

How does the concept of Network as a Service (NaaS) help my agency?



Much like the rise of cloud computing 12 years ago, the growing adoption of Network as a Service (NaaS) allows agencies the flexibility and power of the network within their organization.

However, the value of the network is not the traditional connections of the past. The NaaS solution is able to create a homogeneous network that integrates a more comprehensive view of what your organization needs. An understanding of what applications deliver your agency's mission. From there moving that understanding into a routing framework that empowers your agency and its mission by empowering the applications and solutions your agency uses.

How can the network transform your agency?

The ultimate value for an organization and a government agency will be the reality of two future states that a Network as a Service will allow the organization to achieve.

The two pieces of the NaaS government agency value proposition are:

- **The integration of network and security**
- **The support and use of application aware routing**

Integration of the network and security services

The first way NaaS can transform your agency is through the integration of the network and security services.

With NaaS, the security provided to an organization from the edge to the cloud will come from the network. Of course, we strongly recommend that you layer additional security services based on your needs to reduce your attack surface. However, you can streamline your security under NaaS, because your organization will have a secure, automated and fully-integrated network responding to external and internal threats, without the need of manual human intervention.

This integration of network and security:

- **Allows a secure response before someone penetrates your networks**
- **Adds an additional depth of security, beyond network keys**

Application aware routing

The second transformative value of NaaS is the concept of application aware routing.

Application aware routing allows your organization to prioritize applications within your network. This means you can have specific applications, such as a collaboration package, that is the priority application. Traffic generated by that software solution would be the priority on the network. You can also designate people as a priority, which ensures anything those users generate takes priority on the network, regardless of their location. Lastly, you can designate a specific location as critical.

Application aware routing allows the organization to increase the capabilities of the network in delivering the critical components users need to fulfill the organizational mission. The "how" of that is truly where the power of the application aware network will benefit your agency.

The benefits of application aware routing include:

- **The ability to prioritize applications on your network.** For example, if you need to have an all-agency call, the solution your agency uses for video calls can be the priority system on the entire network.
- **The need to prioritize locations.** Application aware routing allows you to set specific locations that are critical on your network.
- **The need to go beyond applications and locations, and focus on critical users.** Users do not always stay in one place (locations do) or route to one place (applications do), but some users are always a priority to the network.

How a NaaS framework could work for your agency

By adopting Network as a Service, your agency has a homogeneous network that integrates a more comprehensive view of what your organization needs.

But how does this framework work for your agency?

What are some of the more tangible benefits?

Cost Reduction

Many agencies are interested in reducing the cost of their network. The problem is that your network is critical, between all the cell phones, tablets, and other mobile devices in the modern world. So, while you can reduce the cost of the new network, doing so in an unstructured manner can cause organizational issues.

The Network as a Service framework allows you to move forward along that path of reducing your network cost while increasing its reliability. It empowers your network to become a core component of delivering services. When you think about it networks have been doing that for the last 40 years.

The advantage of integration of fixed wireless access, broadband and other low-cost network solutions in the NaaS framework is taking advantage of lower cost connectivity without sacrificing the quality and reliability your users require in delivering your organizational mission.

Network Visibility

Another need government agencies have is gaining insight or visibility into their network. In order to implement that future state application aware routing, you must know what is moving on the network, why it is moving, and what people expect it to do.

An additional benefit of the network as a service framework is that it provides a path to developing an infrastructure that supports visibility services throughout the network. That would include visibility services for broadband, fixed wireless access, cellular backup, and traditional networking circuits, but it also consists of the newer or more modern implementation of cloud-aware networks. Seeing what is happening on your network at any point of any day is critical to fully understanding what your devices, applications and network are doing.

These visibility services must go beyond the network into infrastructure and application performance, from the cloud or data center through to the end-user experience. Simple network analysis may suggest availability and normal functioning of network devices when, in fact, certain applications are not performing optimally over the network. You need an intuitive management portal to provide insight on how users in multiple locations experience your applications and services through your network, with tools to monitor, test, and measure each of these components continually throughout the entire digital delivery chain.

The combined use of a network as a service framework and visibility services should help you better pinpoint the true causes of availability, performance, reachability, and reliability challenges, tracing from users back through your network to the application or service itself. With this level of visibility, you can target resources on such challenges to overcome them as rapidly as possible.

Cloud Agility

One other reason why government agencies will benefit from network as a service is due to the concept of cloud flexibility.

Cloud computing solved one problem many agencies had, cost. NaaS offers a model for reduced cost by supporting the hybrid cloud network, a one connection to many cloud service providers capability. This means you can have one circuit that supports connectivity to all of the cloud service providers your agency uses, with cost savings from replacing two or even three direct connections to cloud providers.

We find this capability changing now in the rise of hybrid cloud connectivity and the ability to have one connection supporting connections to multiple cloud providers, all managed and controlled by a software solution, with reduced cost of connectivity, operations and support.

As part of the network as a service framework, Verizon has a solution that solves the problem of cloud conductivity that will cloud-proof and future-proof your organization going forward.

Verizon created a solution that allows you to connect to every cloud provider you need through one circuit. This circuit also allows you to connect with other US federal agencies directly and it enables you to connect to several third-party organizations or commercial companies.

In another part of the circuit, created by Verizon, is a private network connection. This private network connection ensures that your data going to the cloud and returning always stays in your network, with no data traveling over the public internet.

If we consider cloud agility and visibility services, this circuit gives you virtually an end-to-end, device-to-cloud-to-device visibility into your network infrastructure.

Getting started with Network as a Service

The Network as a Service framework is the future of networking.

Once your agency achieves the future state network-as-a-service solution set of network-based security and application aware routing and network-based security, you will be able to provide your organization with much stronger visibility, a better and future proof resilient connection to the cloud and reducing the cost of your network services in the future. So, how should your organization begin your NaaS journey for digital transformation?

Start with engaging a trusted partner for the journey and work with them to determine your network vision. This is an important step and it will be different for each organization, because each group must begin the journey from its own context and pursue its own specific transformation goals.

Partner Requirements

Here are some important requirements for any partner you engage to help you with your network. Your partner should be able to help:

- **Assess your current network capabilities, then contemplate how all aspects of your new network should be delivered in a flexible, scalable manner**
- **Design an implementation plan based on your priorities and financing approach**
- **Build the network you have envisioned, then operate and maintain it in the most efficient way possible. The object of NaaS is to allow your organization to step back as much as you desire from the day-to-day activities required to run a network, activities that require scarce specialized skills outside your core mission**

Because a partner will play such a critical role in your journey to digital transformation, you should choose wisely. These are the critical characteristics to consider:

- **Can the partner address all aspects of NaaS, like those discussed in this guide?**
- **Can the partner deliver an end-to-end solution, providing all components of all aspects?**
- **Does the partner have significant experience delivering the solution, and a reputation for excellence and reliability?**

Your network will be the foundation on which you will deliver your digital constituent and staff experiences, a critical function worthy of only the most trustworthy partner. We would be happy to work with you on building that future-proof foundation for your organization.

Need help?

Our experts can help guide the next steps in your digital transformation journey.

Call us at: 844.493.0386

Or visit us at:
[verizon.com/publicsector/](https://www.verizon.com/publicsector/)

