# **UML API Topology**

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## ReadWriteJason

JsonReadWriteHelper() fileToString(jsonFilePath:String):String getDeviceObjectFrom DeviceJson(json:String):Device getNetListObjectFrom NetListJson(json:String):HashMap<String,String> getLimitObjectFrom LimitJson(json:String,type:String):Limit convertTopology ToJsonString(topology:Topology):String getComponents Map(deviceArrayList:ArrayList<Device>):ArrayList<Object> read(jsonFilePath:String):Topology write(topology:Topology,jsonFilePath:String):void

# API

searchTopologyID(topologyID:String):Topology readJSON(jsonFilePath:String):void writeJSON(topologyID:String,jsonFilePath:String):void queryTopologies():ArrayList<Topology> query Devices(topologyID:String):ArrayList<Device> query Devices With NetListNode(topologyID:String):ArrayList<Device> delete Topology(topologyID:String):void

# Topology

ID:String components:ArrayList<Device>

getID():String setID(ID:String):void getComponents():ArrayList<Device> setComponents(components:ArrayList<Device>):void getDevices With NetListNode(node:String):ArrayList<Device> equals(obj:Object):boolean equalsComponents(components:ArrayList<Device>):boolean

### Constrain

type:String IdefaultValue:double minValue:double maxValue:double

Limit(type:String,defaultValue:double,minValue:double,maxValue:double) setDefaultValue(defaultValue:double):void getMinValue():double setMinValue(minValue:double):void getMaxValue():double setMaxValue(maxValue:double):void getType():String setType(type:String):void equals(obj:Object):boolean

# Device

- type:String
- id:Constrain
- netList:HashMap<String, String>
- +Device(type:String,ID:String,limit:Limit,netList:HashMap<String,String>)
- +getType():String
- +setType(type:String):void
- +getID():String
- +setID(ID:String));void
- +getLimit():Limit
- +setLimit(limit:Limit):void
- +getNetList():HashMap<String,String>
- +setNetList(netList:HashMap<String,String>):void
- +isConnected(node:String):boolean
- +equals(obj:Object):boolean