



Carrier Grade Caching Solution

TRANSPARENT CACHING FOR ISPS

HIGH PERFORMANCE
MULTI GIGABIT
FULLY TRANSPARENT

BANDWIDTH SAVINGS

Highest bandwidth savings (BHR – Byte Hit Ratio) and bandwidth gain on the market. Supporting the most different content classes and including special optimizations for all popular services and sites.

BROWSING ACCELERATION

Small objects cached and served from ultra high performance Solid State Disks (SSDs). Subscriber satisfaction improved because Internet browsing accelerated.

CDN CACHING

Unique caching mechanism, highly accurate for arbitrary caching of videos and large rich media files from Content Delivery Networks (CDNs).

COST EFFECTIVE

Reduce costs, increase number of subscribers and avoid costly bandwidth upgrades at value-added prices.



SINGLE UNIT XXL

- ✓ 8 Gbps Throughput
- ✓ 4.4 Gbps HTTP
- ✓ 4 Gbps from Disks
- ✓ 3.2 Million Connections
- ✓ 72 TB HDD Storage
- ✓ 2 TB SSD Storage
- ✓ 256 GB ECC Memory

Appliance Features

- HTTP and FTP support, optional HTTPS
- On-device network test tools
- Peer-to-Peer (P2P) / BitTorrent caching
- Encrypted P2P connections
- IPv6 support / IPv6 ready
- High-Availability and redundancy
- Proprietary caching technology
- Video-On-Demand caching (Netflix,...)
- Partial object caching (HTTP range requests,...)
- Content Delivery Networks (Akamai, EdgeSuite,...)
 - ✓ De-duplicates content that comes from different CDN hosts
- Caching Static & Dynamic web content:
 - ✓ Antivirus and software updates
 - ✓ Filehoster/Sharehoster/One-Click-Hoster
 - ✓ Games (EA, Playstation, Steam, Xbox,...)
 - ✓ OS updates (Apple, Linux, Microsoft,...)
 - ✓ Videohoster (GoogleVideo, Youtube,...)
- Caching HTTP-based live streaming:
 - ✓ HTTP Live Streaming (HLS)
 - ✓ HTTP Dynamic Streaming (HDS)
 - ✓ HTTP Smooth Streaming (HSS)
- HTTP access control and content filtering (Blacklists, Whitelists, ACLs, Policies, ...)

Operating System & Platform

- Optimized 64 bit Linux Kernel
- Unified cache cluster management
- Dedicated video caching platform
- Multiple terabytes of storage capacity
- Ultra high performance SSDs for low-latency
- Drive monitoring and management
- Automatic Fail-Over function
- Small and large object file caching
- Disk hot-swap support

Flexible Deployment

- Transparent | Non-Transparent
- Reverse proxy
- Detailed logging facilities
- Comprehensive access control rules
- Dynamic ISP content filtering
- Advanced cache hierarchies
- Bridge Mode | Dynamic routing OSPF
- WCCP Layer 2
- Policy Based Routing (PBR)
- L4 / L7 load balancers, including TmcMARA balancer
- Multiple router connectivity
- 1 / 10 / 25 / 40 Gbps interfaces
- Central cluster monitoring and reporting
- Scalable cache cluster with shared storage

Management & Reporting

- Innovative and intuitive Web GUI (Multilingual)
- Command line interface via serial console & ssh
- Appliance status and live monitoring
- Daily, weekly or monthly executive reports (PDF)
- Real-time and historical statistics by day, week, ...:
 - ✓ System resources, network traffic, HTTP caching performance,...
- Comprehensive usage reports:
 - ✓ Top 1000 Sites, Top 1000 Users
- Simple backup and restore capability
- Remote logging servers support (remote syslog)
- Embedded stateful firewall
- SNMP support with configurable alerts

Optional Modules

- TCP Optimizations for HTTP and HTTPS
- HTTPS access control and content filtering
- Category based content filtering for HTTP and HTTPS
- Deep packet inspection
- Traffic Visibility



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CARRIER GRADE HARDWARE

MARA Systems only provides latest hardware generation and IT findings to deliver the most secure and robust transparent caching solution on the market.

EASY CLUSTERING

Multiple CacheMARA appliances can easily be clustered to implement larger scenarios even up to multiple 100 Gbps of bandwidth. CacheMARAs in the cluster share available storage so that total caching capacity is increased with every CacheMARA added to the cluster.

RELIABLE PLATFORM

Exceptionally optimized and hardened Linux platform, tailored for high availability, security and performance needs. Systems booting from read-only, compressed image. Purpose-built hardware.

PROVEN SOLUTION

CacheMARA is a safe buy with more than 900 installations worldwide.

SERVICES / SUPPORT

- Dedicated technical support
- Expert consulting
- Installation & configuration
- Ongoing maintenance
- Firmware upgrades
- Hardware warranty
- Product manuals & FAQs

Product & Technical Specifications

Q1 2018	XXS-0204	XXS-0204	XS-0204	S-1U-0408	M-2U-0816	L-2U-1224	XL-4U-2448	XXL-4U-3672
Generated from disks all services Mbps	33	66	125	250	500	1000	2000	4000
Total Mbps HTTP to clients	35	70	140	280	550	1100	2200	4400
Total Mbps all services	66	125	250	500	1000	2000	4000	8000
Max concurrent connections	100 K	100 K	100 K	200 K	400 K	800 K	1.6 M	3.2 M
ECC memory	-	-	-	16 GB	32 GB	64 GB	128 GB	256 GB
SSD cache size	-	-	-	120 GB	240 GB	480 GB	1200 GB	2000 GB
HDD cache size	-	-	-	8 TB	16 TB	24 TB	48 TB	72 TB
PSU redundancy	-	-	-	-	-	yes	yes	yes
Hardware Remote	-	-	-	yes	yes	yes	yes	yes
1 Gbps copper	-	-	-	2	2	2	2	2
Form factor	Software only			1U	2U	2U	4U	4U
Typical power	-	-	-	100W	160W	220W	400W	600W
Weight	-	-	-	16 kg	24 kg	30 kg	62 kg	74 kg
Optional 1 Gbps RJ45 or fiber	-	-	-	yes	yes	yes	yes	yes
Optional 10 Gbps RJ45 or SFP+	-	-	-	-	-	yes	yes	yes

Example Deployment

