M S RAMAIAH UNIVERSITY
CASE **STUDY**

Empowering education and
ushering growth with WiFi for campus.

![Indio Networks logo]

OVERVIEW

MS Ramaiah University, located in Bangalore, is a private deemed university ranked within the top 100 universities in India. It caters to over 18,000 students in South India. MS Ramaiah University wanted an on-premise hotspot controller solution which would allow them to integrate 16 campus wide housing departments, over 500 Access Points with easy manageability and onboarding of students.

REQUIREMENT

- Fast WiFi
- Reliable WiFi
- High concurrency handling
- Swift approval based onboarding and MIS integration
- Policy Enforcement
- Web logging
- Central Management

HOW WE HELPED

- Simplified campus wide control of network through UniBox
- Automated student registration using approval-based method and MIS integration
- Designed solution to handle 12000+ concurrent users
- Maintained access logs and browsing history of each student
- Enforced access and bandwidth policies for each group of users
- Easy integration with third party vendor hardware

M S RAMAIAH UNIVERSITY CASE STUDY

MS Ramaiah University is one of the leading learning hubs in South India. Established in 1962, MS Ramaiah University, today, caters to more than 18,000 students spread over a very large campus area. The university offers undergraduate, post graduate and doctoral programs in — Engineering and Technology, Management and Commerce, Art and Design, Pharmacy, Hospitality Management and Catering Technology, Dental Sciences and Science & Humanities.

MS Ramaiah University's hotspot network was spread out over a large area. They wanted to unify control and manageability of the entire hotspot network with an all-in-one solution which took care of all their requirements.

The problem was integrating 16 campus buildings with different faculties, 500 Access Points, 16 different VLANs and management of a concurrency upwards of 10,000 every day.

They wanted a solution which would make it easy for IT admins to manage the entire network, onboard users effectively, monitor network health and optimize the network for performance depending on analytics and reporting gathered.

CHALLENGES

Here are some key challenges we had to face while implementing this project:

- Large area to integrate
- Integration with third party network hardware
- Managing network under one umbrella
- Working with third party System Integrators
- Scaling for high concurrency handling

SOLUTIONS

The solutioning approach we took for this project was to provide M S Ramaiah University with our on-premise Campus Series UniBox Hotspot Controller.

UniBox hotspot controller is an on-premise hotspot controller unit which controlled and managed all core network elements, integrated all third party Access Points seamlessly.

UniBox aided IT admins to facilitate easy, quick onboarding of students, guests and faculties by separating VLANs across the entire network and segmenting users according to the VLANs.

Registrations of users was automated using approval-based mechanisms, and an MIS was also integrated into the system.

Using UniBox's dashboard, the IT admin could set policies relating to bandwidth, access and control to be applied to end users. The policy management function greatly helped the university to structure their resources optimally.

UniBox's reporting and analytics functionalities helped the University maintain access logs and user activity reports for each student.

The solution handles more than 12,000 concurrent users every day, with the UniBox deployed in active-active configuration.

IMPACTS

All of the university's goals were achieved with our solution. The project was deployed swiftly to the utmost satisfaction of university authorities. A unified view of the entire network, easy onboarding and simplified network management helped IT admins in optimizing the network. Here are a few other ways in which our solution helped:

- Increased usage of WiFi services
- Significant improvement in uptime of the WiFi network in the campus
- Reduced WiFi complaints by 50% after auto mating registration and enforcing single sign-on
- Increased average browsing speed per student by 60%
- WiFi network was optimized
- Students and faculty leveraged faster WiFi