





Al Recommended Content



# K000140574: F50S Appliance Mode vulnerability CVE-2025-36546

Published Date: May 7, 2025 Updated Date: May 7, 2025

Evaluated products:

Final- This article is marked as 'Final' because the security issue described in this article either affected F5 products at one time and was resolved or it never affected F5 products. Unless new information is discovered, F5 will no longer update the article.

### Security Advisory Description

On an F50S system, if the root user configures the system to allow login using SSH key-based authentication and later enables appliance mode, the system still allows access using SSH key-based authentication. For an attacker to exploit this vulnerability they must obtain possession of a private key corresponding to a previously-configured entry in root's SSH authorized\_keys file.(CVE-2025-36546)

### **Impact**

This vulnerability may allow an attacker who has obtained access to a root user's SSH private key to log into the F5OS system, even though it is running in appliance mode. This is a control plane issue; there is no data plane exposure.

### **Security Advisory Status**

F5 Product Development has assigned ID 1327689 (F5OS) to this vulnerability. This issue has been classified as <u>CWE-863</u>: Incorrect Authorization.

To determine if your product and version have been evaluated for this vulnerability, refer to the **Evaluated products** box. To determine if your release is known to be vulnerable, the components or features that are affected by the vulnerability, and for information about releases, point releases, or hotfixes that address the vulnerability, refer to the following tables. You can also use <u>iHealth</u> to diagnose a vulnerability for BIG-IP, BIG-IQ, and F5OS systems. For more information about using iHealth, refer to <u>K27404821: Using F5 iHealth to diagnose vulnerabilities</u>. For more information about security advisory versioning, refer to <u>K51812227: Understanding security advisory versioning</u>.

#### In this section

- BIG-IP Next
- BIG-IP and BIG-IQ
- F5 Distributed Cloud and NGINX Services
- F5OS
- NGINX
- Other products

#### **BIG-IP Next**

**Note**: After F5 releases a fix for a given branch, that fix applies to all subsequent minor, maintenance, and point releases for that branch; F5 will not list additional fixes for that branch in the table. For example, when F5 releases a fix in 20.0.2, the fix also applies to 20.0.3 and all later 20.1.x releases. For more information, refer to **K51812227**: **Understanding security advisory versioning**.

Product	Branch	Versions known to be vulnerable <sup>1</sup>	Fixes introduced in	Severity/CVSS score	Vulnerable component or feature
BIG-IP Next (all modules)	All	None	Not applicable	Not vulnerable	None
BIG-IP Next Central Manager	All	None	Not applicable	Not vulnerable	None
BIG-IP Next SPK	All	None	Not applicable	Not vulnerable	None
BIG-IP Next CNF	All	None	Not applicable	Not vulnerable	None
BIG-IP Next for Kubernetes	All	None	Not applicable	Not vulnerable	None

<sup>&</sup>lt;sup>1</sup>F5 evaluates only software versions that have not yet reached the End of Technical Support (EoTS) phase of their lifecycle. For more information, refer to the **Security hotfixes** section of <u>K4602: Overview of the F5 security vulnerability response policy</u>.

#### **BIG-IP** and **BIG-IQ**

**Note**: After F5 releases a fix for a given branch, that fix applies to all subsequent minor, maintenance, and point releases for that branch; F5 will not list additional fixes for that branch in the table. For example, when F5 releases a fix in 17.1.2.1, the fix also applies to 17.1.2.2 and all later 17.1.x releases (17.1.3.x, 17.1.4.x). For more information, refer to **K51812227**: **Understanding security advisory versioning**.

Product	Branch	Versions known to be vulnerable <sup>1</sup>	Fixes introduced in	Severity/CVSS score	Vulnerable component or feature
BIG-IP (all modules)	All	None	Not applicable	Not vulnerable	None
BIG-IQ Centralized Management	All	None	Not applicable	Not vulnerable	None

<sup>1</sup>F5 evaluates only software versions that have not yet reached the End of Technical Support (EoTS) phase of their lifecycle. For more information, refer to the **Security hotfixes** section of <u>K4602: Overview of the F5 security vulnerability response policy</u>.

#### F5 Distributed Cloud and NGINX Services

Service	Severity/CVSS score	Vulnerable component or feature
F5 Distributed Cloud (all services)	Not vulnerable	None
F5 Silverline (all services)	Not vulnerable	None
NGINX One Console	Not vulnerable	None

#### **F50S**

Product	Branch	Versions known to be vulnerable <sup>1</sup>	Fixes introduced in	Severity/CVSS score <sup>2</sup>	Vulnerable component or feature
F5OS-A	1.x	1.5.1 - 1.5.2	1.8.0 1.5.3	High/8.1 (CVSS v3.1) Critical/9.2 (CVSS v4.0)	Appliance mode
F5OS- C	1.x	1.6.0 - 1.6.2	1.8.0	High/8.1 (CVSS v3.1) Critical/9.2 (CVSS v4.0)	Appliance mode

<sup>&</sup>lt;sup>1</sup>F5 evaluates only software versions that have not yet reached the End of Technical Support (EoTS) phase of their lifecycle. For more information, refer to the **Security hotfixes** section of <u>K4602: Overview of the F5 security vulnerability response policy</u>.

#### NGINX

Product	Branch	Versions known to be vulnerable <sup>1</sup>	Fixes introduced in	Severity/CVSS score	Vulnerable component or feature
NGINX (all products)	All	None	Not applicable	Not vulnerable	None

<sup>&</sup>lt;sup>1</sup>F5 evaluates only software versions that have not yet reached the End of Technical Support (EoTS) phase of their lifecycle. For more information, refer to the **Security hotfixes** section of <u>K4602: Overview of the F5 security vulnerability response policy</u>.

#### Other products

Product Branch	Versions known to be vulnerable <sup>1</sup>	Fixes introduced in	Severity/CVSS score	Vulnerable component or feature
----------------	--	---------------------	------------------------	---------------------------------

<sup>&</sup>lt;sup>2</sup>Starting with the August 2024 Quarterly Security Notification, F5 will provide the CVSS v4.0 base score in addition to the CVSS v3.1 score, for first-party security issues only. The CVSS score link takes you to a resource outside of MyF5, and the content may be removed without our knowledge. For more information about how F5 uses CVSS v4.0, refer to K000140363: Overview of CVSS v4.0 in F5 security advisories.

<sup>1</sup>F5 evaluates only software versions that have not yet reached the End of Technical Support (EoTS) phase of their lifecycle. For more information, refer to the **Security hotfixes** section of <u>K4602: Overview of the F5 security vulnerability response policy</u>.

### Security Advisory Recommended Actions

If you are running a version listed in the **Versions known to be vulnerable** column, you can eliminate this vulnerability by installing a version listed in the **Fixes introduced in** column. If the **Fixes introduced in** column does not list a version for your branch, then no update candidate currently exists for that branch and F5 recommends that you upgrade to a version with the fix (refer to the tables).

If the **Fixes introduced in** column lists a version prior to the one you are running, in the same branch, then your version should have the fix.

### Mitigation

Remove all configured public keys before starting up appliance mode. For more information, refer to <u>K000140791: Disable SSH</u> <u>public key authentication on F5OS for root user</u>.

#### **Acknowledgments**

This issue was discovered internally by F5.

#### **Related Content**

- K41942608: Overview of MyF5 security advisory articles
- K12201527: Overview of Quarterly Security Notifications
- K51812227: Understanding security advisory versioning
- K4602: Overview of the F5 security vulnerability response policy
- K4918: Overview of the F5 critical issue hotfix policy
- K39757430: F5 product and services lifecycle policy index
- K000090258: Download F5 products from MyF5
- K9970: Subscribing to email notifications regarding F5 products
- K9957: Creating a custom RSS feed to view new and updated documents
- K000135931: Contact F5 Support

### Al Recommended Content

- Security Advisory K000151008: Quarterly Security Notification (May 2025)
- Policy K4309: F5 hardware product lifecycle support policy
- Security Advisory K000139571: BIG-IP HTTP vulnerability CVE-2025-36557
- Security Advisory K000148591: Appliance mode BIG-IP iControl REST and tmsh vulnerability CVE-2025-31644

## Secure and Deliver Extraordinary Digital Experiences

F5's portfolio of automation, security, performance, and insight capabilities empowers our customers to create, secure, and operate adaptive applications that reduce costs, improve operations, and better protect users. Learn more >

WHAT WE OFFER	
RESOURCES	
SUPPORT	
PARTNERS	
COMPANY	
	CONNECT WITH US

**CONTACT SUPPORT** 

