

Cisco é♦©å¿œåž<ã,»ã,ãƒ¥ãƒªãƒ†ã,£ã,çãƒ—ãƒ©ã,¤ã,çãƒ³ã,¹ã,½ãƒ•ãƒ^ã,|ã,§ã,çã♦Šã,^ã♦³ Firepower Threat Defense ã,½ãƒ•ãƒ^ã,|ã,§ã,çã♦® RSA ç§~å¬tã,ãƒ¼ãƒªãƒ¼ã,¬ã♦®è,,tå¼±æ€§



ã,çãƒ‰oãƒ♦ã,¤ã,¶ãƒªãƒ¼ID : cisco-sa-asaftd-rsa-key-leak-Ms7UEfZz

[CVE-2022-20866](#)

å^♦å...¬é-æ—¥ : 2022-08-10 16:00

ãƒ♦ãƒ¼ã,ãƒ§ãƒ³ 1.0 : Final

CVSSã,¹ã,³ã,¢ : [7.4](#)

å›žé♦¿ç- : No workarounds available

Cisco ãƒ♦ã,° ID : [CSCwb88651](#) [CSCwc28334](#)

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Defenseï¼ FTDï¼‰oã,½ãƒ•ãƒ^ã,|ã,§ã,çã,'å®Ýè;Œã♦—ã♦|ã♦,,ã,ãƒ‡ãƒ♦ã,¤ã,¹ã♦§ã♦® RSA ã,ãƒ¼ã♦®å‡!ç♦tã♦®è,,tå¼±æ€§ã♦«ã,^ã,§ã€♦è^ä♦è^ï¼ã♦•ã,Œã♦|ã♦,,ã♦^ã♦,,ãƒºãƒçãƒ¼ãƒ^ã♦® RSA ç§~å¬tã,ãƒ¼ã,'å♦-å¾—ã♦™ã,«å♦¬èf½æ€§ã♦Œã♦,ã,§ã♦¾ã♦™ã€,

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- ã♦“ã♦®è,,tå¼±æ€§ã♦¬ã€♦Cisco ASAã,½ãƒ•ãƒ^ã,|ã,§ã,çã♦¾ã♦Ýã♦¬Cisco FTDã,½ãƒ•ãƒ^ã,|ã,§ã,çã♦®è,,tå¼±æ€§ã♦®ã♦,ã,«ãƒºãƒªãƒ¼ã,¹ã,’å®Ýè;Œã♦—ã♦|ã♦,,ã,«ãƒ‡ãƒ♦

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- RSA ă,ăf^{1/4}ă♦Œæœ%oăS¹ă♦ă,ă♦fă♦|ă,,ă€♦RSA
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ASA 9.1(1)F • ASA 9.1(1)S, Cisco 3/4-Years – Cisco FTD

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<https://sec.cloudapps.cisco.com/security/center/content/CiscoSecurityAdvisory/cisco-sa-asaftd-rsa-key-leak-Ms7UEfZz>

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Cisco ASA ½äf•äf^ä, | ä, Sä, Cäf¾ä?Ýä? Cisco FTD

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- ASA 5506-X with FirePOWER \tilde{a}_1 , $\tilde{f}^1/4\tilde{a}_1$, \tilde{a}_1
 - ASA 5506H-X with FirePOWER \tilde{a}_1 , $\tilde{f}^1/4\tilde{a}_1$, \tilde{a}_1
 - ASA 5506W-X with FirePOWER \tilde{a}_1 , $\tilde{f}^1/4\tilde{a}_1$, \tilde{a}_1
 - ASA 5508-X with FirePOWER \tilde{a}_1 , $\tilde{f}^1/4\tilde{a}_1$, \tilde{a}_1

- ASA 5516-X with FirePOWER 1/4“¹
 - Firepower 1000 1/4“¹
 - FirePOWER 2100 1/4“¹
 - FirePOWER 4100 1/4“¹
 - FirePOWER 9300 1/4“¹
 - Cisco Secure Firewall 3100

Additional Information:

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RSA

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running-config CLI
show running-config f1/6

Cisco ASA 1/2-Platform 1/2	1/2-Platform 1/2
Adaptive Security Device Manager 1/4-ASDM 1/4% ¹	http server enable <port> http <remote_ip_address>
AnyConnect SSL VPN	webvpn enable <interface_name>
Cisco Security Manager 1/4-CSM 1/4% ¹	http server enable <port> http <remote_ip_address>
SSL VPN 1/4-WebVPN 1/4% ²	webvpn enable <interface_name>
IKEv1 VPN 1/4-% ³ LAN-to-LAN 1/4%	crypto ikev1 enable <ip> crypto ikev1 policy <policy> authentication rsa-signature tunnel-group <tunnel_group>

1. ASDM → CSM → Ša, ^3 REST API → http

„*Å*”²*Å*® IP

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2. SSL VPN Cisco ASA 9.17(1)

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3. SSH \rightarrow ssh IP

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FTD $\tilde{a}, \sqrt{\frac{1}{2}}\tilde{f} \bullet \tilde{f}^*, |\tilde{a}, \S \tilde{a}, \epsilon$

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running-config CLI

AnyConnect SSL VPN¹²

Cisco FTD æ©Ýèf½	è,,†å¼±æ€§ã®åèf½æ€§ãŒã,ã,
AnyConnect SSL VPN ¹ ²	webvpn enable <interface_name>
ã,¬ãf©ã,¤ã,f³ãf^ãf¬ã, ¹ SSL VPNi¹/⁴^WebVPNi¹/⁴oo ²	webvpn enable <interface_name>
è·¹/⁴æ~Žæ»,ãf™ãf¹/⁴ã, ¹ ã®èªè·¹/⁴ã,'ä½¿ç"”ã—ãŸ IKEv1 VPNi¹/⁴^ãfªãfçäf¹/⁴ãf^ã,¤ã,¬ã,»ã, ¹ ãŒŠã,^ã ³ LAN-to-LANi¹/⁴oo ¹ ²	crypto ikev1 enable <interface_name> crypto ikev1 policy <priority> authentication rsa-sig tunnel-group <tunnel_group_name> ipsec-attribu trust-point <trustpoint_name>
è·¹/⁴æ~Žæ»,ãf™ãf¹/⁴ã, ¹ ã®èªè·¹/⁴ã,'ä½¿ç"”ã—ãŸ IKEv2 VPNi¹/⁴^ãfªãfçäf¹/⁴ãf^ã,¤ã,¬ã,»ã, ¹ ãŒŠã,^ã ³ LAN-to-LANi¹/⁴oo ¹ ²	crypto ikev2 enable <interface_name> tunnel-group <tunnel_group_name> ipsec-attribu ikev2 remote-authentication certificate ikev2 local-authentication certificate <trust

1. ãfªãfçäf¹/⁴ãf^ã,¤ã,¬ã,»ã,¹ VPN æ©Ýèf½ãŒCisco Firepower Management Centeri¹/⁴^FMCi¹/⁴ooã,½ãf•ãf^ã,|ã,¤ã,çãŒ§ [ãf‡ãfŒã,¤ã,¹i¹^Devicesi¹/⁴oo] > [VPN] > [ãfªãfçäf¹/⁴ãf^ã,¤ã,¬ã,»ã,¹i¹^Remote Accessi¹/⁴oo]
ã®é tãŒ«éŒ,æŠžãŒ™ã,<ãŒ<ãŒãŒ³/⁴ãŒÝãŒ¬ Cisco Firepower Device Manageri¹/⁴^FDMi¹/⁴ooãŒ§ [ãf‡ãfŒã,¤ã,¹i¹^Devicesi¹/⁴oo] > [ãfªãfçäf¹/⁴ãf^ã,¤ã,¬ã,»ã,¹VPNi¹/⁴^Remote Access VPNi¹/⁴oo]
ãŒ®é tãŒ«éŒ,æŠžãŒ™ã,<ãŒ” æœ‰oåŠ¹ãŒ«ãŒªã,ŠãŒ³/⁴ãŒ™ãŒ,
2.ã,¬ãf©ã,¤ã,f³ãf^ãf¬ã,¹SSL VPNæ©Ýèf½ãŒ¬ãŒCisco
FTDã,½ãf•ãf^ã,|ã,¤ã,çãfªãf¹/⁴ã,¹7.1.0ãŒ§ãŒ¬ã,µãfŒäf¹/⁴ãf^ãŒ•ã,ŒãŒ|ãŒ„ãŒ³/⁴ãŒ»ã,“ãŒ,ãŒÝ
FTDã,½ãf•ãf^ã,|ã,¤ã,çãfªãf¹/⁴ã,¹ãŒ§ãŒ¬ãŒFlexConfigã,‘ä½¿ç"”ã—ãŒ|æœ‰oåŠ¹ãŒ«ãŒ§ãŒ

RSA

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RSA

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ASA ã‡¾ã‡¥ã‡—FTD

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Ãƒ†ÃƒfÃ¢Ã,¤Ã,¹Ã¢Œ Cisco ASA Ã¢¾Ã¢ÝÃ¢¬ FTD

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ä,¹ä,⁻äf^aäf—äf^hä, 'ä½ç"”ä♦™ä,ä♦«ä♦⁻ä€♦æ¬;ä♦®æ‰œé †ä, 'ä®Ÿè;Œä♦—ä♦¾ä♦™ä€,

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RSA ã,ãf½ã,’ã,“ã,¬ã,¹ãf•ãf½ãf^ã•—ã•³/ã•™ã€,

2. ã, †ã, -ãf^aãf—ãf^hã, 'å@Ýè;Œã?—ã? | ã€?ã? „ã?šã,Œã?—ã?® RSA

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—<https://github.com/2022-20866>

RSA ã,ãf¼ã,'‰%oŠé™¤ã—ã€¤ã“ã¤® RSA

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Lenstra ã,ã,¤ãf‰¤ãf?ãf¤ãf?ãf«æ”»æ'f

1996 å¹'ää? Arjen Lenstra

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CRT \sqrt{f} , Lenstra

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%ASA-1-717065:Keypair <name> Cisco RSAçš~å~†ã,ãf¼æ¼♦æ‘©ã♦®è,,†å¼±æ€§(CVE-2022-

20866) «ä, ^ä, Šç,, ¡å¹ä ſä, ä, Šä€ ſäf; äfçäf åt... ä ſä, ¯äf¤ä, çä •ä, ©ä ¾ä™ä€, ä “ä ®ä

%FTD-1-717065:Keypair <name> - Cisco

RSAç§~å~†ã,ãƒ¼æ¼♦æ’©ã♦®è,,†å¼±æ€§(CVE-2022-20866)ã♦ŒåŽ¥å› ã♦§c,,;åŠ¹ã»§ã♦,ã,§ã€♦ãƒ;ãƒ¢ãƒª

Syslog äfjäffä, »äf¼ä, ASA-1-717065 äŠä, ^ä♦³ FTD-1-717065
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%ASA-1-717066: Keypair <name>ãæœ‰åŠ'ãšã™ãŒã€ãCisco
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Syslog **ASA-1-717066** **FTD-1-717066** **RSA**
RSA
RSA **ASA-1-717066** **FTD-1-717066** **RSA**
RSA **ASA-1-717066** **FTD-1-717066** **RSA**

RSA
counters | grep PKI CLI

<#root>

asaftd#

```
show counters | grep PKI
```

• • •

PKI	RSAKEY_INVALID_VULN	1	Summary
PKI	RSAKEY_INVALID_SCRUB	1	Summary
PKI	RSAKEY_INVALID_NOT_VULN	1	Summary
PKI	RSAKEY_VALID_SHORT	1	Summary
PKI	RSAKEY_ANALYSIS_ERROR	1	Summary
PKI	RSAKEY_SCRUB_ERROR	1	Summary

- RSAKEY_INVALID_VULNⁱšç,,;jš¹ã♦^aè,,tå½±æ€§ã,ãf¹/4ã♦Œæ¤œå‡ºã•ã,Œã♦¾ã♦—ã♦Ý
 - RSAKEY_INVALID_SCRUBⁱšç,,;jš¹ã♦^aè,,tå½±æ€§ã,ãf¹/4ã♦Œãf;jãfçãf^aã♦§ã,—ãf^aã,çã♦•ã,Œã♦¾
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 - RSAKEY_SCRUB_ERRORⁱšã,ãf¹/4ã♦®ã,¹ã,—ãf©ãf—ã,ã♦«ã, "ãf©ãf¹/4ã♦Œç™oç"Ýã♦—ã♦¾ã♦—ã♦Ý

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RSA

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CRITICAL:	RSA ã,ãƒ% <name> ã◆ -
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CRITICAL:	RSA ã,ãƒ% <name> ã◆ - ä»¥ä, <ã◆ (EåŽYå› ã◆ §
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INVALID — RSA

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```
asa# debug menu pki 60
```

Key Name	:	Validity	:	Cisco RSA Malformed Key Vulnerability
	:		:	(CVE-2022-20866) exposure status
-----	:	-----	:	-----
<Default-RSA-Key>	:	Valid	:	No exposure characteristics
test1	:	Valid	:	** Possible exposure in earlier software versions
test3	:	INVALID	:	No exposure characteristics
test8	:	INVALID	:	** Key generated by affected version, cleared in memory
tets2	:	ERROR	:	** Error during analysis
test4	:	INVALID	:	** Has exposure characteristics
test5	:	unknown	:	Key pair not analyzed

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

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[Devices](#) [[%00](#)]

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Technical Assistance

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9.16	9.16.3.19
9.17	9.17.1.13
9.18	9.18.2

1. Cisco ASA

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Cisco FTD	First Fixed
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7.0.0	7.0.4
7.1.0	Cisco_FTD_Hotfix_P-7.1.0.2-2.sh.RE L.tar Cisco_FTD_SSP_FP1K_Hotfix_P-7.1.0.2-2.sh.RE L.tar Cisco_FTD_SSP_FP2K_Hotfix_P-7.1.0.2-2.sh.RE L.tar Cisco_FTD_SSP_Hotfix_P-7.1.0.2-2.sh.RE L.tar Cisco_FTD_SSP_FP3K_Hotfix_Q-7.1.0.3-2.sh.RE L.tar
7.2.0	7.2.0.1

1. Cisco FTD

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Nadia Heninger æ°♦ã♦“ George Sullivan
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<https://sec.cloudapps.cisco.com/security/center/content/CiscoSecurityAdvisory/cisco-sa-asaftd-rsa-key-leak-Ms7UEfZz>

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翻訳について

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