1 XtreemFS API calls

1.1 getStaticNodeInfo

JSONString getStaticNodeInfo()
   Return the type of the node. This is always "storage".

Returns: {"storage"}

1.2 getDynamicNodeInfo

JSONString getDynamicNodeInfo()
   Return dynamic information of the node. This includes available capacity in MB, random in IOPS and sequential bandwidth in MB/s.

Returns: a JSONString containing:
   { "storage": { "capacity":10, "ranbw":30, "seqbw":10 } }

1.3 isNodeRunning

boolean isNodeRunning()
   Check whether XtreemFS is running

Returns: currently always returns true.
   {true}

1.4 getAvailableNodeList

JSONString getAvailableNodeList()
   Returns the same information as getDynamicNodeInfo (available capacity in MB, random in IOPS and sequential bandwidth in MB/s).

Returns: a JSONString containing:
   { "storage": { "capacity":10, "ranbw":30, "seqbw":10 } }

1.5 createReservation

String createReservation(JSONString reservDescriptor)
   Create a reservation for an XtreemFS volume. User credentials can also be put in reservDescriptor if necessary.

Parameters: reservDescriptor - a JSON string described a reservation. Possible parameters are:

volume_name (**required**): the name of the XtreemFS Volume

capacity: the required capacity in MB.

ranbw: the required random bandwidth in IOPS.

seqbw: the required sequential bandwidth in MB/s

coldStorage: set this to true for cold storage.

mode: the mode of the XtreemFS volume. Set to a default value, if not provided.

owner: the owner of the XtreemFS volume. Set to a default value, if not provided.

owner_groupname: the groupname of the XtreemFS volume. Set to a default value, if not provided.

Example of a reservDescriptor:

{ volume_name:"testVolume", "capacity":10, "ranbw":3, "seqbw":0, "coldStorage":false, "mode"="700"}

Returns: returns the volume name if successful, otherwise an error string is returned.

{"result":{"volume_name":"localhost:42638\/testVolume"}}

1.6 releaseReservation

boolean releaseReservation(String volumeName) Release a given reservation

Parameters:

volume_name (**required**): the name of the XtreemFS volume.

Returns: returns a string indicating success, or an error message otherwise