

ProcessProfiler Tango Python Class

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ProcessProfiler Class Identification :

Contact : at cells.es - srubio
Class Family : Process
Platform : All Platforms
Bus : Linux
Manufacturer : none
Manufacturer ref. :

ProcessProfiler Class Inheritance :

- [Tango::DeviceImpl](#)
 - ProcessProfiler

ProcessProfiler Class Description :

ProcessProfiler Device Description

ProcessProfiler Class

Revision: - Author:

The server will use `fandango.linos` module to monitorize some OS processes. For each process detailed in the `ProcessList` property (e.g. `notifd`) the device will generate several dynamic attributes:

* `notifd_pid`: * `notifd_mem`: * `notifd_cpu`: The `Update()` command will force the update of this variables. This device server will be used to monitorize `notifd` issues in several control machines and trigger Alarms/Archiving if needed.

ProcessProfiler Properties :

There is no class properties

Device Properties			
Name	Description	Type	Default Value
ProcessList	List of processes to be monitorized	String[]	none
UseEvents	Whether to push events or not	boolean	False
Threaded	Whether to use threads or not	boolean	False

ProcessProfiler Class Commands				
Name	Input type	Output type	Level	Description
State	DEV_VOID	DEV_STATE	OPERATOR	This command gets the device state (stored in its <i>device_state</i> data member) and returns it to the caller.
Status	DEV_VOID	CONST_DEV_STRING	OPERATOR	This command gets the device status (stored in its <i>device_status</i> data member) and returns it to the caller.
Update	DEV_VOID	DEV_VOID	OPERATOR	This command will trigger the update of the dynamic attributes values for all listed processes.

Command State :

This command gets the device state (stored in its *device_state* data member) and returns it to the caller.

State Definition		
Input Argument	Tango::DEV_VOID	none.
Output Argument	Tango::DEV_STATE	State Code
DisplayLevel	OPERATOR	..
Inherited	true	..
Abstract	true	..
Polling Period	Not polled	..
Command allowed for	All states	..

Command Status :

This command gets the device status (stored in its *device_status* data member) and returns it to the caller.

Status Definition		
Input Argument	Tango::DEV_VOID	none.
Output Argument	Tango::CONST_DEV_STRING	Status description
DisplayLevel	OPERATOR	..
Inherited	true	..
Abstract	true	..
Polling Period	Not polled	..
Command allowed for	All states	..

Command Update :

This command will trigger the update of the dynamic attributes values for all listed processes.

Update Definition		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_VOID	
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	10000	..
Command allowed for	All states	..

ProcessProfiler Class Attributes							
Name	Inherited	Abstract	Attr. type	R/W type	Data type	Level	Description
MaxRss	false	false	Scalar	READ	Tango::DEV_DOUBLE	OPERATOR	
MaxRssProcess	false	false	Scalar	READ	Tango::DEV_STRING	OPERATOR	
LoadAverage	false	false	Spectrum	READ	Tango::DEV_DOUBLE	OPERATOR	one, five, and fifteen minute averages
nCPUs	false	false	Scalar	READ	Tango::DEV_SHORT	OPERATOR	`Number of CPUs in this machine`
UpdateLapseTime	false	false	Scalar	READ	Tango::DEV_DOUBLE	OPERATOR	`Time used by the Update() command to proceed`

There is no dynamic attribute defined.

Attribute MaxRss :

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_DOUBLE
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read allowed for	All states

Attribute Properties	
label	
unit	
standard unit	
display unit	
format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
Absolute Change	Not set
Archive Periodic	Not set
Archive Relative Change	Not set
Archive Absolute Change	Not set
Push Change event by user code	false
Push Archive event by user code	false
Push DataReady event by user code	Not set

Attribute MaxRssProcess :

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_STRING
Display Level	OPERATOR
Inherited	false
Abstract	false

Attribute Properties	
label	
unit	
standard unit	
display unit	
format	
max_value	
min_value	

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
Absolute Change	Not set
Archive Periodic	Not set

Polling Period	Not polled
Memorized	Not set
Read allowed for	All states

max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Archive Relative Change	Not set
Archive Absolute Change	Not set
Push Change event by user code	false
Push Archive event by user code	false
Push DataReady event by user code	Not set

Attribute LoadAverage :

one, five, and fifteen minute averages

Attribute Definition	
Attribute Type	Spectrum (3)
R/W Type	READ
Data Type	Tango::DEV_DOUBLE
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read allowed for	All states

Attribute Properties	
label	LoadAverage
unit	
standard unit	
display unit	
format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
Absolute Change	Not set
Archive Periodic	Not set
Archive Relative Change	Not set
Archive Absolute Change	Not set
Push Change event by user code	false
Push Archive event by user code	false
Push DataReady event	Not

Attribute nCPUs :

`Number of CPUs in this machine`

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_SHORT
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read allowed for	All states

Attribute Properties	
label	`CPUs`
unit	
standard unit	
display unit	
format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
Absolute Change	Not set
Archive Periodic	Not set
Archive Relative Change	Not set
Archive Absolute Change	Not set
Push Change event by user code	false
Push Archive event by user code	false
Push DataReady event by user code	Not set

Attribute UpdateLapseTime :

`Time used by the Update() command to proceed`

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_DOUBLE
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read allowed for	All states

Attribute Properties	
label	`Update lapsetime`
unit	's'
standard unit	
display unit	
format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
Absolute Change	Not set
Archive Periodic	Not set
Archive Relative Change	Not set
Archive Absolute Change	Not set
Push Change event by user code	false
Push Archive event by user code	false
Push DataReady event by user code	Not set

There is no state defined