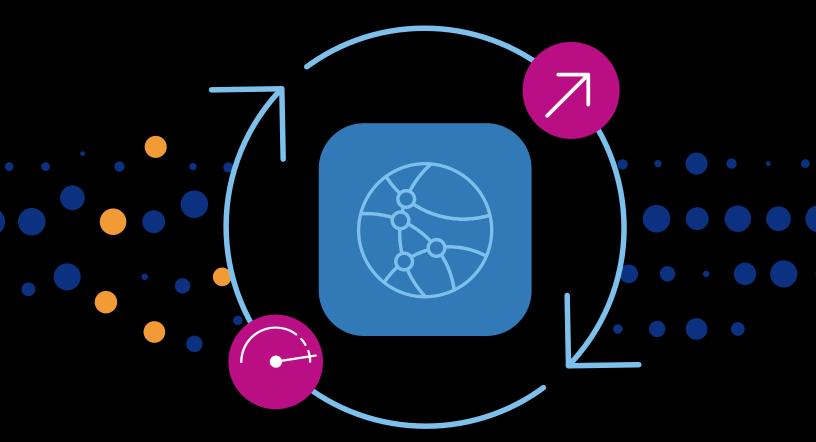
# Enable Globally Resilient Applications with BIG-IP Next DNS

F5's next-generation global server load balancing solution, Global Resiliency with BIG-IP Next DNS, connects applications deployed around the world across multiple workflows to simplify efficient application traffic management across data center and cloud deployments. Global Resiliency with BIG-IP Next DNS helps ensure that users always reach the healthiest, highest-performing applications.





### **Key Benefits**

### **Easy, Rapid Deployment**

Seamlessly attach to critical application deployments and DevOps pipelines and enable configuration of global app delivery services in minutes with just a few clicks, all while reducing the number of instances you have to manage.

#### **Gain Resiliency**

Add application resiliency from the Central Manager dashboard so app traffic always goes to the healthiest, most available application instance.

#### **Zero-effort Observability**

Apps deploy with the components needed for monitoring health and performance metrics. Statistics are seamlessly incorporated into the application's topological view, eliminating the need for integration with a third-party system.

### Global App Delivery—Evolved

Connect applications hosted across diverse environments with Global Resiliency—a single capability that simplifies global traffic management.

### **Application Health Monitoring**

Maintain an exceptional digital experience – never send a user to an unhealthy application.

#### Safe Failover

Build resilience into your network by diverting traffic away from apps that are offline or unhealthy and towards highly performant apps.

With modern, distributed application networks, delivering globally resilient applications requires more time, attention, and resources.

### Globally-Distributed Apps Demand the Best in Global Application Delivery

Deploying and managing resilient applications, especially delivered across a global network, is no easy task. In the era of widely distributed apps, whether deployed in public or private clouds, on-premises data centers, at the edge, in co-locations, or SaaS environments, teams are employing ever-diversifying app architectures and leveraging a mix of third-party libraries, databases, code, and APIs more often. This can result in a patchwork of application delivery solutions which end up exposing applications to myriad weaknesses and insecurities while also raising the risk of a poor digital experience for users.

Meanwhile, users expect low latency, high availability, strong reliability, and a seamless digital experience from their applications. Teams need resilient apps to deliver on these expectations or they risk losing market share and reputation to their competitors. But with modern, distributed application networks, delivering globally resilient applications requires more time, attention, and resources.

While trying to do more, and reach their users' expectations, teams find themselves increasingly burdened with cumbersome global traffic management solutions and high demands on resources, blocking their ability to provide sustainable global resiliency for their applications. At best, the result is burnout and over-taxed assets. At worst, it's a cobbled-together solution for global application delivery that misses the mark on user expectations and potentially exposes businesses to security risks.

## Easily Add Global Application Delivery Capabilities to Your BIG-IP Next Deployment

It should be easy to deploy apps with global resiliency. Currently, however, supplementing apps with global resilience capabilities is expensive, time consuming, and labor-intensive.

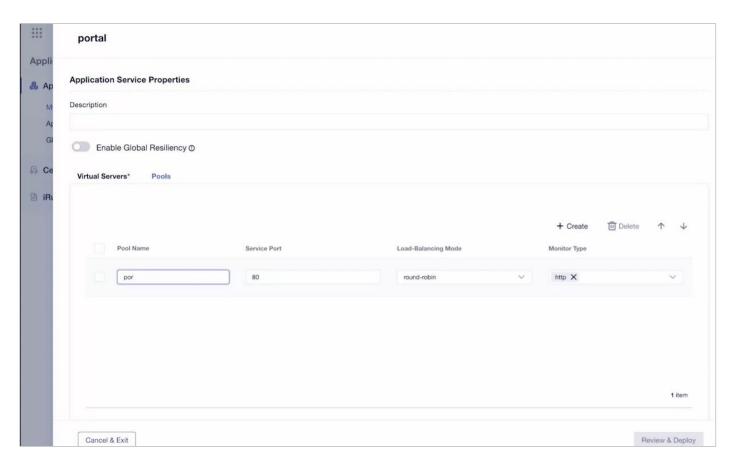
Global Resiliency with BIG-IP Next DNS is available for rapid configuration in BIG-IP Next Central Manager and optimizes the distribution of application traffic across multicloud environments. Through a combination of DNS services and dynamic load balancing decisions, teams can ensure that users are always connected to the highest-performing instance of an application, no matter where that application lives. What if an application instance goes offline or fails a health check in the San Jose data center? Global Resiliency will automatically redirect application traffic to your data center in New York City, keeping users online and applications highly available.

Why call it "Global Resiliency?" Once enabled, Global Resiliency will automatically and dynamically respond to changes in network conditions, server availability, and application performance, regardless of where those apps live. For users, this means always having the

Let BIG-IP Next take the complexity that used to exist with shared objects and merge it into an app's definition. best possible digital experience, regardless of the current state of the network. For supporting teams, this means fortifying an application network so that apps are available, reliable, and operating at peak performance for their users.

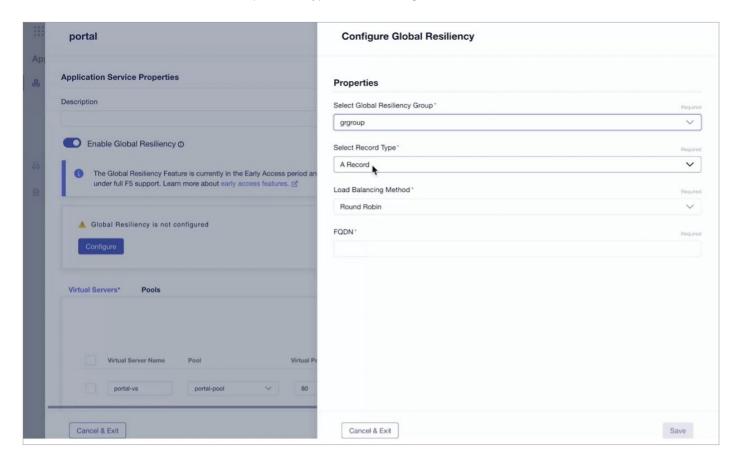
Resilient app performance isn't the only thing that Global Resiliency brings to an app network. With a simple, two-stage process, users can enable Global Resiliency and trim hours off a vital task, saving time and effort and getting apps to users faster. Here's how it works:

**Stage one** creates a Global Resiliency Group (GRG) with just a few configuration commands: pool name, service port, and load balancing method.



**Figure 1**: Specify pool name, service port, and load balancing method to establish the Global Resiliency Group (GRG).

**Stage two** adds Global Resiliency to the application through just four inputs: Global Resiliency Group, Record Type, Load Balancing Method, and FQDN.



### **Key Features**

### **Global Health Monitoring**

Actively observe how sites and applications are running and track performance, health, and usage.

### Global Server Load Balancing

Direct clients to the healthiest app instance with global server load balancing for the best user experience.

### Intuitive, Centralized Management

Manage Global Resiliency from your application deployment within Central Manager not from a separate module. Figure 2: Specify Global Resiliency Group, Record Type, Load Balancing Method, and FQDN to attach Global Resiliency to the application. When you need to attach Global Resiliency to another app, you'll only need to complete this stage.

What took hours in classic BIG-IP DNS takes seconds in BIG-IP Next. And if a new application needs Global Resiliency once the GRG is set, the whole process is as simple as selecting "enable global resiliency" on the new app and repeating the steps in stage two to launch that application with Global Resiliency.

Global Resiliency also simplifies the management of complex environments—those with distributed applications and workloads, numerous locations, and endpoints struggling to deliver a reliable experience and durable performance. Simplify global app delivery and ease the burden on your ops and development teams—let BIG-IP Next take the complexity that used to exist with shared objects and merge it into an app's definition, allowing supporting teams to focus on other issues.

### Deliver Apps Anywhere with Global Resiliency with BIG-IP Next DNS

Delivering highly performant, responsive applications requires a consistent, scalable, and effective global app delivery solution. Global Resiliency with BIG-IP Next DNS provides that and more—it empowers organizations to deliver fast, secure, and highly available applications across diverse and complex environments. It's never been easier to add this layer of functionality to your application deployments. In the past, adding a global load balancing function to an application delivery solution meant spinning up a new module and hours spent configuring individual assets. With Global Resiliency, you can leverage powerful global traffic management functionality with just a few clicks from your BIG-IP Next Central Manager dashboard, saving time and resources while delivering resilient applications to users.

Leverage powerful global traffic management functionality with just a few clicks from the BIG-IP Next Central Manager dashboard

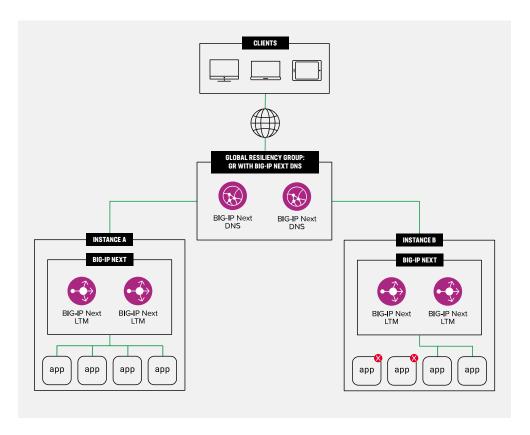


Figure 3: The Global Resiliency capability exists in a group made up of BIG-IP Next DNS instances.

### **Next Steps**

- Global Resiliency with BIG-IP Next DNS is available through Central Manager in BIG-IP Next.
- To learn more about upgrading from BIG-IP to BIG-IP Next, please contact your F5 account team.

