Services Ready Engine
## Compact, Versatile, High-Performance Router Blade

What Is Cisco Services Ready Engine?

The Cisco Services Ready Engine (SRE) modules are high-performance router blades for Cisco ISR G2 that provide the capability to host Cisco, third-party, and custom applications. The modules have their own processors, storage, network interfaces, and memory that operate independently of the host router resources, helping to ensure maximum concurrent routing and application performance. The Cisco SRE provides a service-ready deployment model that enables you to provision applications on the modules remotely at any time.
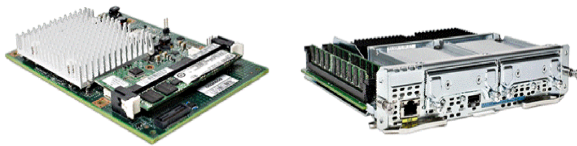
Cisco SRE Features

Host Cisco, Third-party, and Custom Branch-Office Applications

Cisco SRE is a platform for a variety of services and applications that are impractical or too business-critical to centralize:

- Core network services
- Unified communications
- Physical and network security
- Application infrastructure
- Industry applications

High-Performance, High-Capacity Hardware

The Cisco SRE modules offer compute performance and storage capacity on par with typical branch-office servers or appliances:

- x86-64 single- or multicore processor options
- Up to 1 terabyte of hard disk storage capacity
- RAID, field replaceable, or hot-swappable disk
- Hardware-assisted virtualization and cryptography

Small Physical and Carbon Footprint

The Cisco SRE compact and energy-efficient form factors, internally pluggable Internal Service Module, and externally pluggable Service Module:

- Consume no additional physical space
- Require no external cables or connectors
- Use 80-percent less power than a typical server

On-Demand Application Provisioning

The Cisco SRE hosting infrastructure enables deployment of applications when and where they are needed through remote provisioning:

- You can configure a preinstalled application at deployment time
- You can remotely install a new application onto a blank module
- You can remotely replace an existing application with a different one

Centralized Management and Troubleshooting

Cisco Configuration Professional and CiscoWorks LAN Management Solution (LMS) provide single- and multidevice management for the Cisco SRE modules that enables:

- Automated discovery and inventory of modules
- Centralized application provisioning and control
- Centralized module monitoring and reporting
- Power management and online/offline scheduling

Cisco SRE Benefits

The application-hosting capabilities and provisioning flexibility offered by the Cisco SRE, the rich collection of branch-office services available in the Cisco IOS® Software, and the extensive set of network connectivity interfaces and modules—all integrated and housed under a single chassis—make the Cisco ISR G2 with Cisco SRE modules an ideal all-in-one platform for optimizing branch-office IT infrastructure. This solution offers many benefits, including the following.

Low Total Cost of Ownership

The Cisco SRE reduces both capital and operational expenses:

- No field-deployment cost when provisioning new applications
- Lower power, cooling, cabling, and space costs
- Reduced network and application administration cost

Operational Efficiency in the Branch Office

The Cisco SRE offers flexibility to address changing business needs:

- New applications are deployed when and where they are needed
- Service-ready infrastructure enables quick service deployment
- High-performance hardware enables applications to scale with business

Protection of Infrastructure Investment

The Cisco SRE future-proofs the branch-office IT infrastructure:

- One hardware platform for many different applications
- You can replace obsolete applications with new ones
- No infrastructure changes are needed to deploy new applications

Reduced Environmental Impact

The Cisco SRE reduces the impact of branch-office IT on the environment:

- Lower power consumption leads to reduced CO_2 emissions
- No cables, racks, ports, and less space save natural resources
- Compact footprint uses two thirds less material than a typical server