Cisco ISR-AX

General

Q. What is the Cisco® ISR-AX?

A. With Cisco Integrated Services Routers with Application Experience (Cisco ISR-AX), Cisco is expanding the role of our ISRs to deliver application-centric networks that provide granular visibility, control, and optimization without additional devices or bandwidth upgrades. The Cisco ISR-AX Routers directly integrate Cisco Wide Area Application Services (WAAS), Application Visibility and Control (AVC), and Data licenses into a platform that is simple to order, configure, and deploy for secure, optimized cloud connectivity and branch-office routing.

Q. Will the Cisco ISR-AX Router help with the deployment of my Citrix VDI, Microsoft Exchange, or other Citrix applications?

A. Yes. The Cisco ISR-AX has been validated against key applications such as Citrix XenApp and XenDesktop, Microsoft Exchange, SAP, and many more. End-user benefits for these applications include improved latency, reduced bandwidth consumption, and application response time statistics.

Q. How does the ISR-AX differ from my Cisco Integrated Services Routers Generation 2 (ISR G2) Router?

A. The Cisco ISR-AX and ISR G2 Routers are based on the same hardware and software. By bundling software licenses for WAN optimization, AVC, security, and data, as well as memory or service modules for WAAS, we have changed the economics to enable customers to deploy rich application services at scale across their enterprises.

Q. What are the features highlights of the Cisco ISR-AX?

A. The portfolio provides increasing performance and module slot density, and each comes equipped and ready to deploy, including all required Application Experience (AX) licenses including Data, WAAS-Express, and Application Visibility and Control and Right-to-Use (RTU) for 2500 WAAS or Virtual WAAS (vWAAS) connections for the Cisco 3900-AX Series and 1300 RTU WAAS or vWAAS connections for the Cisco 2900-AX Series.

Platform Support

Q. What hardware platforms are supported on Cisco ISR-AX Routers?

A. Similar to the ISR G2, the Cisco ISR-AX Router portfolio consists of three product families: the Cisco ISR 3900-AX, 2900-AX, and 1900-AX Series Application Experience Routers. The hardware platforms included in the Cisco ISR-AX offering are the 3945E-AX, 3925E-AX, 3945-AX, 3925-AX, 2901-AX, 2911-AX, 2921-AX, 2951-AX, 2901-AX, 2911-AX, 2921-AX, 2951-AX, and 1941-AX.

Q. Which platforms can I run WAAS with the on the Cisco ISR-AX?

A. The Cisco ISR-AX contains an RTU license for WAAS, meaning you can run integrated Cisco WAAS on the Cisco Services-Ready Engine (SRE), vWAAS on the Cisco Unified Computing System™ (Cisco UCS®) E-Series Blade Cards, or Cisco WAAS Express.

Q. What are the hardware and software dependencies?

A. As with all Cisco IOS® Software-based platforms, we recommend that you consult specific release notes for feature support and caveats. When using applications that run on Cisco SRE or Cisco UCS E-Series cards, be sure to consult the comparable release notes for those products and applications as well.

Q. Are there any options for customers who have an existing ISR G2?

A. Customers who have already purchased ISR G2 Routers can purchase the App license and any associated hardware upgrades such as memory, flash memory, or modules such as the SRE or Cisco UCS E-Series.

Q. If I want to upgrade beyond the WAAS capability of an App license, can I transfer it to another router?

A. The RTU is associated to the ISR. You can add additional capacity using SRE or Cisco UCS E-Series where the license does transfer, and running multiple SREs or Cisco UCS E-Series Blades is allowed where the platform supports the use of multiple modules. The AX license does not transfer to other routers.

Q. Will Cisco SMARTnet™ support for the Cisco UCS E-Series and SRE Modules remain unchanged?

A. The AX license is a software-only license; existing ISR G2 SMARTnet support remains unchanged.

Architecture

Q. What other solution components do I need when using Cisco ISR-AX and WAAS?

A. When deploying WAAS, you need to ensure that an appropriately configured WAAS Accelerator is located on the opposite end of the network to be optimized. Additional information about the WAAS system is available at: http://www.cisco.com/en/US/docs/app_ntwk_services/waas/waas/v511/configuration/guide/intro.html.

Q. Where would I deploy the Cisco ISR-AX?

A. You can cost-effectively deploy the Cisco ISR-AX at smaller campus buildings, branch-office locations, or other remote sites. The range of physical interfaces supported by the ISR platform allows the Cisco ISR-AX to connect to a wide range of wired and wireless access networks. You can also use the Cisco 3900-AX Series for certain campus locations and regional sites.

Q. Can I still use the Cisco ISR-AX to run other Cisco IOS Software features not in the package, as in the case of Cisco Unified Communications?

A. Yes, with the addition of the appropriate software licenses, you can run other features.

Q. How many WAAS connections for WAAS do I get for each platform?

A. The Cisco ISR 2900-AX comes with a RTU for WAAS for up to 1300 connections, and the 3900-AX has up to 2500. You can use these RTU licenses to run WAAS Express to its capacity, WAAS on SRE710 and SRE910, or vWAAS on the Cisco UCS E-Series. Start with WAAS Express, and then if you need more functions or capacity, add an SRE910, and RTU covers the software cost. If you need to expand further, you can run multiple SRE cards as supported by the platform or you can use a Cisco UCS E-Series single or doublewide module with vWAAS, and the ISR-AX RTU covers it.

Management and Monitoring

Q. What can I monitor on the Cisco ISR-AX platforms using AVC?

A. With AVC you can discover applications running in your network by using Layer 7 signatures regardless of ports and their bandwidth usage. In addition, AVC can also collect performance metrics for TCP applications, voice, and video. Application information and bandwidth usage and performance metrics are aggregated and exported using an open flow export format such as NetFlow Version 9 and IP Information export (IPFIX) to a management tool.

Q. Which Cisco platforms can I use for displaying and reporting of data from the Cisco ISR-AX?

A. You can use the Cisco Prime™ Infrastructure for management and monitoring of the Cisco ISR-AX platforms or any other third-party tools using the standard NetFlow export. You can find certified vendors on the Cisco Development Network at: http://developer.cisco.com.

Q. Can I still use the Cisco WAAS Central Manager (WCM)?

A. Yes, for a deployment that is using WAAS, the WAAS Accelerators that are running on the Cisco ISR-AX as WAAS Express or on the SRE or Cisco UCS E-Series Blade Card will still work with the WCM.

Additional Information

Q. Do you have any additional information about all the services included in the Cisco ISR-AX?

A. More information about the Cisco ISR-AX is available in the ISR-AX ordering guides.

Q. What about additional information about the ISR G2 platforms?

A. More information about the Cisco ISR G2 is available at: http://www.cisco.com/en/US/products/ps10906/Products_Sub_Category_Home.html.