



Grass Valley

Customer profile

Leading provider of technology solutions and services for the media and broadcasting industry.

Industry

High technology.

IT environment

Typical Grass Valley installations consist of 10 to 200 media servers, primarily running on Microsoft Windows operating systems.

Challenges

Create media server solutions that provide protection against security threats without sacrificing mission-critical system performance or network bandwidth.

McAfee solution

McAfee Embedded Control.

Results

- Protects against viruses and other known threats as well as zero-day and advanced persistent attacks.
- Provides robust protection in an environment in which performance without latency is critical.
- Requires minimal to no administration, maintenance, or updates.

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—Tony Combs
 Solutions Architect
 Grass Valley

Grass Valley Secures Real-Time Broadcasting and Video Production with McAfee Embedded Control

For more than 50 years, San Francisco-based Grass Valley has been providing unmatched live production, news, and distribution technology solutions and services for many of the world's leading broadcasters and video production facilities, as well as independent video professionals. Customers such as CNBC, BSKYB, and Major League Baseball trust Grass Valley solutions to cover the world's most high-profile live events, as well as to benefit from efficiencies in day-to-day operations. When viewers watch news, sports, or entertainment programming—whether on a television, the web, or a mobile device—there's a good chance they are watching Grass Valley at work in today's connected world.

Traditional Security Not an Option for Grass Valley's Customers

For several years, Grass Valley developed and sold media servers without any built-in malware protection. "Not having antivirus protection in place is obviously a dangerous proposition," says Tony Combs, solutions architect at Grass Valley. "In an environment where enormous sums are being paid for 30-second commercials, the cost of disrupted or delayed video due to malware could be equally enormous. At the same time, in real-time video and broadcasting environments, traditional anti-virus protection may not be suitable. With media servers processing video often at 90% capacity, our customers simply cannot afford to sacrifice network throughput or CPU usage while antivirus software retrieves updates and scans for viruses. This specific type of environment can't withstand any kind of latency."

The loss of data due to a virus outbreak is detrimental in the media and broadcasting industry. In addition to the losses of advertising revenue, on-site virus cleanup is expensive. For these reasons, Grass Valley knew it needed to be proactive in providing appropriate security for their customers.

McAfee Embedded Control Now Built Into Every Windows-Based Device

When Combs learned about McAfee® Embedded Control, which takes up less than 20 MB of disk space and does not interfere with runtime performance or network throughput, he was excited to test out the solution. McAfee Embedded Control software uses dynamic whitelisting to maintain the integrity of a system, allowing only authorized code to run and only authorized changes to be made. With McAfee Embedded Control, systems built on a commercial operating system appear to malware as a "black box," or closed, proprietary operating system. By incorporating McAfee Embedded Control in its media servers, Grass Valley could reap the benefits of using Microsoft Windows without incurring additional risk or losing control over how the solutions are utilized in the field.

"Initially we intended to add McAfee Embedded Control only to our K2 media client systems that run Microsoft Windows XP Embedded," states Combs. "The McAfee solution worked extremely well at locking down the environment and was so non-intrusive that we decided to use it on all of our Windows-based servers. It doesn't matter if the device is streaming or playing, recording or storing, transcoding or editing video, McAfee Embedded Control is simply not intrusive. Now, every Windows-

based media server sale includes McAfee Embedded Control, whether the sale is 10 media servers to a small TV station or 200 for a major sports organization.”

Satisfying Customers with IT Best Practices and Non-Intrusive Security

Following IT best practices and using off-the-shelf products that work well in a real-time video production environment has played a huge role in Grass Valley’s success. “Providing non-intrusive protection to broadcast environments and associated products with McAfee Embedded Control is a strong competitive differentiator in our best practices arsenal,” maintains Combs. “From our customers’ point of view, McAfee Embedded Control has been perceived as adding quality, not just protection, to an industry that prioritizes quality of service. The more technically-savvy ones had been asking for non-intrusive security for some time. Many of our customers already use McAfee solutions in their IT environments, so they are quite excited that their video production environment can now be protected by a brand they trust.”

Guarding Against Known and Unknown Threats

Like traditional antivirus software, McAfee Embedded Control blocks known viruses and other malware that might be introduced inadvertently via the Internet or removable media. However, unlike most antivirus products, McAfee Embedded Control also thwarts targeted advanced persistent threats (APTs) and zero-day attacks from penetrating Grass Valley devices. Because the McAfee solution permits only “whitelisted” applications to run, it prohibits both known and unknown threats from gaining a foothold, regardless of their point of ingress.

In addition, McAfee Embedded Control protects against potentially harmful installations or changes system users or administrators might make, either intentionally or unintentionally. Grass Valley customers receive their various media servers with a “golden image” that includes McAfee Embedded Control. Accompanying documentation notifies them that the system is locked down, lists the only authorized applications and changes that can be made, and instructs them to contact Grass Valley if they need to make any changes to the system. Grass Valley can also initiate changes, for example, instructing the customer to temporarily disable McAfee Embedded Control, install a network sniffing analyzer, add the sniffer application to the whitelist, then re-enable McAfee Embedded Control. “Aside from these types of infrequent changes, which are all overseen by Grass Valley staff, our systems are sealed by McAfee Embedded Control from any future software installs—malicious or not,” says Combs.

Set It and Forget It

“For the most part, with McAfee Embedded Control, we just set it and forget it,” concludes Combs. “It works well across the video production and broadcasting spectrum—from streaming to storage. Our customers love how it keeps their operations safe while keeping them online. We love it for the same reason. It also reduces the time we spend on support. I can’t say enough good things about McAfee Embedded Control; it has worked that well for us and our customers.”

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