to the Wi-Fi and if a signal is not needed during after school hours the user can set a schedule and the AP will shut down the wireless signal during specified hours.

Time Policy/Voucher

The voucher feature allows clients to have internet access for a limited duration using a code that is randomly generated from the GWN controller. In a school setting admins may only allow students access to Wi-Fi for certain periods of time such as in the library or during a computer class customers. A Voucher codes can be generated with a set amount of time and can be delivered on command, once the voucher expires the student will no longer have access to the Wi-Fi.

MESH Network

With MESH networks, wireless connection is established between multiple APs, which is used to pass-through data traffic rather than client association. Each AP will evaluate the wireless channels available and route the connection through the fastest available channel. Some educational campuses such as large universities will need to have many APs thus the need to keep it organized using a MESH network.

Omni-Directional Antennas

In an open outdoor space such as the sports field at a large school, the GWN7630LR comes equipped with omni-directional antennas. The omni-directional antennas can be deployed to radiate coverage evenly among 360 degrees in the horizontal direction.

GWN.Cloud

GWN.Cloud is an enterprise-grade, management platform for Grandstream access points. The cloud platform allows for a user to access the network from the cloud platform remotely from any device. In case of emergencies an IT person could still login to the system should there be any issues that arise outside of normal working hours.