*College of William & Mary Relies on MySQL to Deploy Network Admission Control Security System*

**Education**

OS: Red Hat Enterprise Linux

Database: MySQL

Language: Java

"The Network Admission Control System (NAC) is a mission critical application for the College of William & Mary. MySQL provides the reliability and high availability to ensure all user authentication policies are continuously available."

**Norman Elton**
Network Engineer
College of William & Mary

## College of William & Mary Overview

The College of William & Mary, founded in 1693, is the second oldest college in the United States. It is home to over 8,000 students and faculty, and provides over 45 undergraduate and graduate programs. The College was named one of Intel's "50 Most Unwired College Campuses" for its secure, campus-wide wireless network. To enforce the College's strict security policies, William & Mary developed a role-based Network Admission Control (NAC) system that ensures that all students, faculty and guests have secure access to their respective networks and resources. William & Mary relies on MySQL to securely sign users on to the proper network so they can have access to their respective information and data.

## The Business Challenge

Prior to implementing the Network Admission Control system at William & Mary, users relied on physical network jacks to connect to a particular network. The problem with this scenario was that each network jack was configured for a specific network, based on its location. This meant that a staff member connecting to the College network from a dormitory could only gain access to the student network and would not be able to access necessary resources on the faculty network. Changing the configuration of a network jack would require an on-site visit to manually rewire it, a process which was both cumbersome and time consuming.

## The MySQL Solution

The College of William & Mary was one of the first universities to deploy a NAC system to improve network access and security. It gives users greater flexibility to connect to the network based on who they are, rather than where they are connecting, helping to secure their information assets.

MySQL enables the NAC system to authenticate users and enforce policies that control which network – Guest, Student or Faculty – users and devices can connect to and what information they have access to. In addition, MySQL and the NAC system enable the network engineers to:

- **Reduce security threats** by preventing unauthorized users from accessing secure data
- **Improve visibility** into which users and devices are connected to the network
- **Track users visits** to the network including connect and disconnect historical detail

Furthermore, the NAC system is a mission critical application for the College. If the NAC isn't available, students, faculty and guests do not have access to the network. Therefore, MySQL's reliability is a perfect match for the NAC system's high availability requirements. To achieve such reliability, the College uses MySQL Replication to ensure all data related to the network infrastructure and users policies is continuously available.

# MySQL Enterprise

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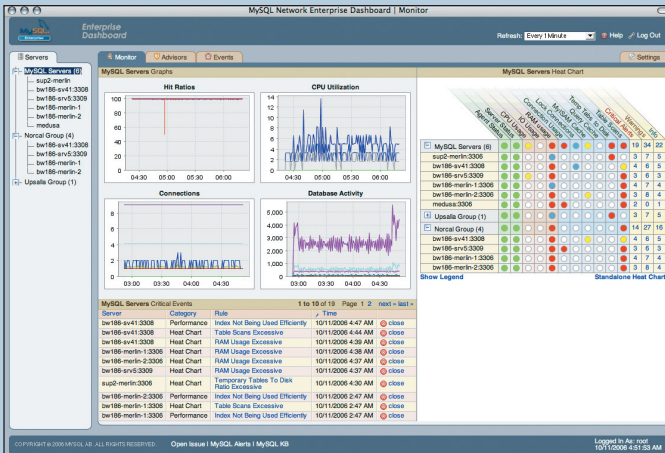


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## About MySQL

MySQL is the most popular open source database software in the world. Many of the world's largest and fastest-growing organizations use MySQL to save time and money powering their high-volume Web sites, critical business systems, and packaged software. At **www.mysql.com**, Sun provides corporate users with commercial subscriptions and services, and actively supports the large MySQL open source developer community.