Domotz Case Study

Cape Fear Community College: Cyber Crime Team leverages Domotz for Server Management

May 2020

domotz

Cape Fear Community College, a world-class, public college based in North Carolina, has been educating students for more than 60 years on Health Sciences, STEM, Liberal Arts, Business & Information Technologies, and more. As a vocational college, many of their students work remotely but require access to the campus resources. The Business & Information Technology school, focusing on Cyber Crime Technology, has taken advantage of Domotz to monitor servers and virtual machines used by their professors and students to ensure continuity and fast response to system management needs.

21st Century Academics...

Greg Vandergriff, Program Director of the Cyber Crime Technology, and his team prepares students to enter the field of computer crime investigations and private security. These students learn how to investigate cyber-crimes, properly seize and recover computer-based evidence, and aid in the prosecution of cybercriminals. The course work branches across disciplines of criminal justice and computer information systems. Graduation from the Cyber Crime Technology program yields opportunities with state and local government criminal justice agencies.

A Cyber Crime Focused Network ...

A critical aspect of the Cyber Crime Technology (CCT) program is the ability for students to practice ethical hacking. In order to enable this in a safe environment, the Cape Fear Community College IT department gave the CCT program authority to create their own network with servers, virtual machines, and necessary equipment. The CCT team needed to create their own IT department to manage this network and the underlying infrastructure associated with it. As the team built out the network, they realized they needed a better way to manage and respond to issues regarding servers and virtual machines.

Enabling Success in a Sandbox...

Cape Fear Community College enables students through remote and distance learning. This added challenge for the CCT team means that they need to create and destroy

domotz

"sandboxes" for their students and professors. These "sandboxes" are secure, safe environments for students and professors to play, educate, and discover real-world scenarios that graduates will encounter. These "sandboxes" are enabled through server farms and virtual machines enabled on the CCT IT network. The CCT team takes advantage of Domotz's monitoring capabilities to ensure that these servers and virtual machines are up and running as expected.

Tracking Stats and Usage...

The CCT team took advantage of Domotz's Ubuntu Agent and placed it into their servers to monitor and manage the virtual machines spun up through Proxmox's virtualization management solution. Domotz Agents are added based on system needs, looking across multiple Virtual LANs within the CCT IT infrastructure. Through Domotz Eyes, the Domotz agents look within the Proxmox VMs to see stats such as "time on," "time used," and "CPU performance." Alerts are generated to the team when a server goes outside the normal expected behavior allowing the team to take immediate action.

Rapid and Remote Response...

Given the nature of Cape Fear Community College and the fact that students often have full-time jobs, education and lab work often happens after standard working hours, continuing late into the night and/or early mornings. In a situation where a student or professor is working on a virtual machine and the system goes into a troubled state, the CCT team leverages Domotz to remotely access the system to restart the server. The key benefit here for the CCT team is they are able to fix issues quickly, remotely, and at any time without the need for going to the college campus.

More than just Monitoring...

Like the CCT team, your clients need and expect a rapid response to problems. The networks and the systems built by you for your clients are expected to be up and running 24/7. Inevitably, situations occur that can take down all or part of these systems. Using Domotz can help ensure that you are notified immediately when a system is in a troubled state. Remote access into these systems helps ensure rapid response and getting your clients working again.