

DeviceRelocator Tango Python Class

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DeviceRelocator Class Identification :

Contact : at cells.es - sblanch
Class Family : SoftwareSystem
Platform : All Platforms
Bus : Not Applicable
Manufacturer : none
Manufacturer ref. :

DeviceRelocator Class Inheritance :

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

DeviceRelocator Class Description :

This device server has been designed to relocate the LinacAlba device instances to place the devices in the computers that the PLCs consider local or remote connections.

DeviceRelocator Properties :

There is no class properties

| Device Properties | | | |
|-------------------|---|----------|---------------|
| Name | Description | Type | Default Value |
| Instances | List of the instances to be managed | String[] | none |
| Locations | List of locations where the instances can be relocated. Pairs `tag`:`hostname`. | String[] | none |

| DeviceRelocator Class Commands | | | | |
|---|--------------------|------------------|----------|---|
| Name | Input type | Output type | Level | Description |
| State | DEV_VOID | DEV_STATE | OPERATOR | This command gets the device state (stored in its device_state data member) and returns it to the caller. |
| Status | DEV_VOID | CONST_DEV_STRING | OPERATOR | This command gets the device status (stored in its device_status data member) and returns it to the caller. |
| AddInstance | DEV_STRING | DEV_BOOLEAN | OPERATOR | Add an instance to be managed |
| RemoveInstance | DEV_STRING | DEV_BOOLEAN | OPERATOR | Remove an instance from the managed list. |
| AddLocation | DEV_STRING | DEV_BOOLEAN | OPERATOR | Add a pair of tag and host to the list of possible locations (separated by `:`) |
| RemoveLocation | DEV_STRING | DEV_BOOLEAN | OPERATOR | Given the tag, remove a possible location from the list. |
| MoveInstance | DEVVAR_STRINGARRAY | DEV_BOOLEAN | OPERATOR | start the procedure to move an instance to the specified location. It must be in the possible locations list. |
| Exec | DEV_STRING | DEV_STRING | EXPERT | Hackish expert attribute to look inside the device during execution. If you use it, be very careful and at your own risk. |
| RefreshAvailableLocations | DEV_VOID | DEV_VOID | EXPERT | Check the database to know the available locations for the servers. |
| | | | | start the procedure to move all the instances |

| | | | | |
|------------------------------------|------------|-------------|----------|--|
| MoveAllInstances | DEV_STRING | DEV_BOOLEAN | OPERATOR | managed to the specified location. It must be in the possible locations list. |
| RestartInstance | DEV_STRING | DEV_BOOLEAN | EXPERT | Given one of the instances monitored, use its astor object to stop and later start it. |
| RestartAllInstance | DEV_VOID | DEV_BOOLEAN | EXPERT | For each of the instances monitored, use its astor object to stop and later start it. |

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 | Device state |
| 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 | Device status |
| DisplayLevel | OPERATOR | .. |
| Inherited | true | .. |
| Abstract | true | .. |
| Polling Period | Not polled | .. |
| | | |

| | | |
|---------------------|------------|----|
| Command allowed for | All states | .. |
|---------------------|------------|----|

Command AddInstance :

Add an instance to be managed

| AddInstance Definition | | |
|-------------------------------|--------------------|----|
| Input Argument | Tango::DEV_STRING | |
| Output Argument | Tango::DEV_BOOLEAN | |
| DisplayLevel | OPERATOR | .. |
| Inherited | false | .. |
| Abstract | false | .. |
| Polling Period | Not polled | .. |
| | | |
| Command allowed for | All states | .. |

Command RemoveInstance :

Remove an instance from the managed list.

| RemoveInstance Definition | | |
|----------------------------------|--------------------|----|
| Input Argument | Tango::DEV_STRING | |
| Output Argument | Tango::DEV_BOOLEAN | |
| DisplayLevel | OPERATOR | .. |
| Inherited | false | .. |
| Abstract | false | .. |
| Polling Period | Not polled | .. |
| | | |
| Command allowed for | All states | .. |

Command AddLocation :

Add a pair of tag and host to the list of possible locations (separated by `:`)

| AddLocation Definition | | |
|-------------------------------|--------------------|----|
| Input Argument | Tango::DEV_STRING | |
| Output Argument | Tango::DEV_BOOLEAN | |
| DisplayLevel | OPERATOR | .. |
| Inherited | false | .. |
| Abstract | false | .. |
| Polling Period | Not polled | .. |
| | | .. |
| Command allowed for | All states | .. |

Command RemoveLocation :

Given the tag, remove a possible location from the list.

| RemoveLocation Definition | | |
|----------------------------------|--------------------|----|
| Input Argument | Tango::DEV_STRING | |
| Output Argument | Tango::DEV_BOOLEAN | |
| DisplayLevel | OPERATOR | .. |
| Inherited | false | .. |
| Abstract | false | .. |
| Polling Period | Not polled | .. |
| | | .. |
| Command allowed for | All states | .. |

Command MoveInstance :

start the procedure to move an instance to the specified location. It must be in the possible locations list.

| MoveInstance Definition | | |
|--------------------------------|---------------------------|----|
| Input Argument | Tango::DEVVAR_STRINGARRAY | |
| Output Argument | Tango::DEV_BOOLEAN | |
| DisplayLevel | OPERATOR | .. |
| Inherited | false | .. |
| Abstract | false | .. |

| | | |
|---------------------|------------|----|
| Polling Period | Not polled | .. |
| | | |
| Command allowed for | All states | .. |

Command Exec :

Hackish expert attribute to look inside the device during execution. If you use it, be very careful and at your own risk.

| Exec Definition | | |
|------------------------|-------------------|----|
| Input Argument | Tango::DEV_STRING | |
| Output Argument | Tango::DEV_STRING | |
| DisplayLevel | EXPERT | .. |
| Inherited | false | .. |
| Abstract | false | .. |
| Polling Period | Not polled | .. |
| | | |
| Command allowed for | All states | .. |

Command RefreshAvailableLocations :

Check the database to know the available locations for the servers.

| RefreshAvailableLocations Definition | | |
|---|-----------------|----|
| Input Argument | Tango::DEV_VOID | |
| Output Argument | Tango::DEV_VOID | |
| DisplayLevel | EXPERT | .. |
| Inherited | false | .. |
| Abstract | false | .. |
| Polling Period | Not polled | .. |
| | | |
| Command allowed for | All states | .. |

Command MoveAllInstances :

start the procedure to move all the instances managed to the specified location. It must be in the possible locations list.

| MoveAllInstances Definition | | |
|------------------------------------|--------------------|----|
| Input Argument | Tango::DEV_STRING | |
| Output Argument | Tango::DEV_BOOLEAN | |
| DisplayLevel | OPERATOR | .. |
| Inherited | false | .. |
| Abstract | false | .. |
| Polling Period | Not polled | .. |
| | | |
| Command allowed for | All states | .. |

Command RestartInstance :

Given one of the instances monitored, use its astor object to stop and later start it.

| RestartInstance Definition | | |
|-----------------------------------|--------------------|----|
| Input Argument | Tango::DEV_STRING | |
| Output Argument | Tango::DEV_BOOLEAN | |
| DisplayLevel | EXPERT | .. |
| Inherited | false | .. |
| Abstract | false | .. |
| Polling Period | Not polled | .. |
| | | |
| Command allowed for | All states | .. |

Command RestartAllInstance :

For each of the instances monitored, use its astor object to stop and later start it.

| RestartAllInstance Definition | | |
|--------------------------------------|--------------------|----|
| Input Argument | Tango::DEV_VOID | |
| Output Argument | Tango::DEV_BOOLEAN | |
| DisplayLevel | EXPERT | .. |

| | | |
|---------------------|------------|----|
| Inherited | false | .. |
| Abstract | false | .. |
| Polling Period | Not polled | .. |
| | | |
| Command allowed for | All states | .. |

| DeviceRelocator Class Attributes | | | | | | | |
|---------------------------------------|-----------|----------|------------|------------|-------------------|----------|---|
| Name | Inherited | Abstract | Attr. type | R/W type | Data type | Level | Description |
| InstanceMonitorPeriod | false | false | Scalar | READ_WRITE | Tango::DEV_DOUBLE | EXPERT | Defines the number of seconds were the instance state is checked to emit state change if necessary. |
| Instances | false | false | Spectrum | READ | Tango::DEV_STRING | OPERATOR | List of the managed instances configured in the device. |
| Locations | false | false | Spectrum | READ | Tango::DEV_STRING | OPERATOR | List of available locations for the managed instances. |

There is no dynamic attribute defined.

Attribute InstanceMonitorPeriod :

Defines the number of seconds were the instance state is checked to emit state change if necessary.



| Attribute Definition | |
|-------------------------|-------------------|
| Attribute Type | Scalar |
| R/W Type | READ_WRITE |
| Data Type | Tango::DEV_DOUBLE |
| Display Level | EXPERT |
| Inherited | false |
| Abstract | false |
| Polling Period | Not polled |
| Memorized | true |
| Write hardware at init. | true |
| | |
| Read allowed for | All states |
| Write allowed for | All states |

| Attribute Properties | |
|----------------------|-------------------------|
| label | Instance Monitor Period |
| 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 | false |

Attribute Instances :

List of the managed instances configured in the device.

| Attribute Definition | |
|----------------------|-------------------|
| Attribute Type | Spectrum (100) |
| R/W Type | READ |
| Data Type | Tango::DEV_STRING |
| 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 | |

| 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 |

delta_val

| | |
|-----------------------------------|-------|
| Push Archive event by user code | false |
| Push DataReady event by user code | false |

Attribute Locations :

List of available locations for the managed instances.

| Attribute Definition | |
|----------------------|-------------------|
| Attribute Type | Spectrum (100) |
| R/W Type | READ |
| Data Type | Tango::DEV_STRING |
| 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 | false |

There is no state defined