

Transform the future of your business with Cisco Ultra Packet Core

Cisco® Ultra Packet Core (UPC) redefines the paradigm of agility for service providers, while also enabling a smooth evolution from physical, to virtual, to ultra packet core.

Value statement

Cisco UPC is an industry-leading, fully virtualized packet core.

Product overview

Cisco UPC has feature commonality with the physical Cisco ASR 5500 Series platform, is 5G ready, and combines all packet core services for 4G, 3G, 2G, Wi-Fi, and small-cell networks into a single solution. UPC provides these network functions as virtualized services, so you can scale capacity and introduce new services much faster and more cost-effectively than ever before.

Since it is designed to distribute and orchestrate packet core functions across physical and virtual resources, UPC allows an easy transition from physical to virtualized packet core services. Or you can use both simultaneously.

In addition, UPC maximizes performance through Control and User Plane Separation (CUPS), lowers costs through the operational efficiencies it enables, improves speed of deployment through automation, and provides high flexibility, openness, and extensibility.

Since UPC is a software-only product, it can run on a variety of hardware platforms to meet customer needs.

Features and benefits

Grow revenue through new services and markets

- **New services** - Cisco UPC provides resource management and orchestration intelligence that simplifies and automates the configuration, testing, and integration of new services. You can create and change service offerings and add new customers to your environment more quickly and at a lower cost.
- **New markets** - Superior performance and scale helps service providers nimbly scale new packet-core systems for markets such as automotive, energy, and healthcare.

Lower CapEx and OpEx

The solution helps lower your capital expenditures by letting you replace purpose-built hardware with standardized compute and storage platforms.

It helps reduce operational expenditures by adding efficiency to your packet core infrastructure, reducing the network footprint, and simplifying network configuration and maintenance.

Increase operational agility

You are in control. Go from dedicated, purpose-built hardware to partially virtualized key functions to complete virtualization, all at your own pace.

Consolidate packet core services. UPC combines all mobile packet core services in a virtualized cloud solution. It is both hardware- and hypervisor-independent, abstracting the solution from the physical layer and hypervisor to offer operators greater choices for the design of their packet core. Capacity can be added along with network intelligence to keep pace with growing demand for advanced mobile data applications, as well as your older 2G and 3G services, without adding layers of complexity and cost to the mobile network.

Increase elasticity and cost-effectiveness in your mobile packet core. UPC dynamically scales your packet core functions to adapt to real-world needs. So instead of building out a packet core infrastructure for peak capacity, your system can elastically deploy services as needed and in a topology that is most economically suited.

Easily transition to virtualized cloud services. UPC draws on Cisco StarOS software intelligence to provide flexibility and high availability across both physical and virtual packet core infrastructures. You can now transition to a virtualized packet core at your own pace, even running some packet core services with dedicated hardware and others as virtualized cloud services if you choose.

Platform support and compatibility

- Complete architectural alignment with the European Telecommunications Standards Institute (ETSI) NFV framework
- Leverages open source and open standards pervasively
 - OpenStack, KVM, OpenDaylight
 - Network Service Header

Licensing

We offer flexible consumption models with options from traditional CapEx purchases to pay-as-you-go subscriptions. License models include:

- Subscription
- Perpetual
- New Perpetual
- Enterprise License Agreement (ELA)

(See <https://wiki.cisco.com/pages/viewpage.action?pageId=131125650>)

Product specifications

- Fully featured mobile core VNF
- Integrates with the Management and Orchestration (MANO) stack through standard interfaces
- Onboard automation tools simplify the NFVI resources and VNF instantiation
- Leverage Cisco contributions into industry-standard and open-source-based technologies, including IETF, ETSI NFV, and OPNFV

Cisco and partner services

Services from Cisco and our partners help you get the most value from your Cisco UPC solution, both quickly and cost-effectively. In addition, we can help you:

- Solidify your vision
- Create a strategy
- Develop a roadmap
- Build a scalable design
- Migrate smoothly
- Simplify your architecture and operations
- Strengthen your team by sharing what we know

Cisco Services delivers award-winning services with a history of market-changing innovation. We provide software-enabled smart services built through more than 28 years of industry leadership. In addition, Cisco Services is globally recognized for expertise in engineering IP next-generation network solutions and managing large system and network integration projects.

Learn more at <https://www.cisco.com/go/spservices>.

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Flexible payment solutions to help you achieve your objectives

Cisco Capital makes it easier to get the right technology to achieve your objectives, enable business transformation and help you stay competitive. We can help you reduce the total cost of ownership, conserve capital, and accelerate growth. In more than 100 countries, our flexible payment solutions can help you acquire hardware, software, services and complementary third-party equipment in easy, predictable payments. [Learn more](#).

Let's get to work together

For more information about Cisco Ultra Packet Core, contact your local account representative.




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