Curtail Security™ is a small network security startup based out of Santa Barbara, California, and led by President and CEO Frank Huerta and CTO Robert Ross. The company started business in 2015 as an advanced network intrusion detection vendor for DevSecOps, delivering its first solution in 2016 based on several of its own patents and other intellectual property.

Using its patented traffic analysis, Curtail Security captures and replays network traffic and analyzes responses in real time. This capture and analysis engine is the core of their two primary solutions, ReCover and ReGrade. As software solutions, users can deploy these within containers or virtual machine environments to protect both on-premises and cloud environments, delivering continuous security and improving operations.

ReCover is similar to a next-generation IDS or advanced breach detection system. It intakes network packets to identify and isolate attacks, including zero-day exploits, without interfering with legitimate traffic. It can also increase a system’s resiliency. Detection is based on running competing implementations of a network service with independent attack surfaces. When a suspected attack happens, administrators can seamlessly redirect legitimate traffic to a clean (not vulnerable) server while isolating the attacker.

ReGrade, however, works as an entirely unique use of the engine to improve application DevOps and security. ReGrade enables IT to run live user traffic to a currently live application and a deployment upgrade candidate. Users see only the interaction with the production application, while development and security teams can monitor the results generated by the copy of the traffic being fed to the upgrade candidate on the ReGrade server. ReGrade compares how the old and new versions respond to actual usage.

ReGrade compares the network responses from the new release candidate versions with the production version, which reduces QA and regression testing times. Using ReGrade is beneficial for teams using sprint development cycles. Users can deploy the new application on ReGrade and in operation while they work on the following sprint. If desired, consecutive sprints can be overlaid and final deployment can wait until all parties are satisfied with security and performance. Development never has to stop to wait for a deployment window, so IT and security have significantly more time to monitor release candidates before deployment. Also, the odds of a significant application problem being released into production are significantly reduced, mitigating application-related failures.

ReGrade’s sophisticated network traffic analysis identifies possible software bugs and security flaws in the upgrade before production rollout, allowing the development team to make corrections before the final deployment of new software. According to Curtail, ReGrade would have found and prevented the Cloudflare vulnerability, which came to light in February of 2017, in a matter of hours. The test application may run for any desired time to test various use patterns and loads, and also to see how it responds to inputs that could affect its security.

Failed release rollbacks can be avoided with the ability to perform testing on live production traffic prior to deployment. Until ReGrade, the closest options were to use a recorded packet capture or a traffic generator to simulate the real thing, both of which are limited in duration and scope. Curtail Security™ saves money and increases productivity by using its redundancy-based traffic analysis to identify and isolate application problems as well as zero-day exploits, while continually serving legitimate traffic to production servers.

Additional information on ReGrade can be found here.
About Enterprise Management Associates, Inc.

Founded in 1996, Enterprise Management Associates (EMA) is a leading industry analyst firm that provides deep insight across the full spectrum of IT and data management technologies. EMA analysts leverage a unique combination of practical experience, insight into industry best practices, and in-depth knowledge of current and planned vendor solutions to help EMA’s clients achieve their goals. Learn more about EMA research, analysis, and consulting services for enterprise line of business users, IT professionals, and IT vendors at www.enterprisemanagement.com or blogs.enterprisemanagement.com. You can also follow EMA on Twitter, Facebook, or LinkedIn.

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