Como recuperar IC3000 do console

Índice

Introdução

Este original descreve como recuperar o IC3000 com o uso do console.

Como recuperar IC3000 do console

Em certos casos, o IC3000 torna-se não-inicializável e é colado no rommon> enquanto não capaz para carreg o é imagem.

Quando este é o caso, o console da série/usb pode mostrar esta saída:

```
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 você interrompe o processo de boot e o tenta carreg a imagem, apresente no disco 0: , você pôde ver a mesma saída que acima e o dispositivo está basicamente em algum tipo do bootloop.

Solução

A fim recuperar o IC3000, você precisa estas condições prévias:

- Conectividade IP à porta de gerenciamento
- TFTP-server, alcançável pela rede na porta de gerenciamento
- Imagem IC3000, disponível para a transferência
  de: https://software.cisco.com/download/home/286321941/type/286322235
- Conexão de console à série ou à conexão USB no IC3000

Estas etapas permitem que você receba de volta o IC3000 em um estado útil:

1. Transfira a imagem IC3000 da URL fornecida acima e faça-a disponível no TFTP-server
2. Conecte ao console IC3000 e interrompa o processo de inicialização pressionando o **ESC** quando você vê esta mensagem:

   ```
   Use BREAK or ESC to interrupt boot.
   Use SPACE to begin boot immediately.
   ```
3. Depois que você quebra a sequência de inicialização normal, você termina acima com a alerta do rommon>:

   ```
   rommon 1 >
   ```
4. Configurar o endereço IP de Um ou Mais Servidores Cisco ICM NT e o gateway para o IC3000 na porta de gerenciamento. Mesmo se nenhum gateway é exigido, um valor tem que ser ajustado:

   ```
   rommon 1 > address 192.168.100.2
   rommon 2 > netmask 255.255.255.0
   rommon 3 > gateway 192.168.100.1
   ```
5. Teste a Conectividade ao TFTP-server:

   ```
   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. Ajuste o endereço de servidor de TFTP e o nome de arquivo para transferir:

   ```
   rommon 5 > server 192.168.100.1
   rommon 6 > file IC3000-K9-1.0.1.SPA
   ```
7. Comece a transferência e carreg a imagem do TFTP-server:

   ```
   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
                   PKTTIMEOUT: 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.
```

Uma vez que a imagem foi transferida com sucesso, o IC3000 carreg imediatamente da imagem:

```
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>
```