

Cisco Security Advisory

# Cisco IOS and Cisco IOS XE Software OpenSSH TCP Denial of Service Vulnerability



**Advisory ID:** cisco-sa-20160620-isr  
**Last Updated:** 2016 August 18 19:47 GMT  
**Published:** 2016 June 20 20:45 GMT  
**Version 1.1:** Final  
**CVSS Score:** [Base - 5.0](#)  
**Workarounds:** No workarounds available  
**Cisco Bug IDs:** [CSCuu13476](#)

CVE-2015-6289  
 CWE-399  
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### Cisco Security Vulnerability Policy

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### Summary

A vulnerability in the handling of Secure Shell (SSH) TCP packets in the Cisco IOS and Cisco IOS XE Software could allow an unauthenticated, remote attacker to cause a partial denial of service (DoS) condition due to low memory on the device.

The vulnerability is due to the handling of out-of-order, or otherwise invalid, TCP packets on an SSH connection to the device. An attacker could exploit this vulnerability by connecting via SSH to the device and then crafting TCP packets which are out of order or have invalid flags. An exploit could allow the attacker to cause the device to report low-memory warnings which could in turn cause a partial DoS condition.

Cisco will release software updates that address this vulnerability. Please refer to the [Cisco Bug Search Tool](#) link as described in the "Fixed Software" section for information about software availability. Workarounds that address this vulnerability are not available.

This advisory is available at the following link:

<http://tools.cisco.com/security/center/content/CiscoSecurityAdvisory/cisco-sa-20160620-isr>

### Affected Products

#### Vulnerable Products

Cisco IOS and Cisco IOS XE Software are vulnerable.

#### Products Confirmed Not Vulnerable

No other Cisco products are currently known to be affected by this vulnerability.

### Workarounds

Workarounds that mitigate this vulnerability are not available.

### Fixed Software

Cisco provides information about fixed software in Cisco bugs, which are accessible through the [Cisco Bug Search Tool](#).

When considering software upgrades, customers are advised to consult the Cisco Security Advisories and Responses archive at <http://www.cisco.com/go/psirt> and review subsequent advisories to determine exposure and a complete upgrade solution.

In all cases, customers should ensure that the devices to be upgraded contain sufficient memory and confirm that current hardware and software configurations will continue to be supported properly by the new release. If the information is not clear, customers are advised to contact the Cisco Technical Assistance Center (TAC) or their contracted maintenance providers.

### Exploitation and Public Announcements

The Cisco Product Security Incident Response Team (PSIRT) is not aware of any public announcements or malicious use of the vulnerability that is described in this advisory.

### URL

<http://tools.cisco.com/security/center/content/CiscoSecurityAdvisory/cisco-sa-20160620-isr>

### Revision History

Version	Description	Section	Status	Date
1.1	This vulnerability affects Cisco IOS and IOS XE Software. Cisco will release software updates for this vulnerability.	Title, Vulnerable Products, and Summary	Final	2016-August-18
1.0	Initial public release.	-	Final	2016-June-20

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