ara | ARA Networks

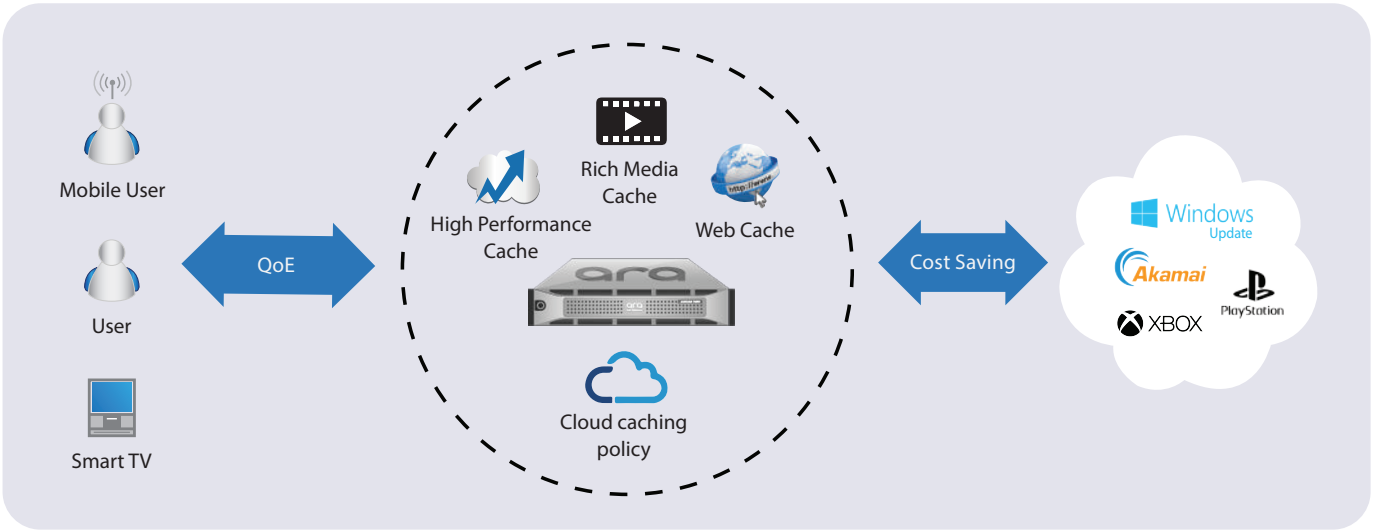
JAGUAR5000

High Performance Multimedia Cache

Optimize Your Bandwidth and Service

Bandwidth–Cost Reduction and QoE Improvement

The amount of Internet video traffic takes more than 50% of the total Internet traffic, and it increases explosively every year. Network administrators, CDNs, and content providers are facing the challenge of transmitting video and web content to users with high speed. JAGUAR5000 accelerates the delivery of Web 2.0 content, especially OTT (over-the-top) video. JAGUAR5000 can save bandwidth and improve QoE (Quality of Experience). JAGUAR5000 also reduces infrastructure costs and attracts more subscribers dramatically.



The Best Performance with Scalability

Cache with the 10Gbps performance that supports various features for ISPs. It is necessary to deploy the cache system to save the cost of leased lines. By deploying in a cache farm, a group of JAGUAR5000 can provide flexibility and scalability with features such as: file-sharing among different sets of storage, distributed cloud storage, automatic collection/distribution of OTT (over-the-top) traffic to increase the hit ratio, and integrated configurations.

Improving QoE for users

Internet responding time can be delayed when the traffic increases or the network is busy. JAGUAR5000 can deliver popular content to users without delay or bottleneck. When users request the same content repeatedly, JAGUAR5000 transmits the content from local cache disks instead of the origin server.

CDN

Demand for CDN service increases as onsumption of multimedia content are rising fast and enterprises depend more on the web to do their businesses and engage their customers. JAGUAR5000, deployed in the core, middle and the edge of network, improves QoE and saves bandwidth, with content stored closer to users. It results in seamless and faster content delivery for users, and efficient business and customer satisfaction for enterprises.

Saving Bandwidth and Cost

It is possible to save bandwidth from 30% to 70% by caching video and web content with JAGUAR5000. In case of caching service with limited content such as web service or CDNs, the maximum bandwidth saving can reach 90%. With JAGUAR5000, ISPs can attract more subscribers without expanding network infrastructure.

Features and Benefits

- **Supported Video over HTTP Formats:** FLV, MP4, AVI, MPEG, HTML5
- **HTTP Live Streaming Caching:** Supports Adobe Flash HTTP Streaming, Apple HTTP Live Streaming, MS Silverlight Smooth Streaming.
- **Caching Shared Files:** Megavideo, 4shared, zSHARE, etc.

- **Content-based File Hashing:** (Content Key Caching)
- **Distributed Cloud Storage (MSE, Media Storage Extensions):** Large objects can be shared among different sets of video cache storage
- **Cloud-Based Configuration Synchronization:** Patterns are updated and distributed on cloud for frequently changed patterns from websites such as YouTube.
- **Auto Detection and Bypassing on a Symmetric Sessions:** Asymmetric routing sessions between the client and the server are bypassed after automatic detection.

- **Supported Protocols:** HTTP, HTTPS, FTP, DNS
- **Cache Modes:** Proxy, Reverse Cache, Transparent Cache, Hidden Cache
- **Supporting Various Network Platforms:** L4/L7 switch, PBR, WCCP, Inline structure with the bypass NIC

Hardware Specifications

MODEL		AF451	AF653	AF853	AF1253	AF1634	AF2634	AF2688
Customer		Small ISP	Medium ISP		Large ISP			
Max sustainable Client-side throughput		350Mbps	600Mbps	1Gbps	2Gbps	3Gbps	4Gbps	8Gbps
Concurrent Session		500k	500k	1million	1million	1million	1million	1million
RPS (Request per second)		10k	10k	20k	20k	20k	20k	20k
Typical B/W saving ratio		30~70%						
S/W		Jaguar5000 (ver. 2.1.0 or higher version)						
Server Model		Dell R650 (1U)		Dell R750 (2U)				
H/W	CPU	1*8core	1*8core	2*8core	2*12core	2*12core	2*12core	2*18core
	RAM	32GB	32GB	32GB	64GB	64GB	128GB	384GB
	HDD	2* 600GB 4*1.8TB	2* 600GB 6*1.8TB	2* 600GB 8*1.8TB	2* 600GB 12*2.4TB	2* 600GB 16*2.4TB	2* 600GB 24*1.8TB	2* 600GB 24*2.4TB

Note: SF/SR requires the same hardware specifications as AF/AR.