Recupero della password su XE-SDWAN

Sommario

Introduzione

Questo documento descrive la procedura per recuperare la password su XE-SDWAN.

Prerequisiti

Requisiti

Nessun requisito specifico previsto per questo documento.

Componenti usati

Le informazioni discusse in questo documento fanno riferimento a dispositivi usati in uno specifico ambiente di emulazione. Su tutti i dispositivi menzionati nel documento la configurazione è stata ripristinata ai valori predefiniti. Se la rete è operativa, valutare attentamente eventuali conseguenze derivanti dall'uso dei comandi.

Problema

In XE-SDWAN (versione 16.10.3 successiva), è disponibile una password monouso predefinita per l'amministratore per motivi di sicurezza che possono essere facilmente ignorati dall'utente e che potrebbero causare un blocco dell'utente.

Ciò è particolarmente pericoloso durante la configurazione iniziale del router se la connessione di controllo con il controller vManage non viene stabilita; non è possibile allegare semplicemente un nuovo modello con il nome utente e la password impostati.

In questo articolo viene illustrata una procedura dettagliata per il recupero.

```
Username: admin
Password:
Router#

Sep 23 20:36:03.133: SDWAN INFO: WARNING: Please configure a new username and password; one-time user ac
```

Questo è il nuovo messaggio sulla console dopo l'accesso con le credenziali admin/admin predefinite.

> **Nota**: questa procedura cancella la configurazione corrente, quindi se possibile eseguire un backup della configurazione prima di procedere.

Soluzione

Questo è un esempio di come un dispositivo viene bloccato in quanto ignora il messaggio di una sola volta con la password dai log della console.

```
rommon 2 > boot bootflash:asr1000-ucmk9.16.10.3a.SPA.bin

File size is 0x2f7f66c6

Located asr1000-ucmk9.16.10.3a.SPA.bin

Image size 796878534 inode num 17, bks cnt 194551 blk size 8*512

##############################################################################################
Boot image size = 796878534 (0x2f7f66c6) bytes


<<<<<<<< OUTPUT TRIMMED >>>>>>>>

Press RETURN to get started!


<<<<<<<< OUTPUT TRIMMED >>>>>>>>

*Sep 23 20:35:33.558: %Cisco-SDWAN-Router-SYSMGR-6-INFO-200017: R0/0: SYSMGR: Started daemon vdaemon @ p
*Sep 23 20:35:33.635: %Cisco-SDWAN-Router-TTMD-6-INFO-1200001: R0/0: TTMD: Starting
*Sep 23 20:35:33.725: %Cisco-SDWAN-Router-CFGMGR-6-INFO-300001: R0/0: CFGMGR: Starting
*Sep 23 20:35:33.823: %Cisco-SDWAN-Router-FPMD-6-INFO-1100001: R0/0: FPMD: Starting
*Sep 23 20:35:33.953: %Cisco-SDWAN-Router-FTMD-6-INFO-1000020: R0/0: FTMD: SLA class '__all_tunnels__' a
*Sep 23 20:35:34.424: %Cisco-SDWAN-Router-FTMD-4-WARN-1000007: R0/0: FTMD: Connection to TTM came up. p_
*Sep 23 20:35:41.475: %DMI-5-INITIALIZED: R0/0: syncfd: process has initialized.
*Sep 23 20:35:44.975: %LINEPROTO-5-UPDOWN: Line protocol on Interface Loopback65528, changed state to up
*Sep 23 20:35:44.991: %SYS-5-LOG_CONFIG_CHANGE: Buffer logging: level debugging, xml disabled, filtering
*Sep 23 20:35:45.025: SDWAN INFO: Received ENABLE_CONSOLE message from sysmgr
*Sep 23 20:35:45.025: Console Enabled
*Sep 23 20:35:45.025: SDWAN INFO: PNP start, status: success
*Sep 23 20:35:45.023: %DMI-5-ACTIVE: R0/0: nesd: process is in steady state.
*Sep 23 20:35:45.888: EXEC mode enabled on console

User Access Verification

Username: admin
Password:
Router#
*Sep 23 20:36:03.133: SDWAN INFO: WARNING: Please configure a new username and password; one-time user a
*Sep 23 20:36:03.240: %DMI-5-CONFIG_I: R0/0: nesd: Configured from NETCONF/RESTCONF by system, transacti
Router#exit

Press RETURN to get started.

User Access Verification

Username: admin
Password:
```

```
% Login invalid

Press RETURN to get started.

User Access Verification

Username:
Login incorrect

Username:
```

Passaggio 1. Avviare il processo con questi passaggi

1. Spegnere e riaccendere il router e forzarlo ad accedere alla modalità ROMmon con la sequenza di interruzione (ctrl+break, ctrl+c).
2. Modificare il registro di configurazione in 0xA102 o 0x8000.

Nota: si consiglia 0xA102 perché è meno soggetto a errori dell'utente. Ad esempio, se si imposta il registro di configurazione per errore su 0x800 anziché su 0x8000 (due zeri anziché tre), la velocità in baud della console viene impostata su 4800 anziché sul bypass della configurazione. Per ulteriori informazioni sui registri di configurazione, vedere https://www.cisco.com/c/en/us/support/docs/routers/10000-series-routers/50421-config-register-use.html

---

Nota: nel software Cisco IOS® XE, non è possibile eseguire il bypass della configurazione con il registro di configurazione 0x2142 perché il software Cisco IOS® XE SD-WAN memorizza la configurazione in modo diverso nel database di configurazione (CDB) sulla memoria flash. Dal software Cisco IOS® XE SD-WAN 16.10.1 in avanti, il bit 15 può essere impostato su 1 per ignorare la configurazione, quindi il registro di configurazione è, ad esempio, 0xA102. Questo è il risultato del bit 15 a (0x8000) in combinazione con il valore esadecimale del registro predefinito 0x2102.

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3. Reimpostare la casella (controllare l'output del comando).

```
Initializing Hardware ...

System integrity status: 90170400 12030117

U

System Bootstrap, Version 16.3(2r), RELEASE SOFTWARE
Copyright (c) 1994-2016  by cisco Systems, Inc.


Current image running: Boot ROM1

Last reset cause: PowerOn


Warning: Octeon PCIe lanes not x2 width: sts=0x5011

ASR1001-HX platform with 16777216 Kbytes of main memory
```

```
rommon 1 >      confreg 0x8000


You must reset or power cycle for new config to take effect

rommon 2 > i


Reset .......



Initializing Hardware ...

System integrity status: 90170400 12030117

Trixie configured
CaveCreek Link Status reg: Bus/Dev/Func: 0/28/1, offset 0x52, status = 00003011Times left ms:0000005C
Initializing DS31408...
 Read MB FPGA Version: 0x16051716

 DS31408 locked to local Oscillator
Taking Yoda out of reset...

Yoda VID enabled...

Crypto enabled...

Warning: Octeon PCIe link width not x2: sts=00001001
     requesting link retrain

Astro enabled...

Astro PLL/bandgap init...

NP5c out of reset...

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System Bootstrap, Version 16.3(2r), RELEASE SOFTWARE
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CPLD Version: 16033009 ASR1001-HX Slot:0


Current image running: Boot ROM1

Last reset cause: LocalSoft

Reading confreg 0x8000


Enabling interrupts

Initializing SATA controller...done

Checking for PCIe device presence...
```

Warning: Octeon PCIe lanes not x2 width: sts=0x5011 done

ASR1001-HX platform with 16777216 Kbytes of main memory

autoboot entry: NVRAM VALUES: bootconf: 0x0, autobootstate: 0

autobootcount: 0, autobootsptr: 0x0

Passaggio 2. Avviare l'immagine .bin XE-SDWAN da rommon.

rommon 3 > boot bootflash:asr1000-ucmk9.16.10.3a.SPA.bin

Warning: filesystem is not clean

File size is 0x2f7f66c6

Located asr1000-ucmk9.16.10.3a.SPA.bin

Image size 796878534 inode num 17, bks cnt 194551 blk size 8*512

###

File is comprised of 200 fragments (0%)

<<<<<< OUTPUT TRIMMED >>>>>>>

Press RETURN to get started!

<<<<<< OUTPUT TRIMMED >>>>>>>

```
*Sep 23 20:47:34.124: %Cisco-SDWAN-Router-SYSMGR-6-INFO-200017: R0/0: SYSMGR: Started daemon cfgmgr @ pi
*Sep 23 20:47:34.125: %Cisco-SDWAN-Router-SYSMGR-6-INFO-200017: R0/0: SYSMGR: Started daemon fpmd @ pid
*Sep 23 20:47:34.125: %Cisco-SDWAN-Router-SYSMGR-6-INFO-200017: R0/0: SYSMGR: Started daemon ftmd @ pid
*Sep 23 20:47:34.126: %Cisco-SDWAN-Router-SYSMGR-6-INFO-200017: R0/0: SYSMGR: Started daemon ompd @ pid
*Sep 23 20:47:34.127: %Cisco-SDWAN-Router-SYSMGR-6-INFO-200017: R0/0: SYSMGR: Started daemon ttmd @ pid
*Sep 23 20:47:34.127: %Cisco-SDWAN-Router-SYSMGR-6-INFO-200017: R0/0: SYSMGR: Started daemon vdaemon @ p
*Sep 23 20:47:34.214: %Cisco-SDWAN-Router-TTMD-6-INFO-1200001: R0/0: TTMD: Starting
*Sep 23 20:47:34.307: %Cisco-SDWAN-Router-CFGMGR-6-INFO-300001: R0/0: CFGMGR: Starting
*Sep 23 20:47:34.382: %Cisco-SDWAN-Router-FPMD-6-INFO-1100001: R0/0: FPMD: Starting
*Sep 23 20:47:34.525: %Cisco-SDWAN-Router-FTMD-6-INFO-1000020: R0/0: FTMD: SLA class '__all_tunnels__' a
*Sep 23 20:47:41.143: %ONEP_BASE-6-CONNECT: [Element]: ONEP session Application:com.cisco.syncfd Host:R0
*Sep 23 20:47:41.997: %DMI-5-INITIALIZED: R0/0: syncfd: process has initialized.
*Sep 23 20:47:45.480: %LINEPROTO-5-UPDOWN: Line protocol on Interface Loopback65528, changed state to up
*Sep 23 20:47:45.495: %SYS-5-LOG_CONFIG_CHANGE: Buffer logging: level debugging, xml disabled, filtering
*Sep 23 20:47:45.534: SDWAN INFO: Received ENABLE_CONSOLE message from sysmgr
*Sep 23 20:47:45.534: Console Enabled
*Sep 23 20:47:45.534: SDWAN INFO: PNP start, status: success
*Sep 23 20:47:45.531: %DMI-5-ACTIVE: R0/0: nesd: process is in steady state.
*Sep 23 20:47:45.945: EXEC mode enabled on console
```

Passaggio 3. Eseguire l'accesso con le credenziali di amministratore predefinite.

```
User Access Verification

Username: admin
Password:
Router#
*Sep 23 20:48:16.659: SDWAN INFO: WARNING: Please configure a new username and password; one-time user a
*Sep 23 20:48:16.767: %DMI-5-CONFIG_I: R0/0: nesd: Configured from NETCONF/RESTCONF by system, transacti
Router#
Router#sh ver | i Configuration register
Configuration register is 0x8000
```

Passaggio 4. Si tratta di un passaggio obbligatorio.

1. Modificare il registro di configurazione in 0x2102 ed eseguire un reset del software sdwan. In questo modo viene eliminata tutta la configurazione esistente.
2. In questo passaggio il router viene riavviato e viene avviato con il software specificato nel file di configurazione packages.conf.

```
Router#request platform software sdwan software reset

*Sep 23 20:52:17.400: %INSTALL-5-INSTALL_START_INFO: R0/0: install_engine: Started install activate boot
*Sep 23 20:52:23.919: %SYS-7-NV_BLOCK_INIT: Initialized the geometry of nvram
Router#
*Sep 23 20:52:47.943: %INSTALL-5-INSTALL_COMPLETED_INFO: R0/0: install_engine: Completed install activat


Initializing Hardware ...

System integrity status: 90170400 12030117

U

System Bootstrap, Version 16.3(2r), RELEASE SOFTWARE
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Current image running: Boot ROM1

Last reset cause: LocalSoft


Warning: Octeon PCIe lanes not x2 width: sts=0x5011

ASR1001-HX platform with 16777216 Kbytes of main memory


File size is 0x00001a47

Located packages.conf

Image size 6727 inode num 1120114, bks cnt 2 blk size 8*512

#
```

```
File size is 0x01e7df8e

Located asr1000-rpboot.16.10.3a.SPA.pkg

Image size 31973262 inode num 1120126, bks cnt 7806 blk size 8*512

##########################################################################################

Boot image size = 31973262 (0x1e7df8e) bytes


ROM:RSA Self Test Passed

ROM:Sha512 Self Test Passed


<<<<<< OUTPUT TRIMMED >>>>>>>>



*Sep 23 20:57:13.347: %ONEP_BASE-6-CONNECT: [Element]: ONEP session Application:com.cisco.syncfd Host:R
*Sep 23 20:57:15.226: %Cisco-SDWAN-Router-SYSMGR-6-INFO-200017: R0/0: SYSMGR: Started daemon cfgmgr @ pi
*Sep 23 20:57:15.227: %Cisco-SDWAN-Router-SYSMGR-6-INFO-200017: R0/0: SYSMGR: Started daemon fpmd @ pid
*Sep 23 20:57:15.228: %Cisco-SDWAN-Router-SYSMGR-6-INFO-200017: R0/0: SYSMGR: Started daemon ftmd @ pid
*Sep 23 20:57:15.229: %Cisco-SDWAN-Router-SYSMGR-6-INFO-200017: R0/0: SYSMGR: Started daemon ompd @ pid
*Sep 23 20:57:15.229: %Cisco-SDWAN-Router-SYSMGR-6-INFO-200017: R0/0: SYSMGR: Started daemon ttmd @ pid
*Sep 23 20:57:15.230: %Cisco-SDWAN-Router-SYSMGR-6-INFO-200017: R0/0: SYSMGR: Started daemon vdaemon @ p
*Sep 23 20:57:15.308: %Cisco-SDWAN-Router-TTMD-6-INFO-1200001: R0/0: TTMD: Starting
*Sep 23 20:57:15.391: %Cisco-SDWAN-Router-CFGMGR-6-INFO-300001: R0/0: CFGMGR: Starting
*Sep 23 20:57:15.484: %Cisco-SDWAN-Router-FPMD-6-INFO-1100001: R0/0: FPMD: Starting
*Sep 23 20:57:15.620: %Cisco-SDWAN-Router-FTMD-6-INFO-1000020: R0/0: FTMD: SLA class '__all_tunnels__' a
*Sep 23 20:57:16.092: %Cisco-SDWAN-Router-FTMD-4-WARN-1000007: R0/0: FTMD: Connection to TTM came up. p_
*Sep 23 20:57:27.380: %DMI-5-INITIALIZED: R0/0: syncfd: process has initialized.
*Sep 23 20:57:35.032: %LINEPROTO-5-UPDOWN: Line protocol on Interface Loopback65528, changed state to up
*Sep 23 20:57:35.048: %SYS-5-LOG_CONFIG_CHANGE: Buffer logging: level debugging, xml disabled, filtering
*Sep 23 20:57:35.081: SDWAN INFO: Received ENABLE_CONSOLE message from sysmgr
*Sep 23 20:57:35.081: Console Enabled
*Sep 23 20:57:35.081: SDWAN INFO: PNP start, status: success
*Sep 23 20:57:35.079: %DMI-5-ACTIVE: R0/0: nesd: process is in steady state.
*Sep 23 20:57:35.682: EXEC mode enabled on console
```

Passaggio 5. A questo punto, vengono nuovamente richieste le credenziali di amministratore occasionale.
Dopo questo passaggio, non dimenticare di modificare la password predefinita. Si consiglia di aggiungere
anche un altro utente. Se si perde questo passaggio e si rimane bloccati, è necessario ripetere di nuovo tutti i
passaggi.


```
User Access Verification

Username: admin
Password:
Router#
*Sep 23 20:58:18.048: SDWAN INFO: WARNING: Please configure a new username and password; one-time user a
*Sep 23 20:58:18.155: %DMI-5-CONFIG_I: R0/0: nesd: Configured from NETCONF/RESTCONF by system, transacti
Router#confi
Router#config-tr
System is still initializing. Wait for PnP to be completed or terminate PnP with the command:
```

```
pnpa service discovery stop
Router#pnpa service discovery stop
PNP-EXEC-DISCOVERY (1): Stopping PnP Discovery...
Waiting for PnP discovery cleanup ..

Router#
*Sep 23 20:58:48.997: %PNP-6-PNP_DISCOVERY_ABORT_ON_CLI: PnP Discovery abort on CLI input
*Sep 23 20:58:48.999: %DMI-5-SYNC_START: R0/0: syncfd: External change to running configuration detected
*Sep 23 20:58:54.955: %DMI-5-SYNC_COMPLETE: R0/0: syncfd: The running configuration has been synchronize
*Sep 23 20:58:54.955: %DMI-5-ACTIVE: R0/0: syncfd: process is in steady state.
*Sep 23 20:58:55.150: %DMI-5-CONFIG_I: R0/0: nesd: Configured from NETCONF/RESTCONF by system, transacti
*Sep 23 20:58:55.676: %Cisco-SDWAN-Router-SYSMGR-5-NTCE-200050: R0/0: SYSMGR: System status solid green
Router#
*Sep 23 20:59:00.083: %INSTALL-5-INSTALL_START_INFO: R0/0: install_engine: Started install commit PACKA0
*Sep 23 20:59:00.327: %INSTALL-5-INSTALL_COMPLETED_INFO: R0/0: install_engine: Completed install commit
Router#sh ver | i register
Configuration register is 0x2102
Router#sh sdwan ver

*Sep 23 20:59:12.640: %PNP-6-PNP_DISCOVERY_ABORT_ON_CLI: PnP Discovery abort on CLI input
*Sep 23 20:59:12.640: %PNP-6-PNP_DISCOVERY_STOPPED: PnP Discovery stopped (Discovery Aborted)16.10.3a

Router#
Router#sh sdwan ver
16.10.3a

Router#
Router#conf
Router#config-tr

admin connected from 127.0.0.1 with console on Router
Router(config)# username admin privilege 15   secret <your password>
Router(config)# username  sdwan privilege 15 secret <your password>
Router(config)# comm
Commit complete.
Router(config)#
*Sep 23 21:00:59.270: %DMI-5-CONFIG_I: R0/0: nesd: Configured from NETCONF/RESTCONF by admin, transactio
Router(config)# end
```

Passaggio 6. Verificare di disporre ancora dell'accesso al dispositivo con il nuovo nome utente e la nuova password.

```
Router#exit
Router con0 is now available

Press RETURN to get started.

User Access Verification

Username: admin
Password:

Router>en
Router#
Router#exit

Router con0 is now available
```

```
Press RETURN to get started.
User Access Verification

Username: sdwan
Password:

Router>en
Router#
```