

Ultra Packet Core

Grow revenue through new services and markets

New services - 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.

Benefits list

Cisco® Ultra Packet Core (UPC) provides a host of benefits to service providers to grow revenue, reduce costs, and increase operational agility. Use it to:

- Grow revenue through new services and markets
- Lower CapEx and OpEx
- Increase operational agility

Build an effective next-generation mobile core

UPC is an industry-leading, fully virtualized packet core. It has feature commonality with the physical Cisco ASR 5500 Series Aggregation Services Routers 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 UCP is a software-only product, it can run on a variety of hardware platforms to meet customer needs.

Increase operational agility

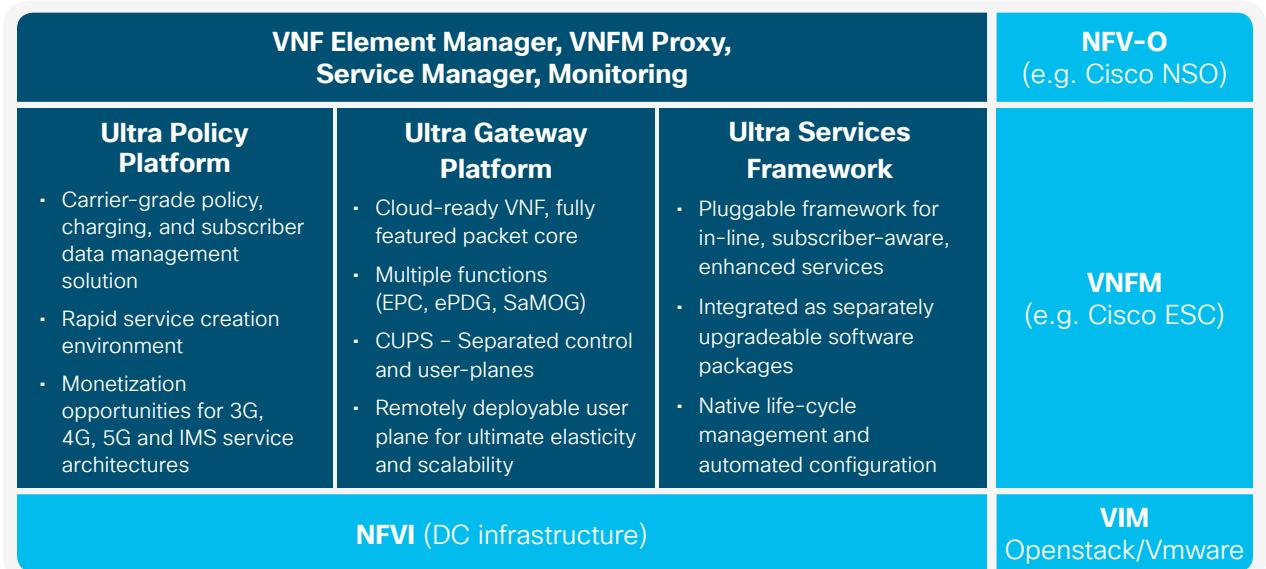
You are in control. Go from dedicated, purpose-built hardware to partially virtualized key functions to complete virtualization, all at your own pace.

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 and giving 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. This allows you to 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.

Ultra Packet Core framework



Get started

Ultra Control Plane is ideal for customers looking to virtualize and implement a 5G-ready network. Learn more about UPC at: <https://www.cisco.com/c/en/us/solutions/service-provider/virtualized-packet-core/index.html?dtid=osscdc000283>

Why you want UPC

UPC redefines the paradigm of agility for service providers, while also enabling a smooth evolution from physical, to virtual, to ultra-packet core.

- It is a proven platform, serving 1.5 billion subscribers and deployed by many tier-1 operators.
- You can create a strong core, with the goal of supporting multiple services in the same load.
- It offers high performance, and is scalable up and down.