

Expedite mobile content delivery



HP ProLiant m700 Server Cartridges

As every content delivery network operator knows, milliseconds count. Clients are unwilling to wait for their video or multimedia file, or to access their favorite social network. HP Moonshot solves that.

Get better benefits

What if you could meet your client's mobile demands by deploying an all-new and totally innovative platform that offers more density and less complexity, while also accelerating graphics performance?

When you compare HP ProLiant m700 Server Cartridges to traditional 1U servers, the ProLiant m700 Server Cartridge delivers density, with 180 servers in a 4.3U chassis, or 1,800 servers/rack. That density means less spend on racks, switches, and cables.

Drastically improve your infrastructure economics

Rather than continue to spend precious budget dollars on energy for power and cooling, you can use HP Moonshot and save. In fact, when HP migrated its own Web pages and objects from legacy servers to Moonshot servers, we cut energy consumption by a whopping 89 percent!¹

Scale on demand

When you need to grow your infrastructure to meet increasing demands, you have no time to waste. With Moonshot, you simply add more server cartridges to the chassis, and you're ready to go. Each Moonshot 1500 chassis holds up to 45 cartridges—which means up to 720 server cores/chassis, using quad-core HP ProLiant m700 Server Cartridges.

Time for something new and different?

Today's mobile Content Delivery Networks (CDNs) have a single goal—serve content to end-users—and do it ultra-quickly and reliably, no matter what.

Looking for the total “Internet content experience,” your clients want Web objects, downloadable objects, applications, live streaming media, on-demand streaming media, and access to social networks—and they want them now.

Like many CDNs, you might try to meet these content-serving demands using dedicated servers deployed in multiple locations. Doing so can help improve page load times and increase global availability of content for customers, while also reducing bandwidth costs for you.

But what happens when those servers fail to keep pace with growing demands? And when the large amounts of energy they consume impact your bottom line? Or when your sprawling data centers run out of space?

The simple answer is, “Do something different. Something new. Something innovative!” Something like HP ProLiant m700 Server Cartridges.

Who benefits from the m700?

Any organization that delivers content over the Internet can benefit from the cost, space, simplicity, and performance benefits of the HP ProLiant m700 Server Cartridge.

Better content delivery

Optimized for cost-effective content delivery, the HP ProLiant m700 Server Cartridge is designed to resolve the top three challenges that virtually every CDN operator faces today—regardless of size or global location.

- **Reduce costs**—Internal HP research shows when compared to traditional 1U servers, Moonshot servers use less energy for power and cooling, and cost less to purchase.
- **Save space**—Another cost-saving benefit, Moonshot servers are so compact they use less data center space.
- **Boost performance**—With four AMD Opteron X2150 APU processors, ProLiant m700 Server Cartridges offer higher single-threaded performance than other chips available today. According to AMD, Opteron X2150s are the highest density, most power-efficient, small-core x86 processors ever built.²

Moonshot at a glance

An exciting new class of software-defined server, the HP Moonshot System is engineered to address the IT challenges created by today's complex content delivery networks—as well as by Web, Big Data, cloud, and other workloads. Built from chips more commonly found in smartphones and tablets, HP Moonshot server cartridges:

- Fit in the palm of your hand
- Significantly reduce energy consumption
- Offer breakthrough scale and performance
- Cost less than traditional servers

¹ h20195.www2.hp.com/v2/GetDocument.aspx?docname=4AA5-0059ENW&cc=us&lc=en

² amd.com/us/press-releases/Pages/amd-launches-the-2013may29.aspx

Contact

hpdiscovery.lab@hp.com

In addition, Moonshot server cartridges boost efficiency by sharing management, power, cooling, and networking resources across all servers in the chassis. So rather than dedicate resources to each server in the chassis—up to 180—one set of shared resources applies to all. And instead of managing and maintaining each server individually, you can manage them all at the same time—a huge time- and money-saving benefit.

Did you know?

- The CDN market is powered primarily by growth in the video delivery segment. This segment is expected to grow by more than 30 percent in the next five years as a result of the surging popularity of over-the-top video, according to BCC Research.³
- More than six billion hours of video are watched each month on YouTube—that's almost an hour for every person on Earth, and 50 percent more than last year.⁴

The enclosure

The HP Moonshot System consists of HP Moonshot 1500 enclosure/chassis and application-optimized HP Moonshot ProLiant server cartridges. With an integrated graphics processor, the HP ProLiant m700 Server Cartridge is optimized for mobile content delivery.

A single 4.3U enclosure holds up to 45 server cartridges, two network switches, and supporting components. With support for up to 720 server cores per chassis and 1,800 servers/rack, the high-density m700 means less spend on racks, switches, and cables.

The beauty of the Moonshot System is you can very cost-effectively get the amount of performance and throughput you need for lightweight workloads, including:

- Web
- Hosting
- Hosted desktop infrastructure
- Voice over IP (VoIP)/LTE (telecommunications)
- Seismic processing

- Media transcoding
- Open source cloud Web serving
- Analytics

Bringing it all together

HP hardware is a critical part of the Moonshot System. But the “special sauce” that optimizes each cartridge for a particular workload is the technology delivered through the HP Pathfinder Innovation Ecosystem.

Including technology from leaders in their respective areas—e.g., CDN, hosting, Web, Big Data—means you can access groundbreaking solutions in months instead of years. Partners in the HP Pathfinder Innovation Ecosystem include AMD, Intel®, Microsoft®, Red Hat®, SUSE, and many more.

Get the support you need

To ensure you get the services you need when you need them, HP Technology Servers help you successfully utilize HP ProLiant m700 Server Cartridges in your content delivery environment. Depending on your needs, you can choose from:

- Strategic planning
- Hands-on training
- On-site or factory-integrated installation
- Ongoing support from HP Foundation Care to HP Datacenter Care

Every Moonshot chassis comes with warranty and Canonical Ubuntu operating system support.

Try before you deploy

In case you want to test your applications running on HP ProLiant m700 Server Cartridges, you can use an HP Discovery Lab. With facilities located around the world, HP Discovery Labs provide fast and easy access to technology, industry experts, and peers—enabling you to confidently choose the right solution for your hosting service's unique needs. If you prefer, you can access an HP Discovery Lab remotely.

Learn more at

hp.com/go/moonshot

³ advanced-television.com/2013/05/21/cdn-market-to-near-7bn-in-2017/

⁴ youtube.com/yt/press/statistics.html

Sign up for updates
hp.com/go/getupdated



Share with colleagues



Rate this document

