

Cisco ASR 1000 Series Aggregation Services Routers

Rev up the edge of your WAN

Your network traffic volumes are likely exploding because of mobility, cloud networking, video, and other applications. So you might need more “oomph” in network locations where traffic converges to avoid bottlenecks and keep performance humming.

Cisco® ASR 1000 routers have the power to aggregate all your traffic streams from branch offices and other sites while running the intelligent services that help you control, filter, and secure traffic. You get consistent application performance among enterprise sites and cloud locations.

All on a compact, universal hardware platform. Consistent software operates across the whole product family, so you can deploy and manage all your ASRs in the same way.

Benefits

- Network speeds to 200 Gbps
- High-performance support for multiple concurrent services
- Compliance with industry security mandates
- All-in-one compact router design for OpEx and CapEx savings
- In-service software upgrades and redundant power supply for high availability
- High-speed crypto

“By providing network connectivity that is very fast and always on, we’re enabling our scientists to collaborate in ways they never could have collaborated before.”

Eric Hicks

Director of Information Technology,
Burnham Institute for Medical Research

Super fast and always on

ASR 1000 series routers deliver the extra oomph you need to data centers, large offices, and service provider networks. The boost in performance comes from the routers’ split data/ control plane architecture. The control plane is dedicated to control functions, and the data plane is dedicated to traffic forwarding, so you can program your data plane with predictable performance.

Another source of performance power is our Quantum Flow Processor™. The processor delivers massive parallel processing so you can activate many enhanced routing services simultaneously while maintaining high performance.

The Cisco ASR 1000 family’s architecture supports a redundant design for five-nines (99.999 percent) availability. ASR 1006-X and ASR 1009-X chassis models support N+1 redundancy of power supply, for the flexibility to balance uptime, cost, and the size of your carbon footprint.

Cisco SD-WAN capability can be enabled on the Cisco ASR 1000 series platforms with IOS-XE. Cisco SD-WAN offers an entirely new way to manage and operate your WAN infrastructure. Cisco SD-WAN is a cloud delivered architecture that offers secure, flexible and rich services. And with Cisco SD-WAN and the ASR 1000 series platforms, you have integrated security built-right-in for branch security with these integrated security capabilities:

- Application aware enterprise firewall
- DNS layer enforcement (Umbrella)

Unified access security and multi-factor authentication

Zero trust security model, allows SD-WAN secure connections to all applications (whether on premises or in the cloud) based on the trust worthiness of users and devices.

A variety of models and licensing options help you meet the changing speed and budget requirements of your various locations. You can choose from router models that support speed ranges from 2.5 to 200 Gbps to get just the right price/performance ratio for a particular site. The product series contains nine ASR models (Table 1) in form factors ranging from a single rack unit (RU) to 13 RUs.

Table 1. ASR 1000 Router models

ASR Model	1001-X	1002-X	1001-HX	1002-HX	1004	1006	1006-X	1009-X	1013
Speed	2.5 to 20 Gbps	5 to 36 Gbps	44 to 60 Gbps	44 to 100 Gbps	20 to 40 Gbps	20 to 100 Gbps	40 to 100 Gbps	40 to 200 Gbps	40 to 200 Gbps
Typical Uses	<ul style="list-style-type: none"> High-end branch Enterprise WAN or Internet edge Route Reflector Datacenter Edge 	<ul style="list-style-type: none"> Enterprise WAN or Internet edge Service provider edge Datacenter Edge 	<ul style="list-style-type: none"> Enterprise WAN or Internet edge Service provider edge Datacenter Edge 	<ul style="list-style-type: none"> Enterprise WAN or Internet edge Service provider edge Datacenter Edge 	<ul style="list-style-type: none"> Enterprise WAN or Internet edge Service provider edge Datacenter Edge 	<ul style="list-style-type: none"> Large enterprise Internet edge Service provider edge Datacenter Edge 	<ul style="list-style-type: none"> Large enterprise Internet edge Service provider edge Datacenter Edge 	<ul style="list-style-type: none"> Large enterprise Internet edge Service provider edge Datacenter Edge 	<ul style="list-style-type: none"> Large enterprise Internet edge Service provider edge Datacenter Edge

Next steps

For more information about the Cisco ASR 1000 Series Routers, visit <https://www.cisco.com/go/asr1000>. To further compare models, visit <https://www.cisco.com/c/en/us/products/routers/asr-1000-series-aggregation-services-routers/models-comparison.html>.

Accelerate your intent-based networking journey with Cisco Services.

With proven experience, best practices, and innovative tools, we help you confidently migrate, adopt, deploy and manage your new solutions. View all services for routers at: <https://www.cisco.com/c/en/us/products/routers/service-listing.html>