



# AKS ADC

## **Application Delivery Controller**

**TECHNICAL SPECIFICATIONS** 

## **SOLUTION MODELS**

MODELS	AKS-ADC-4100	AKS-ADC-4600	AKS-ADC-5100	AKS-ADC-5400	AKS-ADC-6200
Throughput	upto 4 Gbps	upto 20 Gbps	upto 40 Gbps	upto 60 Gbps	upto 100 Gbps
Max concurrent connections	24 M	24 M	48 M	96 M	160 M
L7 requests per second	750 K	3 M	7 M	10 M	15 M
L4 connections per second	480 K	960 K	1.2 M	2 M	4 M
SSL/TLS transactions per second	20K TPS (RSA 2K)	95K TPS (RSA 2K)	95K TPS (RSA 2K)	95K TPS (RSA 2K)	150K TPS (RSA 2K)
Compute	1 CPU	1 CPU	2 CPU	2 CPU	4 CPU
	(8 logical cores)	(20 logical cores)	(32 logical cores)	(40 logical cores)	(64 logical cores)
Memory	16 GB	32 GB	64 GB	128 GB	256 GB
Hard Drive	500 GB SATA	256 GB SSD	512 GB SSD	1 TB SSD	2 TB SSD
1G Ports (RJ45/SFP)	8	8	4	(optional)	NA
10G Ports (RJ45/SFP)	(optional)	2	8	8	4
40G Ports (QSFP+)	NA	(optional)	(optional)	2	4
100G Ports (QSFP28)	NA	NA	NA	(optional)	(optional)
*No. of ports can be customized					
vADC Supported	NA	upto 15	upto 25	upto 30	upto 50

#### ALL MOODELS SUPPORT

1. Form Factor 1U / 2U Rack Mount Server (19' mounting)

2. Power Supply Redundant power supply (hot swappable) AC 170-240V, 50Hz

3. System Management IPMI 2.0 compliant

**4. Humidity** 8%-90% (non-condensing)

5. Operating Temperature 10C - 35C

6. Out of Band Management ports (RJ 45 / SFP / SFP+), Console Port (RS 232/ RJ 45), HA Port (RJ 45 / SFP / SFP+)

7. Network Operations Reverse Proxy, Inline Bridge Mode, Router Mode, Transparent, Full Proxy, Offline, Passive Promiscuous Mode

8. Operation Modes Report Only, Block, Block & Report

9. LB Algorithms Round Robin, Weighted Round Robin, Min Misses, Hash, Persistent Hash, Tunable Hash Weighted Hash,

 $Least\ Connections,\ Response\ Time,\ Least\ Bandwidth,\ SNMP$ 

**10. Deployment Modes** Direct Server Return, 1 or 2 Arm Proxy, Immediate or Delayed Binding, Direct Access Mode, WCCP

11. Compliance Certificates FCC, ROHS, CE compliant

## **AKS ADC FEATURES**

#### **OPERATIONS & DEPLOYMENT**

- 1. IPv4 & IPv6 support with translation
- 2. HTTP 0.9/1.0/1.1/2.0 with translation
- 3. Web socket support
- 4. Support for dynamic routing protocols (BGP, OSFP, RIP 1/2)
- 5. Optional FIPS-2 / Non-FIPS HSM for SSL inspection
- 6. High Availability (HA) (N+1) with Active / Passive modes (VRRP)
- 7. Support for SNMP, SMTP, Syslog logging
- 8. AAA integration with RADIUS / TACACS+
- 9. Periodic threat updates (Geo IP, TOR IP, Bad IP, etc)
- 10. Periodic signatures updates
- 11. Integration with AD / LDAP / SAML
- 12. On the fly configuration updates
- 13. Date-Time sync with SNTP/NTP
- 14. Centralized management for multiple servers
- 15. Secure communication to mitigation servers
- 16. State sync across multiple servers
- 17. Centralized logging and reporting in multiple formats
- 18. Log & event storage and export
- 19. Simple SIEM integration

#### MANAGEMENT FEATURES

- 20. Secure web user interface (via HTTPS)
- 21. Command line interface (via SSH or console port)
- 22. Built-in RESTFul APIs for automation
- 23. Real-time & historical dashboards
- 24. Custom dashboards & reporting
- 25. System status dashboard
- 26. RBAC administration & audit logs
- 27. Network forensics with packet capture, traceroute, etc
- 28. Detailed event / alert reporting
- 29. Automated / manual backup & restore
- 30. Log retention for audit
- 31. False positive forensics

#### **APPLICATION DELIVERY FEATURES**

- 32. Layer 4 load balancing (TCP, UDP)
- 33. Layer 7 load balancing (HTTP, DNS, etc)
- 34. SSL v2,v3, TLS v1.0/1.1/1.2/1.3 support
- 35. HTTP RFC compliance
- 36. Client / Server / Full NAT
- 37. TCP buffering, optimization & multiplexing
- 38. TCP keep alive & timeout policy
- 39. Health check via SSL / TCP / ICMP / SNMTP / HTTP(s)
- 40. Alarm on health failure
- 41. Marking server up / down / backup
- 42. Automatic failover & recovery
- 43. Content compression (gzip, brotili)
- 44. Content caching
- 45. Transformation rules to add, edit, remove headers / parameters
- 46. Redirection rules to rewrite URLs
- 47. Variable rules for dynamic load balancing
- 48. Upstream rules for dynamic content routing
- 49. Script rules for custom load balancing
- 50. Error rules for error handling
- 51. Aggregated health checks
- 52. Virtual matrix architecture
- 53. Acceleration for mobile devices
- 54. Content minification
- 55. Real User Metrics (RUM)
- 56. User / device fingerpriting
- 57. Anti-DDoS protection
- 58. Header rules for Request / Response header manipulation

#### **GLOBAL SERVER LOAD BALANCING**

- 59. Built-in DNS Firewall with RPZ policy
- 60. DNSSEC support
- 61. DNS Load Balancing
- 62. DNS over SSL / HTTP(s)
- 63. Data exfiltration protection
- 64. Bot Protection
- 65. Authoritative / Recursive Modes
- 66. Routing traffic across multiple locations

### AKS ADC FEATURES

#### **APPLICATION FIREWALL FEATURES**

- Multiple security modes
  (Bypass, Record, Learning, Mitigation)
- 2. Multiple security policy per application
- 3. SSL certificate management
- 4. Built-in vulnerability scanner with virtual patching
- 5. File upload scanning with ICAP / built-in AV
- 6. OWASP Top 10 protection
- 7. SANS 25 Software Error protection
- 8. PCI DSS 2.0 section 6.6 enforcement
- 9. Positive & Negative security model
- 10. Anti-DDoS protection
- 11. Anti-Bot protection
- 12. Anti-Bot mobile SDK
- 13. JS / Captcha challenge
- 14. Temporary & dynamic blacklist
- 15. Advanced browser fingerprinting
- 16. Anti-reconnaisance & cloaking
- 17. Anti-scraping & Anti-automation protection
- 18. Malware detection
- 19. API / Webservice protection
- 20. Account Takeover protection
- 21. Brute force protection
- 22. Man-in-the-browser protection
- 23. Request normalization before inspection
- 24. Two factor authentication
- 25. Web defacement protection
- 26. Data leak prevention / response filtering
- 27. Machine learning & self-correction
- 28. Threat scoring & weighting
- 29. Known threat & 0-day attack protection
- 30. Automatic profiling (whitelist)
- 31. Auto-learning applications
- 32. Pre-defined rules for various frameworks
- 33. Web server and application signatures (blacklist)
- 34. Operating System signatures
- 35. Ruleset staging and deploy
- 36. Bad IP reputation / TOR IP protection
- 37. Whitelist / Blacklist (IP, Prefix, Geo location)

#### **APPLICATION FIREWALL FEATURES**

- 38. Forceful browsing
- 39. Unauthorized nagivation protection
- 40. Access predictable resources
- 41. Protocol validation
- 42. Application policy validation & restriction (request method, size, file ext, etc.)
- 43. HTTP header security & header rules
- 44. XML / JSON / AJAX support & validation
- 45. XML Firewall
- 46. Evasion & illegal encoding
- 47. REGEX based custom rules
- 48. REGEX based whitelist rules
- 49. Form validation rules
- 50. Correlation rules
- 51. Deception rules
- 52. Rate limit rules
- 53. Script rules for custom logic
- 54. Cookie signing and encryption
- 55. Hidden form field protection
- 56. Parameter / URL tampering
- 57. LDAP injection protection
- 58. SSI injection protection
- 59. Buffer overflow protection
- 60.. Integration with 3rd party scanner (web / source code)
- 61... Integration with custom Threat Intel
- 62..Variable Rules
- 63. Log Rules

#### **LINK LOAD BALANCING**

- 64. Advanced NATting (static NAT, PAT, dynamic NAT, Full NAT)
- 65. NAT 46/64 with DNS proxy for DNS 46/64
- 66. Link Monitoring with instant failover ( <10s )
- 67. Link bonding / aggregation
- 68. Static & Policy based routing
- 69.. Traffic shaping & bandwidth restriction

## AKS IT SERVICES QUALITY ASSURED

To learn more about AKS Enterprise Application Delivery Controller and find out how our solution can ensure application traffic management and security, visit www.aksitservices.co.in or email us at sales@aksitservices.co.in

## **AKS ADC**

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