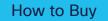ılıılı
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How to Buy

Benefits of Migrating to Cisco ASR 1001-X and 1002-X Application Services Routers

The new Cisco® ASR 1001-X and 1002-X Routers provide many more capabilities than previous models, and at higher scale and performance. Customers are encouraged to migrate from the older ASR 1001 and ASR 1002 to the next-generation ASR 1001-X and ASR 1002-X.

Intent-based networking capability	Feature	First-generation ASR 1001 and 1002	Next-generation ASR 1001-X	Next-generation ASR 1002-X	Benefits
Comprehensive security solutions	Highly scalable and flexible VPN solutions	Up to 1.8 Gbps (ASR 1001) and up to 3.5 Gbps (ASR 1002)	Up to 8 Gbps	Up to 4 Gbps	Higher number of secure connections with diverse VPN solutions (DMVPN, GETVPN, FlexVPN, and SSL VPN)
	NSA Suite B encryption support	No	Yes	Yes	Supports robust, more efficient next-generation encryption that offers strong ciphers and key entropy
	Advanced Encryption Standard (AES)–256 WAN MACsec	No	Yes	No	Overlays encrypted secure channels over provider Ethernet circuits in point-to-point or point-to-multipoint solutions
	Encrypted Traffic Analytics	No	Yes	Yes	Able to detect security threats in encrypted traffic at line rate

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Intent-based networking capability	Feature	First-generation ASR 1001 and 1002	Next-generation ASR 1001-X	Next-generation ASR 1002-X	Benefits
	Software-Defined Access (SD-Access)	No	Yes	Yes	Border router for SD-Access; extends segmentation through the WAN
	Trustworthy systems	No	Yes	Yes	Security foundation provides integrity verification, trust, and security built into the hardware
	Patchability and Software Maintenance Upgrade (SMU)	No	Yes	Yes	Ability to patch critical bug fixes and PSIRTs on the same Cisco IOS® XE Software release (no recertification of new software release)
High-performance cloud connectivity	Scalable throughput	Up to 5 Gbps (ASR 1001) and 10 Gbps (ASR 1002)	Up to 20 Gbps	Up to 36 Gbps	Up to 4 times the performance in the same form factor available on demand
	Higher control plane memory	Up to 1 million IPv4 routes	Up to 3.5 million IPv4 routes	Up to 3.5 million IPv4 routes	Up to 3.5 times more routes for multiple ISP peering
	1 Gigabit Ethernet (GE) and 10GE ports	4x 1GE built in; no built-in 10GE shared port adapters (SPAs) for 1GE and 10GE	6x 1GE and 2x 10GE built in; 1 SPA	6x 1GE built in; 3 SPAs	Built-in 10GE ports provide an easier 1GE to 10GE transition. Up to 3x 10GE ports in 1 rack unit (ASR1001-X)
	Hybrid cloud connectivity	No	Yes	Yes	Use proven designs with the ASR 1001-X and 1002-X on-premises in your data center and the Cisco CSR 1000V in the cloud to extend into public and private clouds

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Intent-based networking capability	Feature	First-generation ASR 1001 and 1002	Next-generation ASR 1001-X	Next-generation ASR 1002-X	Benefits
	Azure ExpressRoute certified	No	Yes	No	Fast, private connections to Microsoft Azure. ASR 1001-X is jointly validated by Cisco and Microsoft for 50, 100, 200, and 500 Mbps, and 1 Gbps ExpressRoute circuits
Simplified orchestration and management	Able to support SD-WAN networking	No	Yes	Yes	Application visibility and optimization, lower WAN OpEx and TCO
	Cisco DNA Center orchestration and management	No	Yes	Yes	Single pane of glass for provisioning, managing, and securing the network
	Programmability	No	Yes	Yes	Zero-touch provisioning, Guest Shell, telemetry, and programmatic interfaces (such as NETCONF and RESTCONF) to simplify network management
Analytics and assurance	Cisco vAnalytics	Yes	Yes	Yes	Cisco vAnalytics assesses application health and correlates it with network performance for actionable insights
	Cisco ThousandEyes	No	Yes	Yes	Extends visibility into the internet, cloud, and SaaS*

Intent-based networking capability	Feature	First-generation ASR 1001 and 1002	Next-generation ASR 1001-X	Next-generation ASR 1002-X	Benefits
Flexible consumption models	Subscription-based software licensing options	No	Yes	Yes	Flexible consumption models, software portability, pay as you grow
	On-demand services and features	Yes	Yes	Yes	Next-generation platforms offer instant-on services and features with on-demand licensing at higher performance than older platforms

* Selected Cisco ASR 1000-X and 1002-X models only.

The Cisco ASR 1001 and 1002 Routers reached end of sale effective April 2016, with final milestone dates for software maintenance and software security/ vulnerability support of August 1, 2018, and August 1, 2019, respectively.

References

EOS notice for ASR 1001 and 1002: https://www.cisco.com/c/en/us/products/collateral/routers/asr-1000-series-aggregation-services-routers/eos-eol-notice-c51-734572.html.

EOS notice for Cisco IOS XE Release 3.16: https://www.cisco.com/c/en/us/products/collateral/routers/asr-1000-series-aggregation-services-routers/eos-eol-notice-c51-738519.html.

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To view buying options and speak with a Cisco sales representative, visit https://www.cisco.com/c/en/us/buy.html.