Minnesota State Community College and Technical College

Statistics

- 9,000 students systemwide
- 4 campuses: Moorhead, Fergus Falls, Detroit Lakes, and Wadena MN
- M-State serves students in credit courses through more than 120 career and liberal arts programs.

“Convenience for our users, all the BYOD devices...that sheer convenience for them to get connected easily, it’s pretty hard to put a price on that.”
— Dan Knudson
Director Of Network Services

Making Wireless “Solid, secure, and easy to setup”

“Wireless isn’t what it used to be, it used to be a convenient add-on,” Knudson says. For today’s modern education environment, providing reliable wireless access while maintaining security standards is imperative. Over-the-air encryption and authentication are both critical requirements in keeping users safe from attacks and vulnerabilities.

With this in mind, M State faced a challenge that every WPA2-Enterprise deployment faces with diverse BYOD environments: How do we reliably and easily on-board our students’ and staff’s personal devices for secure wireless access?

“With all the tablets and smartphones and laptops exploding on the market, tons of those devices are coming onto our campus,” Knudson says. “Because of all the mobility, we needed to make wireless solid, secure, and easy to set up.”

The Challenge of BYOD

With the rapid growth of the BYOD movement, and the ever expanding diversity of devices coming onto campuses, IT departments around the world have struggled to provide users with a simple and easy-to-use approach for configuring their devices for WPA/WPA2 Enterprise. Users often misconfigure, skip crucial security settings such as server certificate validation, or become frustrated with lengthy manual configuration guides, which also need to be constantly updated and maintained. The result: overwhelmed help-desks and
IT departments trying to deal with dissatisfied and frustrated users who are struggling to access mission-critical wireless networks from their personal devices.

“Students coming to campus would have to visit the help desk and get help setting up and getting on secure wireless. They would literally have a table full of devices from students who had dropped them off to get configured. Our help-desk was always having to help users get connected,” Knudson recalls.

Knudson knew there had to be a better way for students to self-service and configure themselves for the WPA2-Enterprise network. The M State help desk was wasting precious man-hours configuring BYOD devices, and students and staff were frustrated with the challenge of accessing wireless on campus.

The JoinNow Solution

In search of a solution, Knudson found JoinNow MultiOS, a simple, self-service, web-based software wizard that automatically configures and connects BYOD devices for secure wireless networks. JoinNow MultiOS allows network administrators to create and deploy easy-to-use configuration assistants, making it as simple as possible for users to configure and connect to the network.

JoinNow deployments are fully customizable to include secure SSID names, EAP type, server certificate information, encryption type, proxies and other technical settings. For the network administrator and IT staff, JoinNow packages are fool-proof and simple to create and deploy, and can be hosted on a local webserver or in the cloud. A web-based Management Portal assists with creating, managing and deploying packages, as well as monitoring connection and error logs. Help-desk users may also be granted read-only accounts to access error and device logs, making the troubleshooting process a breeze.

Today, students and staff members connecting their laptops, smartphones and tablets to the WPA2 network for the first time are ushered to the M State JoinNow deployment. The user’s device and Operating System is automatically detected. After entering their username and password, the device is automatically configured, connected, and migrated to the secure SSID.

This self-service approach dramatically cuts down on configuration errors, ensures server certificates are properly configured, boosts secure wireless adoption, and increases connection reliability. If any errors are encountered during the configuration, JoinNow identifies the error, reports detailed device and error information to the Management Portal and helps resolve the issue.

Providing students and staff with the proper tools to connect ultimately improves the end-user experience and satisfaction with WPA/WPA2-Enterprise networks by eliminating friction, decreasing potential errors, and simplifying the configuration and authentication process.

“For our students and our faculty, wireless is all they use. It’s very important that someone can come to campus and just use the technology to get authenticated and configured automatically,” says Knudson.
“Our help-desk doesn’t have to run around and try to get all these devices configured and set up. The user doesn’t have to bother anyone, they can get connected on their own…..Our help-desk loves that.”

For M State, using JoinNow has taken a huge burden off of the help-desk. By providing the student population with a solution to configure their own BYOD devices and removing the need for IT involvement, the help-desk no longer wastes precious resources fighting the constant battle to configure or troubleshoot personal devices.

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With a solution to the WPA/WPA2-Enterprise challenge in place, M State continues to see the benefits of offering it’s thousands of users a simple approach for configuring and connecting their personal devices to secure wireless.

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