**GraphSystem**

# System initialization

## Erase existing system

If an existing system was set up, then it has to be erased. For this, use:

POST /system/clear

## Setting up the new system

When the system is empty, a new one can be initialized:

POST /system

# System elements

## Core

Core is the central node of a GraphSystem hub. The core acts like an object, but does not implement any class. The core can be connected with any amount and any type of edge with any direction.

## Classes

Each class belongs to a defining object.

A class can

* define fields
* define edges
* define events
* be implemented by objects
* be inherited from other classes
* be abstract

### Default abstract classes

* Root
  + defines *children* edges
* Leaf
  + defines *parent* edge
* Pipe
  + extends *Leaf*
  + defines *child* edge
* Tree
  + extends *Root*
  + extends *Leaf*
* Controller
  + extends *Tree*
  + defines *actions* field
  + defines *controls* edge

## Objects

Each object implements one class.

### Create

A newly created object must be connected to at least one already existing object or the core.

# Permissions

An object can be personalized if

* has a field for permission definitions
* has at least one edge pointing to the controlled object(s)
* may implement the Tree class with parent and children edge types