

# Education on Leading Networks

Reykjavik University supports world-class research and education with a flexible Cisco network that combines power with manageability.

“ Having wireless availability and performance for every student is as important as having desks for them. ”

- Heidar Jon Hannesson, CIO, Reykjavik University

At Reykjavik University, thousands of students and hundreds of faculty rely on the Internet for research, lectures, and collaboration inside and outside the university. Network slowdowns have a direct impact on the quality of education delivered.

## Challenges

- Upgrade wireless network to meet demands for advanced wireless access
- Support high-network capacity for collaborative research and education
- Manage network with limited staff

As the largest private university in Iceland and having a strong technology focus, Reykjavik University needs high-performance networks to stream video lectures, teach computer science classes, and connect faculty with research collaborators around the world.

Most people now use wireless instead of wired devices and carry more than one device. Combined with a booming student population, the network environment at Reykjavik University's new campus could not provide students and faculty with the experience they needed.

“Our students keep on top of technology and may be using multiple devices,” says Heidar Jon Hannesson, chief information officer (CIO) at Reykjavik University. “Having wireless availability and performance for every student is as important as having desks for them.”

In addition to high-volume wireless access, research grants often prioritize interuniversity collaboration. Reykjavik University decided to expand the wired network and upgrade the wireless network. “We needed a solution that was powerful and flexible, but easy to manage with our small IT staff,” says Jacky Mallett, IT project manager at Reykjavik University. “Cisco's integrated networking solution reduced management and saved significant amounts of manpower.”

## Case Study | Reykjavik University

Size: 4,000 Students

Location: Reykjavik, Iceland

Industry: Education



# High-performance Cisco® networks meet the diverse academic and research needs of a leading university.

## Solutions

- Upgraded wireless with high-density 802.11ac Cisco access points
- Gained visibility into networks with Cisco Prime™ Infrastructure
- Established foundation for location services with the Cisco Mobility Service Engine (MSE)

### High-density wireless networks

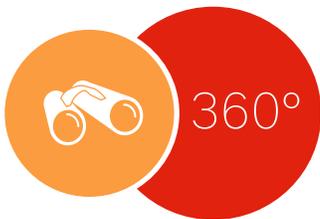
We encourage group work, which leads to large numbers of students congregating in small areas. Cisco access points include integrated support for the high-performance 802.11ac networking standard, which is ideal for high-density areas.

“When we host conferences, we can easily register up to 700 devices in an auditorium,” says Mallett. “We previously saw slowdowns from the overcrowded network, but the Cisco access points now handle crowds flawlessly.”

### Deep visibility, easy management

Using Cisco Prime Infrastructure, we can manage the entire Cisco network and analyze traffic patterns from a single location.

“We have a very small IT staff, so we can’t spend all of our time troubleshooting network issues,” says Mallett. “The ability to look up individual user sessions helps us work through issues much faster.”



Cisco Application and Visibility Control (AVC), embedded in the routers and wireless LAN controllers, enhances network management by identifying and prioritizing traffic. By integrating Cisco AVC with Cisco Prime Infrastructure, IT staff gain a 360-degree view of all devices, users, and applications from a single location.

### Connecting devices with location services

Cisco MSE supports location-based services as a part of Cisco Connected Mobile Experiences (CMX). Through location analytics, our IT staff can identify congested areas and track traffic. Radio frequency identification (RFID) tags have the potential to improve tracking, access, and security as well.

### Instant access across the campus

According to a recent Forrester Report, IT staff spend close to 80 percent of their time on repetitive tasks such as troubleshooting, configurations, or upgrades. Cisco Catalyst Instant Access and the Cisco Catalyst 6800ia Switch help to reduce the number of configuration and management points. As a result, we can dramatically improve efficiencies and lower the cost of ownership.



## Results

- Gained visibility into network to analyze traffic and identify problems
- Reduced time spent troubleshooting network issues
- Improved performance through high-density connections and reduced congestion

## Investing in the future

With the biggest 802.11ac deployment in Iceland, Reykjavik University is dedicated to providing the best technology experiences to faculty and students. IT staff plans to expand services, such as to further secure networks to facilitate collaboration using confidential data.

“Well-run, high-performance, and flexible networks are vital for us,” says Hannesson. “We’re better supporting international collaboration for research staff, which is crucial for our competitive advantage as an international university in the long run. At the same time, the networks offer new learning experiences for our students, from video lectures and interactive tutorials to hands-on network experience. We’re producing better-educated students who we expect to accomplish even greater things in the future.”



## Products & Services

### Wireless

- Cisco 5760 Series Wireless LAN Controllers
- Cisco Aironet® 3720i Access Points
- Cisco Mobility Services Engine
- Cisco Identity Services Engine

### Network Management

- Cisco Prime Infrastructure

### Routing and Switching

- Cisco Catalyst 6807 Switches
- Cisco Catalyst 6880 Switches
- Cisco Catalyst 6800ia Switches
- Cisco Application Visibility and Control
- Cisco ASR 1002-x Router

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