

Cisco IOS XR 1/2af•af^a,|a,§a,cā® BGP EVPN å•ä½œäf«äf¼äf^a«ä®Šä®'a,[µäf¼äf”a,¹å](#)



ã,çāf‰äf®ä,¤ä,¶äfäf¼ID : cisco-sa-

[CVE-2019-](#)

20200122-ios-xr-routes

[16018](#)

å♦å...-é-æ-¥ : 2020-01-22 16:00

æœ€qæ>æ°æ—¥ : 2020-01-24 16:22

äf®äf¼ä,äf§äf³ 1.1 : Final

CVSSä,¹ä,³ä,c : [7.4](#)

å›é®ç- : No workarounds available

Cisco af®ä,° ID : [CSCvr74902](#)

æ—¥æœ-èäzä®«ä,^ä,<æf...å±ä®-ä€®è<±èäzä®«ä,^ä,<åŽ¥æ-‡ä®é®žå...-å¼®ä

æ!,è!

Cisco IOS XR 1/2af•af^a,|a,§a,cā®BGPœäf¼äf¼ ä,²äf¼äf^a,|a,§a,¤
äf—äfäf^a,³äf«i¼^BGPi¼‰ä,¤äf¼ä,µäf®äffäf^
VPNi¼^EVPNi¼‰æ©Yèf½ä®å®YèF...ä®è,,†å¼±æ€§ä®«ä,^ä,Šä€®è^ä®è „¼ä®•ä,Cä®|ä®,„ä®ä

ä®“ä®è,,†å¼±æ€§ä®-ä€®å·§ä|™ä®«ç°å·¥ä®•ä,Cä®Y EVPN å±žæ€§ä,/ä®«ä,€ BGP
ä,çäffäf—äf‡äf¼äf^äfjäffä,»äf¼ä,ä®ä,é®©å^‡ä®å‡|ç®†ä®«èµ·å» ä®—ä®¾ä®™ä€,æ”»æ’fè
BGP EVPN

ä,çäffäf—äf‡äf¼äf^äfjäffä,»äf¼ä,ä,’è©²å½“ä,·ä,¹äftäf ä®«é€®äçjä®—ä€®äf‡äf®ä,¤ä,¹ä,Šä®äf
EVPN

å•ä½œäf«äf¼äf^ä®ä,¹äftäf¼ä,çä,¹ä,’èj „ç¤ºä®™ä,<ä®ä,‘ä¾...ä®¤ä®“ä® „ä®«ä,^ä,Šä€®ä®“ä®
BGP äf—äfäf,»ä,¹ä,’ä®æœYä®»ä®šå†®èµ·å•ä®»ä€®DoS
çŠ¶æ...ä,’å¼ä®èµ·ä®“ä®™å®-èf½æ€§ä®Cä®,ä,Šä®¾ä®™ä€,

ä,·ä,¹ä,³ä®BGP
å®YèF...ä®-ä€®æ~Žç¤ºçš,,ä®«å®šç¾©ä®•ä,Cä®|ä®,„ä,<äf”ä,çä®[ä,‰å®—äçjä®™ä](#),
BGP

äf^äf©äf•ä,Fäffä,~ä®ä®ä®ä,’å®—ä®‘å...¥ä,Cä®¾ä®™ä€,ä®“ä,Cä®®è,,†å¼±æ€§ä,’ä,“ä,~ä,~ä,¹äf—ä
BGP ä,çäffäf—äf‡äf¼äf^äfjäffä,»äf¼ä,ä®Cä®“ä®è „å®šä®•ä,Cä®Yæœ‰åŠ¹ä®ª BGP
äf”ä,çä®[ä,‰é€®äçjä®•ä,Cä®,„ä,<ä®...è|®ä®Cä®,ä,Šä®¾ä®™ä€,ä®¾ä®Yä®-ä€®æ”»æ’fè€...ä®C](#)
BGP äf”ä,çä®[ä®æ—çå~ä®æœ‰åŠ¹ä®ª TCP æŽ¥ç¶šä®SèC«å®³è€...ä®BGP](#)
äf®äffäf^äf”äf¼ä,~ä®«æ³“å...¥ä®™ä,<ä®...è|®ä®Cä®,ä,Šä®¾ä®™ä€,

<https://sec.cloudapps.cisco.com/security/center/content/CiscoSecurityAdvisory/cisco-sa-20200122-ios-xr-routes>

è©²å¹½“è£¹½å“◆?

è,,†å¼±æ€§ã®ã,ã,«è£½å“?

„Cisco IOS XR 6.6.1

ä»¥é™♦ã?«å~åœ“ã♦™ã,
è,“†å¼±æ€§ã,’å®Ÿè;Œã♦—ã€♦L2VPN EVPN

ã,¢ãf‰oãf¬ã,¹ãf•ã,¡ãfÝãfªã,'æŒ♦ã♦¤ãf‡ãf♦ã,¤ã,¹ã♦§ BGP

ç”“ ã♦«è”å®šã♦•ã,Œã♦|ã♦„ã,<ã,·ã,¹ã,³ãƒ‡ãƒ♦ã,¤ã,¹ã♦«å½±éŸ;ã♦—ã♦³/4ã♦™ã€,

ãf†ãf♦ã,¤ã,¹ã♦®è”å®šã♦«è,†å¼±æ€§ã♦Œã♦,ã,<ã♦<ã♦©ã♦†ã♦<ã♦®ççºèª?

ãf†ãf?ã,¤ã,¹ã?Œ BGP

ç”“ã»«è”å®šã»•ã,Œæ»|ã»„ã,<ã»<ã»©ã»†ã»•ã,’ç°è»ã»™ã,ã»«ã»—ã€»ç®¡ç»†è€...ã»—

CLI ➔ show running-config router bgp EXEC

ç`..ã?«è..å®šã?•ã,Œã?|ã?„ã,<å^ã€?ã?“ã?®ã,³ãfžãf³ãf‰ã?¬å†°åŠ›ã,’è?“ã?—ã?¾ã?™

ç”“ã»«è·å®šã»·ã,Œã»Ýãf‡äf»ã,¤ã,¹ã»§ã»® show running-config router bgp

„**á, ³áfžáf³áf%** „**®éf” á ^†çš,, á ♦ a # o á Š > á,’ c x o á ♦ — á ♦ | á ♦ „ á ♦ ¾ á ♦ ™ á €,**

<#root>

```
# show running-config router bgp
```

```
router bgp 65536
```

•

ãf†ãf?ã,¤ã,¹ã?Œ EVPN

ã,çãf%ooãf¬ã,¹ãf•ã,;ãfÝãfªç”“ã◆«è”“å®šã◆•ã,Œã◆|ã◆„ã,<ã◆<ã◆©ã◆†ã◆<ã,’ç¢ºèªã◆ã◆™ã,<ã◆«ã◆

```
show running-config router bgp AS-Number address-family l2vpn evpn EXEC æ,³æfžæf³æf%oæ,' CLI
```

„**BGP EVPN**“

ã, ç ã f%oõãf-ã, ¹ãf•ã, jãfYãf^ac” “ã♦«è ” å®šã♦•ã, ÇEã♦ | ã♦,,ã,^å `ã♦^ã€♦ã♦”ã♦®ã, ³ãfžãf³ãf%oã♦” å

show running-config

router bgp AS-Number address-family l2vpn evpn

<#root>

```
# show running-config router bgp 65536 address-family 12vpn evpn
```

```
router bgp 100  
address-family l2vpn evpn
```

•
•
•

è, †å¼±æ€§ã,’å?«ã,“ã?§ã?„ã?^ã?„ã?“ã?“ã?“ã?Œç¢°è^ã?•ã,Œã?¥è£½å?”

ã»“ã»®ã,çãf%oãf»ã,¤ã,¶ãf»ã»®è,,†å¼±æ€§ã»®ã»ã,«è½å“ã»ã,»ã,¬ã,·ãf§ãf»ã»«è”“è½%oã»ã,»ã

„Cisco IOS XE Cisco NX-OS

ã,½ãf•ãf^ã,|ã,§ã,çã «ã♦«ã♦-å½±éÝ;ã,'ã,žã♦^ã♦^ã♦„ã♦“ã♦”ã,ç°è^ã♦—ã♦¾ã♦—ã♦Ýã€,

è©³çº

and Ethernet Services configuration Guide for Cisco ASR 9000 Series

router#
EVN#

å>žé? ;c-

ä; ®æ£æ. ^ã♦; ã, ½ãƒ•ãƒ^ã, |ã, sã, ç

<https://www.cisco.com/c/en/us/products/end-user-license-agreement.html>

ã•¾ã•Ýã€•ã•Šå®çæ§~ã•Œã,½ãf•ãf^ã,|ã,§ã,çã,'ãf€ã,|ãf³ãfãf%4ãf%oã•§ã•ã,«ã•®ã•~ã€•ã,ã,çãffãf—ã,°ãf~ãf%4ãf%oã•§ã•™ã€,ç,,jå,,Ýã•®ã,»ã,ãf¥ãf^ãftã,£ã,½ãf•ãf^ã,|ã,§ã,çã,çãffãf—ãf#ãf%4ãf^ã•«ã,^ã•£ã•|ã€•ã•Šå®çæ§~ã•«æ~°ã•—ã•,,ã,½ãf•ãf^ã,|ã,§ã,çãf@ã,¤ã,»ãf³ã,¹ã€•è¿½åŠã,½ãf•ãf^ã,|ã,§ã,çãf•ã,£ãf%4ãf•ãf£ã,»ãffãf^ã€•ã•¾ã•Ýã•~ãfjã,ãf£ãf%4ãf^ã,ãf§ãf³ã,çãffãf—ã,°ãf~ãf%4ãf%oã•«ã•~ã•¾ã•™ã,«æ~°çé™•ã•Œã»~ã,žã•ã,Œã,«ã•~ã•~ã•,ã,Šã•¾ã•

[Security Advisories and Alerts](#)

ãfšãf%ä,,ã♦§å...¥æ‰¤¤§ã♦§ã,¤ã,·ã,¹ã,³è£½å“♦ã♦®ã,çãf‰¤ãf♦ã,¤ã,¶ãf¤ã,'å®šæœŸçš,,ã♦«å♦,çã,½ãf¤ãf¥ãf%ä,,ã¤§ãf¤ã,'ççºè¤ã—ã¤,|ã¤,¤ã¤,¤ã¤,¤ã¤,¤ã¤,,¤ã¤,

Technical Assistance

Center $\frac{1}{4}$ TAC 1%
— — — — —
— — — — —

ä; ®æfæ, ^ä? ; ãf^aãf^aãf^{1/4}ä, 1

Cisco IOS XR 1.2.5.1 6.63 7.02 7.1.1
Cisco IOS XR 1.2.5.1 6.63 7.02 7.1.1

ç™ºè;Œæ®æ™,ç,¹ã§ã€æ¬;ã®è;”ã® SMU
ãŒæ½¿ç”“åèf½ã§ã—ãŸã€,ä»-ã®äf—äf©äffäf^äf•ã,©äf¼äf ã§ã,^ã®³äf¤äf¤äf¼ä,¹ã®
SMU

IOS XR Version ¹	Platform	SMU Version ¹
6.6.1	NCS5500	ncs5500-6.6.1.CSCvr91660
6.6.1	ASR9K-X64	asr9k-x64-6.6.1.CSCvr91660

IOS XR Version	Platform	SMU Patch
6.6.1	NCS540	ncs540-6.6.1.CSCvr91660
6.6.1	NCS6K	ncs6k-6.6.1.CSCvr91660
6.6.2	ASR9K	asr9k-px-6.6.2.CSCvr91676
6.6.2	ASR9K-X64	asr9k-x64-6.6.2.CSCvr91676
6.6.2	CRS	
6.6.2	NCS5K	
6.6.2	XRV9K	xrv9k-6.6.2.CSCvr91676
6.6.25	NCS540	
6.6.25	NCS540L	
6.6.25	NCS560	ncs560-6.6.25.CSCvr91676
6.6.25	NCS5500	ncs5500-6.6.25.CSCvr91676
7.0.1	ASR9K-X64	asr9k-x64-7.0.1.CSCvr91676
7.0.1	NCS1K	
7.0.1	NCS5K	
7.0.1	NCS6K	
7.0.1	NCS540	
7.0.1	NCS540L	
7.0.1	NCS560	
7.0.1	NCS5500	
7.0.1	XRV9K	

1. ã♦“ã♦®ã, çãf‰oãf♦ã, ã, ¶ã, ¶ãfªã♦«è~™è¼‰oã♦•ã, ¶ã? | ã♦, „ã, <è, †å¼±æ€§ã♦«å~¾ã♦™ã, <ã? ®æ£ã»

CSCvr91660

— ã€«ã€—ã€ CSCvr84254 ã€ CSCvr74986 ã€ CSCvr74413 ã€ CSCvr80793 ã€ CSCvr83742 ã€ CSCvr69950 ã€®ã€æ£ã€—ã€ã€, °ã€©ã€ ã€Œå«ã€¾ã€Œã€|ã€„ã€¾ã€™ã€,

CSCvr91676

ã»«ã»—ã€ CSCvr84254 ã€ CSCvr74986 ã€ CSCvr74413 ã€ CSCvr80793 ã€ CSCvr83742 ã€ CSCvr69950 ã®ä¿®æ£ãƒ—ãƒã, °ãƒ©ãƒ ã»«ã»¾ã, Æã»|ã»„ã»¾ã»™ã€,

SMU Cisco.com Software Center

ã♦ã,‰oæ¬;ã♦®æ‰oé †ã♦§ãf€ã, |ã³ãfãf¹¼ãf‰oã♦§ã♦ã♦ã³/4ã♦™ã€,

- [**IOS-S, ^3NX-OS, ½ƒ-ãƒ^ã, | ã, sã, cï¼^IOS and NX-OS Softwareï¼‰**] > [**IOS**

XR] > [IOS XRã,½ãf•ãf^ã,|ã,§ã,çï¼^IOS XR Softwareï¼‰o] >
[ã,ºãf—ãftã,£ã,«ãf«ãf♦ãffãf^ãf—ãf½ã,ãf³ã,ºï¼^Optical Networkingï¼‰o]
ã♦¾ã♦Ýã♦—[ãf«ãf½ã,¿ï¼^Routersï¼‰o] ã, ’é♦,æŠžã♦—ã♦¾ã♦™ã€,

3. è©²å½“ã♦™ã,‹è£½å“♦ã♦”ãfçãf‡ãf«ã,’é♦,æŠžã♦—ã♦¾ã♦™ã€,
4. è©²å½“ã♦™ã,‹è£½å“♦ãfšãf½ã,ã♦®å·|å♦’ã♦®ãfšã,¤ãf³ã,’ä½¿ç””ã♦—ã♦|ãfãfãf½ã,¹ã♦«ã,¹ã♦

ã,♦æfå^©ç””ã°<ã¾ã♦”å...¬å½ã♦ç™oèi”

Cisco Product Security Incident Response

Teamiï¼^PSIRTiï¼‰oã♦—ã€♦æœ—ã,çãf‰oãf♦ã,¤ã,¶ãfãã♦«è””è¼‰oã♦•ã,Œã♦|ã♦,,ã,‹è,,†å½±æ€§ã♦

å†ºå...,

ã♦”ã♦®è,,†å½±æ€§ã♦—ã€♦ã,·ã,¹ã,³å†...éf”ã♦§ã,»ã,ãf¥ãfãftã,£ãftã,¹ãf^ã,’å®Ýæ-½ä,ã€♦Mrinmoy Ghosh ã♦«ã,^ã♦£ã♦|ç™oè|ã♦•ã,Œã♦¾ã♦—ã♦Ýã€,

URL

<https://sec.cloudapps.cisco.com/security/center/content/CiscoSecurityAdvisory/cisco-sa-20200122-ios-xr-routes>

æ”¹è”,å±¥æ‘

ãf♦ãf½ã,ãf§ãf³	èª¬æ~Ž
1.1	å½±eÝçã, ’å♦—ã♦’ã,¤ãf½ãf”ã,¹ã,’ã,^ã,Šé♦®å^‡ã♦«è”å^¥ã♦™ã,‹ã♦Ýã,♦ã€♦ã
1.0	å^♦å>žå...¬é-<ãfãfãf½ã,¹

å^©ç””è!♦ç“

æœ—ã,çãf‰oãf♦ã,¤ã,¶ãfãã♦—ç,,¡ä¿♦è””½ã♦®ã,,ã♦®ã♦”ã♦—ã♦|ã♦”æ♦♦æ¾ã♦—ã♦|ã♦Šã,Šã€æœ—ã,çãf‰oãf♦ã,¤ã,¶ãfãã♦®æf...å±ã♦Šã,^ã♦³ãfãf³ã,—ã♦®ä½¿ç””ã♦«é-çã♦™ã,‹è²¬ä»»ã♦®ã,€ã♦¾ã♦Ýã€♦ã,·ã,¹ã,³ã♦—æœ—ãf‰oã,ãf¥ãf;jãf³ãf^ã♦®å†...å®¹ã,’ä°^å’Šã♦^ã—ã♦«å¤‰oæ›’ã♦—ã♦æœ—ã,çãf‰oãf♦ã,¤ã,¶ãfãã♦®è””è¿°å†...å®¹ã♦«é-çã♦—ã♦|æf...å±é...♦ä¿jã♦® URL
ã,’çœ♦ç•¥ã♦—ã€♦å♦~ç¬ã♦®è»çè¼‰oã,,æ,,♦è””³ã,’æ-½ã♦—ã♦Ýã’å♦^ã€♦å½”ç¤¾ã♦Œç®jç♦ã♦”ã♦®ãf‰oã,ãf¥ãf;jãf³ãf^ã♦®æf...å±ã♦—ã€♦ã,·ã,¹ã,³è£½å”♦ã♦®ã,“ãf³ãf‰oãf’ãf½ã,¶ã,’å”¾è±íã

翻訳について

シスコは世界中のユーザにそれぞれの言語でサポート コンテンツを提供するために、機械と人による翻訳を組み合わせて、本ドキュメントを翻訳しています。ただし、最高度の機械翻訳であっても、専門家による翻訳のような正確性は確保されません。シスコは、これら翻訳の正確性について法的責任を負いません。原典である英語版（リンクからアクセス可能）もあわせて参照することを推奨します。