

Case Study

Background

Morrisville State College (MSC) is a college of the State University of New York, founded in 1908. Approximately 3,200 students are enrolled in 23 bachelor's degree programs and over 50 associate degrees, spread across two campuses in New York. Programs are offered in Agricultural Sciences and Management, Animal and Equine Science, Computer Information Technology and many more. MSC recently was ranked #33 Best Regional College in the US News & World Report Best Colleges issue.

In the year 2001, MSC was considered one of the most technologically advanced colleges in the country for its ThinkPad program and wireless technology initiative. Then on June 21, 2007, MSC announced the world's first large-scale implementation of a draft 802.11n wireless network. The college continued its technology tradition recently when it became the first in the nation to comprehensively replace all phones in residence halls with individual cellular phones for students.

The Challenge and Solutions Considered

We recently talked to Rob Gaudreau, Network Administrator, and 2004 graduate of MSC, to find out more about their experiences with the NetEqualizer. Here is what we learned...

Morrisville State College experiences all of the typical bandwidth-related problems that higher educational institutions normally face. They have a mix of staff, students, and faculty who all want available and fast Internet access. MSC prides itself on being vendor-neutral. In their initial search, they started looking for products that could address this problem and eventually landed on a shaping system from Blue Coat. After years of using this device in their network, they decided that they wanted to switch to an easier-to-manage, more cost-effective solution. They found NetEqualizer in 2007, and have never looked back.

Why NetEqualizer?

When Morrisville State College originally chose the NetEqualizer, they selected it because of its affordable pricing and simple settings that allowed for "set it and forget it" management. They also enjoyed the easy, simple interfaces that allowed them to solve their primary problem efficiently.

MSC started with a NE2000 45Mbps license in May 2007. They upgraded to a 100Mbps license later that year. The NetEqualizer has continued to grow with them, as they grow their network capability. In June 2010, they traded-in their old NetEqualizer for an NE3000, and purchased a 350Mbps license. In 2012 they again refreshed their technology, and upgraded to 1Gbps, which is what they are using today.

Executive Summary

Customer: Morrisville State College (morrisville.edu)

Industry: Higher Education

Location: Morrisville, New York

Students: 3,200

Challenge: Provide fast Internet access across students, faculty, and staff.

Solution: NetEqualizer 3000 series (NE3000-1Gbps)

Results:

- Bandwidth shared equitably across groups
- Network running smoothly even during peak

Benefits:

- Affordable
- Reduced management – "set it and forget it"
- Real-time Reporting (RTR) keeps them informed.
- License upgrades and trade-in value leveraged their investment



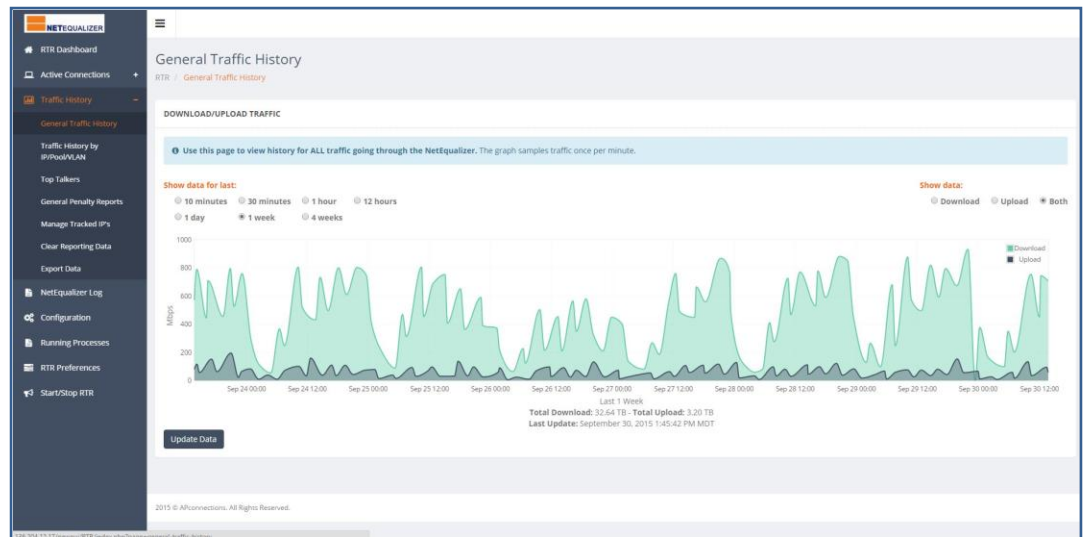
Live NetEqualizer Results

Morrisville State College network administrators recently upgraded to the newest software version (Release 8.3) and are excited to utilize the new Real-Time Reporting (RTR) features. After working with the new reporting interfaces for a few weeks, MSC reported back that they love access to real-time data and the ability to slice and dice the information in various ways with the graphs offered by the NetEqualizer. In particular, they like seeing something simple like bandwidth usage interpreted and reported in many different ways, as available in Top Talkers (bar chart of the biggest bandwidth users), Penalty Histories (graph showing when equalizing kicked in on the network), and the classic Active Connections table (all usage for all IPs on your network in real-time).

“I am a graph geek,” says Rob. “I love all the different ways the data going through the NetEqualizer can be viewed.”

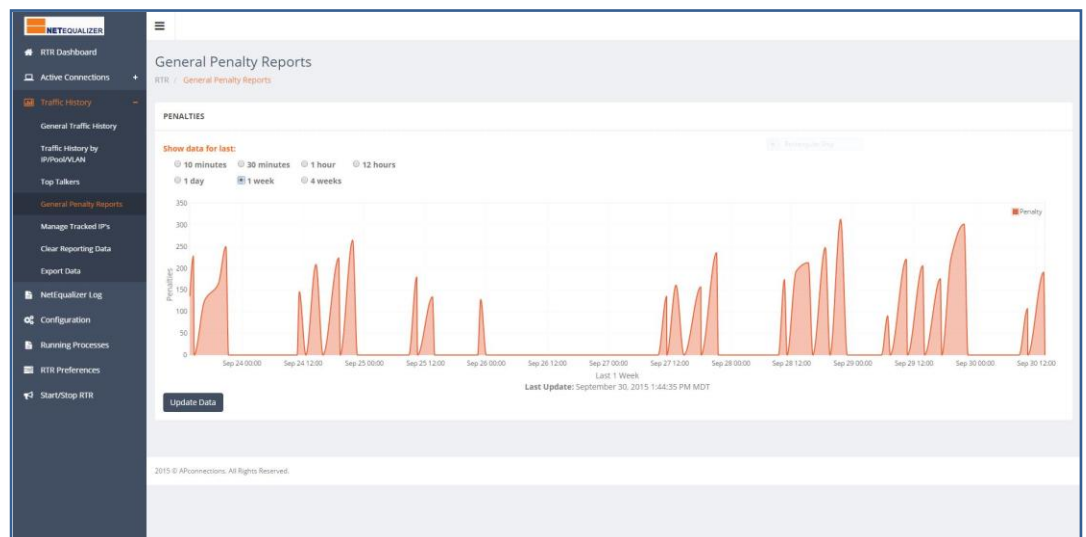
We recently reviewed some of the Real-Time Reporting in place at MSC. Here we share some of the more interesting graphs, which demonstrate the value of the 8.3 Release – you really need to get updated if you are not already!, and also show the NetEqualizer in action - shaping their network to help resolve congestion.

First, take a look at this graph to the right, which shows bandwidth usage for the whole network over the last week.



Now, take a look at their penalty history for the same time period. Notice how the number of penalties directly correlates to the busyness of the network.

Here is what is going on behind the scenes. As the MSC network nears congestion, the NetEqualizer is jumping in and throttling back low priority applications. So, even though the graph shows that they are at capacity, the user experience hums along without interruption. In other words, the MSC network can run at capacity all day while still providing good service to students without latency and interruptions.



This is exactly how we designed NetEqualizer to function. Because it makes all its decisions on a behavioral basis, there is no need to intervene during congested times.



The Future

As they get more comfortable with the new features in 8.3, MSC hopes to explore some of the other features of the NetEqualizer - including Pools and Time-of-Day Configurations - to further optimize their network.

About Morrisville State College

The Morrisville State College, formerly the State University of New York at Morrisville or SUNY Morrisville, is a college of the State University of New York system. It offers 22 bachelor's degrees and a wide variety of associate degrees at two campuses in central New York, United States: Morrisville and Norwich. Programs are offered in Agricultural Sciences and Management, Animal and Equine Science, Computer Information Technology and many more.

The NetEqualizer is a great little box. It allows our students, faculty, and staff to always have a robust connection to the Internet while fairly equalizing our connection at peak times.

Rob Gaudreau
Morrisville State College

About APconnections, Inc.

APconnections is an innovation-driven technology company that delivers best-in-class network traffic management solutions to give our customers better networks, with zero maintenance, at the best prices. We specialize in turnkey bandwidth shaping and intrusion prevention system (IPS) appliances.

APconnections is based in Lafayette, Colorado, USA. We released our first commercial offering in July 2003, and since then thousands of customers all over the world have put our products into service. Today, our flexible and scalable solutions can be found in many types of public and private organizations of all sizes across the globe, including: Fortune 500 companies, major universities, K-12 schools, and Internet Providers on six (6) continents.