

# The IoT Ready Platform



Peter Silva, 2015-16-06

---

Over the last couple months, in between some [video coverage](#) for [events](#), I've been writing a series of IoT stories. From the basic [What are These "Things"?](#) and [IoT Influence on Society](#) to the descriptive [IoT Effect on Applications](#) and the [IoT Ready Infrastructure](#). I thought it only fair to share how [F5](#) can play within an IoT infrastructure.

Because [F5 application services](#) share a common control plane—the [F5 platform](#)—we've simplified the process of deploying and optimizing IoT application delivery services. With the elastic power of [Software Defined Application Services](#) (SDAS), you can rapidly provision IoT application services across the data center and into cloud computing environments, reducing the time and costs associated with deploying new applications and architectures.

The beauty of SDAS is that it can provide the global services to direct the IoT devices to the most appropriate data center or hybrid cloud depending on the request, context, and application health. Customers, employees, and the IoT devices themselves receive the most secure and fastest experience possible.

F5's high-performance services fabric supports traditional and emerging underlay networks. It can be deployed atop traditional IP and VLAN-based networks, works with SDN overlay networks using NVGRE or VXLAN (as well as a variety of less well-known overlay protocols) and integrates with SDN network fabrics such as those from [Cisco/Insieme](#), Arista and BigSwitch among others.

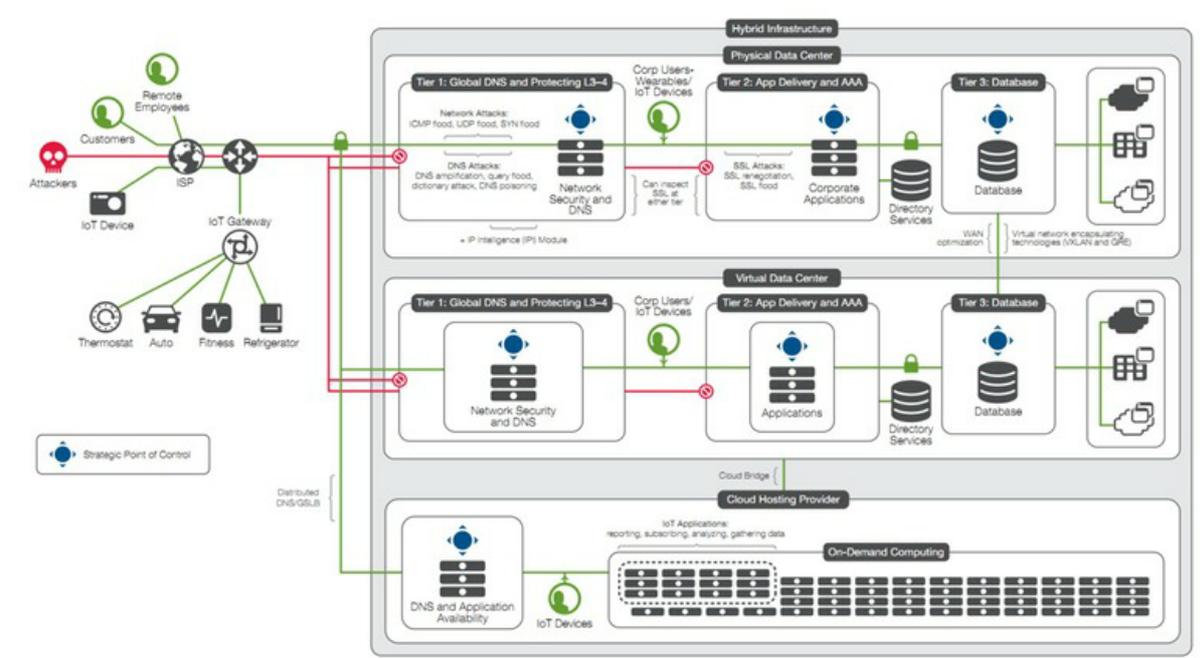
## Hardware, Software or Cloud

The services fabric model enables consolidation of services onto a common platform that can be deployed on hardware, software or in the cloud. This reduces operational overhead by standardizing management as well as deployment processes to support continuous delivery efforts. By sharing service resources and leveraging fine-grained multi-tenancy, the cost of individual services is dramatically reduced, enabling all IoT applications - regardless of size - to take advantage of services that are beneficial to their security, reliability and performance.

The F5 platform:

- Provides the network security to protect against inbound attacks
- Offloads SSL to improve the performance of the application servers
- Not only understands the application but also know when it is having problems
- Ensures not only the best end user experience but also quick and efficient data replication

F5 Cloud solutions can automate and orchestrate the deployment of IoT application delivery services across both traditional and cloud infrastructures while also managing the dynamic redirection of workloads to the most suitable location. These application delivery services ensure predictable IoT experiences, replicated security policy, and workload agility.



F5 BIG-IQ™ Cloud can federate management of F5 BIG-IP® solutions across both traditional and cloud infrastructures, helping organizations deploy and manage IoT delivery services in a fast, consistent, and repeatable manner, regardless of the underlying infrastructure. In addition, BIG-IQ Cloud integrates or interfaces with existing cloud orchestration engines such as VMware vCloud Director to streamline the overall process of deploying applications.

### Extend, Scale - and Secure

F5 Cloud solutions offer a rapid Application Delivery Network provisioning solution, drastically reducing the lead times for expanding IoT delivery capabilities across data centers, be they private or public. As a result, organizations can efficiently:

- Extend data centers to the cloud to support IoT deployments
- Scale IoT applications beyond the data center when required.
- Secure and accelerate IoT connections to the cloud

For maintenance situations, organizations no longer need to manually redirect traffic by configuring applications. Instead, IoT applications are proactively redirected to an alternate data center prior to maintenance.

For continuous DDoS protection, F5 [Silverline DDoS Protection](#) is a service delivered via the F5 Silverline cloud-based platform that provides detection and mitigation to stop even the largest of volumetric DDoS attacks from reaching your IoT network.

The BIG-IP platform is application and location agnostic, meaning the type of application or where the application lives really does not matter. As long as you tell the BIG-IP platform where to find the IoT application, the BIG-IP platform will deliver it.

Bringing it all together, F5 Synthesis enables cloud and application providers as well as mobile network operators the architectural framework necessary to ensure the performance, reliability and security of IoT applications.

Connected devices are here to stay—forcing us to move forward into this brave new world where almost everything generates data traffic. While there's much to consider, proactively addressing these challenges and adopting new approaches for enabling an IoT-ready network will help organizations chart a clearer course toward success.

An IoT-ready environment enables IT to begin taking advantage of this societal shift without a wholesale rip-and-replace of existing technology. It also provides the breathing room IT needs to ensure that the coming rush of connected devices does not cripple the infrastructure. This process ensures benefits will be realized without compromising on the operational governance required to ensure availability and security of IoT network, data, and application resources. It also means IT can manage IoT services instead than boxes.

However an IoT ready infrastructure is constructed, it is a transformational journey for both IT and the business. It is not something that should be taken lightly or without a long-term strategy in place. When done properly, F5-powered IoT ready infrastructure can bring significant benefits to an organization and its people.

ps

Related:

- [The Digital Dress Code](#)
- [Is IoT Hype For Real?](#)
- [What are These "Things"?](#)
- [IoT Influence on Society](#)
- [IoT Effect on Applications](#)
- [CloudExpo 2014: The DNS of Things](#)
- [Intelligent DNS Animated Whiteboard](#)
- [The Internet of Me, Myself & I](#)

Technorati Tags: [f5](#),[iot](#),[things](#),[sensors](#),[silverline](#),[big-ip](#),[scale](#),[sdas](#),[synthesis](#),[infrastructure](#)

Connect with Peter:



Connect with F5:



---

F5 Networks, Inc. | 401 Elliot Avenue West, Seattle, WA 98119 | 888-882-4447 | [f5.com](#)

F5 Networks, Inc.  
Corporate Headquarters  
[info@f5.com](mailto:info@f5.com)

F5 Networks  
Asia-Pacific  
[apacinfo@f5.com](mailto:apacinfo@f5.com)

F5 Networks Ltd.  
Europe/Middle-East/Africa  
[emeainfo@f5.com](mailto:emeainfo@f5.com)

F5 Networks  
Japan K.K.  
[f5j-info@f5.com](mailto:f5j-info@f5.com)

---

©2016 F5 Networks, Inc. All rights reserved. F5, F5 Networks, and the F5 logo are trademarks of F5 Networks, Inc. in the U.S. and in certain other countries. Other F5 trademarks are identified at [f5.com](#). Any other products, services, or company names referenced herein may be trademarks of their respective owners with no endorsement or affiliation, express or implied, claimed by F5. CS04-00015 0113