Work Anywhere on Any Device and Application with Cisco Unified Workspace Services for Bring Your Own Device Smart Solution

Founded in 1794, top-ranked Bowdoin College has approximately 1700 students. With 33 academic departments, advanced interdisciplinary programs, and flexible curriculums, a Bowdoin education is a highly personalized experience.

Bowdoin worked with Cisco to:

- Enhance teaching and learning innovation
- Streamline IT management
- Support the ongoing bring-your-own-device (BYOD) trend

Challenges

It’s a challenge to support anywhere, anytime teaching through popular devices like iPads and iPhones. Bowdoin takes pride in its excellence in delivering a tailored experience. Another critical reason students select Bowdoin is the level of technology that the campus supports, with high-performance, ubiquitous wireless Internet access topping the list. Students and faculty are increasingly requesting access to wireless networks on a wide array of personal mobile devices, transforming the BYOD trend from an emerging phenomenon to the norm. Mitch Davis, chief information officer for Bowdoin College, said: “A large portion of our population brought their own personal devices before BYOD became a popular term. To enable anytime, anywhere learning, wireless access on any device is a crucial business requirement at Bowdoin.”

The need for comprehensive, reliable indoor and outdoor wireless network throughout the campus is another facet of the challenge. When there were only hundreds of users, wireless access was concentrated in hotspots such as common areas where students congregated. But as demand for wireless began climbing into the thousands of users and as personal devices continued to proliferate, Bowdoin saw the need to deliver a more comprehensive, high-capacity indoor and outdoor wireless network that would enable access from anywhere on campus.

Finally, Bowdoin needed to decrease coverage interruptions and minimize IT management overhead. Supplying updated wired access across the 95-building environment meant not only expanding the coverage area, but also supporting a variety of devices, improving dependability by mitigating sources of interference, and scaling to meeting escalating demand. At the same time, the college needed to manage the wireless network without costly manual troubleshooting and network management problem.

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Solution

To address these challenges, Bowdoin turned to Cisco who has designed their current wireless infrastructure. Cisco worked with Bowdoin’s Mitch Davis to:

- Add wireless access points and controller and management tools to create a borderless network that allows the university to connect anyone (student, faculty, or guest) to any device or service, virtually anywhere on or near campus, at any time.
- Deploy Cisco® Identity Service Engine to provide unified policy and access controls for secure connectivity.
- Introduce Cisco Prime™ Network Control System to simplify and automate network management.
- Deploy the Cisco Mobility Service Engine to track assets and devices and help automate debugging.
- Use Cisco CleanAir™ technology so that the IT team can automatically detect and mitigate RF interference to help protect performance, increase reliability, and deliver unprecedented RF troubleshooting, resulting in a high-quality, high-performance experience.

Results

- **Enhance teaching and learning innovation** by providing wireless access anywhere faculty and students want to be. Even in packed classrooms, students can use iPads over a wireless network to ask questions, increasing interactivity and providing an engaging learning environment. Davis explained: “The upgraded wireless network provides support for high-density areas. So even if a professor says ‘Let’s all stream this video now,’ we know the network will handle it.”
- **Streamline IT management.** With Cisco tools, the IT team is more efficient and spends less time manually troubleshooting, allowing them to more easily scale the network without incurring substantial overhead. “CleanAir and other innovative Cisco management technologies provide so many benefits. We spend a lot less timing travelling around campus diagnosing problems,” Davis commented.
- **Support the BYOD trend.** Cisco technology supports BYOD by providing secure, wireless connectivity. “Now students and faculty can collaborate with ease, working anywhere, anytime on campus without even thinking about connectivity, because it’s there transparently whenever they need it.”

How Cisco Services Can Help

Companies often start this journey by adding wireless and security capabilities to their network, but run into problems like poor access to applications, poor network performance, poor user interface, poor compliance, and poor security. These problems undermine the productivity benefit and put IT in a reactive mode.
Cisco Unified Workspace Services:

- **Provides the plan, build, and manage services to help enterprises and service providers** continuously evolve and improve their IT infrastructure to support changing organization requirements.

- **Take a holistic, architectural approach.** According to Cisco’s 2012 Cisco IBSG Horizons study of 600 U.S. IT and business leaders, companies are recognizing the need for a holistic approach to planning and designing a flexible BYOD environment: “BYOD is here to stay, and managers are now recognizing the need for a more holistic approach to proactively managing/growing the organization, one that is scalable and addresses mobility, security virtualization, and network policy management in order to keep management costs in line while simultaneously providing optimal experiences.”

- **Create policies and security architecture to meet a flexible work environment.** In a 2011 Connected World report, Cisco found that three of five employees believe they aren’t responsible for protecting company information and devices. To manage this environment, IT needs to help ensure that the policy and governance plans are robust enough to protect sensitive corporate and employee information. Security and policy must extend to every mobile device. Cisco Services can help you evaluate your application, mobility, collaboration, security, and network architecture to identify gaps and help you prepare for new technology adoptions. Cisco can help you manage your security risk and policies for any device.

- **Change the game.** Customers can change the game as they embrace a flexible mobile experience. Cisco can go beyond traditional BYOD solutions to help you integrate rich media capability and application availability across your enterprise. Cisco can help you use Cisco networking technology and application expertise to help you integrate new business processes.

- **Adopt pervasive video.** Cisco can help ensure that networks can support and adopt pervasive video so that your organization benefit from the power of this technology.

- **Provide a flexible and consistent applications experience.** Cisco can integrate plans for a virtualized desktop to flexibly provide the same work experience from any device.

- **Rethink business processes.** Cisco can work with customers to plan for and integrate new processes that take advantage of flexible access to information and tighter integration.

### Conclusion

Cisco Services can help drive outcomes for organizations—whether in the public or private sector—through an architectural approach that can increase innovation, help streamline IT management, and support a flexible user experience.

Through this outcomes-based approach, Cisco and our partners can work with you to define a multigenerational, multiyear plan to address current and future business needs across architectures and solutions. Whether you are in discussions about renewing current services or looking at new business opportunities, we can help you define a comprehensive set of services—moving your organization from reactive to proactive and preemptive—to help ensure your ongoing business success.