Introduction

Technology is becoming more pervasive and critical in the classroom environment. 1:1 computing, flipped classrooms, blended-learning and web-assisted courses all rely on both students and teachers having reliable and secure network access from one or more devices. While this promises to enable new and more successful educational models, there are significant issues to fully realizing the potential. Getting 30-40 students and teachers connected and able to use and share various resources including video requires a high performance wireless network. And once online, tech-savvy students may be more interested in their social media connections than today’s lessons.

Ruckus and NetSupport have developed a joint solution that addresses these key issues so that schools can confidently and securely implement new technology-based learning approaches. Ruckus Wi-Fi provides high performance wireless connectivity so that students have fast connections, even in dense classroom environments. NetSupport’s School provides comprehensive classroom management capabilities to effectively deliver educational content and manage student participation.

Wireless Infrastructure To Enable Classroom Connectivity

The critical enabler for successful technology-enabled classrooms is high quality wireless connectivity. Slow or dropped connections and limited range are simply too disruptive and unacceptable to teachers, students and administrators. Wi-Fi needs to support high density concurrent usage, often with video and other bandwidth-intensive content, regardless of device type, interference or classroom configuration. Ruckus Smart Wi-Fi solutions are designed to provide more robust, adaptive and affordable wireless LAN environments within schools, colleges and other locations where IT resources are sparse but requirements for a secure and robust Wi-Fi infrastructure remains high.
The Technology

At the heart of all Ruckus Wireless products is its patented Smart Wi-Fi technology. Smart Wi-Fi is a collection of unique technology breakthroughs in the areas of adaptive RF control (BeamFlex), sophisticated application-aware QoS (SmartCast), advanced security mechanisms and resilient Wi-Fi meshing (Smart Mesh Networking). Integrated within Ruckus Smart Wi-Fi systems, these technologies ensure reliable and predictable performance, essential for supporting the most challenging applications.

BeamFlex is the industry's most advanced Wi-Fi smart antenna implementation. Combining a compact internal antenna array with expert control software, BeamFlex continuously optimizes the connection for each connected client to bypass interference and physical barriers, and increase range and performance of the Wi-Fi network from 200 to 300 percent. Highly sensitive antenna elements also deliver the industry’s most sensitive Wi-Fi receiving capabilities. This results in the most reliable Wi-Fi system available today.

In addition, Ruckus provides a comprehensive BYOD solution to get new users and devices securely connected to appropriate resources without any IT involvement.

NetSupport School: Classroom Instruction & Management

The award winning classroom management solution, NetSupport School, provides teachers the tools to monitor, orchestrate, assess and control the classroom using Ofsted best practice in a technology-led teaching and learning environment. With educational budgets under increasing pressure, NetSupport School enables schools, colleges and training institutions to cost-effectively deliver a rich and effective online learning environment running over Ruckus Wi-Fi.

NetSupport School helps teachers maintain student focus by monitoring and controlling application and web usage. It also saves time by automatically sending and collecting work files, plus with a dedicated Windows 10 teacher app, launch office 365 and share files using OneDrive. Using the unique student journal and toolbar, teachers can highlight lesson objectives and expected outcomes, and improve support with online help and chat requests.

VIEW STUDENT SCREENS IN REAL TIME (MONITOR MODE)
- Monitor the entire class in a single view
- Scan through sets of student PCs in predefined multiples

REAL TIME INSTRUCTION (SHOW MODE)
- Show the Tutor’s screen to selected students
- Deliver your presentations optimised for wireless networks
- Virtual Whiteboard
NetSupport Classroom Management

CONTROL
- Power On or Off and manage all classroom computers
- Blank Student screens to gain attention
- Prevent students printing in the classroom
- Prevent data being copied to or from USB storage devices
- Teacher app for Windows 10
- Multi-platform support

MONITOR
- Real-time audio monitoring
- Instant Messenger monitoring
- Real-time keyboard monitoring
- Application metering and control
- Internet metering and control

LEARN AND TEST
- Question and Answer module
- Student surveys
- Student testing and quiz
- Language lab tools

TECHNICIAN’S CONSOLE
- Transfer files
- Hardware and software inventory
- Assistance to teacher
- Review individual client settings
- View and control services, processes and applications running

Interactive Classroom
The explosion of new devices, high-speed Internet connectivity, and online educational resources is driving schools to investigate and deploy new tools and infrastructure to enhance their curriculum and accelerate student learning. Ruckus and NetSupport provide a complete, proven solution to enable teachers and students to focus on innovative new learning approaches, and streamline the process to reduce or eliminate the need for extensive IT support.

Contact us at http://www.ruckuswireless.com or http://www.netsupportschool.com to learn more.