

Agile Appliance

High-density TV servers optimized for TV delivery

The Agile Appliances, part of Agile Delivery, are using the proven Edgware server hardware that is purpose-built for TV delivery. They are designed to efficiently combine different TV services and protocols on a single appliance.

What it does

As an optimized platform for Agile Content's CDN architecture, it enables service providers, broadcasters and content owners to offer a full range of IPTV and OTT TV services from one platform. Agile Content's hardware accelerated TV Servers come with a pre-integrated OS and TV Delivery software for rapid "plug-and-play" installation.

One TV platform, many TV services

Agile Appliances are purpose-built to cache and stream any mix of live and VOD content. It is a single TV server platform for both RTSP and HTTP/S TV delivery, offering both IPTV and OTT TV services.

Delivering multiple TV services from a single platform cuts cost and makes it easier and faster to grow your TV service offering. For example, the Agile Appliance platform is ideal if you are considering expanding your TV services from an IPTV model to an OTT TV model.

Owning your own CDN allows greater control over the viewing quality, reducing buffering, delays and glitches.

Right-sized deployments

The Agile Appliance is available in different versions enabling deployments with various capacity needs.

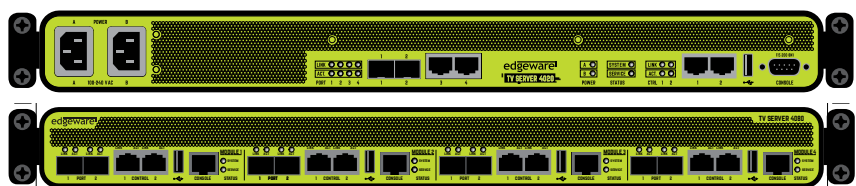
4020 can be deployed anywhere in a network, from the core to the deep edge, ingesting up to 2 Gbps and delivering 20 Gbps wirespeed or up to 32,000 concurrent sessions from a single half depth rack unit.

4080* provides a step-change in streaming density by ingesting up to 8 Gbps and delivering 80 Gbps wirespeed or 128,000 concurrent sessions from a single rack unit.

Delivering ten times the throughput of many generic servers, it further enhances the quality of viewing experience, delivers massive scale and lowers OPEX compared to conventional solutions.

Features & benefits

- ✓ Distributed, as opposed to centralized, streaming and caching massively reduce backhaul traffic
- ✓ Minimal power consumption and small footprint, only 1 RU, makes the appliances ideal to deploy anywhere in the network, reaching a highly distributed distributed TV CDN
- ✓ High-reliability appliance, more than 10 years of meantime between failure (MTBF)
- ✓ Chunked transfer encoding enabling ultra-low latency
- ✓ Multicast to unicast conversion enabling personalized ad insertion
- ✓ Instant scalability through license keys enables up to 80 Gbps of TV streaming per server
- ✓ Multi-threaded HTTPS enabling up to 20k/80k requests per sec



* Available on special order

Technical specifications

4020/4080 COMMON FEATURES	4020 SPECIFICS	4080* SPECIFICS
APPLICATIONS <ul style="list-style-type: none"> Just in Time Repackaging to supported ABR formats Just in Time Encryption Multiscreen Video Delivery (HTTP ABR) Network/Cloud DVR, incl. "recording in the past" Catch-up TV Pause live TV, Re-start TV Live Webcast Download Video on Demand Subscribed TV on Demand 	BANDWIDTH AND SESSION <ul style="list-style-type: none"> Up to 20 Gbps output streaming, licensed range 2-20 Gbps Up to 32,000 fully concurrent sessions: <ul style="list-style-type: none"> up to 32,000 streams @ 600 kbps up to 8,000 streams @ 2.5 Mbps up to 2,500 streams @ 8.0 Mbps Up to 20,000 HTTPS requests/sec 	BANDWIDTH AND SESSION <ul style="list-style-type: none"> Up to 80 Gbps output streaming, licensed range 20-80 Gbps Up to 128,000 fully concurrent sessions: <ul style="list-style-type: none"> up to 128,000 streams @ 600 kbps up to 32,000 streams @ 2.5 Mbps up to 10,000 streams @ 8.0 Mbps Up to 80,000 HTTPS requests/sec
STREAM BITRATES <ul style="list-style-type: none"> 96 kbps – 50 Mbps / stream CBR, VBR 	LIVE TV INGEST <ul style="list-style-type: none"> Total ingest bandwidth: Up to 2 Gbps Up to 1024 channels Direct snooping of UDP multicast Remote scheduling of recordings 	LIVE TV INGEST <ul style="list-style-type: none"> Total ingest bandwidth: Up to 8 Gbps Up to 4096 channels Direct snooping of UDP multicast Remote scheduling of recordings
SECURITY AND INTEGRITY <ul style="list-style-type: none"> Hardware classification/denial of service filter Ingress/Egress bandwidth control VLAN traffic and control separation Linux Iptables/Netfilter firewalling 	CONTENT STORAGE (CACHE) – SOLID STATE	
STREAM CONTROL <ul style="list-style-type: none"> RTSP/SDP (RFC2326, RFC2327) Single asset trick play 100% concurrency guaranteed HTTP/HTTPS Partial download with seek (dragbar) 	<ul style="list-style-type: none"> 1–48 TB NAND Flash, e.g. <ul style="list-style-type: none"> 180,000 h of video @ 600 kbps (e.g. mobile web TV) 44,000 h of video @ 2.5 Mbps (SDTV) 24,000 h @ 4.5 Mbps (e.g. ABR, 300 kbps, 600 kbps, 1.2 Mbps, 2.4 Mbps all profiles in cache) 14,000 h of video @ 8 Mbps (HDTV) 	<ul style="list-style-type: none"> 8–64 TB NAND Flash, e.g. <ul style="list-style-type: none"> 242,000 h of video @ 600 kbps (e.g. mobile web TV) 58,000 h of video @ 2.5 Mbps (SDTV) 32,400 h @ 4.5 Mbps (e.g. ABR, 300 kbps, 600 kbps, 1.2 Mbps, 2.4 Mbps all profiles in cache) 18,200 h of video @ 8 Mbps (HDTV)
CONTENT UPLOAD <ul style="list-style-type: none"> FTP, HTTP Convoy Control and Management Software IP multicast ingest (Time Shift TV) Automatic indexing for single asset trick play (RTSP) 	STREAM CONTROL <ul style="list-style-type: none"> RTSP/SDP (RFC2326, RFC2327) Single asset trick play 100% concurrency guaranteed HTTP/HTTPS Partial download with seek (dragbar) 	<ul style="list-style-type: none"> 8 x 10/100/1000BASE-T, RJ45 802.1Q VLAN USB 4 x RS-232, RJ45 Control also possible over streaming interfaces
MANAGEMENT AND CONTROL <ul style="list-style-type: none"> Origin and Convoy Management Software (optional) Embedded Linux SNMPv3 IGMPv3 syslog 	POWER <ul style="list-style-type: none"> 100 W peak power consumption full configuration, max load Heat flow rate: 340 BTU/h 	<ul style="list-style-type: none"> 400 W peak power consumption full configuration, max load Heat flow rate: 1360 BTU/h
REGULATORY <ul style="list-style-type: none"> FCC Part 15 CE UL/EN 60950-1 RoHS WEEE 	POWER CONNECTIONS <ul style="list-style-type: none"> -48 VDC or 100-240 VAC 50/60 Hz (factory option) Dual redundant power supplies 	<ul style="list-style-type: none"> 100-240 VAC 50/60 Hz Dual redundant power supplies
OPTIONS <ul style="list-style-type: none"> 19" Rack mount brackets (Standard) 23" Rack mount brackets Front panel air filter (4020) 	PHYSICAL DIMENSIONS <ul style="list-style-type: none"> 1RU/19" Height: 44 mm (1.73") Width: 448 mm (17.64") Depth: 250 mm (9.84") Weight: 5.1-6.0 kg (11.2-13.2 lbs) 	PHYSICAL DIMENSIONS <ul style="list-style-type: none"> 1RU/19" Height: 44 mm (1.73") Width: 448 mm (17.64") Depth: 600 mm (23.62") Weight: 12.7 kg (28.00 lbs)
	ENVIRONMENTAL <p>Operating:</p> <ul style="list-style-type: none"> 0 to 50° C (32 to 122° F) 30 – 90% RH (non-condensing) <p>Storage:</p> <ul style="list-style-type: none"> -20 to 70° C (-4 to 158° F) 10 – 90% RH (non-condensing) <p>Air flow:</p> <ul style="list-style-type: none"> 8 fans, high reliability. 4+4 redundancy Front to rear air flow Individual fan monitoring Temperature monitoring 	ENVIRONMENTAL <p>Operating:</p> <ul style="list-style-type: none"> 0 to 40° C (32 to 104° F) 30 – 90% RH (non-condensing) <p>Storage:</p> <ul style="list-style-type: none"> -20 to 70° C (-4 to 158° F) 10 – 90% RH (non-condensing) <p>Air flow:</p> <ul style="list-style-type: none"> 8 fans, high reliability. 4+4 redundancy Front to rear air flow Individual fan monitoring Temperature monitoring

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