



# Case Study ON

## Premier Technology Education Institute

## About

It is a group of higher education institutes in India that focuses on core areas of information technology, such as Computer Science, Electronics, and Communication, as well as their applications in other fields.

This institute was established in order to provide Andhra Pradesh's rural youth with access to high-quality educational opportunities.

## The Challenges

- Connectivity between all different locations of the spread across state along with redundancy
- Application based traffic segregation
- Support of Latency Sensitive & Bandwidth Intensive applications
- Solution that requires any transport mechanism along with Load Balancing
- No Single Point of Failure
- Remote Sub campus – No road connectivity –Via RF Towers
- Large area: multiple buildings, outdoor areas, remote campuses.
- Planning for coverage, capacity, while minimizing cost
- Performance monitoring, troubleshooting, analytics.
- Wi-Fi access for guests

### IT Objectives at the Institute

The institute's mission is to bring technology and high-quality instruction closer to its students. With the same objective in mind, the institute campuses called for a solution that connects the students over Wi-Fi across the campuses.

## How Pi Led the way

### Wi-Fi on Cloud

Extensive due diligence proved Wi-Fi on the cloud to be the need of the hour and the most suitable solution for the institute. In India, this SDN-based cloud-controlled campus-wide network, which includes Wi-Fi provisioning from Pi, is the first implementation of its kind.

# INTERNET



Location 1



Location 6



Location 2



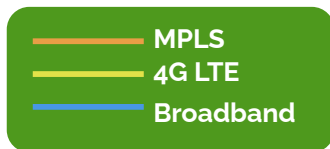
Location 5



Location 3



Location 4



Pi was responsible for the Supply, Installation, and Commissioning of SDN-based, cloud-controlled campus-wide networking, including Wi-Fi for the institute's campuses.

Core switches with a high switching capacity capable of meeting 100G requirements were installed in administrative buildings as part of the installation. Access Switches are installed in classrooms, dormitories, and other campus buildings where internet and intranet access will be made available.

This implementation provided students with seamless internet and intranet connectivity via Wi-Fi across all campus buildings and campuses.

## Conclusion

The Wi-Fi on Cloud solution is packaged with a wide stack of Managed Services from Pi. The delivered Managed Services Stack includes:

### The Support Scope:

- Compute utilization monitoring
- Network utilization monitoring
- Storage utilization monitoring
- Server level / Network security monitoring
- Track and escalate usage to customer
- RHES (Remote Hands and Eyes Support)

## Benefits

- **Path Selection:**  
Path awareness intelligence by automated fail-over and fail-back mechanism
- **Single pane of glass Management and Security**  
Policy Configurations, Access Control, Tenant Provisioning, Remote Diagnostics
- **Secure WAN**  
Secure direct internet access for cloud applications for Latency Sensitive & Bandwidth Intensive applications
- **Traffic Control**  
Improved cloud application performance by prioritizing business critical applications
- **Threat Prevention**  
High performance with cost effective threat prevention capabilities

## Benefits (contd.)

- **Application Control**  
Provides complete control over the creation of policies that permit, deny, or restrict access to applications or entire application categories.
- **Web filtering**  
Offers protection against web-based attacks, malicious or hacked websites, downloads of malware, spyware, or risky content, and websites that are hacked.
- **Sandbox Cloud Service**  
Provides an advanced threat detection solution that performs dynamic analysis to identify previously unknown malware and feeds that information back to preventative controls within your network, thereby neutralizing the threat.