sysfs-devices-memory..txt

What: /sys/devices/system/memory
Date: June 2008
Contact: Badari Pulavarty <pbadari@us.ibm.com>
Description:

                 The /sys/devices/system/memory contains a snapshot of the
                 internal state of the kernel memory blocks. Files could be
                 added or removed dynamically to represent hot-add/remove
                 operations.
Users: hotplug memory add/remove tools
                 https://w3.opensource.ibm.com/projects/powerpc-utils/

What: /sys/devices/system/memory/memoryX/removable
Date: June 2008
Contact: Badari Pulavarty <pbadari@us.ibm.com>
Description:

                 The file /sys/devices/system/memory/memoryX/removable
                 indicates whether this memory block is removable or not.
                 This is useful for a user-level agent to determine
                 identify removable sections of the memory before attempting
                 potentially expensive hot-remove memory operation
Users: hotplug memory remove tools
                 https://w3.opensource.ibm.com/projects/powerpc-utils/

What: /sys/devices/system/memory/memoryX/phys_device
Date: September 2008
Contact: Badari Pulavarty <pbadari@us.ibm.com>
Description:

                 The file /sys/devices/system/memory/memoryX/phys_device
                 is read-only and is designed to show the name of physical
                 memory device. Implementation is currently incomplete.

What: /sys/devices/system/memory/memoryX/phys_index
Date: September 2008
Contact: Badari Pulavarty <pbadari@us.ibm.com>
Description:

                 The file /sys/devices/system/memory/memoryX/phys_index
                 is read-only and contains the section ID in hexadecimal
                 which is equivalent to decimal X contained in the
                 memory section directory name.

What: /sys/devices/system/memory/memoryX/state
Date: September 2008
Contact: Badari Pulavarty <pbadari@us.ibm.com>
Description:

                 The file /sys/devices/system/memory/memoryX/state
                 is read-write. When read, its contents show the
                 online/offline state of the memory section. When written,
                 root can toggle the the online/offline state of a removable
                 memory section (see removable file description above)
                 using the following commands.
                 # echo online > /sys/devices/system/memory/memoryX/state
                 # echo offline > /sys/devices/system/memory/memoryX/state

                 For example, if /sys/devices/system/memory/memory22/removable
                 contains a value of 1 and
                 /sys/devices/system/memory/memory22/state contains the

string "online" the following command can be executed by
by root to offline that section.
echo offline > /sys/devices/system/memory/memory22/state

Users: hotplug memory remove tools
                        https://w3.opensource.ibm.com/projects/powerpc-utils/

What: /sys/devices/system/memoryX/nodeY
Date: October 2009
Contact: Linux Memory Management list <linux-mm@kvack.org>
Description:

                        When CONFIG_NUMA is enabled, a symbolic link that
                        points to the corresponding NUMA node directory.

                        For example, the following symbolic link is created for
                        memory section 9 on node0:
                        /sys/devices/system/memory/memory9/node0 -> ../../node/node0

What: /sys/devices/system/node/nodeX/memoryY
Date: September 2008
Contact: Gary Hade <garyhade@us.ibm.com>
Description:

                        When CONFIG_NUMA is enabled
                        /sys/devices/system/node/nodeX/memoryY is a symbolic link that
                        points to the corresponding /sys/devices/system/memory/memoryY
                        memory section directory. For example, the following symbolic
                        link is created for memory section 9 on node0.
                        /sys/devices/system/node/node0/memory9 -> ../../memory/memory9