Scalable high-performance application delivery

Kemp ECS Connection Manager offers the scalability, feature depth and security required to enable resilient delivery of a wide range of application workloads for organizations of all sizes and capabilities. ECS Connection Manager simplifies Dell ECS application delivery with easy management via web UI, API and Kemp 360 Central with a compelling TCO and outstanding customer support.

Benefits of Kemp ECS Connection Manager

Multi-network Access
ECS Connection Manager provides transparent access to ECS from multiple networks while maintaining security and existing network addressing.

ECS Optimized QoS (Quality of Service)
Apply QoS to any ECS resource (bucket, URI) to ensure optimal performance of critical applications and protect against traffic storms and 'noisy neighbors'.

Secure using TLS 1.3
ECS Connection Manager provides the latest and most robust security by enabling TLS 1.3 security without any impact on ECS infrastructure.

Concurrent IPv6 and IPv4
ECS Connection Manager allows IPv6 and IPv4 co-existence with IPv6 to IPv4 gateway/proxy using a NIST certified IPv6 network stack as required by federal customers.

SSL Offload
ECS Connection Manager simplifies the management of certificates and security policies while also reducing the security overheads on the ECS infrastructure.

Route based on DNS query source
Optimize traffic routing by using the source subnet of the client where provided via EDNS (Extensions for DNS). Client traffic can now be mapped to specific storage locations to provide fine-grained control to support use cases such as localized in-rack traffic steering and routing ISP/customer networks to dedicated storage.
Seamless VDC failover
ECS Connection Manager provides support for multi-site VDC environments with totally transparent failover and recovery in the event of a VDC outage with dynamic host resolution. Support up to 256 storage IP addresses on a single FQDN.

Purpose built ECS S3 traffic steering
Intelligently deliver traffic to the S3 location that can best service the requests including storage using XOR optimizations.

ECS S3 Health Checking
S3 optimized detection of outages and service degradation with redirection of traffic to resources that can service requests.

Hybrid path and host addressing
Concurrent support of S3 ‘Path Style’ and ‘Host’ addressing enabling support of multiple applications using different addressing against the same storage objects.

Support Subscription
ECS Connection Manager support subscription offers flexibility, simplicity and value to meet your application delivery requirements and challenges. The ECS support subscriptions are mapped to common customer challenges and requirements and include multiyear support options.

Support subscription options include single or multi-year support and offer the benefits mentioned previously as well as the following of features and services:

- 24x7 Customer Support
- Software Updates
- Security Patches
- L4-L7 Application Delivery
- Edge Security Pack (ESP)
- Intrusion Prevention
- WAF with rule updates
- ECS Optimized QoS (Quality of Service)
- ECS S3 traffic steering
- GSLB with IP Reputation
- Floating License
- Kemp 360 Vision Application Monitoring & Preemptive Alerting
- Kemp 360 Central Management and Orchestration
Features

Network Telemetry
• Export network flow data to Flowmon Collector in the industry standard IPFIX protocol format.
• Leverage the power of Flowmon Collector to store and analyze flow data, gaining visibility into the entire application value delivery chain to identify bottlenecks, misconfigurations, and potential security issues.
• Combine LoadMaster-exported data with IPFIX data from other network nodes on Collector to gain a complete picture of your infrastructure.
• View LoadMaster data on Flowmon Collector in dashboards and widgets specific to LoadMaster and the Virtual Services defined on it.

Web Application Firewall (WAF)
• Real-time application threat mitigation
• Updated reputation data daily
• Threats mitigated
  • Cookie tampering
  • Cross site request forgery
  • Cross site scripting
  • Data loss prevention
  • SQL injection
  • PCI-DSS Section 6.6 compliance

Intrusion Prevention
• Snort compatible IPS
• Aggregated health checks

Global Server Load Balancing (GSLB)
Scheduling and Balancing
• Round Robin
• Weighted Round Robin
• Chained Failover (Fixed Weighting)
• Regional
• Real Server Load
• Location Based
• EDNS Client subnet

Security
• Allow/Deny List (Access Control List)
• Updated reputation data daily
• DDoS mitigation

Edge Security Pack
• Microsoft TMG replacement
• Pre-authentication
• Multi-domain authentication & SSO
• X.509 client certificate authentication
• Custom login forms
• Two-factor authentication
• OIDC, SAML, Active Directory, RADIUS & LDAP
• Forms to Forms based authentication

Health Checking & Failover
• ICMP health checking of server farm machines
• Layer 4 TCP checking
• HTTP/HTTPS health check
• Active/Active High Availability
• Scale to 256 nodes per FQDN

L4-L7 Application Delivery
General
• Server Load Balancing (SLB) for TCP/UDP based protocols
• TLS (SSL) Offload
• Layer 7 Content Switching
• Transparent caching for HTTP/HTTPS
• Compression of static and dynamic HTTP/HTTPS content
• HTTP/2 Support
• Up to 1000 Virtual and 1000 Real Servers
• NAT-based forwarding
• Support for Direct Server Return (DSR) configurations
• Configurable S-NAT support
• VLAN Trunking (802.1Q)
• Link interface bonding (802.3ad)
• IPv6 support for addressing and features
• IPv6 - IPv4 bidirectional conversion

Health Checking
• Aggregated health checks
• ICMP health checking
• Layer 7 checking against any target server port
• Active/Hot Standby configurations for High Availability
• Stateful Failover
• Scale-out Clustering

Session Persistence
• Source IP (L4)
• TLS (SSL) SessionID (L4)
• HTTP/HTTPS Browser-session (L7)
• HTTP/HTTPS WebClient-session (L7)
• RDP Login ID (L7)
• Port Following for mixed HTTP/HTTPS sessions
• Session reconnection for Microsoft RDS

Scheduling and Balancing Methods
• Round Robin
• Weighted Round Robin
• Least Connection
• Weighted Least Connection
• Agent-based Adaptive
• Chained Failover (Fixed Weighting)
• Source-IP Hash
• Layer 7 Content Switching
• Global Server Load Balancing (GSLB)
• AD Group based traffic steering

SSL/TLS Features
• Configurable TLS (1.0, 1.1, 1.2, 1.3) and SSL (2.0, 3.0)
• Support for EV (Extended Validation) certificates
• OCSP certificate validation
• Server Name Identification (SNI) support
• Support for up to 1,000 TLS (SSL) certificates
• Automated TLS (SSL) certificate chaining
• Certificate Signing Request (CSR) generation
• FIPS 140-2 Level 1
• STARTTLS mail protocols (POP3, SMTP, IMAP)

Administration
• Change auditing
• Web User Interface (WUI)
• SSH & physical console
• RESTful and PowerShell APIs
• VMware vRealize Orchestrator
• Context based help (WUI)
• Real time display of performance and availability
• Application templates
• Remote syslogd support
• Automated configuration backup
• Selective restore of configuration
• Connection draining
• Comprehensive logging and reporting
• SNMP support
• Diagnostic shell with in-line tcpdump

Security
• Allow/Deny List (Access Control List)
• IP address filtering
• IPSec Tunnel support
• DDoS mitigation, including L7 rate-based attacks
• IPSec VPN to Azure, AWS, and public clouds
• Authenticated NTP
Kemp 360 Central

- Centralized management and orchestration
- Included with Enterprise support subscription, and Enterprise Plus support subscription
- LoadMaster configuration management
- Automated LoadMaster backups
- Centralized & scheduled firmware updates
- LoadMaster logfile consolidation
- Performance management
- 3rd party load balancer support

Kemp 360 Vision

- Managed service for application monitoring & preemptive alerting
- Included with Enterprise support subscription, and Enterprise Plus support subscription
- 24x7 automated issue escalation service
- Proactive issue management
- Integrated with Kemp Support ticketing
## ECS Connection Manager Platform Support

Virtual ECS Connection Manager is available on Hyper-V, VMware, XEN, KVM and VirtualBox.

<table>
<thead>
<tr>
<th></th>
<th>VM1</th>
<th>VM2</th>
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</thead>
<tbody>
<tr>
<td><strong>Licensed Performance</strong></td>
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<tr>
<td><strong>SSL TPS</strong></td>
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<tr>
<td><strong>Concurrent Layer 4 Connections‡</strong></td>
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<tr>
<td><strong>Max Servers/ Virtual Clusters</strong></td>
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<td>1000/1000</td>
</tr>
</tbody>
</table>

‡ Achievement of this licensed performance level depends on hypervisor resources allocated

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**About Progress**

Dedicated to propelling business forward in a technology-driven world, Progress (NASDAQ: PRGS) helps businesses drive faster cycles of innovation, fuel momentum and accelerate their path to success. As the trusted provider of the best products to develop, deploy and manage high-impact applications, Progress enables customers to build the applications and experiences they need, deploy where and how they want and manage it all safely and securely. Hundreds of thousands of enterprises, including 1,700 software companies and 3.5 million developers, depend on Progress to achieve their goals—with confidence. Learn more at [www.progress.com](http://www.progress.com)

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