Case Study

24online Deployed at
Lovely Professional University, India

In Nutshell

› More than a decade of
  product experience/
  solution development
› Supports next generation
  services
› Acknowledged player in
  Telecom & Hospitality
  industry
› Caters Wired, Wi-Fi, WiMAX
  and VSAT Networks
› Plug-n-play solution

The Bottom Line

❝ "We were constantly facing
high bandwidth usage and
unauthorized access from
students. Now entire user
traffic passes through
24online and only
authenticated user traffic is
allowed to access the
university network." ❞

24online Deploys Hotspot Management Solution at
Lovely Professional University (LPU), India

Background

Lovely Professional University – India's Largest University in terms of number of students with 35000+ students from 28 states of India and 26 countries around the world, aims to provide professional learning environment and bring exponential growth of student's abilities. LPU comprises of 600+ Acres campus and 3500 faculty and staff employees to offer more than 150 programmes. It is a residential university with separate boys and girls hostels facility for more than 15000 students.

LPU needed a complete billing and bandwidth solution for their university that can manage their network and deliver faultlesswireless internet connectivity to students, faculty and staff members throughout the campus.

Requirements

With the increasing demand of internet usage in educational institutes, managing bandwidth and internet access has become a dire need! Facing regular issues like high bandwidth usage, unauthorized user access and improper reporting to identify the users, LPU decided to deploy a comprehensive solution that manage internet requests from their campus, student accommodations, campus cafe and restaurant.

Mr. Ramnesh Kumar, NOC & Data Center Project Manager of Lovely Professional University, listed down their complete requirements of the solution. He said, "We require a solution that can manage Wi-Fiaccess requests from various locations of the university. Most importantly, the solution should have user authentication feature by which any user trying to access internet should first get a login page. The user should enter the username & password to login and post successful login, the user should be allowed to access our network. The solution should also be integrated with our internal [ADS] database for fetching student's details. The solution should allow us to create and manage different user profiles based on which it should be able to distinguish their bandwidth and package assigned. This will help us to restrict students on their usage and maintain reports based on user's usage".

Solution

Bandwidth Control: 24online bandwidth management functionality enables the university to define specific amount of bandwidth to each user. Based on the bandwidth defined in the plan of the user, user can upload and download. Once the defined amount of quota is exhausted, then user will have to purchase new plan. This way LPU can fairly distribute the bandwidth among all users and staff.

User Management: 24online's user management feature will help admin to manage all users and view connected users in the network instantly. It helps in managing the user life-cycle and track complete user details like package, bandwidth consumption, user status etc.

LPU creates different group wise plans for students, staff and admin by which different access policies can be defined.

Authentication, Authorization and Accounting [AAA]: 24online AAA functionality ensures the authentication and authorization of the user request received from the network. It provides authorization based on IP and MAC addresses as well as accounting based on time, duration, and usage.

ADS Integration: 24online solution is integrated with LPU's LDAP for smoothly communicating with their database server and fetch student's information and account details required for authenticating them. Integrating university's LDAP will also eliminate the need of recreating of complete user base in the 24online system.

Captive Portal Capabilities: It is important that all users accessing LPU's network should pass through determined authentication process helping to secure the network from malicious activities and threats. With 24online's captive portal technique, unauthenticated users will receive captive portal page before they can surf internet. 24online's captive portal feature offers various options to create and configure pre-login captive portal web pages. Different login templates can be designed and various authentication parameters can be integrated required for different login pages.

Data Transfer Features: By data transfer module, defining the amount of quota to be allocated for each user or a package can be done. 24online also facilitates to degrade the bandwidth after specific quota is consumed by the user.

Internet Coupon Management: 24online enables universities to provide internet coupons to access internet from any location in the university. Walk-in coupons can be generated for the selected packages with pins and passwords which can be further printed as prepaid cards.

Package Management: With the help of the package management feature, admin can create group wise, pool wise package for students, staff and visitors. Using the plan creation option, LPU creates 1 month complimentary package for their students, exhausting which students need to purchase new plans from the office.
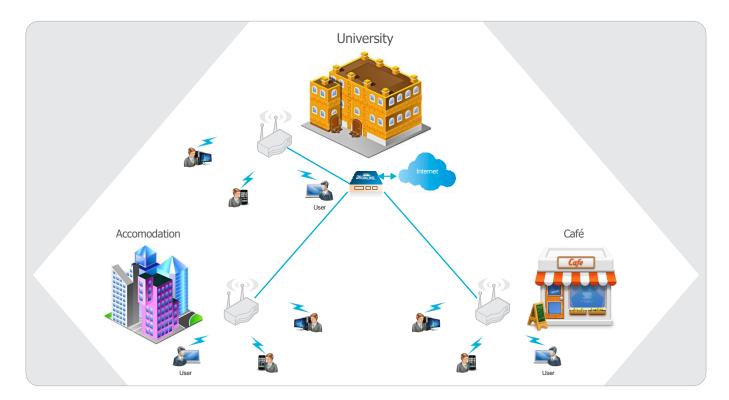
Reporting: Complied with the government norms to maintain the user surfing logs of users for specific time period, 24online Web surfing logger, helps in tracking and maintaining the websites and applications surfed by students, faculty, or other users from the network. With the help of this feature, admin can generate different type of reports in printable and graphical formats.

Statistics

Currently Four Appliances of 24online are deployed in HA (High Availability) at LPU to provide wireless internet connectivity throughout the university campus –

- Two 24online SMS 5000iX solutions in HA (High Availability) acting as Access Gateways
- Two24online SMS 2500iX solution in HA (High Availability) for Authentication, Authorization and Accounting (AAA)

Network Diagram

About 24online

24online is a leading internet access management and network management solution that offers wide range of internet access control and management solutions that enables ISPs, Hotels, Hotspots, Airports, Educational Institutes, Smart Cities, etc. to simplify their internet network. 24online addresses the challenges of customer acquisition, secured service provisioning, internet billing, monetization via internet services and revenue management. The solution has vast experience in catering to varied network like Wired, Wi-Fi, Cloud, VSAT and LTE. With more than a decade of experience, we offer the world class solutions in the most cost-effective way.

STCC14/CS-LPU2712

24 ONLINE
INFO TECHNOLOGIES PRIVATE LIMITED

Contact Us
sales@24onlinebilling.com