API Documentation

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1 Package Products.Zuul.routers

Zenoss JSON API

1.1 Modules

- device: Operations for Device Organizers and Devices. (Section 2, p. 5)
- messaging: Operations for Messaging. (Section 3, p. 35)
- mibs: Operations for MIBs. (Section 4, p. 36)
- nav: Operations for Navigation (Section 5, p. 41)
- **network**: Operations for Networks. (Section 6, p. 42)
- process: Operations for Processes. (Section 7, p. 47)
- report: Operations for Reports. (Section 8, p. 52)
- **service**: Operations for Services. (Section 9, p. 55)
- template: Operations for Templates. (Section 10, p. 60)
- triggers (Section 11, p. 74)
- **zenpack**: Operations for ZenPacks. (Section 12, p. 76)
- **zep**: Operations for Events. (Section 13, p. 78)

1.2 Variables

Name	Description
log	Value: logging.getLogger(name)

1.3 Class TreeRouter

Products.ZenUtils.Ext.DirectRouter — Products.Zuul.routers.TreeRouter

A common base class for routers that have a hierarchical tree structure.

1.3.1 Methods

addNode(self, type, contextUid, id, description=None)

Add a node to the existing tree underneath the node specified by the context UID

Parameters

type: Either 'class' or 'organizer'

(type=string)

contextUid: Path to the node that will be the new node's parent (ex.

/zport/dmd/Devices)

(type=string)

id: Identifier of the new node, must be unique in the parent context

(type=string)

description: (optional) Describes this new node (default: None)

(type=string)

Return Value

Marshaled form of the created node

(type=dictionary)

deleteNode(self, uid)

Deletes a node from the tree.

NOTE: You can not delete a root node of a tree

Parameters

uid: Unique identifier of the node we wish to delete

(type=string)

Return Value

Properties:

• msg: (string) Status message

(type=DirectResponse)

moveOrganizer(self, targetUid, organizerUid)

Move the organizer uid to be underneath the organizer specified by the targetUid.

Parameters

targetUid: New parent of the organizer

(type=string)

organizerUid: The organizer to move

(type=string)

Return Value

Properties:

• data: (dictionary) Moved organizer

asyncGetTree(self, id=None)

Server side method for asynchronous tree calls. Retrieves the immediate children of the node specified by "id"

NOTE: our convention on the UI side is if we are asking for the root node then return the root and its children otherwise just return the children

Parameters

id: The uid of the node we are getting the children for (type=string)

Return Value

Object representing the immediate children

(type = [dictionary])

2 Module Products.Zuul.routers.device

Operations for Device Organizers and Devices.

Available at: /zport/dmd/device_router

2.1 Variables

Name	Description
log	Value: logging.getLogger('zen.Zuul')

2.2 Class DeviceRouter

Products.ZenUtils.Ext.DirectRouter — Products.Zuul.routers.TreeRouter — Products.Zuul.routers.device.DeviceRouter

A JSON/ExtDirect interface to operations on devices

2.2.1 Methods

addLocationNode(self, type, contextUid, id, description=None, address=None)

Adds a new location organizer specified by the parameter id to the parent organizer specified by contextUid.

contextUid must be a path to a Location.

Parameters

type: Node type (always 'organizer' in this case)

(type = string)

contextUid: Path to the location organizer that will be the new node's parent

(ex. /zport/dmd/Devices/Locations)

(type=string)

id: The identifier of the new node

(type=string)

description: (optional) Describes the new location

(type=string)

address: (optional) Physical address of the new location

(type=string)

Return Value

Properties:

• success: (bool) Success of node creation

• nodeConfig: (dictionary) The new location's properties

(type=dictionary)

getTree(self, id)

Returns the tree structure of an organizer hierarchy where the root node is the organizer identified by the id parameter.

Parameters

id: Id of the root node of the tree to be returned

(type=string)

Return Value

Object representing the tree

(type=[dictionary])

Retrieves all of the components at a given UID. This method allows for pagination.

Parameters

uid: Unique identifier of the device whose components are being

retrieved

(type=string)

meta_type: (optional) The meta type of the components to be retrieved

(default: None)

(type=string)

keys: (optional) List of keys to include in the returned dictionary. If None

then all keys will be returned (default: None)

(type=list)

start: (optional) Offset to return the results from; used in pagination

(default: 0)

(type=integer)

limit: (optional) Number of items to return; used in pagination (default:

50)

(type=integer)

sort: (optional) Key on which to sort the return results; (default: 'name')

(type=string)

dir: (optional) Sort order; can be either 'ASC' or 'DESC' (default:

'ASC')

(type=string)

name: (optional) Used to filter the results (default: None)

(type = regex)

Return Value

Properties:

- data: (dictionary) The components returned
- totalCount: (integer) Number of items returned
- hash: (string) Hashcheck of the current component state (to check whether components have changed since last query)

getComponentTree(self, uid=None, id=None)

Retrieves all of the components set up to be used in a tree.

Parameters

uid: Unique identifier of the root of the tree to retrieve

(type=string)

id: not used

(type = string)

Return Value

Component properties in tree form

(type=[dictionary])

 $\label{eq:component} \textbf{findComponentIndex} (self, \ component \ Uid, \ uid = \texttt{None}, \ meta_type = \texttt{None}, \ sort = \texttt{'name'}, \\ dir = \texttt{'ASC'}, \ name = \texttt{None}, \ **kwargs)$

Given a component uid and the component search criteria, this retrieves the position of the component in the results.

Parameters

componentUid: Unique identifier of the component whose index to return

(type=string)

uid: Unique identifier of the device queried for components

(type=string)

meta_type: (optional) The meta type of the components to retrieve

(default: None)

(type=string)

sort: (optional) Key on which to sort the return results (default:

'name')

(type=string)

dir: (optional) Sort order; can be either 'ASC' or 'DESC' (default:

'ASC')

(type=string)

name: (optional) Used to filter the results (default: None)

(type=regex)

Return Value

Properties:

• index: (integer) Index of the component

getForm(self, uid)

Given an object identifier, this returns all of the editable fields on that object as well as their ExtJs xtype that one would use on a client side form.

Parameters

uid: Unique identifier of an object

$$(type = string)$$

Return Value

Properties

• form: (dictionary) form fields for the object

(type=DirectResponse)

getInfo(self, uid, keys=None)

Get the properties of a device or device organizer

Parameters

uid: Unique identifier of an object

(type=string)

keys: (optional) List of keys to include in the returned dictionary. If None then all keys will be returned (default: None)

$$(type=list)$$

Return Value

Properties

- data: (dictionary) Object properties
- disabled: (bool) If current user doesn't have permission to use setInfo

(type = DirectResponse)

setInfo(self, **data)

Set attributes on a device or device organizer. This method accepts any keyword argument for the property that you wish to set. The only required property is "uid".

Parameters

uid: Unique identifier of an object

```
(type=string)
```

Return Value

DirectResponse

setProductInfo(self, uid, **data)

Sets the ProductInfo on a device. This method has the following valid keyword arguments:

Parameters

uid: Unique identifier of a device

(type=string)

hwManufacturer: Hardware manufacturer

(type=string)

hwProductName: Hardware product name

(type = string)

osManufacturer: Operating system manufacturer

 $(type{=}string)$

osProductName: Operating system product name

(type=string)

Return Value

DirectResponse

getDeviceUuidsByName(self, query="")

Retrieves a list of device uuids. For use in combos.

Retrieves a list of devices. This method supports pagination.

Parameters

uid: Unique identifier of the organizer to get devices from

(type=string)

start: (optional) Offset to return the results from; used in pagination (default:

0)

(type=integer)

params: (optional) Key-value pair of filters for this search. Can be one of the

following: name, ipAddress, deviceClass, or productionState (default:

None)

(type=dictionary)

limit: (optional) Number of items to return; used in pagination (default: 50)

(type=integer)

sort: (optional) Key on which to sort the return results (default: 'name')

(type=string)

dir: (optional) Sort order; can be either 'ASC' or 'DESC' (default: 'ASC')

 $(type{=}string)$

Return Value

Properties:

- devices: (list) Dictionaries of device properties
- totalCount: (integer) Number of devices returned
- hash: (string) Hashcheck of the current device state (to check whether devices have changed since last query)

moveDevices(self, uids, target, hashcheck, ranges=(), uid=None, params=None, sort='name', dir='ASC')

Moves the devices specified by uids to the organizer specified by 'target'.

Parameters

uids: List of device uids to move

(type=[string])

target: Uid of the organizer to move the devices to

(type=string)

hashcheck: Hashcheck for the devices (from getDevices())

(type=string)

ranges: (optional) List of two integers that are the min/max values of a

range of uids to include (default: None)

(type=[integer])

uid: (optional) Organizer to use when using ranges to get additional

uids (default: None)

(type=string)

params: (optional) Key-value pair of filters for this search. Can be one of

the following: name, ipAddress, deviceClass, or productionState

(default: None) (type=dictionary)

sort: (optional) Key on which to sort the return result (default: 'name')

(type=string)

dir: (optional) Sort order; can be either 'ASC' or 'DESC' (default:

'ASC')

(type=string)

Return Value

Properties:

- tree: ([dictionary]) Object representing the new device tree
- exports: (integer) Number of devices moved

pushChanges(self, uids, hashcheck, ranges =(), uid =None, params =None, sort ='name', dir ='ASC')

Push changes on device(s) configuration to collectors.

Parameters

uids: List of device uids to push changes

(type=[string])

hashcheck: Hashcheck for the devices (from getDevices())

(type=string)

ranges: (optional) List of two integers that are the min/max values of a

range of uids to include (default: None)

(type=[integer])

uid: (optional) Organizer to use when using ranges to get additional

uids (default: None)

(type = string)

params: (optional) Key-value pair of filters for this search. Can be one of

the following: name, ip Address, device Class, or production State

(default: None)

(type=dictionary)

sort: (optional) Key on which to sort the return result (default: 'name')

(type=string)

dir: (optional) Sort order; can be either 'ASC' or 'DESC' (default:

'ASC')

(type=string)

Return Value

Success message

 $\label{lockDevices} \begin{aligned} &\textbf{lockDevices}(\textit{self}, \textit{uids}, \textit{hashcheck}, \textit{ranges} \texttt{=()}, \textit{updates} \texttt{=} \texttt{False}, \textit{deletion} \texttt{=} \texttt{False}, \\ &\textit{sendEvent} \texttt{=} \texttt{False}, \textit{uid} \texttt{=} \texttt{None}, \textit{params} \texttt{=} \texttt{None}, \textit{sort} \texttt{='name'}, \textit{dir} \texttt{='ASC'}) \end{aligned}$

Lock device(s) from changes.

Parameters

uids: List of device uids to lock

(type=[string])

hashcheck: Hashcheck for the devices (from getDevices())

(type=string)

ranges: (optional) List of two integers that are the min/max values of a

range of uids to include (default: None)

(type=[integer])

updates: (optional) True to lock device from updates (default: False)

(type=boolean)

deletion: (optional) True to lock device from deletion (default: False)

(type=boolean)

sendEvent: (optional) True to send an event when an action is blocked by

locking (default: False)

(type=boolean)

uid: (optional) Organizer to use when using ranges to get additional

uids (default: None)

(type=string)

params: (optional) Key-value pair of filters for this search. Can be one of

the following: name, ipAddress, deviceClass, or productionState

(default: None) (type=dictionary)

sort: (optional) Key on which to sort the return result (default: 'name')

(type=string)

dir: (optional) Sort order; can be either 'ASC' or 'DESC' (default:

'ASC')

(type = string)

Return Value

Success or failure message

resetIp(self, uids, hashcheck, uid=None, ranges=(), params=None, sort='name',
dir='ASC', ip='')

Reset IP address(es) of device(s) to the results of a DNS lookup or a manually set address

Parameters

uids: List of device uids with IP's to reset

(type=[string])

hashcheck: Hashcheck for the devices (from getDevices())

(type=string)

uid: (optional) Organizer to use when using ranges to get additional

uids (default: None)

(type = string)

ranges: (optional) List of two integers that are the min/max values of a

range of uids to include (default: None)

(type=[integer])

params: (optional) Key-value pair of filters for this search. Can be one of

the following: name, ipAddress, deviceClass, or productionState

(default: None)

(type=dictionary)

sort: (optional) Key on which to sort the return result (default: 'name')

(type=string)

dir: (optional) Sort order; can be either 'ASC' or 'DESC' (default:

'ASC')

(type=string)

ip: (optional) IP to set device to. Empty string causes DNS lookup

(default: ")

(type=string)

Return Value

Success or failure message

Reset SNMP community string(s) on device(s)

Parameters

uids: List of device uids to reset

(type=[string])

hashcheck: Hashcheck for the devices (from getDevices())

(type=string)

uid: (optional) Organizer to use when using ranges to get additional

uids (default: None)

(type=string)

ranges: (optional) List of two integers that are the min/max values of a

range of uids to include (default: None)

(type=[integer])

params: (optional) Key-value pair of filters for this search. Can be one of

the following: name, ipAddress, deviceClass, or productionState

(default: None)

(type=dictionary)

sort: (optional) Key on which to sort the return result (default: 'name')

(type=string)

dir: (optional) Sort order; can be either 'ASC' or 'DESC' (default:

'ASC')

(type=string)

Return Value

Success or failure message

Set the production state of device(s)

Parameters

uids: List of device uids to set

(type=[string])

prodState: Production state to set device(s) to.

(type=integer)

hashcheck: Hashcheck for the devices (from getDevices())

(type=string)

uid: (optional) Organizer to use when using ranges to get additional

uids (default: None)

(type=string)

ranges: (optional) List of two integers that are the min/max values of a

range of uids to include (default: None)

(type=[integer])

params: (optional) Key-value pair of filters for this search. Can be one of

the following: name, ipAddress, deviceClass, or productionState

(default: None) (type=dictionary)

sort: (optional) Key on which to sort the return result (default: 'name')

(type=string)

dir: (optional) Sort order; can be either 'ASC' or 'DESC' (default:

'ASC')

(type=string)

Return Value

Success or failure message

setPriority(self, uids, priority, hashcheck, uid=None, ranges=(), params=None, sort='name', dir='ASC')

Set device(s) priority.

Parameters

uids: List of device uids to set

(type=[string])

priority: Priority to set device(s) to.

(type=integer)

hashcheck: Hashcheck for the devices (from getDevices())

(type=string)

uid: (optional) Organizer to use when using ranges to get additional

uids (default: None)

(type=string)

ranges: (optional) List of two integers that are the min/max values of a

range of uids to include (default: None)

(type=[integer])

params: (optional) Key-value pair of filters for this search. Can be one of

the following: name, ipAddress, deviceClass, or productionState

(default: None) (type=dictionary)

sort: (optional) Key on which to sort the return result (default: 'name')

(type=string)

dir: (optional) Sort order; can be either 'ASC' or 'DESC' (default:

'ASC')

(type=string)

Return Value

Success or failure message

setCollector(self, uids, collector, hashcheck, uid=None, ranges=(), params=None, sort='name', dir='ASC')

Set device(s) collector.

Parameters

uids: List of device uids to set

(type=[string])

collector: Collector to set devices to

(type=string)

hashcheck: Hashcheck for the devices (from getDevices())

(type=string)

uid: (optional) Organizer to use when using ranges to get additional

uids (default: None)

(type=string)

ranges: (optional) List of two integers that are the min/max values of a

range of uids to include (default: None)

(type=[integer])

params: (optional) Key-value pair of filters for this search. Can be one of

the following: name, ipAddress, deviceClass, or productionState

(default: None) (type=dictionary)

sort: (optional) Key on which to sort the return result (default: 'name')

(type=string)

dir: (optional) Sort order; can be either 'ASC' or 'DESC' (default:

'ASC')

(type=string)

Return Value

Success or failure message

Set the monitoring flag for component(s)

Parameters

uids: List of component uids to set

(type=[string])

hashcheck: Hashcheck for the components (from getComponents())

(type=string)

monitor: (optional) True to monitor component (default: False)

(type=boolean)

uid: (optional) Device to use when using ranges to get additional uids

(default: None)

(type = string)

ranges: (optional) List of two integers that are the min/max values of a

range of uids to include (default: None)

(type=[integer])

meta_type: (optional) The meta type of the components to retrieve (default:

None)

(type=string)

keys: not used

(type=[string])

start: (optional) Offset to return the results from; used in pagination

(default: 0)

(type=integer)

limit: (optional) Number of items to return; used in pagination (default:

50)

(type=integer)

sort: (optional) Key on which to sort the return result (default: 'name')

(type=string)

dir: (optional) Sort order; can be either 'ASC' or 'DESC' (default:

'ASC')

(type=string)

name: (optional) Component name to search for when loading ranges

(default: None)

(type=string)

Return Value

Success or failure message

 $\label{lockComponents} \begin{tabular}{ll} {\bf lockComponents}(self,\ uids,\ hashcheck,\ uid={\tt None},\ ranges=(\tt),\ updates={\tt False},\ deletion={\tt False},\ sendEvent={\tt False},\ meta_type={\tt None},\ keys={\tt None},\ start=0,\ limit={\tt 50},\ sort={\tt 'name'},\ dir={\tt 'ASC'},\ name={\tt None}) \end{tabular}$

Lock component(s) from changes.

Parameters

uids: List of component uids to lock

(type=[string])

hashcheck: Hashcheck for the components (from getComponents())

(type=string)

uid: (optional) Device to use when using ranges to get additional uids

(default: None)

(type=string)

ranges: (optional) List of two integers that are the min/max values of a

range of uids to include (default: None)

(type=[integer])

updates: (optional) True to lock component from updates (default: False)

(type=boolean)

deletion: (optional) True to lock component from deletion (default: False)

(type=boolean)

sendEvent: (optional) True to send an event when an action is blocked by

locking (default: False)

(type=boolean)

meta_type: (optional) The meta type of the components to retrieve (default:

None)

(type=string)

keys: not used

(type=[string])

start: (optional) Offset to return the results from; used in pagination

(default: 0)

(type=integer)

limit: (optional) Number of items to return; used in pagination (default:

50)

(type=integer)

sort: (optional) Key on which to sort the return result (default: 'name')

(type = string)

dir: (optional) Sort order; can be either 'ASC' or 'DESC' (default:

'ASC')

(type=string)

name: (optional) Component name to search for when loading ranges

(default: None)

(type=string)

Return Value

Success or failure message

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Delete device component(s).

Parameters

uids: List of component uids to delete

(type=[string])

hashcheck: Hashcheck for the components (from getComponents())

(type=string)

uid: (optional) Device to use when using ranges to get additional uids

(default: None)

(type=string)

ranges: (optional) List of two integers that are the min/max values of a

range of uids to include (default: None)

(type=[integer])

meta_type: (optional) The meta type of the components to retrieve (default:

None)

(type = string)

keys: not used

(type=[string])

start: (optional) Offset to return the results from; used in pagination

(default: 0)

(type=integer)

limit: (optional) Number of items to return; used in pagination (default:

50)

(type=integer)

sort: (optional) Key on which to sort the return result (default: 'name')

(type=string)

dir: (optional) Sort order; can be either 'ASC' or 'DESC' (default:

'ASC')

(type=string)

name: (optional) Component name to search for when loading ranges

(default: None)

(type=string)

Return Value

Success or failure message

removeDevices(self, uids, hashcheck, action="remove", uid=None, ranges=(),
params=None, sort='name', dir='ASC', deleteEvents=False, deletePerf=False)

Remove/delete device(s).

Parameters

uids: List of device uids to remove

(type=[string])

hashcheck: Hashcheck for the devices (from getDevices())

(type=string)

action: Action to take. 'remove' to remove devices from organizer uid,

and 'delete' to delete the device from Zenoss.

(type=string)

uid: (optional) Organizer to use when using ranges to get additional

uids and/or to remove device (default: None)

 $(type{=}string)$

ranges: (optional) List of two integers that are the min/max values of a

range of uids to include (default: None)

(type=[integer])

params: (optional) Key-value pair of filters for this search. Can be one of

the following: name, ipAddress, deviceClass, or productionState

(default: None) (type=dictionary)

sort: (optional) Key on which to sort the return result (default:

'name')

(type=string)

dir: (optional) Sort order; can be either 'ASC' or 'DESC' (default:

'ASC')

(type=string)

deleteEvents: will remove all the events for the devices as well

(type=bool)

deletePerf: will remove all the perf data for the devices

(type=bool)

Return Value

Properties:

• devtree: ([dictionary]) Object representing the new device tree

• grptree: ([dictionary]) Object representing the new group tree

• systree: ([dictionary]) Object representing the new system tree

• loctree: ([dictionary]) Object representing the new location tree

getGraphDefs(self, uid, drange=None)

Returns the url and title for each graph for the object passed in.

Parameters

uid: unique identifier of an object

(type=string)

setZenProperty(self, uid, zProperty, value)

Sets the zProperty value

getZenProperties(self, uid, start=0, params="{}", limit=None, sort=None, dir='ASC')

Returns the definition and values of all the zen properties for this context

Parameters

uid: unique identifier of an object

(type=string)

deleteZenProperty(self, uid, zProperty)

Removes the local instance of the each property in properties. Note that the property will only be deleted if a hasProperty is true

Parameters

unique identifier of an object

(type=String)

properties: zenproperty identifier

(type=String)

getEvents(self, uid)

Get events for a device.

Parameters

uid: Device to get events for

(type = [string])

Return Value

Properties:

• data: ([dictionary]) List of events for a device

loadRanges(self, ranges, hashcheck, uid=None, params=None, sort='name', dir='ASC')

Get a range of device uids.

Parameters

ranges: List of two integers that are the min/max values of a range of uids

(type=[integer])

hashcheck: Hashcheck for the devices (from getDevices())

(type=string)

uid: (optional) Organizer to use to get uids (default: None)

(type=string)

params: (optional) Key-value pair of filters for this search. Can be one of

the following: name, ipAddress, deviceClass, or productionState

(default: None)

(type=dictionary)

sort: (optional) Key on which to sort the return result (default: 'name')

(type = string)

dir: (optional) Sort order; can be either 'ASC' or 'DESC' (default:

'ASC')

(type=string)

Return Value

A list of device uids

(type=[string])

 $\label{loadComponentRanges} \\ (self, \ ranges, \ hashcheck, \ uid=\texttt{None}, \ types=\texttt{()}, \ meta_type=\texttt{()}, \\ start=\texttt{0}, \ limit=\texttt{None}, \ sort=\texttt{'name'}, \ dir=\texttt{'ASC'}, \ name=\texttt{None}) \\$

Get a range of component uids.

Parameters

ranges: List of two integers that are the min/max values of a range of uids

(type=[integer])

hashcheck: not used

(type=string)

uid: (optional) Device to use to get uids (default: None)

(type=string)

types: (optional) The types of components to retrieve (default: None)

(type=[string])

meta_type: (optional) The meta type of the components to retrieve (default:

None)

(type=string)

start: (optional) Offset to return the results from; used in pagination

(default: 0)
(type=integer)

(vgpe viitoger)

limit: (optional) Number of items to return; used in pagination (default:

None)

(type=integer)

sort: (optional) Key on which to sort the return result (default: 'name')

(type=string)

dir: (optional) Sort order; can be either 'ASC' or 'DESC' (default:

'ASC')

(type=string)

name: (optional) Component name to search for when loading ranges

(default: None)

(type=string)

Return Value

A list of component uids

(type=[string])

getUserCommands(self, uid)

Get a list of user commands for a device uid.

Parameters

uid: Device to use to get user commands

(type=string)

Return Value

List of objects representing user commands

(type=|dictionary|)

${\bf getProductionStates}(\textit{self}, \textit{**kwargs})$

Get a list of available production states.

Return Value

List of name/value pairs of available production states

(type=[dictionary])

getPriorities(self, **kwargs)

Get a list of available device priorities.

Return Value

List of name/value pairs of available device priorities

(type=[dictionary])

$\mathbf{getCollectors}(self)$

Get a list of available collectors.

Return Value

List of collectors

(type=[string])

${\bf getDeviceClasses}(\textit{self}, \, **data)$

Get a list of all device classes.

Return Value

Properties:

- deviceClasses: ([dictionary]) List of device classes
- totalCount: (integer) Total number of device classes

getSystems(self, **data)

Get a list of all systems.

Return Value

Properties:

- systems: ([dictionary]) List of systems
- totalCount: (integer) Total number of systems

(type = DirectResponse)

$\mathbf{getGroups}(\mathit{self},\ ^{**}\mathit{data})$

Get a list of all groups.

Return Value

Properties:

- ullet systems: ([dictionary]) List of groups
- totalCount: (integer) Total number of groups

(type=DirectResponse)

getLocations(self, **data)

Get a list of all locations.

Return Value

Properties:

- systems: ([dictionary]) List of locations
- totalCount: (integer) Total number of locations

(type = DirectResponse)

getManufacturerNames(self, **data)

Get a list of all manufacturer names.

Return Value

Properties:

- manufacturers: ([dictionary]) List of manufacturer names
- totalCount: (integer) Total number of manufacturer names

getHardwareProductNames(self, manufacturer=',', **data)

Get a list of all hardware product names from a manufacturer.

Parameters

manufacturer: Manufacturer name

(type=string)

Return Value

Properties:

- productNames: ([dictionary]) List of hardware product names
- totalCount: (integer) Total number of hardware product names

(type = DirectResponse)

$\overline{{\bf getOSProductNames}(\mathit{self}, \mathit{manufacturer}\texttt{='}, **data)}$

Get a list of all OS product names from a manufacturer.

Parameters

manufacturer: Manufacturer name

(type=string)

Return Value

Properties:

- productNames: ([dictionary]) List of OS product names
- totalCount: (integer) Total number of OS product names

 $\label{eq:addDevice} \begin{tabular}{ll} {\bf addDevice}(self,\ deviceName,\ deviceClass,\ title=None,\ snmpCommunity="",\ snmpPort=161,\ model=False,\ collector='localhost',\ rackSlot=0,\ locationPath="",\ systemPaths=[],\ groupPaths=[],\ productionState=1000,\ comments="",\ hwManufacturer="",\ hwProductName="",\ osManufacturer="",\ osProductName="",\ priority=3,\ tag="",\ serialNumber="") \end{tabular}$

Add a device.

Parameters

deviceName: Name or IP of the new device

(type=string)

deviceClass: The device class to add new device to

(type = string)

title: (optional) The title of the new device (default: ")

(type=string)

snmpCommunity: (optional) A specific community string to use for this device.

(default: ")

(type=string)

snmpPort: (optional) SNMP port on new device (default: 161)

(type=integer)

locationPath: (optional) Organizer path of the location for this device

(type=string)

systemPaths: (optional) List of organizer paths for the device

 $(type=List\ (strings))$

groupPaths: (optional) List of organizer paths for the device

 $(type=List\ (strings))$

model: (optional) True to model device at add time (default: False)

(type=boolean)

collector: (optional) Collector to use for new device (default: localhost)

(type = string)

rackSlot: (optional) Rack slot description (default: ")

(type=string)

productionState: (optional) Production state of the new device (default: 1000)

(type=integer)

comments: (optional) Comments on this device (default: ")

(type=string)

hwManufacturer: (optional) Hardware manufacturer name (default: ")

(type=string)

hwProductName: (optional) Hardware product name (default: ")

(type=string)

osManufacturer: (optional) OS manufacturer name (default: ")

(type=string)

osProductName: (optional) OS product name (default: ")

(type=string)

priority: (optional) Priority of this device (default: 3)

(type=integer)

tag: (optional) Tag number of this device (default: ")

remodel(self, deviceUid)

Submit a job to have a device remodeled.

Parameters

deviceUid: Device uid to have local template

(type=string)

Return Value

Properties:

• jobId: (string) ID of the add device job

(type=DirectResponse)

addLocalTemplate(self, deviceUid, templateId)

Adds a local template on a device.

Parameters

deviceUid: Device uid to have local template

(type = string)

templateId: Name of the new template

 $(type{=}string)$

Return Value

Success message

(type=DirectResponse)

removeLocalTemplate(self, deviceUid, templateUid)

Removes a locally defined template on a device.

Parameters

deviceUid: Device uid that has local template

(type=string)

templateUid: Name of the template to remove

(type=string)

Return Value

Success message

getLocalTemplates(self, query, uid)

Get a list of locally defined templates on a device.

Parameters

query: not used

(type=string)

uid: Device uid to query for templates

(type=string)

Return Value

Properties:

• data: ([dictionary]) List of objects representing local templates

(type = DirectResponse)

getTemplates(self, id)

Get a list of available templates for a device.

Parameters

id: Device uid to query for templates

(type=string)

Return Value

Properties:

• data: ([dictionary]) List of objects representing templates

(type=DirectResponse)

getUnboundTemplates(self, uid)

Get a list of unbound templates for a device.

Parameters

uid: Device uid to query for templates

(type=string)

Return Value

Properties:

• data: ([dictionary]) List of objects representing templates

getBoundTemplates(self, uid)

Get a list of bound templates for a device.

Parameters

uid: Device uid to query for templates

(type=string)

Return Value

Properties:

• data: ([dictionary]) List of objects representing templates

(type=DirectResponse)

setBoundTemplates(self, uid, templateIds)

Set a list of templates as bound to a device.

Parameters

uid: Device uid to bind templates to

(type=string)

templateIds: List of template uids to bind to device

(type=[string])

Return Value

Success message

(type=DirectResponse)

resetBoundTemplates(self, uid)

Remove all bound templates from a device.

Parameters

uid: Device uid to remove bound templates from

(type=string)

Return Value

Success message

(type = DirectResponse)

bindOrUnbindTemplate(self, uid, templateUid)

Bind an unbound template or unbind a bound template from a device.

Parameters

uid: Device uid to bind/unbind template

(type=string)

templateUid: Template uid to bind/unbind

(type=string)

Return Value

Success message

getOverridableTemplates(self, query, uid)

Get a list of available templates on a device that can be overridden.

Parameters

query: not used

(type=string)

uid: Device to query for overridable templates

(type=string)

Return Value

Properties:

• data: ([dictionary]) List of objects representing templates

(type=DirectResponse)

clearGeocodeCache(self)

Clear the Google Maps geocode cache.

Return Value

Success message

(type = DirectResponse)

getZenProperty(self, uid, zProperty)

Returns information about a zproperty for a given context, including its value

Return Value

Properties:

- path: (string) where the property is defined
- type: (string) type of zproperty it is
- options: (Array) available options for the zproperty
- value (Array) value of the zproperty
- valueAsString (string)

(type=Dictionary)

getModelerPluginDocStrings(self, uid)

Given a uid returns the documentation for all the modeler plugins.

getModifications(self, id, types)

Given a uid this method returns meta data about when it was modified.

Parameters

uid: Unique Identifier of an object

(type=string)

Inherited from Products.Zuul.routers.TreeRouter(Section 1.3)

addNode(), asyncGetTree(), deleteNode(), moveOrganizer()

3 Module Products.Zuul.routers.messaging

Operations for Messaging.

Available at: /zport/dmd/messaging_router

3.1 Class MessagingRouter

 $Products. Zen Utils. Ext. Direct Router \,\, -$

Products.Zuul.routers.messaging.MessagingRouter

A JSON/ExtDirect interface to operations on messages

3.1.1 Methods

setBrowserState(self, state)

Save the browser state for the current user.

Parameters

state: The browser state as a JSON-encoded string (type=str)

getUserMessages(self)

Get the queued messages for the logged in user.

Return Value

Properties:

• messages: ([string]) A list of queued messages.

(type=dictionary)

4 Module Products.Zuul.routers.mibs

Operations for MIBs.

Available at: /zport/dmd/mib_router

4.1 Variables

Name	Description
log	Value:
	<pre>logging.getLogger('zen.MibRouter')</pre>

4.2 Class MibRouter

 ${\bf Products. Zen Utils. Ext. Direct Router} \ __$

Products.Zuul.routers.TreeRouter -

Products.Zuul.routers.mibs.MibRouter

A JSON/ExtDirect interface to operations on MIBs

4.2.1 Methods

 $_$ init $_$ (self, context, request)

${\bf getTree}(\mathit{self},\,\mathit{id}\!=\!\text{'/zport/dmd/Mibs'})$

Returns the tree structure of an organizer hierarchy. Default tree root is MIBs.

Parameters

id: (optional) Id of the root node of the tree to be returned (default: '/zport/dmd/Mibs')

(type=string)

Return Value

Object representing the tree

(type=[dictionary])

getOrganizerTree(self, id)

Returns the tree structure of an organizer hierarchy, only including organizers.

Parameters

id: Id of the root node of the tree to be returned

$$(type=string)$$

Return Value

Object representing the organizer tree

(type=|dictionary|)

addNode(self, contextUid=',', id=',', type=',')

Add an organizer or new blank MIB.

Parameters

contextUid: Context to attach new node

(type = string)

id: Id of the new organizer or blank MIB

(type=string)

type: Type of new node. Can be 'organizer' or 'MIB'

(type = string)

Return Value

${\bf Properties:}$

• tree: ([dictionary]) Object representing the new tree

(type = DirectResponse)

 $Overrides:\ Products. Zuul. routers. Tree Router. add Node$

addMIB(self, package, organizer=',')

Add a new MIB by URL or local file.

Parameters

package: URL or local file path to MIB file

(type=string)

organizer: ID of the organizer to add MIB to

(type=string)

Return Value

Properties:

• jobId: (string) ID of the add MIB job

(type=DirectResponse)

deleteNode(self, uid)

Remove an organizer or MIB.

Parameters

uid: UID of organizer or MIB to remove

(type=string)

Return Value

Properties:

• tree: ([dictionary]) Object representing the new tree

(type = DirectResponse)

 $Overrides:\ Products. Zuul. routers. Tree Router. delete Node$

moveNode(self, uids, target)

Move an organizer or MIB from one organizer to another.

Parameters

uids: UIDs of organizers and MIBs to move

(type=[string])

target: UID of the organizer to move to

(type=string)

Return Value

Properties:

• data: (dictionary) Object representing the new parent organizer

getInfo(self, uid, useFieldSets=True)

Get the properties of a MIB

Parameters

uid: Unique identifier of a MIB

(type=string)

useFieldSets: True to return a fieldset version of the info form

(default: True) (type=boolean)

Return Value

Properties

- data: (dictionary) Object representing a MIB's properties
- form: (dictionary) Object representing an edit form for a MIB's properties

(type = DirectResponse)

setInfo(self, **data)

Set attributes on a MIB. This method accepts any keyword argument for the property that you wish to set. The only required property is "uid".

Parameters

uid: Unique identifier of a MIB

(type=string)

Return Value

Properties

• data: (dictionary) Object representing a MIB's new properties

(type=DirectResponse)

addOidMapping(self, uid, id, oid, nodetype='node')

addTrap(self, uid, id, oid, nodetype='notification')

deleteOidMapping(self, uid)

deleteTrap(self, uid)

getOidMappings(self, uid, dir='ASC', sort='name', start=0, limit=256)

getTraps(self, uid, dir='ASC', sort='name', start=0, limit=256)

 $\mathbf{getMibNodeTree}(\mathit{self}, \mathit{id} = \mathtt{None})$

A MIB node is a regular OID (ie you can hit it with snmpwalk)

 ${\bf getMibTrapTree}(\mathit{self}, \mathit{id} {=} \mathtt{None})$

A MIB trap node is an OID received from a trap

 $Inherited\ from\ Products. Zuul. routers. Tree Router (Section\ 1.3)$

asyncGetTree(), moveOrganizer()

5 Module Products.Zuul.routers.nav

Operations for Navigation

Available at: /zport/dmd/detailnav_router

5.1 Class DetailNavRouter

Products.ZenUtils.Ext.DirectRouter —

Products.Zuul.routers.nav.DetailNavRouter

Router to Details navigation for given uid

5.1.1 Methods

getDetailNavConfigs(self, uid=None, menuIds=None)

return a list of Detail navigation configurations. Can be used to create navigation links. Format is: { id: <id of the configuration>, 'viewName': <view to display>, 'xtype': <Ext type for the panel>, 'text': <display name of the config info> }

getContextMenus(self, uid=None, menuIds=None)

getSecurityPermissions(self, uid)

returns a dictionary of all the permissions a user has on the context

6 Module Products.Zuul.routers.network

Operations for Networks.

Available at: /zport/dmd/network_router

6.1 Variables

Name	Description
log	Value:
	<pre>logging.getLogger('zen.NetworkRouter')</pre>

6.2 Class NetworkRouter

Products.Zuul.routers.TreeRouter -

Products.Zuul.routers.network.NetworkRouter

A JSON/ExtDirect interface to operations on networks

6.2.1 Methods

 $_$ **init** $_$ (self, context, request)

discoverDevices(self, uid)

Discover devices on a network.

Parameters

uid: Unique identifier of the network to discover

(type=string)

Return Value

Properties:

• jobId: (integer) The id of the discovery job

addNode(self, newSubnet, contextUid)

Add a new subnet.

Parameters

newSubnet: New subnet to add

(type=string)

contextUid: Unique identifier of the network parent of the new

subnet

(type=string)

Return Value

Properties:

• newNode: (dictionary) An object representing the new subnet node

(type = DirectResponse)

Overrides: Products.Zuul.routers.TreeRouter.addNode

deleteNode(self, uid)

Delete a subnet.

Parameters

uid: Unique identifier of the subnet to delete

(type=string)

Return Value

Properties:

• tree: (dictionary) An object representing the new network tree

(type = DirectResponse)

Overrides: Products.Zuul.routers.TreeRouter.deleteNode

${f getTree}(\mathit{self}, \mathit{id} = \text{'/zport/dmd/Networks'})$

Returns the tree structure of an organizer hierarchy where the root node is the organizer identified by the id parameter.

Parameters

id: Id of the root node of the tree to be returned. Defaults to the Networks tree root.

(type=string)

Return Value

Object representing the tree

(type=[dictionary])

getInfo(self, uid, keys=None)

Returns a dictionary of the properties of an object

Parameters

uid: Unique identifier of an object

(type=string)

keys: (optional) List of keys to include in the returned dictionary. If

None then all keys will be returned

(type=list)

Return Value

Properties

• data: (dictionary) Object properties

(type = DirectResponse)

$setInfo(self, **da\overline{ta})$

Main method for setting attributes on a device or device organizer. This method accepts any keyword argument for the property that you wish to set. The only required property is "uid".

Parameters

uid: Unique identifier of an object

(type=string)

Return Value

DirectResponse

getIpAddresses(self, uid, start=0, params=None, limit=50,
sort='ipAddressAsInt', dir='ASC')

Given a subnet, get a list of IP addresses and their relations.

Parameters

uid: Unique identifier of a subnet

(type=string)

start: Offset to return the results from; used in pagination

(type=integer)

params: Not used

(type=string)

limit: Number of items to return; used in pagination

(type=integer)

sort: (optional) Key on which to sort the return results; defaults

to 'name'

(type=string)

order: Sort order; can be either 'ASC' or 'DESC'

(type=string)

Return Value

DirectResponse

removeIpAddresses(self, uids=None)

Removes every ip address specified by uids that are not attached to any device

Parameters

uids: unique identfiers of the ip addresses to delete

(type=Array of Strings)

Inherited from Products.Zuul.routers.TreeRouter(Section 1.3)

asyncGetTree(), moveOrganizer()

6.3 Class Network6Router

Products.ZenUtils.Ext.DirectRouter — Products.Zuul.routers.TreeRouter —

 $Products. Zuul. routers. network. Network Router \\ -$

Products.Zuul.routers.network.Network6Router

A JSON/ExtDirect interface to operations on IPv6 networks

6.3.1 Methods

__init__(self, context, request)
Overrides: Products.Zuul.routers.network.NetworkRouter.__init__

 $Inherited\ from\ Products. Zuul. routers. network. Network Router (Section\ 6.2)$

addNode(), deleteNode(), discoverDevices(), getInfo(), getIpAddresses(), getTree(), removeIpAddresses(), setInfo()

Inherited from Products.Zuul.routers.TreeRouter(Section 1.3)

asyncGetTree(), moveOrganizer()

7 Module Products.Zuul.routers.process

Operations for Processes.

Available at: /zport/dmd/process_router

7.1 Class ProcessRouter

 ${\bf Products. Zen Utils. Ext. Direct Router \ --}$

Products. Zuul. routers. Tree Router

Products.Zuul.routers.process.ProcessRouter

A JSON/ExtDirect interface to operations on processes

7.1.1 Methods

getTree(self, id)

Returns the tree structure of an organizer hierarchy where the root node is the organizer identified by the id parameter.

Parameters

id: Id of the root node of the tree to be returned

$$(type=string)$$

Return Value

Object representing the tree

(type=[dictionary])

moveProcess(self, uid, targetUid)

Move a process or organizer from one organizer to another.

Parameters

uid: UID of the process or organizer to move

(type=string)

targetUid: UID of the organizer to move to

(type=string)

Return Value

Properties:

• uid: (dictionary) The new uid for moved process or organizer

(type = DirectResponse)

getInfo(self, uid, keys=None)

Get the properties of a process.

Parameters

uid: Unique identifier of a process

(type=string)

keys: (optional) List of keys to include in the returned dictionary. If

None then all keys will be returned (default: None)

(type=list)

Return Value

Properties

• data: (dictionary) Object representing a process's properties

(type = DirectResponse)

setInfo(self, **data)

Set attributes on a process. This method accepts any keyword argument for the property that you wish to set. The only required property is "uid".

Parameters

uid: Unique identifier of a process

(type=string)

Return Value

Properties

• data: (dictionary) Object representing a process's new properties

Get a list of instances for a process UID.

Parameters

uid: Process UID to get instances of

(type=string)

start: (optional) Offset to return the results from; used in

pagination (default: 0)

(type=integer)

params: (optional) Key-value pair of filters for this search.

(type=dictionary)

limit: (optional) Number of items to return; used in pagination

(default: 50)

(type=integer)

sort: (optional) Key on which to sort the return results (default:

'name')

(type=string)

dir: (optional) Sort order; can be either 'ASC' or 'DESC'

(default: 'ASC')

(type=string)

Return Value

Properties:

- data: ([dictionary]) List of objects representing process instances
- total: (integer) Total number of instances

(type = DirectResponse)

getSequence(self)

Get the current processes sequence.

Return Value

Properties:

• data: ([dictionary]) List of objects representing processes in sequence order

setSequence(self, uids)

Set the current processes sequence.

Parameters

uids: The set of process uid's in the desired sequence

$$(type=[string])$$

Return Value

Success message

query(self, limit=None, start=None, sort=None, dir=None, params=None,
history=False, uid=None, criteria=())

Retrieve a list of processes based on a set of parameters.

Parameters

limit: (optional) Number of items to return; used in pagination

(default: None)

(type=integer)

start: (optional) Offset to return the results from; used in

pagination (default: None)

(type=integer)

sort: (optional) Key on which to sort the return results

(default: None)

(type=string)

dir: (optional) Sort order; can be either 'ASC' or 'DESC'

(default: None)

(type=string)

params: (optional) Key-value pair of filters for this search.

(type=dictionary)

history: not used

(type=boolean)

uid: Service class UID to query

(type=string)

criteria: not used

(type=list)

Return Value

Properties:

- processes: ([dictionary]) List of objects representing processes
- totalCount: (integer) Total number of processes
- hash: (string) Hashcheck of the current processes state
- disabled: (boolean) True if current user cannot manage processes

(type=DirectResponse)

Inherited from Products.Zuul.routers.TreeRouter(Section 1.3)

addNode(), asyncGetTree(), deleteNode(), moveOrganizer()

8 Module Products.Zuul.routers.report

Operations for Reports.

Available at: /zport/dmd/report_router

8.1 Variables

Name	Description
log	Value:
	logging.getLogger('zen.ReportRouter')
reportTypes	Value: ['customDeviceReport',
	'graphReport', 'multiGraphReport',]
menuText	Value: [_t('Custom Device Report'),
	_t('Graph Report'), _t('Mult
essentialReportOrganizers	Value: ['/zport/dmd/Reports/Custom
	Device Reports', '/zport/dmd/

8.2 Class ReportRouter

Products. Zen Utils. Ext. Direct Router

 ${\bf Products. Zuul. routers. report. Report Router}$

A JSON/ExtDirect interface to operations on reports

8.2.1 Methods

 $_$ init $_$ (self, context, request)

getReportTypes(self)

Get the available report types.

Return Value

Properties:

- menuText: ([string]) Human readable list of report types
- reportTypes: ([string]) A list of the available report types

asyncGetTree(self, id=None)

addNode(self, nodeType, contextUid, id)

Add a new report or report organizer.

Parameters

nodeType: Type of new node. Can either be 'organizer' or one of

the report types returned from getReportTypes()

(type=string)

contextUid: The organizer where the new node should be added

(type = string)

id: The new node's ID

(type = string)

Return Value

Properties:

- tree: (dictionary) Object representing the new Reports tree
- newNode: (dictionary) Object representing the added node

(type = DirectResponse)

deleteNode(self, uid)

Remove a report or report organizer.

Parameters

uid: The UID of the node to delete

(type=string)

Return Value

Properties:

• tree: (dictionary) Object representing the new Reports tree

(type=[dictionary])

moveNode(self, uid, target)

Move a report or report organizer from one organizer to another.

Parameters

uid: The UID of node to move

(type=string)

target: The UID of the target Report organizer

(type=string)

Return Value

Properties:

- tree: (dictionary) Object representing the new Reports tree
- newNode: (dictionary) Object representing the moved node

(type=[dictionary])

9 Module Products.Zuul.routers.service

Operations for Services.

Available at: /zport/dmd/service_router

9.1 Class ServiceRouter

 $Products. Zen Utils. Ext. Direct Router \ --$

Products.Zuul.routers.TreeRouter

Products.Zuul.routers.service.ServiceRouter

A JSON/ExtDirect interface to operations on services

9.1.1 Methods

_init__(self, context, request)

getClassNames(self, uid=None, query=None)

addClass(self, contextUid, id, posQuery=None)

Add a new service class.

Parameters

contextUid: Unique ID of the service ogranizer to add new class to

(type=string)

id: ID of the new service

(type=string)

posQuery: Object defining a query where the returned position

will lie

(type=dictionary)

Return Value

Properties:

• newIndex: (integer) Index of the newly added class in the query defined by posQuery

query(self, limit=None, start=None, sort=None, dir=None, params=None, history=False, uid=None, criteria=())

Retrieve a list of services based on a set of parameters.

Parameters

limit: (optional) Number of items to return; used in pagination

(default: None)

(type=integer)

start: (optional) Offset to return the results from; used in

pagination (default: None)

(type=integer)

sort: (optional) Key on which to sort the return results

(default: None)

(type=string)

dir: (optional) Sort order; can be either 'ASC' or 'DESC'

(default: None)

(type = string)

params: (optional) Key-value pair of filters for this search.

(type=dictionary)

history: not used

(type=boolean)

uid: Service class UID to query

(type=string)

criteria: not used

(type=list)

Return Value

Properties:

- services: ([dictionary]) List of objects representing services
- totalCount: (integer) Total number of services
- hash: (string) Hashcheck of the current services state
- disabled: (boolean) True if current user cannot manage services

getTree(self, id)

Returns the tree structure of an organizer hierarchy.

Parameters

id: Id of the root node of the tree to be returned

$$(type=string)$$

Return Value

Object representing the tree

(type=[dictionary])

getOrganizerTree(self, id)

Returns the tree structure of an organizer hierarchy, only including organizers.

Parameters

id: Id of the root node of the tree to be returned

$$(type = string)$$

Return Value

Object representing the organizer tree

(type=|dictionary|)

$\mathbf{getInfo}(\mathit{self}, \mathit{uid}, \mathit{keys} {=} \mathtt{None})$

Get the properties of a service.

Parameters

uid: Unique identifier of a service

$$(type=string)$$

keys: (optional) List of keys to include in the returned dictionary. If

None then all keys will be returned (default: None)

$$(type=list)$$

Return Value

Properties

- data: (dictionary) Object representing a service's properties
- disabled: (boolean) True if current user cannot manage services

setInfo(self, **data)

Set attributes on a service. This method accepts any keyword argument for the property that you wish to set. The only required property is "uid".

Parameters

uid: Unique identifier of a service

(type=string)

Return Value

Success message

(type = DirectResponse)

$\mathbf{getInstances}(self,\ uid,\ start = \mathtt{0},\ params = \mathtt{None},\ limit = \mathtt{50},\ sort = \mathtt{'name'},\ dir = \mathtt{'ASC'})$

Get a list of instances for a service UID.

Parameters

uid: Service UID to get instances of

(type=string)

start: (optional) Offset to return the results from; used in

pagination (default: 0)

(type=integer)

params: (optional) Key-value pair of filters for this search.

(type=dictionary)

limit: (optional) Number of items to return; used in pagination

(default: 50)

(type=integer)

sort: (optional) Key on which to sort the return results (default:

'name')

(type=string)

dir: (optional) Sort order; can be either 'ASC' or 'DESC'

(default: 'ASC')

(type=string)

Return Value

Properties:

- data: ([dictionary]) List of objects representing service instances
- totalCount: (integer) Total number of instances

moveServices(self, sourceUids, targetUid)

Move service(s) from one organizer to another.

Parameters

sourceUids: UID(s) of the service(s) to move

(type=[string])

targetUid: UID of the organizer to move to

(type=string)

Return Value

Success messsage

(type = DirectResponse)

getUnmonitoredStartModes(self, uid)

Get a list of unmonitored start modes for a Windows service.

Parameters

uid: Unique ID of a Windows service.

(type=string)

Return Value

Properties:

• data: ([string]) List of unmonitored start modes for a Windows service

(type = DirectResponse)

getMonitoredStartModes(self, uid)

Get a list of monitored start modes for a Windows service.

Parameters

uid: Unique ID of a Windows service.

(type=string)

Return Value

Properties:

• data: ([string]) List of monitored start modes for a Windows service

(type=DirectResponse)

Inherited from Products.Zuul.routers.TreeRouter(Section 1.3)

addNode(), asyncGetTree(), deleteNode(), moveOrganizer()

10 Module Products.Zuul.routers.template

Operations for Templates.

Available at: /zport/dmd/template_router

10.1 Class TemplateRouter

Products.ZenUtils.Ext.DirectRouter —

Products.Zuul.routers.TreeRouter

Products.Zuul.routers.template.TemplateRouter

A JSON/ExtDirect interface to operations on templates

10.1.1 Methods

getTemplates(self, id)

Get all templates.

Parameters

id: not used

(type=string)

Return Value

List of objects representing the templates in tree hierarchy

(type=[dictionary])

getDeviceClassTemplates(self, id)

Get all templates by device class. This will return a tree where device classes are nodes, and templates are leaves.

Parameters

id: not used

(type=string)

Return Value

List of objects representing the templates in tree hierarchy

(type=[dictionary])

getAddTemplateTargets(self, query)

Get a list of available device classes where new templates can be added.

Parameters

query: not used (type=string)

Return Value

Properties:

• data: ([dictionary]) List of objects containing an available device class UID and a human-readable label for that class

(type = DirectResponse)

addTemplate(self, id, targetUid)

Add a template to a device class.

Parameters

id: Unique ID of the template to add

(type=string)

targetUid: Unique ID of the device class to add template to

(type=string)

Return Value

Properties:

• nodeConfig: (dictionary) Object representing the added template

(type=DirectResponse)

deleteTemplate(self, uid)

Delete a template.

Parameters

uid: Unique ID of the template to delete

(type=string)

Return Value

Success message

getObjTemplates(self, uid)

Parameters

uid: Identifier for the object we want templates on, must descend from RRDView

(type=string)

Return Value

List of templates

(type = DirectResponse)

makeLocalRRDTemplate(self, uid, templateName)

Parameters

uid: Identifer of the obj we wish to make the template

local for

(type=string)

templateName: identifier of the template

(type=string)

removeLocalRRDTemplate(self, uid, templateName)

Parameters

uid: Identifer of the obj we wish to remove the local

template

(type=string)

templateName: identifier of the local template

(type=string)

getThresholds(self, uid, query=',')

Get the thresholds for a template.

Parameters

uid: Unique ID of a template

(type = string)

query: not used

(type=string)

Return Value

List of objects representing representing thresholds

(type=[dictionary])

getThresholdDetails(self, uid)

Get a threshold's details.

Parameters

uid: Unique ID of a threshold

$$(type=string)$$

Return Value

Properties:

- record: (dictionary) Object representing the threshold
- form: (dictionary) Object representing an ExtJS form for the threshold

(type=dictionary)

getDataPoints(self, query, uid)

Get a list of available data points for a template.

Parameters

query: not used

(type=string)

uid: Unique ID of a template

(type = string)

Return Value

Properties:

• data: ([dictionary]) List of objects representing data points

(type = DirectResponse)

addDataPoint(self, dataSourceUid, name)

Add a new data point to a data source.

Parameters

dataSourceUid: Unique ID of the data source to add data point to

(type=string)

name: ID of the new data point

(type=string)

Return Value

Success message

addDataSource(self, templateUid, name, type)

Add a new data source to a template.

Parameters

templateUid: Unique ID of the template to add data source to

(type = string)

name: ID of the new data source

(type=string)

type: Type of the new data source. From

getDataSourceTypes()

(type=string)

Return Value

Success message

(type = DirectResponse)

getDataSources(self, id)

Get the data sources for a template.

Parameters

id: Unique ID of a template

(type=string)

Return Value

List of objects representing representing data sources

(type=[dictionary])

getDataSourceDetails(self, uid)

Get a data source's details.

Parameters

uid: Unique ID of a data source

(type=string)

Return Value

Properties:

- record: (dictionary) Object representing the data source
- form: (dictionary) Object representing an ExtJS form for the data source

(type=dictionary)

getDataPointDetails(self, uid)

Get a data point's details.

Parameters

uid: Unique ID of a data point

$$(type=string)$$

Return Value

Properties:

- record: (dictionary) Object representing the data point
- form: (dictionary) Object representing an ExtJS form for the data point

(type=dictionary)

setInfo(self, **data)

Set attributes on an object. This method accepts any keyword argument for the property that you wish to set. The only required property is "uid".

Parameters

uid: Unique identifier of an object

$$(type=string)$$

Return Value

Properties:

• data: (dictionary) The modified object

addThreshold(self, **data)

Add a threshold.

Parameters

uid: Unique identifier of template to add threshold to

(type=string)

thresholdType: Type of the new threshold. From

getThresholdTypes()

(type=string)

thresholdId: ID of the new threshold

(type=string)

dataPoints: List of data points to select for this threshold

(type=[string])

Return Value

Success message

(type = DirectResponse)

removeThreshold(self, uid)

Remove a threshold.

Parameters

uid: Unique identifier of threshold to remove

(type=string)

Return Value

Success message

(type = DirectResponse)

getThresholdTypes(self, query)

Get a list of available threshold types.

Parameters

query: not used

(type=string)

Return Value

List of objects representing threshold types

(type = [dictionary])

getDataSourceTypes(self, query)

Get a list of available data source types.

Parameters

query: not used

(type=string)

Return Value

List of objects representing data source types

(type=[dictionary])

getGraphs(self, uid, query=None)

Get the graph definitions for a template.

Parameters

uid: Unique ID of a template

(type = string)

query: not used

(type=string)

Return Value

List of objects representing representing graphs

(type=[dictionary])

${\bf addDataPointToGraph} (\textit{self}, \textit{ dataPointUid}, \textit{ graphUid}, \\$

includeThresholds=False)

Add a data point to a graph.

Parameters

dataPointUid: Unique ID of the data point to add to graph

(type=string)

graphUid: Unique ID of the graph to add data point to

(type=string)

includeThresholds: (optional) True to include related thresholds

(default: False)

(type=boolean)

Return Value

Success message

getCopyTargets(self, uid, query=',')

Get a list of available device classes to copy a template to.

Parameters

uid: Unique ID of the template to copy

(type=string)

query: (optional) Filter the returned targets' names based on this

parameter (default: ")

(type=string)

Return Value

Properties:

• data: ([dictionary]) List of objects containing an available device class UID and a human-readable label for that class

(type = DirectResponse)

copyTemplate(self, uid, targetUid)

Copy a template to a device or device class.

Parameters

uid: Unique ID of the template to copy

(type=string)

targetUid: Unique ID of the device or device class to bind to

template

(type=string)

Return Value

Success message

addGraphDefinition(self, templateUid, graphDefinitionId)

Add a new graph definition to a template.

Parameters

templateUid: Unique ID of the template to add graph

definition to

(type=string)

graphDefinitionId: ID of the new graph definition

(type=string)

Return Value

Success message

(type = DirectResponse)

deleteDataSource(self, uid)

Delete a data source.

Parameters

uid: Unique ID of the data source to delete

(type=string)

Return Value

Success message

(type = DirectResponse)

deleteDataPoint(self, uid)

Delete a data point.

Parameters

uid: Unique ID of the data point to delete

(type=string)

Return Value

Success message

deleteGraphDefinition(self, uid)

Delete a graph definition.

Parameters

uid: Unique ID of the graph definition to delete

$$(type=string)$$

Return Value

Success message

(type = DirectResponse)

${\bf deleteGraphPoint}(\mathit{self},\mathit{uid})$

Delete a graph point.

Parameters

uid: Unique ID of the graph point to delete

$$(type=string)$$

Return Value

Success message

(type=DirectResponse)

getGraphPoints(self, uid)

Get a list of graph points for a graph definition.

Parameters

uid: Unique ID of a graph definition

$$(type=string)$$

Return Value

Properties:

• data: ([dictionary]) List of objects representing graph points

getInfo(self, uid)

Get the properties of an object.

Parameters

uid: Unique identifier of an object

$$(type=string)$$

Return Value

Properties

- data: (dictionary) Object properties
- form: (dictionary) Object representing an ExtJS form for the object

(type = DirectResponse)

addThresholdToGraph(self, graphUid, thresholdUid)

Add a threshold to a graph definition.

Parameters

graphUid: Unique ID of the graph definition to add threshold

to

(type=string)

thresholdUid: Unique ID of the threshold to add

(type=string)

Return Value

Success message

addCustomToGraph(self, graphUid, customId, customType)

Add a custom graph point to a graph definition.

Parameters

graphUid: Unique ID of the graph definition to add graph point

to

(type=string)

customId: ID of the new custom graph point

(type = string)

customType: Type of the new graph point. From

getGraphInstructionTypes()

(type = string)

Return Value

Success message

(type = DirectResponse)

getGraphInstructionTypes(self, query=',')

Get a list of available instruction types for graph points.

Parameters

query: not used

(type=string)

Return Value

Properties:

• data: ([dictionary]) List of objects representing instruction types

(type=DirectResponse)

setGraphPointSequence(self, uids)

Sets the sequence of graph points in a graph definition.

Parameters

uids: List of graph point UID's in desired order

(type=[string])

Return Value

Success message

getGraphDefinition(self, uid)

Get a graph definition.

Parameters

uid: Unique ID of the graph definition to retrieve

(type=string)

Return Value

Properties:

• data: (dictionary) Object representing a graph definition

(type = DirectResponse)

setGraphDefinition(self, ***data)

Set attributes on an graph definition. This method accepts any keyword argument for the property that you wish to set. Properties are enumerated via getGraphDefinition(). The only required property is "uid".

Parameters

uid: Unique identifier of an object

(type=string)

Return Value

Properties:

• data: (dictionary) The modified object

(type = DirectResponse)

setGraphDefinitionSequence(self, uids)

Sets the sequence of graph definitions.

Parameters

uids: List of graph definition UID's in desired order

(type=[string])

Return Value

Success message

(type=DirectResponse)

Inherited from Products.Zuul.routers.TreeRouter(Section 1.3)

addNode(), asyncGetTree(), deleteNode(), moveOrganizer()

11 Module Products.Zuul.routers.triggers

11.1 Variables

Name	Description
log	Value: logging.getLogger('zen.triggers')

11.2 Class TriggersRouter

11.2.1 Methods

getTriggers(self, **kwargs)
getTriggerList(self, **unused)
addTrigger(self, newId)
removeTrigger(self, uuid)
Temove Higger (set), untu)
getTrigger(self, uuid)
$\boxed{ \mathbf{updateTrigger}(\mathit{self}, ^{**}\mathit{data}) }$
parseFilter(self, source)
${\bf getNotifications}(self)$
$\boxed{ \mathbf{addNotification}(\mathit{self}, \mathit{newId}, \mathit{action}) }$
$\boxed{\mathbf{removeNotification}(\mathit{self},\mathit{uid})}$
${\bf getNotificationTypes}(self)$

getNotification(self, uid)	
d-4 - NT-4: C4: (1f ** d-4-)	
${\bf updateNotification}(\textit{self}, **data)$	
$\boxed{\mathbf{getRecipientOptions}(\mathit{self})}$	
$\mathbf{getWindows}(\mathit{self},\mathit{uid})$	
${\bf addWindow}(\textit{self}, \textit{contextUid}, \textit{newId})$	
$\boxed{\mathbf{removeWindow}(\mathit{self},\mathit{uid})}$	
$\mathbf{getWindow}(\mathit{self},\mathit{uid})$	
$\boxed{ \mathbf{updateWindow}(\mathit{self},\ ^{**}\mathit{data}) }$	

12 Module Products.Zuul.routers.zenpack

Operations for ZenPacks.

Available at: /zport/dmd/zenpack_router

12.1 Variables

Name	Description
log	Value:
	<pre>logging.getLogger('zen.ZenPackRouter')</pre>

12.2 Class ZenPackRouter

Products.ZenUtils.Ext.DirectRouter —

Products.Zuul.routers.zenpack.ZenPackRouter

A JSON/ExtDirect interface to operations on ZenPacks

12.2.1 Methods

getEligiblePacks(self, **data)

Get a list of eligible ZenPacks to add to.

Return Value

Properties:

- packs: ([dictionary]) List of objects representing ZenPacks
- \bullet total Count: (integer) Total number of eligible Zen
Packs

$\mathbf{addToZenPack}(\mathit{self}, \mathit{topack}, \mathit{zenpack})$

Add an object to a ZenPack.

Parameters

topack: Unique ID of the object to add to ZenPack

(type=string)

zenpack: Unique ID of the ZenPack to add object to

(type=string)

Return Value

Success message

13 Module Products.Zuul.routers.zep

Operations for Events.

Available at: /zport/dmd/evconsole_router

13.1 Variables

Name	Description
log	Value: logging.getLogger('zen.%s' %
	name)

13.2 Class EventsRouter

 $Products. Zen Utils. Ext. Direct Router \ --$

Products.Zuul.routers.zep.EventsRouter

A JSON/ExtDirect interface to operations on events in ZEP

13.2.1 Methods

 $\begin{array}{l} \textbf{queryArchive}(self,\ limit=\texttt{0},\ start=\texttt{0},\ sort=\texttt{'lastTime'},\ dir=\texttt{'desc'},\\ params=\texttt{None},\ uid=\texttt{None},\ detailFormat=\texttt{False}) \end{array}$

 $\begin{array}{l} \mathbf{query}(\mathit{self}, \mathit{limit} = \mathtt{0}, \mathit{start} = \mathtt{0}, \mathit{sort} = \mathtt{'lastTime'}, \mathit{dir} = \mathtt{'desc'}, \mathit{params} = \mathtt{None}, \\ \mathit{archive} = \mathtt{False}, \mathit{uid} = \mathtt{None}, \mathit{detailFormat} = \mathtt{False}) \end{array}$

Query for events.

Parameters

limit: (optional) Max index of events to retrieve (default: 0)

(type=integer)

start: (optional) Min index of events to retrieve (default: 0)

(type=integer)

sort: (optional) Key on which to sort the return results

(default: 'lastTime')

(type=string)

dir: (optional) Sort order; can be either 'ASC' or 'DESC'

(default: 'DESC')

(type=string)

params: (optional) Key-value pair of filters for this search.

(default: None)

(type=dictionary)

history: (optional) True to search the event history table instead of

active events (default: False)

(type=boolean)

uid: (optional) Context for the query (default: None)

(type=string)

Return Value

Properties:

- events: ([dictionary]) List of objects representing events
- totalCount: (integer) Total count of events returned
- asof: (float) Current time

(type=dictionary)

 $\begin{array}{l} \mathbf{queryGenerator}(self,\,sort=\texttt{'lastTime'},\,dir=\texttt{'desc'},\,evids=\texttt{None},\\ excludeIds=\texttt{None},\,params=\texttt{None},\,archive=\texttt{False},\,uid=\texttt{None},\\ detailFormat=\texttt{False}) \end{array}$

Query for events.

Parameters

sort: (optional) Key on which to sort the return results

(default: 'lastTime')

(type=string)

dir: (optional) Sort order; can be either 'ASC' or 'DESC'

(default: 'DESC')

(type=string)

params: (optional) Key-value pair of filters for this search.

(default: None)

(type=dictionary)

archive: (optional) True to search the event archive instead of

active events (default: False)

(type=boolean)

uid: (optional) Context for the query (default: None)

(type=string)

Return Value

Generator returning events.

(type = qenerator)

detail(self, evid)

Get event details.

Parameters

evid: Event ID to get details

(type=string)

history: Deprecated

(type=boolean)

Return Value

Properties:

• event: ([dictionary]) List containing a dictionary representing event details

write_log(self, evid=None, message=None)

Write a message to an event's log.

Parameters

evid: Event ID to log to

(type=string)

message: Message to log

(type=string)

Return Value

Success message

(type = DirectResponse)

nextEventSummaryUpdate(self, next_request)

When performing updates from the event console, updates are performed in batches to allow the user to see the progress of event changes and cancel out of updates while they are in progress. This works by specifying a limit to one of the close, acknowledge, or reopen calls in this router. The response will contain an EventSummaryUpdateResponse, and if there are additional updates to be performed, it will contain a next_request field with all of the parameters used to update the next range of events.

Parameters

next_request: The next_request field from the previous updates.

(type=dictionary)

Close event(s).

Parameters

evids: (optional) List of event IDs to close (default: None)

(type=[string])

excludeIds: (optional) List of event IDs to exclude from close

(default: None)

(type = [string])

params: (optional) Key-value pair of filters for this search.

(default: None)

(type=dictionary)

uid: (optional) Context for the query (default: None)

(type = string)

asof: (optional) Only close if there has been no state change

since this time (default: None)

(type = float)

limit: (optional) Maximum number of events to update

(default: None).

(type=The maximum number of events to update in

this batch.)

Return Value

Success message

 $\begin{tabular}{ll} \bf acknowledge (\it self, \it evids=None, \it exclude Ids=None, \it params=None, \it uid=None, \it asof=None, \it limit=None) \end{tabular}$

Acknowledge event(s).

Parameters

evids: (optional) List of event IDs to acknowledge (default:

None)

(type=[string])

excludeIds: (optional) List of event IDs to exclude from

acknowledgment (default: None)

(type=[string])

params: (optional) Key-value pair of filters for this search.

(default: None)

(type=dictionary)

uid: (optional) Context for the query (default: None)

(type=string)

asof: (optional) Only acknowledge if there has been no state

change since this time (default: None)

(type = float)

limit: (optional) Maximum number of events to update

(default: None).

(type=The maximum number of events to update in

this batch.)

Return Value

Success message

(type = DirectResponse)

unacknowledge(self, *args, **kwargs)

@Deprecated Use reopen

Reopen event(s).

Parameters

evids: (optional) List of event IDs to reopen (default: None)

(type=|string|)

excludeIds: (optional) List of event IDs to exclude from reopen

(default: None)

(type = [string])

params: (optional) Key-value pair of filters for this search.

(default: None)

(type=dictionary)

uid: (optional) Context for the query (default: None)

(type = string)

asof: (optional) Only reopen if there has been no state

change since this time (default: None)

(type = float)

limit: (optional) Maximum number of events to update

(Default: None).

(type=The maximum number of events to update in

this batch.)

Return Value

Success message

add_event(self, summary, device, component, severity, evclasskey, evclass)

Create a new event.

Parameters

summary: New event's summary

(type=string)

device: Device uid to use for new event

(type=string)

component: Component uid to use for new event

(type=string)

severity: Severity of new event. Can be one of the following:

Critical, Error, Warning, Info, Debug, or Clear

(type=string)

evclasskey: The Event Class Key to assign to this event

(type=string)

evclass: Event class for the new event

(type = string)

Return Value

DirectResponse

configSchema(self)

getConfig(self)

setConfigValues(self, values)

Parameters

values: Key Value pairs of config values

(type=Dictionary)

column_config(self, uid=None, archive=False)

Get the current event console field column configuration.

Parameters

uid: (optional) UID context to use (default: None)

(type=string)

archive: (optional) True to use the event archive instead of active

events (default: False)

(type=boolean)

Return Value

A list of objects representing field columns

(type=[dictionary])

classify(self, evrows, evclass)

Associate event(s) with an event class.

Parameters

evrows: List of event rows to classify

(type=[dictionary])

evclass: Event class to associate events to

(type=string)

Return Value

Properties:

- msg: (string) Success/failure message
- success: (boolean) True if class update successful

(type = DirectResponse)

clear_heartbeats(self)

Clear all heartbeat events

Return Value

Properties:

• success: (boolean) True if heartbeats deleted successfully

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