

GNU/Linux Administration - Feature #184

Enabling Unused PowerPC CPU on Debian

08/21/2013 06:03 PM - Daniel Curtis

Status:	Closed	Start date:	08/21/2013
Priority:	Normal	Due date:	
Assignee:	Daniel Curtis	% Done:	100%
Category:		Estimated time:	0.50 hour
Target version:	Debian	Spent time:	0.50 hour

Description

During routine system maintenance I noticed that one CPU was disabled. The system has been running solid since its deployment, and enabling the second CPU is purely for performance gain. I checked the systems hardware like so:

```
sudo lshw
```

```
!*-cpu:0
description: CPU
product: 7455, altivec supported
physical id: 2
bus info: cpu@0
version: 2.1 (pvr 8001 0201)
size: 999MHz
clock: 133MHz
capabilities: altivec performance-monitor
!*-cache:0
description: L1 Cache
physical id: 0
size: 32KiB
!*-cache:1
description: L2 Cache (unified)
physical id: 1
size: 256KiB
clock: 999MHz (1.0ns)

!*-cpu:1 DISABLED
description: CPU
product: PowerPC,G4
physical id: 3
bus info: cpu@1
version: 8001.2.1
size: 999MHz
clock: 133MHz
capabilities: altivec performance-monitor
!*-cache:0 UNCLAIMED
description: L1 Cache
physical id: 0
size: 32KiB
!*-cache:1 UNCLAIMED
description: L2 Cache (unified)
physical id: 1
size: 256KiB
clock: 999MHz (1.0ns)
```

This is where I spotted that the CPU was disabled.

I decided to search with apt-cache and locate the SMP (Symmetric MultiProcessing) Linux Image for the PowerPC architecture:

```
sudo apt-cache search linux-image
```

From there I installed the proper linux-image-powerpc-smp:

```
sudo apt-get install linux-image-powerpc-smp linux-image-headers-powerpc-smp
```

Reboot the server:

```
sudo reboot
```

And check to see if the CPU has been enabled:

```
sudo lshw
```

```
!*-cpu:0
description: CPU
product: 7455, altivec supported
physical id: 2
bus info: cpu@0
version: 2.1 (pvr 8001 0201)
size: 999MHz
clock: 133MHz
capabilities: altivec performance-monitor
!*-cache:0
description: L1 Cache
physical id: 0
size: 32KiB
!*-cache:1
description: L2 Cache (unified)
physical id: 1
size: 256KiB
clock: 999MHz (1.0ns)
!*-cpu:1
description: CPU
product: 7455, altivec supported
physical id: 3
bus info: cpu@1
version: 2.1 (pvr 8001 0201)
size: 999MHz
clock: 133MHz
capabilities: altivec performance-monitor
!*-cache:0
description: L1 Cache
physical id: 0
size: 32KiB
!*-cache:1
description: L2 Cache (unified)
physical id: 1
size: 256KiB
clock: 999MHz (1.0ns)
```

History

#1 - 08/21/2013 06:04 PM - Daniel Curtis

- Description updated

#2 - 08/21/2013 06:05 PM - Daniel Curtis

- Description updated

#3 - 05/09/2015 01:42 PM - Daniel Curtis

- Project changed from 15 to GNU/Linux Administration

- Subject changed from Enabling Unused CPU on Debian to Enabling Unused PowerPC CPU on Debian

- Target version set to Debian