



# Federal Newsletter

July 2021



## July 2021 Update

Here is a periodic update to start Q3 2021 (Fed Q4) from the Kemp Federal team with a compilation of Kemp relevant information we believe may be of interest to you. Since Kemp's acquisition of Flowmon, we have had a significant customer and partner interest in improving the visibility of network level events. To better support these new interests and our capabilities, we have included LoadMaster and Flowmon recent content (blog posts, videos, etc) divided into separate sections. There are also links to previous newsletters provided. Let us know of any feedback you have for modifications you prefer.

Kemp load balancing solutions are available for very small (500 Mbps) to extremely large (100 Gbps) requirements. Our recent addition of hardware appliances supporting 25Gbps, 40Gbps and 100Gbps interface speeds has resulted in increasing interest from existing F5 (and Citrix) customers. Many of these customers already have Kemp installed to support specific application or mission requirements, and soon realize they can replace expensive and complex F5 solutions across much more of their IT environment.

The single most often asked question is "Can Kemp help us with the migration of applications from F5 to Kemp". The answer is yes, Kemp has been supporting large customers with migrations from F5 to Kemp for years. We have developed a set of processes and best practices that address (1) initial installation/configuration/integration, (2) application migration, and (3) operational enablement. These three pillars ensure customers moving from F5 get onto Kemp quickly with minimal impact to operations or their customers. We can share a notional (or customer-specific) migration process document (no cost) and assist in your messaging to management regarding why moving to Kemp is important for your mission/business.

We can provide Total Cost of Ownership (TCO) comparisons at no cost, or we can assist your team in developing these comparisons. One current example is a customer with 2 data centers and one lab, 40G WAN connectivity, using 14 x F5 load balancers. They are planning a tech refresh and have Kemp for load balancing specific applications. This customer came to us asking if the LoadMaster can be used to replace F5 and what would the overall process look like. We proposed our LoadMaster LM-XHC-40G hardware appliance (75Gbps throughput, 4 x 40Gbps interfaces) and our professional services team with a specific workplan to ensure application migration with 30-60 days with operational support including a significant F5 iRules migration. The difference in list price for the entire package compared to an F5 tech refresh will save this customer \$1.5M in initial costs making Return on Investment (ROI) justification easy in their case. As important, they know how easy LoadMaster is to operate which will reduce their operational complexity. Bottom Line – Do not let concerns about change drive technology and business decisions. The Kemp value proposition is about getting your load balancing capabilities from expensive and complex to affordable and easy to use.

**WEB APPLICATION FIREWALL (WAF) ENHANCEMENTS:** Kemp has introduced major enhancements to our Web Application Firewall (WAF) that will provide improved protection, visibility and reporting for your applications. The latest version of these enhancements is included our current GA firmware release, LMOS 7.2.54.1. As part of the enhancement, Kemp is including WAF rules in firmware updates (you will no longer need to download and install the Core Rule Set manually) and we are discontinuing our "over the network" rules update service. For our customers on Internet connected networks, we will still offer an IP Reputation service that can be consumed over the network. The new rules baseline is designed to detect and react to broad ranges of attacks and is better suited for detection and response against zero-day attacks. To benefit from these enhanced WAF capabilities, upgrade your LoadMaster firmware to LMOS 7.2.54.1. Note that Legacy WAF rules are being retired on 29th June 2021 and no further updates

will be available. The LoadMaster user interface will reflect this with the title 'WAF Options (Legacy)' on v7.2.54.1 release. More information is [available here](#).

## **New LoadMaster Operating System (LMOS) version 7.2.54.1 is now available and has interesting new capabilities and optional services:**

1. Enhancements and bug fixes related to PIV based certificate authentication. Our initial PIV release (7.2.53.0) had an issue related to mapping of user rights that required creation of a shadow account on the LoadMaster. This is now rectified, and all user account associated data can be stored on an external LDAP(S) based authentication service (e.g., Microsoft Active Directory).
2. Generation of 4096-bit DHE Key. During an upgrade to this version of LMOS from a version prior to 7.2.53.0, a new 4096-bit DHE key is generated. On smaller LoadMasters, this can lead to significant CPU and memory consumption that could impact regular virtual service traffic. Kemp strongly recommends that this update be performed in a maintenance interval
3. Virtual Service Configuration: Fixed an issue that caused the Show Headers button to work incorrectly when SSL offload is enabled.
4. ECS Connection Manager Add-on & Patch: Addressed usability issues in the names chosen for files in the downloaded archive.
5. IP Location Database: Addressed issues with country codes that caused repeated WAF errors to appear, such as: "wafd: Missing country code".
6. Inspect HTML POST Request Bodies (WAF): With this WAF option enabled on the previous release, only files less than 128KB can be uploaded to a Virtual Service. enabled VS. Now, files up to 1MB can be uploaded.
7. WAF 1.5: Fixed issues causing segmentation faults when using custom rules.
8. WAF 1.5: Fixed issues that caused WAF Misconfigured to appear for a Virtual Service that has been configured with WAF rules.

## **Common Criteria (CC) / National Information Assurance Partnership (NIAP) status**

Kemp has been working with a NIAP certified test laboratory to prepare our LoadMaster (virtual and hardware) appliances for formal certification under NIAP. This process has progressed to the final stages (minor bug fixes) and we will soon be submitted by the lab to NIAP for official "Under Test" status. The lab will submit final test results to NIAP within 30-60 days of when NIAP officially recognizes the LoadMaster as being "Under Test". Bottom line is our process to gain NIAP certification is progressing, and we expect to complete all actions around Q4 CY2021.

## Partnership Update: Dell EMC Federal

Kemp is fortunate to have a Tier 1 product partner relationship with Dell EMC for both the Enterprise Infrastructure (EI) and Unstructured Data (UDS) Elastic Cloud Storage (ECS) market segments. Dell EMC Federal is an authorized reseller of Kemp products and services and is our largest reseller in the US Federal market. Kemp brands the LoadMaster as the ECS Connection Manager for ECS deployments, which are purchased by resell partners direct from Dell. We now have a number of US Federal agency deployments with ECS. Check out the Kemp website ECS content to learn more about how load balancing applies to Dell EMC Elastic Cloud Storage: <https://kemptechnologies.com/ecs-connection-manager/>

## Training Reminder

Partner Sales and Technical training is available online at no charge - <https://pages.kemptechnologies.com/partner-training-certification.html>. Kemp Federal will continue to offer End User technical training online at no cost. Schedule with our federal solutions architect Mike Bomba <mbomba@kemptechnologies.com>. End User Training is also available as a service that can be purchased from Kemp. Training is offered at levels matching the enabled features on the LoadMaster (101, 201 and 301 levels) <https://kemptechnologies.com/support/professional-services/end-user-training/>

## LoadMaster Content Update

### Blog Posts:

- **Basic zero trust principles for application security:** <https://kemptechnologies.com/blog/zero-trust-application-security/>
- **Kemp zero trust access gateway architecture overview:** <https://kemptechnologies.com/blog/kemp-zero-trust-access-gateway-architecture-overview/>
- **Kemp zero trust access gateway architecture overview:** <https://kemptechnologies.com/blog/zero-trust-kemp/>
- **Cloud Native Load Balancing Versus Kemp:** <https://kemptechnologies.com/blog/cloud-native-load-balancing-kemp-comparison/>
- **Confessions of a certified Citrix engineer on load balancing:** <https://kemptechnologies.com/blog/citrix-engineer-confessions-kemp/>
- **Content rules and the joy of regular expressions:** <https://kemptechnologies.com/blog/content-rules-builder-tool/>
- **Deploying custom rules on LoadMaster:** <https://kemptechnologies.com/blog/deploying-custom-rules-on-loadmaster/>
- **Exposing Kubernetes services:** <https://kemptechnologies.com/blog/exposing-kubernetes-services-load-balancer/>
- **False positive handling on LoadMaster:** <https://kemptechnologies.com/blog/false-positive-handling-loadbalancer/>
- **Getting Started with LoadMaster Network Telemetry:** <https://kemptechnologies.com/blog/kemp-loadmaster-network-telemetry>

- **Global site load balancing:** <https://www.flowmon.com/en/blog/global-site-load-balancing-explained>
- **How Kemp Uses Content Rules to Improve Application Experience (AX) for Kubernetes (K8S) Applications:** <https://kemptechnologies.com/blog/kemp-content-rules-kubernetes/>
- **Introduction to OWASP CRS:** <https://kemptechnologies.com/blog/kemp-owasp-crs-load-balancer/>
- **Kemp 2021 LoadMaster OS Update:** <https://kemptechnologies.com/blog/kemp-2021-loadmaster-os-update/>
- **Kemp ELK (ELASTICSEARCH: LOGSTASH AND KIBANA) Stack:** <https://kemptechnologies.com/blog/kemp-elk-stack/>
- **Managing the right level of access between NetOps and Dev for Microservice Publishing:** <https://kemptechnologies.com/blog/netops-and-dev-for-microservice-load-balance/>
- **Publishing and securing legacy applications:** <https://www.flowmon.com/en/blog/publishing-securing-legacy-applications>
- **Q&A 5 Reasons to Replace Citrix ADC Load Balancing with Kemp:** <https://kemptechnologies.com/blog/5-reasons-to-replace-citrix-adc-load-balancing-with-kemp/>
- **Siloscape Malware Reminder of the importance of securing Kubernetes containers:** <https://kemptechnologies.com/blog/siloscape-malware-reminder-of-the-importance-of-securing-kubernetes-containers/>
- **The Benefits of Object Storage for Modern Application Ecosystems:** <https://kemptechnologies.com/blog/object-storage-benefits-modern-application-ecosystems/>
- **The impact of Kubernetes on network administrators:** <https://kemptechnologies.com/blog/impact-kubernetes-networkadministrators/>
- **What is Kubernetes:** <https://kemptechnologies.com/blog/what-is-kubernetes/>

## Webinars:

- **6 Reasons You Need to Replace your F5 Load Balancer:** <https://www.brighttalk.com/webcast/17702/493481>
- **How to simplify Kubernetes with load balancers:** <https://www.brighttalk.com/webcast/17702/486892>
- **Load Balancing 101-What is a Load Balancer:** <https://www.brighttalk.com/webcast/17702/479600>
- **Migrating: Upgrading: and Securing Microsoft Apps Beyond 2020:** <https://www.brighttalk.com/webcast/17702/456099>

## Press Releases:

- **Kemp Adds Enhanced Network Telemetry to Load Balancer:** <https://kemptechnologies.com/uk/news/kemp-adds-enhanced-network-telemetry-load-balancer/>
- **Kemp ECS Connection Manager Optimizes Dell EMC ECS Object Storage:** <https://kemptechnologies.com/news/dell-emc-ecs-connection-manager-object-storage/>
- **Kemp Joins Microsoft Intelligent Security Association:** <https://kemptechnologies.com/uk/news/kemp-joins-microsoft-intelligent-security-association/>

- **Kemp launches zero trust architecture to simplify secure access application access:** <https://kemptechnologies.com/uk/news/kemp-launches-zero-trust-architecture-simplify-secure-application-access/>
- **Kemp: the world's most deployed load balancer wins TrustRadius top-rated award!:** <https://kemptechnologies.com/uk/news/kemp-worlds-most-deployed-load-balancer-wins-trustradius-top-rated-award/>

## Articles:

- **ECS Zero Trust solution brief:** <https://kemptechnologies.com/files/assets/solution-briefs/zero-trust-object-storage.pdf?pdf-file-view=1>
- **Kemp - Free Network Assessment Request:** <https://kemptechnologies.com/network-assessment-trial/>
- **Load Balancer Buyers Guide research page:** <https://kemptechnologies.com/research-papers/load-balancing-buyers-guide-2021/>
- **Load Balancing Cloudian HyperStore:** <https://kemptechnologies.com/solutions/cloudian/>
- **Load Balancing CyberArk:** <https://kemptechnologies.com/solutions/cyberark/>
- **Load Balancing JAMF (mobile device management):** <https://kemptechnologies.com/solutions/jamf/>
- **Load Balancing NetApp StorageGRID:** <https://kemptechnologies.com/solutions/netapp/>
- **Load Balancing Scalify Ring:** <https://kemptechnologies.com/solutions/scalify/>
- **Updated Competitive Comparison page:** <https://kemptechnologies.com/compare-kemp-to-f5-big-ip-ltm-citrix-netscaler-mpx-load-balancers/>
- **Updated Dell ECS Connection Manager resources:** <https://kemptechnologies.com/ecs-connection-manager/>
- **Updated sizing guides for new products:** <https://kemptechnologies.com/loadmaster-sizing-guide/>
- **WAF solution brief:** <https://kemptechnologies.com/krel/223/files/assets/data-sheets/KEMP-WAF.pdf?pdf-file-view=1>
- **Zero Trust Access Gateway solution brief:** <https://kemptechnologies.com/files/assets/solution-briefs/zero-trust-access-gateway.pdf?pdf-file-view=1>
- **Publishing and Securing Legacy Applications:** <https://www.flowmon.com/en/blog/publishing-securing-legacy-applications>
- **Global Site Load Balancing Explained:** <https://www.flowmon.com/en/blog/global-site-load-balancing-explained>
- **Understanding load balancing essentials:** <https://www.flowmon.com/en/blog/understanding-load-balancing-essentials>

## Podcasts:

- **App Experience Insights Podcast #1 - Your Load Balancer, The Hidden Key for Improved Security Posture:** <https://open.spotify.com/episode/4mn0miMoOCOLNRL9Zj0m2d?si=T2E3vtfdRrmYqtTUPkUlRg>
- **App Experience Insights Podcast #2 - Securely Publishing Non-Cloud Native apps in AWS:** <https://open.spotify.com/episode/6cpbmwzSoEcnA2fwY2lIEf?si=RKS5xBPKStGZCHdqDM6Uzg>



- **Application Experience Insights Podcast #6 - Starting Your Zero Trust Access Journey:** [https://open.spotify.com/episode/26Xj5U4VpnFh4k5LGX7hbP?si=Qe8aMlMHSEK\\_MZSw\\_XWUpA&nd=1](https://open.spotify.com/episode/26Xj5U4VpnFh4k5LGX7hbP?si=Qe8aMlMHSEK_MZSw_XWUpA&nd=1)

## Web Updates:

- **How Azure AD and a Load Balancer Can Simplify App Delivery:** <https://petri.com/how-azure-ad-and-a-load-balancer-can-simplify-app-delivery>
- **Web - Kemp Introduces Enhanced Network Telemetry within LoadMaster:** <https://virtualg.uk/kemp-introduces-enhanced-network-telemetry-within-loadmaster-load-balancer/>
- **Kemp Introduces Enhanced Network Telemetry within LoadMaster Load Balancer:** <https://www.alburns.com/2021/04/kemp-network-telemetry/>
- **My network broke my application, or did it:** <https://thesolutionsarchitect.net/the-network-broke-my-application-or-did-it/>

## YouTube Vidoes:

- **4 Key Application Experience (AX) Monitoring Technologies you cannot ignore:** <https://www.brighttalk.com/webcast/17702/474335>
- **5 Reasons to Replace Citrix ADC Load Balancing with Kemp:** <https://www.youtube.com/watch?v=qsNGjllkRPk>
- **Accelerating Product Growth - Kemp Partner Webinar:** <https://youtu.be/3YvRAjG7pY0>
- **Application delivery in AWS with Kemp LoadMaster:** <https://www.youtube.com/watch?v=JbGWvL0TQKA>
- **Application Load Balancing and Monitoring made easy:** <https://www.youtube.com/watch?v=JMjHCTonG98y>
- **Content Rules and the Joy of Regular Expressions:** <https://www.youtube.com/watch?v=S4sUCeVLQ6A>
- **Delivering Hyper-scalable Cloud-Native Storage with Dell EMC ECS and Kemp:** <https://www.youtube.com/watch?v=DYRWBLfdCeQ>
- **Deploying WAF Custom Rules on LoadMaster:** <https://youtu.be/b8Tl5na-s7o>
- **Don't use the F\* Word. Up your Game with Kemp Load Balancing:** <https://www.youtube.com/watch?v=XhCLAKUrxzw>
- **Enable Zero Trust for Object Storage using ZTAG:** <https://youtu.be/NnFk8liyUL0>
- **Kemp Citrix storefront demo:** <https://youtu.be/rA7TJGpAGO4>
- **Kemp ESP Oauth & Lets Encrypt:** <https://youtu.be/tWgRY8aXtAM>
- **Kemp vs Citrix:** <https://youtu.be/71A76S7VfMI>
- **Lightboard Techtalk | Global Server Load Balancing (GSLB):** <https://www.youtube.com/watch?v=BFBobi0ETBs>
- **Lightboard Techtalk | Load balancer algorithms:** <https://www.youtube.com/watch?v=yG8xiK7Vorc>
- **Lightboard Techtalk | Load Balancer Content Switching:** <https://youtu.be/TtTLflhOM>
- **Lightboard Techtalk | Load Balancer Health Checks:** <https://youtu.be/oZFItaTq2oI>
- **Lightboard Techtalk | Load balancing object storage:** <https://www.youtube.com/watch?v=IJ9xm96Rsmk>

- **Lightboard Techtalk | Load Balancing Packet Walkthrough:** <https://www.youtube.com/watch?v=Mj9MWH2thTY>
- **Lightboard Techtalk | What is a Load Balancer?:** <https://www.youtube.com/watch?v=cSwybf7fIBo>
- **Lightboard Techtalk | What is a Zero Trust Access Gateway?:** <https://youtu.be/23fDyozh7nc>
- **Load Balancing Object Storage:** <https://youtu.be/IJ9xm96Rsmk>
- **Migrating, Upgrading, and Securing Microsoft Apps Beyond 2020:** <https://www.youtube.com/watch?v=ODEFv6xchxs>
- **Scality Ring & Kemp Loadmaster:** [https://www.youtube.com/watch?v=D9ZZBF7\\_v7k](https://www.youtube.com/watch?v=D9ZZBF7_v7k)
- **Zero Trust 5-in-5 | Kemp:** <https://youtu.be/rzY5vsVqU5E>
- **Zero Trust Access Gateway (ZTAG), Technical Overview:** <https://youtu.be/vVrtvfDmlsc>
- **You need to learn load balancing right now:** <https://www.youtube.com/watch?v=LlbTSfc4biw>

## Flowmon Content:

- **Webinar - How to Identify and Fix Application Problems with Kemp's Network Telemetry:** <https://www.brighttalk.com/webcast/17702/480996>
- **Webinar - How to detect ransomware in your network:** <https://www.brighttalk.com/webcast/17702/484807>
- **Webinar - How Integrating Flowmon & PRTG Guarantees IT Performance and Maximizes Security:** <https://www.brighttalk.com/webcast/17702/467636>
- **ComputerWeek - NDR and NPMD, meaningful acronyms for once:** <https://www.computerweekly.com/blog/Networks-Generation/NDR-and-NPMD-important-meaningful-acronyms-for-once>
- **YouTube - Tackling networking issues between users and cloud apps:** <https://youtu.be/LPSB1DjD4lY>
- **Blog - Why Kemp Flowmon is a Better Choice Versus Darktrace:** <https://kemptechnologies.com/blog/kemp-flowmon-versus-darktrace/>
- **Blog - 5 Steps of incident detection and response:** <https://kemptechnologies.com/blog/incident-detection-response/>
- **Blog - Flowmon 11.1 – A time-saver:** <https://www.flowmon.com/en/blog/flowmon-11-1-a-time-saver>
- **Blog - How Flowmon Helps to Detect SUNBURST Trojan Attack in Your Network:** <https://www.flowmon.com/en/blog/how-flowmon-helps-to-detect-sunburst-trojan-attack>
- **Blog - Bridging Visibility Gaps in Hybrid Cloud Monitoring:** <https://www.flowmon.com/en/blog/hybrid-cloud-monitoring>
- **Blog - Investigating Network Anomalies Workflow:** <https://www.flowmon.com/en/blog/investigating-network-anomalies-workflow>
- **Blog - User Identity with LoadMaster ESP Flowmon:** <https://www.flowmon.com/en/blog/user-identity-with-loadmaster-esp-flowmon>
- **Blog - Flowmon 11.1 – A time-saver:** <https://www.flowmon.com/en/blog/flowmon-11-1-a-time-saver>
- **Blog - User Identity Awareness with LoadMaster ESP and Flowmon:** <https://www.flowmon.com/en/blog/user-identity-with-loadmaster-esp-flowmon>
- **Blog - Investigating network anomalies – A sample workflow:** <https://www.flowmon.com/en/blog/investigating-network-anomalies-workflow>
- **Youtube - Enhance and automate your cybersecurity operations:** <https://youtu.be/jeHUWtBUyig>



- **Tech Field Day - Gaining Visibility with Network Performance Monitoring & Diagnostics:**  
<https://techfieldday.com/event/nfd25/>
- **Tech Field Day – Securing Your Environment with Intelligent Network Detection & Response:** <https://techfieldday.com/appearance/kemp-presents-at-security-field-day-5/>
- **Tech Field Day - The future of network management - Networking Field Day:**  
<https://www.nojitter.com/enterprise-networking/future-network-management>
- **Web - Kemp Flowmon NetFlow IPFIX Monitoring:**  
<https://www.flowmon.com/en/solutions/network-and-cloud-operations/netflow-ipfix>
- **Web - NetSecOps: The future for network and security workers?:**  
<https://www.siliconrepublic.com/advice/netsecops-security-networks-trends-2021>
- **Web - Solutions Review: 6 Network Monitoring Vendors to Watch in 2021:**  
<https://solutionsreview.com/network-monitoring/solutions-review-6-network-monitoring-vendors-to-watch-in-2021/>
- **Web - How NetSecOps can help enterprises fight back against the escalating cybersecurity threat:** <https://www.arnnet.com.au/brand-post/content/685333/how-netsecops-can-help-enterprises-fight-back-against-the-escalating-cybersecurity-threat/?preview-hash=c5f2306e9c1822a68fbd1c87f92fd63bf6b9bf3>
- **Web - How Kemp Maximizes Network Flow Visibility with Flowmon:**  
<https://gestaltit.com/tech-field-day/zach/how-kemp-maximizes-network-flow-visibility-with-flowmon/>
- **Web – What’s going on with my network:** <https://nerdblurt.com/whats-going-on-with-my-network/>
- **YouTube - 5 in 5: Kemp Introduces Network Telemetry:**  
<https://www.youtube.com/watch?v=2hhMAMmT87w>
- **YouTube - Network Telemetry: Getting Started with LMNT:**  
<https://www.youtube.com/watch?v=ZfIPXbiHlIa>
- **YouTube - Streamline Network Detection and Response to Cyber Threats:**  
<https://www.youtube.com/watch?v=w4T7TnuDJEw>
- **YouTube - Gaining visibility with network performance monitoring and diagnostics:**  
<https://www.youtube.com/watch?v=2pd-klpJvMs>
- **YouTube - Lightboard TechTalk | Flow Technologies:**  
<https://www.youtube.com/watch?v=8f1GthTO3eY>
- **YouTube - Gaining Visibility with Network Performance Monitoring and Diagnostics Networking Field Day:** <https://youtu.be/Mp3sOknHxNY>
- **YouTube - Optimising application experience, monitoring, and security:**  
<https://www.youtube.com/watch?v=CHjiPMQi2-s>
- **YouTube - Kemp Masterclass: Network Performance Monitoring & Diagnostics:**  
<https://www.youtube.com/watch?v=FuQP8q5ZvcU>
- **Case Study - Safeguarding Engineering Know-How Case Study (Flowmon):**  
<https://www.flowmon.com/getattachment/657f3f07-c7d0-4133-af88-dddc846952d1/CEH.aspx>
- **Case Study - Network Performance Monitoring in Critical Infrastructure (Flowmon):**  
<https://www.flowmon.com/getattachment/80630675-8ef8-488d-94f1-793ff42a43f8/EG-D.aspx>
- **Case Study - Network Analysis and Troubleshooting Case Study (Flowmon):**  
<https://www.flowmon.com/getattachment/f85ed860-734d-4abe-a7e2-828401ee2102/Fondazione-CRC.aspx>