What: /sys/class/regulator/.../state
Date: April 2008
KernelVersion: 2.6.26
Contact: Liam Girdwood <lrg@slimlogic.co.uk>
Description:

Some regulator directories will contain a field called state. This reports the regulator enable control, for regulators which can report that input value.

This will be one of the following strings:

'enabled'
'disabled'
'unknown'

'enabled' means the regulator output is ON and is supplying power to the system (assuming no error prevents it).

'disabled' means the regulator output is OFF and is not supplying power to the system (unless some non-Linux control has enabled it).

'unknown' means software cannot determine the state, or the reported state is invalid.

NOTE: this field can be used in conjunction with microvolts or microamps to determine configured regulator output levels.

What: /sys/class/regulator/.../status
Description:

Some regulator directories will contain a field called "status". This reports the current regulator status, for regulators which can report that output value.

This will be one of the following strings:

off
on
error
fast
normal
idle
standby

"off" means the regulator is not supplying power to the system.

"on" means the regulator is supplying power to the system, and the regulator can't report a detailed operation mode.

"error" indicates an out-of-regulation status such as being disabled due to thermal shutdown, or voltage being unstable because of problems with the input power supply.

"fast", "normal", "idle", and "standby" are all detailed

regulator operation modes (described elsewhere). They
imply "on", but provide more detail.

Note that regulator status is a function of many inputs,
not limited to control inputs from Linux. For example,
the actual load presented may trigger "error" status; or
a regulator may be enabled by another user, even though
Linux did not enable it.

What: /sys/class/regulator/.../type
Date: April 2008
KernelVersion: 2.6.26
Contact: Liam Girdwood <lrg@slimlogic.co.uk>
Description:
Each regulator directory will contain a field called
type. This holds the regulator type.

This will be one of the following strings:

'voltage'
'current'
'unknown'

'voltage' means the regulator output voltage can be controlled
by software.

'current' means the regulator output current limit can be
controlled by software.

'unknown' means software cannot control either voltage or
current limit.

What: /sys/class/regulator/.../microvolts
Date: April 2008
KernelVersion: 2.6.26
Contact: Liam Girdwood <lrg@slimlogic.co.uk>
Description:
Some regulator directories will contain a field called
microvolts. This holds the regulator output voltage setting
measured in microvolts (i.e. E-6 Volts), for regulators
which can report the control input for voltage.

NOTE: This value should not be used to determine the regulator
output voltage level as this value is the same regardless of
whether the regulator is enabled or disabled.

What: /sys/class/regulator/.../microamps
Date: April 2008
KernelVersion: 2.6.26
Contact: Liam Girdwood <lrg@slimlogic.co.uk>
Description:
Some regulator directories will contain a field called
microamps. This holds the regulator output current limit

setting measured in microamps (i.e. E-6 Amps), for regulators
which can report the control input for a current limit.

NOTE: This value should not be used to determine the regulator
output current level as this value is the same regardless of
whether the regulator is enabled or disabled.

What: /sys/class/regulator/.../opmode
Date: April 2008
KernelVersion: 2.6.26
Contact: Liam Girdwood <lrg@slimlogic.co.uk>
Description:
Some regulator directories will contain a field called
opmode. This holds the current regulator operating mode,
for regulators which can report that control input value.

The opmode value can be one of the following strings:

'fast'
'normal'
'idle'
'standby'
'unknown'

The modes are described in include/linux/regulator/consumer.h

NOTE: This value should not be used to determine the regulator
output operating mode as this value is the same regardless of
whether the regulator is enabled or disabled. A "status"
attribute may be available to determine the actual mode.

What: /sys/class/regulator/.../min_microvolts
Date: April 2008
KernelVersion: 2.6.26
Contact: Liam Girdwood <lrg@slimlogic.co.uk>
Description:
Some regulator directories will contain a field called
min_microvolts. This holds the minimum safe working regulator
output voltage setting for this domain measured in microvolts,
for regulators which support voltage constraints.

NOTE: this will return the string 'constraint not defined' if
the power domain has no min microvolts constraint defined by
platform code.

What: /sys/class/regulator/.../max_microvolts
Date: April 2008
KernelVersion: 2.6.26
Contact: Liam Girdwood <lrg@slimlogic.co.uk>
Description:
Some regulator directories will contain a field called
max_microvolts. This holds the maximum safe working regulator
output voltage setting for this domain measured in microvolts,

for regulators which support voltage constraints.

NOTE: this will return the string 'constraint not defined' if the power domain has no max microvolts constraint defined by platform code.

What: /sys/class/regulator/.../min_microamps
Date: April 2008
KernelVersion: 2.6.26
Contact: Liam Girdwood <lrg@slimlogic.co.uk>
Description:
Some regulator directories will contain a field called min_microamps. This holds the minimum safe working regulator output current limit setting for this domain measured in microamps, for regulators which support current constraints.

NOTE: this will return the string 'constraint not defined' if the power domain has no min microamps constraint defined by platform code.

What: /sys/class/regulator/.../max_microamps
Date: April 2008
KernelVersion: 2.6.26
Contact: Liam Girdwood <lrg@slimlogic.co.uk>
Description:
Some regulator directories will contain a field called max_microamps. This holds the maximum safe working regulator output current limit setting for this domain measured in microamps, for regulators which support current constraints.

NOTE: this will return the string 'constraint not defined' if the power domain has no max microamps constraint defined by platform code.

What: /sys/class/regulator/.../name
Date: October 2008
KernelVersion: 2.6.28
Contact: Liam Girdwood <lrg@slimlogic.co.uk>
Description:
Each regulator directory will contain a field called name. This holds a string identifying the regulator for display purposes.

NOTE: this will be empty if no suitable name is provided by platform or regulator drivers.

What: /sys/class/regulator/.../num_users
Date: April 2008
KernelVersion: 2.6.26
Contact: Liam Girdwood <lrg@slimlogic.co.uk>
Description:
Each regulator directory will contain a field called

num_users. This holds the number of consumer devices that
have called regulator_enable() on this regulator.

What: /sys/class/regulator/.../requested_microamps
Date: April 2008
KernelVersion: 2.6.26
Contact: Liam Girdwood <lrg@slimlogic.co.uk>
Description:
Some regulator directories will contain a field called
requested_microamps. This holds the total requested load
current in microamps for this regulator from all its consumer
devices.

What: /sys/class/regulator/.../parent
Date: April 2008
KernelVersion: 2.6.26
Contact: Liam Girdwood <lrg@slimlogic.co.uk>
Description:
Some regulator directories will contain a link called parent.
This points to the parent or supply regulator if one exists.

What: /sys/class/regulator/.../suspend_mem_microvolts
Date: May 2008
KernelVersion: 2.6.26
Contact: Liam Girdwood <lrg@slimlogic.co.uk>
Description:
Some regulator directories will contain a field called
suspend_mem_microvolts. This holds the regulator output
voltage setting for this domain measured in microvolts when
the system is suspended to memory, for voltage regulators
implementing suspend voltage configuration constraints.

What: /sys/class/regulator/.../suspend_disk_microvolts
Date: May 2008
KernelVersion: 2.6.26
Contact: Liam Girdwood <lrg@slimlogic.co.uk>
Description:
Some regulator directories will contain a field called
suspend_disk_microvolts. This holds the regulator output
voltage setting for this domain measured in microvolts when
the system is suspended to disk, for voltage regulators
implementing suspend voltage configuration constraints.

What: /sys/class/regulator/.../suspend_standby_microvolts
Date: May 2008
KernelVersion: 2.6.26
Contact: Liam Girdwood <lrg@slimlogic.co.uk>
Description:
Some regulator directories will contain a field called
suspend_standby_microvolts. This holds the regulator output
voltage setting for this domain measured in microvolts when
the system is suspended to standby, for voltage regulators
implementing suspend voltage configuration constraints.

What: /sys/class/regulator/.../suspend_mem_mode
Date: May 2008
KernelVersion: 2.6.26
Contact: Liam Girdwood <lrg@slimlogic.co.uk>
Description:
Some regulator directories will contain a field called suspend_mem_mode. This holds the regulator operating mode setting for this domain when the system is suspended to memory, for regulators implementing suspend mode configuration constraints.

What: /sys/class/regulator/.../suspend_disk_mode
Date: May 2008
KernelVersion: 2.6.26
Contact: Liam Girdwood <lrg@slimlogic.co.uk>
Description:
Some regulator directories will contain a field called suspend_disk_mode. This holds the regulator operating mode setting for this domain when the system is suspended to disk, for regulators implementing suspend mode configuration constraints.

What: /sys/class/regulator/.../suspend_standby_mode
Date: May 2008
KernelVersion: 2.6.26
Contact: Liam Girdwood <lrg@slimlogic.co.uk>
Description:
Some regulator directories will contain a field called suspend_standby_mode. This holds the regulator operating mode setting for this domain when the system is suspended to standby, for regulators implementing suspend mode configuration constraints.

What: /sys/class/regulator/.../suspend_mem_state
Date: May 2008
KernelVersion: 2.6.26
Contact: Liam Girdwood <lrg@slimlogic.co.uk>
Description:
Some regulator directories will contain a field called suspend_mem_state. This holds the regulator operating state when suspended to memory, for regulators implementing suspend configuration constraints.

This will be one of the same strings reported by the "state" attribute.

What: /sys/class/regulator/.../suspend_disk_state
Date: May 2008
KernelVersion: 2.6.26
Contact: Liam Girdwood <lrg@slimlogic.co.uk>
Description:
Some regulator directories will contain a field called suspend_disk_state. This holds the regulator operating state when suspended to disk, for regulators implementing suspend configuration constraints.

This will be one of the same strings reported by
the "state" attribute.

What: /sys/class/regulator/.../suspend_standby_state
Date: May 2008
KernelVersion: 2.6.26
Contact: Liam Girdwood <lrg@slimlogic.co.uk>
Description:

Some regulator directories will contain a field called
suspend_standby_state. This holds the regulator operating
state when suspended to standby, for regulators implementing
suspend configuration constraints.

This will be one of the same strings reported by
the "state" attribute.