

Come ripristinare IC3000 dalla console

Sommario

[Introduzione](#)

[Come ripristinare IC3000 dalla console](#)

[Soluzione](#)

Introduzione

In questo documento viene descritto come ripristinare l'IC3000 utilizzando la console.

Come ripristinare IC3000 dalla console

In alcuni casi, IC3000 non è più avviabile ed è bloccato in rommon>, ma non è in grado di avviare l'immagine.

In questo caso, la console seriale/USB può visualizzare questo output:

```
autoboot: Restarting the system.
```

```
Rom image verified correctly
```

```
Cisco Systems ROMMON, Version 1.0.0(IC3000), RELEASE SOFTWARE  
Copyright (c) 1994-2018 by Cisco Systems, Inc.  
Compiled Thu 09/06/2018 11:38:52.09 by builders
```

```
Current image running: Boot ROM1  
Last reset cause: LocalSoft  
DIMM Slot 0 : Present
```

```
Platform IC3000-2C2F-K9 with 8192 Mbytes of main memory  
MAC Address: 00:00:00:00:00:00
```

```
Use BREAK or ESC to interrupt boot.  
Use SPACE to begin boot immediately.
```

```
Warning: filesystem is not clean  
Directory .boot_string not found  
Unable to locate .boot_string directory  
Unable to load .boot_string  
Attempt autoboot: "boot disk0:"  
Warning: filesystem is not clean  
Warning: filesystem is not clean  
File size is 0x01360000  
Located IC3000-K9-1.0.1.SPA  
Image size 20316160 inode num 12, bks cnt 4960 blk size 8*512  
#####
```

```
Signature verification failed for key# 1  
Failed to validate digital signature
```

```
Signature verification failed for key# 1
Signature verification failed for key# 2
Failed to validate digital signature
LFBFF signature verification failed!!
No kernel found to launch.
boot: cannot determine first file name on device "disk0:/"
autoboot: All boot attempts have failed.
autoboot: Restarting the system.
```

Quando si interrompe il processo di avvio e si tenta di avviare l'immagine, presente su disco0:, è possibile che venga visualizzato lo stesso output di cui sopra e che il dispositivo sia fondamentalmente in una sorta di bootloop.

Soluzione

Per ripristinare IC3000, è necessario soddisfare i seguenti prerequisiti:

- Connettività IP alla porta di gestione
- Server TFTP, raggiungibile dalla rete tramite la porta di gestione
- Immagine IC3000, disponibile per il download all'indirizzo:
<https://software.cisco.com/download/home/286321941/type/286322235>
- Connessione console alla connessione seriale o USB su IC3000

I seguenti passaggi consentono di riportare IC3000 in uno stato utilizzabile:

1. Scaricare l'immagine IC3000 dall'URL fornito sopra e renderla disponibile sul server TFTP
2. Collegarsi alla console IC3000 e interrompere il processo di avvio premendo **ESC** quando viene visualizzato questo messaggio:

```
Use BREAK or ESC to interrupt boot.
Use SPACE to begin boot immediately.
```

3. Dopo aver interrotto la normale sequenza di avvio, viene visualizzato il prompt rommon>:

```
rommon 1 >
```

4. Configurare l'indirizzo IP e il gateway per IC3000 sulla porta di gestione. Anche se non è richiesto alcun gateway, è necessario impostare un valore:

```
rommon 1 > address 192.168.100.2
rommon 2 > netmask 255.255.255.0
rommon 3 > gateway 192.168.100.1
```

5. Verificare la connettività al server TFTP:

```
rommon 4 > ping 192.168.100.1
Sending 10, 32-byte ICMP Echoes to 192.168.100.1 timeout is 4 seconds
!!!!!!!
Success rate is 90 percent (9/10)
```

6. Impostare l'indirizzo e il nome del file del server TFTP da scaricare:

```
rommon 5 > server 192.168.100.1
rommon 6 > file IC3000-K9-1.0.1.SPA
```

7. Avviare il download e l'avvio dell'immagine dal server TFTP:

```
rommon 7 > tftpdnld
ADDRESS: 192.168.100.2
NETMASK: 255.255.255.0
```

```
GATEWAY: 192.168.100.1
SERVER: 192.168.100.1
IMAGE: IC3000-K9-1.0.1.SPA
MACADDR: 00:00:00:00:00:00
VERBOSITY: Progress
RETRY: 40
PKT TIMEOUT: 7200
BLKSIZE: 1460
CHECKSUM: Yes
PORT: GbE/0
PHYMODE: Auto Detect
```

```
Receiving IC3000-K9-1.0.1.SPA from  
192.168.100.1!!!!!!!!!!!!!!  
!!!!!!!!!!!!!!  
!!!!!!!!!!!!!!  
!!!!!!!!!!!!!!  
!!!!!!!!!!!!!!  
File reception completed.
```

Una volta completato il trasferimento dell'immagine, IC3000 si avvia immediatamente dall'immagine:

```
File reception completed.
Boot buffer bigbuf=348bd018
Boot image size = 102729968 (0x61f88f0) bytes
[image size] 102729968
[MD5 signaure] 294a052497277c330d6b2159cf37f1ab
LFBFF signature verified.
[    4.446627] sd 2:0:0:0: [sdb] No Caching mode page found
[    4.510305] sd 2:0:0:0: [sdb] Assuming drive cache: write through
INIT: version 2.88 booting
Starting udev
Populating dev cache
INIT: Entering runlevel: 5postinsts/000-monit...
Configuring network interfaces... Setting bridge MAC address to: 00:b8:b3:80:02:c0
done.
Starting system message bus: dbus.
Checking and Mounting BOOT filesystem...
fsck (busybox 1.24.1, 2018-09-13 06:16:00 UTC)
BOOT was not cleanly unmounted, check forced.
BOOT: Inode 12, i_size is 20316160, should be 20447232. FIXED.
BOOT: Inode 12, i_blocks is 39728, should be 39984. FIXED.
BOOT: 12/244320 files (0.0% non-contiguous), 22254/976892 blocks
Checking and Mounting BOOT filesystem...Done
Checking GOLDEN filesystem...
fsck (busybox 1.24.1, 2018-09-13 06:16:00 UTC)
GOLDEN was not cleanly unmounted, check forced.
GOLDEN: 12/122160 files (8.3% non-contiguous), 33504/488448 blocks
Checking GOLDEN filesystem...Done
Checking and Mounting SYSTEM filesystem...
fsck (busybox 1.24.1, 2018-09-13 06:16:00 UTC)
SYSTEM: clean, 11/535392 files, 71084/2139136 [    21.111486] fpga_i2c_init_module: FPGA base
address = ffffc90001078000
blocks
Checking and Mounting SYSTEM filesystem...Done
Checking and Mounting IOX filesystem...
fsck (busybox 1.24.1, 2018-09-13 06:16:00 UTC)
IOX: clean, 11/5865472 files, 415148/23442851 blocks
Checking and Mounting IOX filesystem...Done
```

```
Checking and Mounting LOG filesystem...
fsck (busybox 1.24.1, 2018-09-13 06:16:00 UTC)
LOG: clean, 11/244800 files, 33670/977949 blocks
Checking and Mounting LOG filesystem...Done
0x0000
Authenticating ACT2...ACT2 success

System initializing...
System Type Fiber.
Mounting cgroups...Done
Checking if cgroup is provided by kernel...Yes.
Checking if cgroup is mounted...Yes.
Checking if lssubsys is available...Yes.
Checking if platform defines cgroup parameters...Yes.
Tweaking base cgroup parameters...Done.
Checking if subsystems needed by IOx exist...
Setting up cpu cgroup parameters...
Setting cpu.shares for apphosting.partition to 921...OK
Setting cpu.shares for host to 100...OK
Setting cpu.shares for host/caf to 100...OK
Setting cpuset values for apphosting.partition...OK
Setting up memory cgroup parameters...
Setting memory.limit_in_bytes for apphosting.partition to 6589061529...OK
Setting memory.limit_in_bytes for host to 1647265382...OK
Setting memory.limit_in_bytes for host/caf to 1317812305...OK
OpenBSD Secure Shell server not in use (/etc/ssh/sshd_not_to_be_run)
Starting atd: OK
starting DNS forwarder and DHCP server: dnsmasq... done.
Starting ntpd: done
Starting system log daemon...0
Starting kernel log daemon...0
Network mgmt starting with factory default configuration
User mgmt starting with factory default configuration
Starting konfd: OK
 * Starting virtualization library daemon: libvirtd
no /usr/bin/dnsmasq found; none killed [ ok ]
 * Starting libvirt log management daemon: virtlogd [ ok ]
Starting crond: OK
Starting Monit 5.14 daemon with http interface at /var/run/monit.sock
```

ic3k>