

STORMSHIELD



MANAGING SECURE BOOT IN SNS FIREWALLS' UEFI

Product concerned: SN-S-Series-220, SN-S-Series-320, SN-M-Series-520, SN-M-Series-720, SN-M-Series-920, SN1100, SN3100 and SNi20

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Change log

Date	Description
May 25, 2023	Add SN-S-Series-220, SN-S-Series-320, SN-M-Series-520, SN-M-Series-720 and SN-M- Series-920 firewalls Add section Disabling Secure Boot in the SNS firewall's UEFI
June 13, 2022	New document





Getting started

This document explains how to enable and disable the Secure Boot feature in the UEFI on SNS firewalls. Secure Boot increases the security of the system, in particular by verifying the signature of the system loaded when the SNS starts up.

This procedure applies to the following products: SN-S-Series-220, SN-S-Series-320, SN-M-Series-520, SN-M-Series-920, SN1100, SN3100 and SNi20.

🚺 NOTE

For security reasons, before enabling Secure Boot, you are advised to protect your firewall's UEFI control panel with a password.

 ${m heta}$ Protecting access to the configuration panel of the UEFI on SNS firewalls





Requirements and operation

SNS firewall models on which Secure Boot is enabled by default

Secure Boot is enabled by default on the following SNS firewall models: SN-S-Series-220, SN-S-Series-320 and SN-M-Series-520.

Important information regarding the activation of Secure Boot

Do note that you can no longer perform the following operations on your SNS firewall after you enable Secure Boot:

- Reset the administrator password in *single user* mode,
- Start the SNS firewall on a backup partition in a version of SNS lower than 4.2.1,
- Start the SNS firewall on a USB key when restoring the program via USB key (USB Recovery),
- Install a version of SNS lower than 4.2.1.

Secure Boot cannot be enabled on all SNS firewall models. Refer to the list below to know which models are affected.

Required equipment

Depending on the SNS firewall model used, you will need the following items. Continue according to the model of your SNS firewall.

Model used	Elements
SN-S-Series-220 SN-S-Series-320 SN-M-Series-520 SN-M-Series-720 SN-M-Series-920	 A computer with a terminal emulator installed, e.g., Putty, A USB-A to USB-C cable (provided with the product).
SN1100 SN3100 SNi20	 A computer with a terminal emulator installed, e.g., Putty, An RJ45 to RS232 serial cable (provided with the product).





SN-S-Series-220 and SN-S-Series-320

- 1. Connect the computer to the SNS firewall using the USB-A to USB-C cable.
- 2. Open the terminal emulator and enter the serial port and baud rate (115200).
- 3. Restart the SNS firewall and immediately press **[Del]** several times to stop the SNS firewall startup sequence.
- 4. Go to the **Security** tab by using the arrow keys.
- 5. Select Secure Boot and press [Enter].

Main	Advanced	Chipset	Security	Boot	Save	& Exit
/ Passwo 	ord Descrip	tion				+\ Secure Boot configuration
Admini	istrator Pa	ssword				
> Secure 						<pre>><: Select Screen ^v: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit</pre>

- 6. Change the status of the Secure Boot parameter to Enabled.
- 7. Change the status of the Secure Boot Mode parameter to Standard.

	Security	
/		\
System Mode	User	Secure Boot feature is
1		Active if Secure Boot
Secure Boot		is Enabled,
1	Active	Platform Key(PK) is
1		enrolled and the System
Secure Boot Mode	[Standard]	is in User mode.
> Restore Factory Keys		The mode change
> Reset To Setup Mode		requires platform reset
1		
> Key Management		
1		><: Select Screen
I		^v: Select Item
I		Enter: Select
I		+/-: Change Opt.
I		F1: General Help
I		F2: Previous Values
I		F3: Optimized Defaults
I construction of the second sec		F4: Save & Reset
I		ESC: Exit
\		/







- 8. Press [Esc] and go to the Save & Exit tab.
- 9. Select Save Changes and Reset and press [Enter].
- 10. In the Save & Reset window, select Yes then press [Enter].

Main Advanced Chip	pset Security Boot	Save & Exit	
Save Options		† Re sa	set the system after ving the changes.
Save Changes and Rese			
Discard Changes and H	Reset		
	/ Save & res	set\	
Default Options		1	
Restore Defaults	Save configuration	and reset?	
 Boot Override	 <u></u>	 	
UEFI OS (P1: M.2 (S4	Yes	No	Select Screen
Launch EFI Shell fro	\	/	Select Item
			r: Select
		+/-	-: Change Opt.
		111	: General Help
		E'Z	: Previous values
		13 FA	· Save & Peret
		114	C. Evit
\		+	

- 1. Connect the computer to the SNS firewall using the USB-A to USB-C cable.
- 2. Open the terminal emulator and enter the serial port and baud rate (115200).
- 3. Restart the SNS firewall and immediately press **[Del]** several times to stop the SNS firewall startup sequence.
- 4. Go to the **Security** tab by using the arrow keys.
- 5. Select Secure Boot and press [Enter].

Main Advanced Chip	oset Security Boot	Save & Exit
/ Password Description 		Secure Boot configuration
Administrator Passwor 	rd	
> Secure Boot 		<pre>><: Select Screen ``Y: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit</pre>





- 6. Change the status of the Secure Boot parameter to Disabled.
- 7. Change the status of the Secure Boot Mode parameter to Custom.

		Security		
/-			+	\
1	System Mode	User	Secure Boot mode	^
1			options:	*
1	Secure Boot	[Disabled]	Standard or Custom.	*
1		Not Active	In Custom mode, Secure	*
1			Boot Policy variables	*
1	Secure Boot Mode	[Standard]	can be configured by a	*
>	Restore Factory Keys		physically present user	+
>	Reset To Setup Mode 🛛 🖊	' Secure Boot Mode∖	without full	v
1		Standard		
>	Key Management	Custom		
1		/	<: Select Screen	
1			v: Select Item	
1			Enter: Select	
1			+/-: Change Opt.	
1			F1: General Help	
1			F2: Previous Values	
1			F3: Optimized Defaults	
1			F4: Save & Reset	
1			ESC: Exit	
$\setminus -$			+	/

- 8. Press [Esc] and go to the Save & Exit tab.
- 9. Select Save Changes and Reset and press [Enter].
- 10. In the Save & Reset window, select Yes then press [Enter].

Main Advanced Chip	set Security B	Boot Save & E	xit
/			+\
Save Options			Reset the system after
			saving the changes.
Save Changes and Rese			
Discard Changes and R	eset		
1			
	Save &	reset	
Default Options			
Restore Defaults	Save configurat	ion and reset	2
i i i i i i i i i i i i i i i i i i i			
Boot Override			
UEFI OS (P1: M.2 (S4	Yes	No	Select Screen
Launch EFI Shell fro			/ Select Item
· · · · · · · · · · · · · · · · · · ·			r: Select
i de la companya de l			+/-: Change Opt.
i de la companya de l			F1: General Help
i de la companya de l			IF2: Previous Values
i de la companya de l			F3: Optimized Defaults
			F4: Save & Reset
			IESC: Exit
\			+



SN-M-Series-520

- 1. Connect the computer to the SNS firewall using the USB-A to USB-C cable.
- 2. Open the terminal emulator and enter the serial port and baud rate (115200).
- 3. Restart the SNS firewall and immediately press **[Del]** several times to stop the SNS firewall startup sequence.
- 4. Go to the **Security** tab by using the arrow keys.
- 5. Select Secure Boot and press [Enter].

	Main	Advanced	Chipset	Security	Boot	Save &	Exit
/-							+\
1	Passwo	rd Descrip	tion				Secure Boot
1							configuration
1							- I
1	Admini	strator Pa	ssword				- I
1							- I
1							- I
1							- I
1							- I
>							- I
1							
1							><: Select Screen
1							^v: Select Item
1							Enter: Select
1							+/-: Change Opt.
1							F1: General Help
1							F2: Previous Values
1							F3: Optimized Defaults
1							F4: Save & Reset
1							ESC: Exit
N I							1 /

- 6. Change the status of the Secure Boot parameter to Enabled.
- 7. Change the status of the Secure Boot Mode parameter to Standard.









- 8. Press [Esc] and go to the Save & Exit tab.
- 9. Select Save Changes and Reset and press [Enter].
- 10. In the Save & Reset window, select Yes then press [Enter].

Main Advanced Chi	pset Security Boot	Save & Exit	
/ Save Options 		+ Re sa	eset the system after aving the changes.
Save Changes and Rese			
Discard Changes and H	Reset		
I and the second se			
I	/ Save & re	set'	
Default Options	1		
Restore Defaults	Save configuration	and reset?	
	1		
Boot Override	I		
UEFI OS (P1: M.2 (S4	Yes	No	Select Screen
Launch EFI Shell fro	<u></u>	,	Select Item
			r: Select
		1+/	-: Change Opt.
		F.	I: General Help
		E'.	2: Previous values
		L.	A: Some & Reset
		12	C. Fvit
\			

- 1. Connect the computer to the SNS firewall using the USB-A to USB-C cable.
- 2. Open the terminal emulator and enter the serial port and baud rate (115200).
- 3. Restart the SNS firewall and immediately press **[Del]** several times to stop the SNS firewall startup sequence.
- 4. Go to the **Security** tab by using the arrow keys.
- 5. Select Secure Boot and press [Enter].

Main Advanced Ch	ipset Security Boot	t Save & Exit
/ Password Descriptio 	n	 Secure Boot configuration
Administrator Passw 	ord	
> Secure Boot 		<pre>><: Select Screen ><: Select Item Enter: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit +</pre>

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- 6. Change the status of the Secure Boot parameter to Disabled.
- 7. Change the status of the Secure Boot Mode parameter to Custom.

		Security		
/-			+	\
1	System Mode	User	Secure Boot mode	^
1			options:	*
1	Secure Boot	[Disabled]	Standard or Custom.	*
1		Not Active	In Custom mode, Secure	*
1			Boot Policy variables	*
1	Secure Boot Mode	[Standard]	can be configured by a	*
>	Restore Factory Keys		physically present user	+
>	Reset To Setup Mode	/ Secure Boot Mode\	without full	v
1		Standard		
>	Key Management	Custom		
1		\/	<: Select Screen	
1			v: Select Item	
1			Enter: Select	
1			+/-: Change Opt.	
1			F1: General Help	
1			F2: Previous Values	
1			F3: Optimized Defaults	
1			F4: Save & Reset	
1			ESC: Exit	
1-			+	/

- 8. Press [Esc] and go to the Save & Exit tab.
- 9. Select Save Changes and Reset and press [Enter].
- 10. In the Save & Reset window, select Yes then press [Enter].

Main Advanced Chipset Secu	irity Boot	Save &	Exit
/			_+/
Save Options			Reset the system after
			saving the changes.
Save Changes and Reset			
Discard Changes and Reset			
/	- Save & rese	et	\
Default Options			
Restore Defaults Save con	nfiguration a	and rese	t?
	2		
Boot Override			
UEFI OS (P1: M.2 (S4 Yes		No	Select Screen
Launch EFI Shell fro			/ Select Item
La contra de la co			r: Select
			+/-: Change Opt.
			F1: General Help
			F2: Previous Values
			F3: Optimized Defaults
			F4: Save & Reset
			ESC: Exit
\			-+/





SN-M-Series-720 and SN-M-Series-920

Enabling Secure Boot in the SNS firewall's UEFI

- 1. Connect the computer to the SNS firewall using the USB-A to USB-C cable.
- 2. Open the terminal emulator and enter the serial port and baud rate (115200).
- 3. Restart the SNS firewall and immediately press **[Del]** several times to stop the SNS firewall startup sequence.
- 4. Go to the **Security** tab by using the arrow keys.
- 5. Select Secure Boot and press [Enter].



6. Change the status of the Secure Boot parameter to Enabled.

1	Security	±
/ System Mode	User	Secure Boot feature is Active if Secure Boot
Secure Boot 	[Enabled] Active	is Enabled, Platform Key(PK) is enrolled and the System
Secure Boot Mode > Restore Factory Keys > Reset To Setup Mode > Key Management 	[Custom]	<pre> is in User mode. The mode change requires platform reset </pre>
 \		<pre> +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit +/</pre>





- 7. Press [Esc] and go to the Save & Exit tab.
- 8. Select Save Changes and Reset and press [Enter].
- 9. In the Save & Reset window, select Yes then press [Enter].

	Main Advanced Chipset Security Boot Save & Exit	
/-	/	->
1	Save Options Reset the system after	
1	Save Changes and Exit saving the changes.	
1	Discard Changes and Exit	
1		
1	Save Changes and Reset	
1	Discard Changes and / Save & reset\	
1		
	Default Options Save configuration and reset?	
	Restore Defaults	
		-1
ļI.	Boot Override Yes No Select Screen	
1	UEFI OS (P4: M.2 (S4\/ Select Item	
1	Launch EFI Shell from n: Select	
1	+/-: Change Opt.	
1	F1: General Help	
1	F2: Previous Values	
1	F3: Optimized Defaults	
	F4: Save & Exit	l
I	ESC: Exit	l
$\backslash -$		-/

- 1. Connect the computer to the SNS firewall using the USB-A to USB-C cable.
- 2. Open the terminal emulator and enter the serial port and baud rate (115200).
- 3. Restart the SNS firewall and immediately press **[Del]** several times to stop the SNS firewall's startup sequence.
- 4. Go to the **Security** tab by using the arrow keys.
- 5. Select Secure Boot and press [Enter].

/ttttt	
Password Description Set Administrator Password Password Administrator Password I Administrator Password I Secure Boot I I	\
Password Administrator Password Secure Boot I </td <td></td>	
Administrator Password I Administrator Password I I I I I I I I I I I I I I I I I I I	
Administrator Password > Secure Boot 	
> Secure Boot	
><: Select Screen	
^V: Select Item	
Enter: Select	
+/-: Change Opt.	
F1: General Help	
F2: Previous values	
F3: Optimized Defaults	
ESC: EXIT	ų

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- 6. Change the status of the Secure Boot parameter to Disabled.
- 7. Change the status of the Secure Boot Mode parameter to Custom.

1	Security	
/ System Mode 	User	Secure Boot feature is Active if Secure Boot
Secure Boot 	[Disabled] Not Active	is Enabled, Platform Key(PK) is enrolled and the System
Secure Boot Mode > Restore Factory Keys > Reset To Setup Mode > Key Management 	[Custom]	<pre> is in User mode. The mode change requires platform reset ><: Select Screen ^v: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit </pre>
\		++/

- 8. Press [Esc] and go to the Save & Exit tab.
- 9. Select Save Changes and Reset and press [Enter].
- 10. In the Save & Reset window, select Yes then press [Enter].

	Main Advanced Chi	ipset Security	Boot Sav	7e & Exit	
/-				+	\
1	Save Options			Re	eset the system after
1	Save Changes and Exi	it		sa	ving the changes.
1	Discard Changes and	Exit		1	1
1					I
1	Save Changes and Res	set		1	I
1	Discard Changes and	/ Save	e & reset -	\	、 I
1					I
1	Default Options	Save configur	ation and	reset?	I
	Restore Defaults				I
1					I
1	Boot Override	Yes	No)	Select Screen
1	UEFI OS (P4: M.2 (S4	1\		/	Select Item
1	Launch EFI Shell fro	om			r: Select
1				+/	-: Change Opt.
1				F1	: General Help
Γ				F2	: Previous Values
I				F3	: Optimized Defaults
I				F4	: Save & Exit
I				ES	C: Exit
$\setminus -$				+	/



SN1100 and SN3100

- 1. Connect the computer to the SNS firewall using the RJ45 to RS232 serial cable.
- 2. Open the terminal emulator and enter the serial port and baud rate (115200).
- 3. Restart the SNS firewall and immediately press **[Del]** several times to stop the SNS firewall startup sequence.
- 4. Go to the **Security** tab by using the arrow keys.
- 5. Select Secure Boot and press [Enter].
- 6. Select Secure Boot again and press [Enter].
- 7. Select Enabled and press [Enter].

	Security Security	
System Mode Vendor Keys	User Not Modified	Secure Boot activated when:
Secure Boot	[Disabled]	Secure Boot is enabled Platform Key(PK) is enrolled.
Secure Boot varia Platform Key(PK) Key Exchange Keys Authorized Signa	able Size Keys Key Source 1549 1 Factory s 155 Secure Boot — tures 154 Disabled	e System mode is User/Deployed, and CSM is disabled
▶ Forbidden Signa	tures 156 Enabled	++: Select Screen 14: Select Item Enter: Select +/-: Change Opt.
		F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit

- 8. Press [Esc] and go to the Save & Exit tab.
- 9. Select Save Changes and Reset and press [Enter].
- 10. In the Save & Reset window, select Yes then press [Enter].

nain Huvanced Chipset	Security Boot Sa	ve & Exit
Save Options Save Changes and Reset Discard Changes and Rese	t	Reset the system after saving the changes.
Default Options Restore Defaults	————————————————————————————————————	reset?
UEFI OS (PO: SATADOM	Yes No	Select Screen Select Item
		+/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset F5C: Exit

- 1. Connect the computer to the SNS firewall using the RJ45 to RS232 serial cable.
- 2. Open the terminal emulator and enter the serial port and baud rate (115200).
- 3. Restart the SNS firewall and immediately press **[Del]** several times to stop the SNS firewall startup sequence.
- 4. Go to the **Security** tab by using the arrow keys.
- 5. Select Secure Boot and press [Enter].
- 6. Select Secure Boot again and press [Enter].
- 7. Select Disabled and press [Enter].

- 8. Press [Esc] and go to the Save & Exit tab.
- 9. Select Save Changes and Reset and press [Enter].
- 10. In the Save & Reset window, select Yes then press [Enter].

SNi20

- 1. Connect the computer to the SNS firewall using the RJ45 to RS232 serial cable.
- 2. Open the terminal emulator and enter the serial port and baud rate (115200).
- 3. Restart the SNS firewall and immediately press **[Del]** several times to stop the SNS firewall startup sequence.
- 4. Go to the **Security** tab by using the arrow keys.
- 5. Select Secure Boot and press [Enter].
- 6. Select Secure Boot again and press [Enter].
- 7. Select Enabled and press [Enter].

	Security Contraction	
System Mode	User Not Modified	Secure Boot activated
Secure Boot	[Disabled]	Secure Boot is enabled Platform Key(PK) is
Secure Boot variat	ole Size Keys Key Source	enrolled, System mode is
 Platform Key(PK) Key Exchange Keys Authonized Signate 	1549 1 Factory 155 Secure Boot	and CSM is disabled
 Forbidden Signatu 	ures 156 Enabled	++: Select Screen
		TI: Select Item Enter: Select
		+/-: Change Upt. F1: General Help
		F3: Optimized Defaults F4: Save & Reset
		ESC: Exit

- 8. Press [Esc] and go to the Save & Exit tab.
- 9. Select Save Changes and Reset and press [Enter].
- 10. In the Save & Reset window, select Yes then press [Enter].

Hain Hovanced Chipset Sec	ourity Boot Save & P	Exit
Save Options		Reset the system after
Save Changes and Reset Discard Changes and Reset		o the shanges.
Default Options Restore Defaults Save co	— Save & reset ——— Dnfiguration and reset	
Boot Override UEFI OS (PO: SATADOM	Yes No	Select Screen
		+/-: Change Opt. F1: General Help
		F2: Previous Values F3: Optimized Defaults F4: Save & Reset FSC: Exit

- 1. Connect the computer to the SNS firewall using the RJ45 to RS232 serial cable.
- 2. Open the terminal emulator and enter the serial port and baud rate (115200).
- 3. Restart the SNS firewall and immediately press **[Del]** several times to stop the SNS firewall startup sequence.
- 4. Go to the **Security** tab by using the arrow keys.
- 5. Select Secure Boot and press [Enter].
- 6. Select Secure Boot again and press [Enter].
- 7. Select Disabled and press [Enter].

- 8. Press [Esc] and go to the Save & Exit tab.
- 9. Select Save Changes and Reset and press [Enter].
- 10. In the Save & Reset window, select Yes then press [Enter].

Additional information and answers to questions can be found in the **Stormshield knowledge base** (authentication required).

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