



# Understand and Troubleshoot Application Issues

Identify and resolve application issues faster with F5's self-service solutions and tools.



## KEY BENEFITS

### Collecting and Analyzing Inline Data

By pulling data directly from inline application delivery controllers, F5 can securely capture performance, health, and security insights and analytics that other solutions don't have access to.

### Application-Centric Troubleshooting

See your application through your customers' eyes by combining infrastructure, security, and traffic telemetry integrated into a single, actionable view.

### API-First Connectivity

Platform-agnostic connectivity lets you collect analytics no matter where you deploy—the cloud, colocated data centers, microservices, or bare metal.

### Third-Party Integrations

Stream telemetry to existing enterprise solutions, providing critical data to the teams responsible for keeping your applications running.

### Actionable Insights

Connect analytics with configuration and policy management features to quickly and securely make fast changes before issues affect your customers.

92% OF CUSTOMERS WOULD COMPLETELY ABANDON A COMPANY AFTER 2 OR 3 NEGATIVE INTERACTIONS.<sup>1</sup>

**Customer loyalty and value are determined** by how well your application performs. Knowing this, application developers cannot afford to wait days or hours to diagnose and resolve application issues.

But troubleshooting application health and performance is challenging. Problems can stem from several causes, such as flaws in the application code, network issues, an application-layer attack, or a spike in traffic (malicious or otherwise). In many organizations, process delays between development, security, and infrastructure teams can slow down problem identification and resolution times, making the situation worse.

Yet even a highly collaborative DevOps environment still needs the appropriate tools to identify the root cause of a performance issue to be able to mitigate and fix it quickly.

## Seeing, and Acting, With Speed and Accuracy

**Capture and visualize the right data from application traffic so you can detect and diagnose application performance problems fast.**

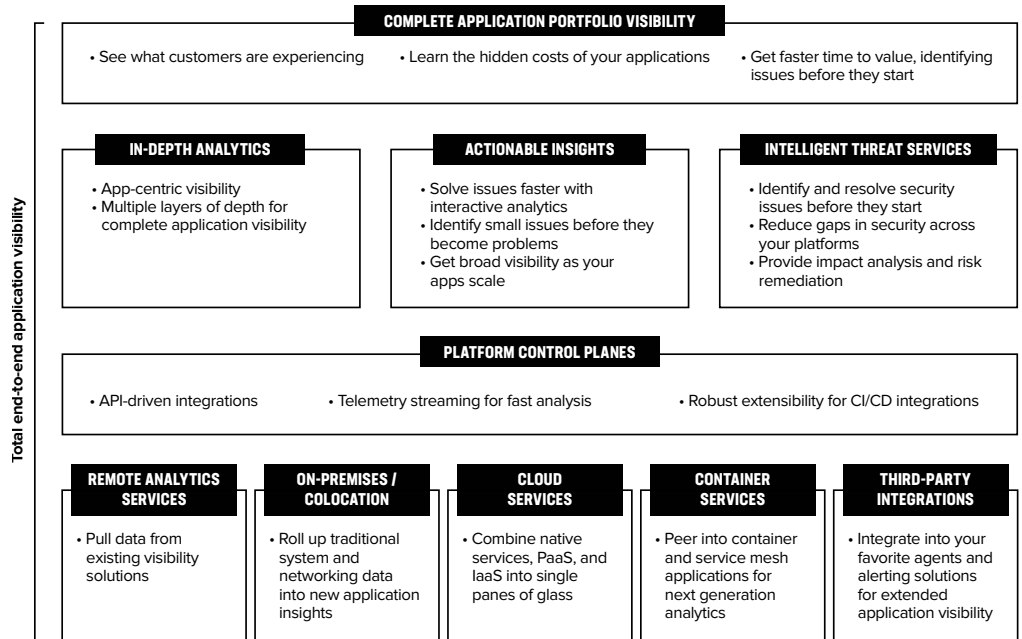
With F5 embedded within your multi-cloud and on-premises application traffic flow, managing performance and health is easier and more effective, thanks to centralized network and application-layer data.

F5 leverages deep telemetry data from the application and network to provide the insights needed to optimize performance—regardless of the cause. Shared application-centric dashboards give your NetOps, DevOps, and SecOps teams access to the data they need while supporting collaborative problem solving.

- **NetOps teams** can see resource utilization spikes to head off performance issues
- **DevOps teams** can focus on application health and performance
- **SecOps teams** can keep an eye on attack vectors and take action on policy violations

**KEY FEATURES:**

- Decrypt and inspect safely with F5 as your applications' traffic proxy
- Provide analytics that everyone can understand and act on, keeping your applications running smoothly
- Provides visibility through a cloud agnostic analytics display reliable data across your application portfolio
- Integrate external application health to better understand your application's overall health.



**Figure 1:** Having complete visibility throughout your application portfolio helps ensure better performance enterprise-wide.

## The Architectural Components

You need the right toolset to inspect, capture, and display your application traffic in an actionable format.

The [F5 BIG-IQ Centralized Management platform](#)® provides application-centric visibility and analytics of your applications' health and performance. BIG-IQ offers device, network, security, and application-level visibility and insights with personalized, role-based per-app dashboards. Give your support teams the data they need to take action on issues directly from analytics with actionable insights. You can also connect BIG-IQ to upload collected telemetry to your preferred analytics solution to provide insights where your teams are already investigating.

[NGINX Controller](#)® provides API-driven cloud-agnostic visibility, no matter where you deploy NGINX Plus. Your analytics scale as your applications scale, seamlessly integrating and collecting data for up-to-the minute analysis. All of your teams—DevOps, NetOps, SecOps, and AppDev—can collaborate through application-centric monitoring. That ensures that everyone gets the information that matters to them most.

THE TOP TWO FRUSTRATIONS THAT CAUSE A "BAD EXPERIENCE" WITH APPLICATIONS ARE PERFORMANCE (55%) AND AVAILABILITY (40%).<sup>2</sup>

F5 Beacon® offers a SaaS solution for connecting your F5 instances, NGINX, and your applications into a complete portfolio visibility solution. It empowers end-to-end visibility across your application portfolio. Beacon offers anomaly detection, root cause analysis, and security compliance assurance to drive better-informed decisions and improve customer experience.

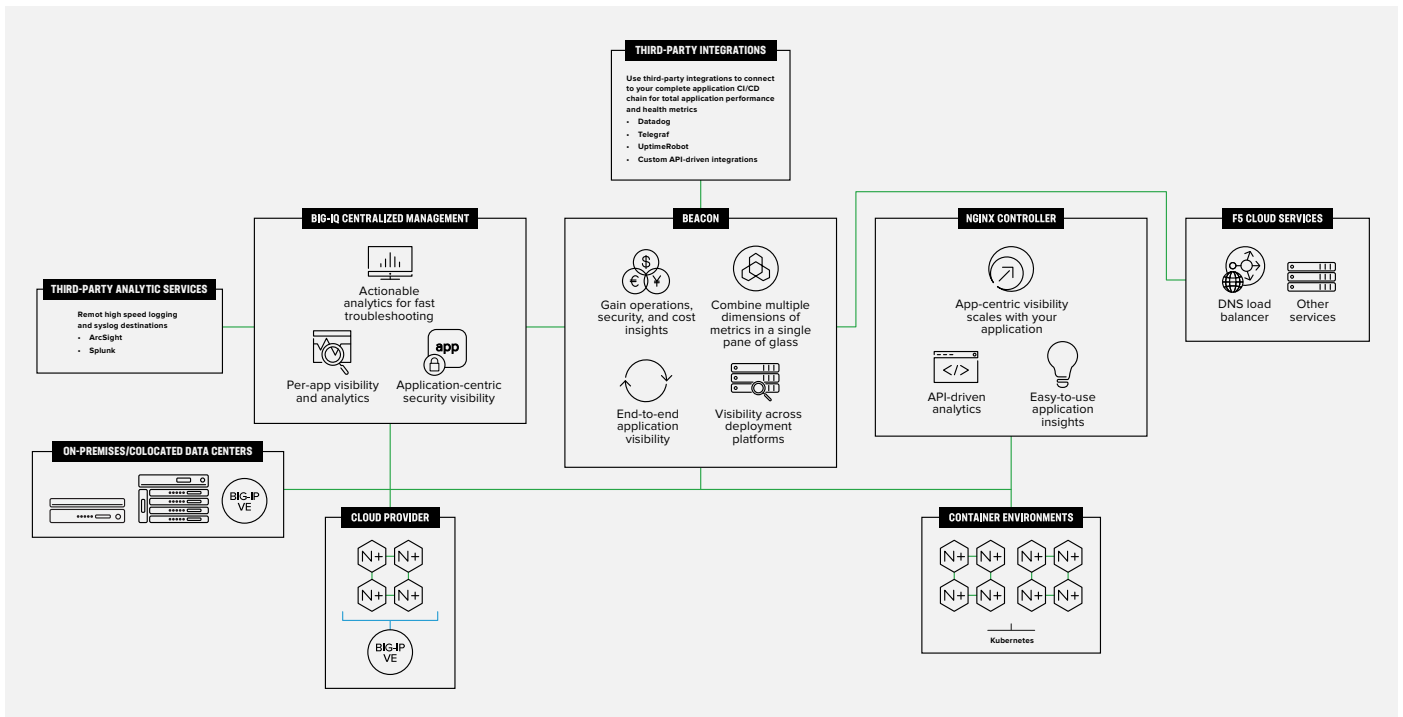


Figure 2: F5 products help your applications and providers integrate for end-to-end visibility. The result: Actionable data that keeps systems running smoothly.

## Conclusion

Multi-cloud is here to stay. If you want to maximize the benefits and minimize the risks, then putting together the people, processes, and technology to deliver consistent, high-quality application performance and security services in all your private and public cloud locations is a smart move. Partnering with F5 to do it is an even smarter one.

To learn more, [contact your F5 representative](#), or visit [F5](#).

## Endnotes

<sup>1</sup> 37 Customer Experience Statistics You Need to Know for 2021, found at <https://www.superoffice.com/blog/customer-experience-statistics/>

<sup>2</sup> The App Attention Index 2019: The Era of Digital Reflex, found at <https://www.appdynamics.com/blog/news/app-attention-index-2019/>

