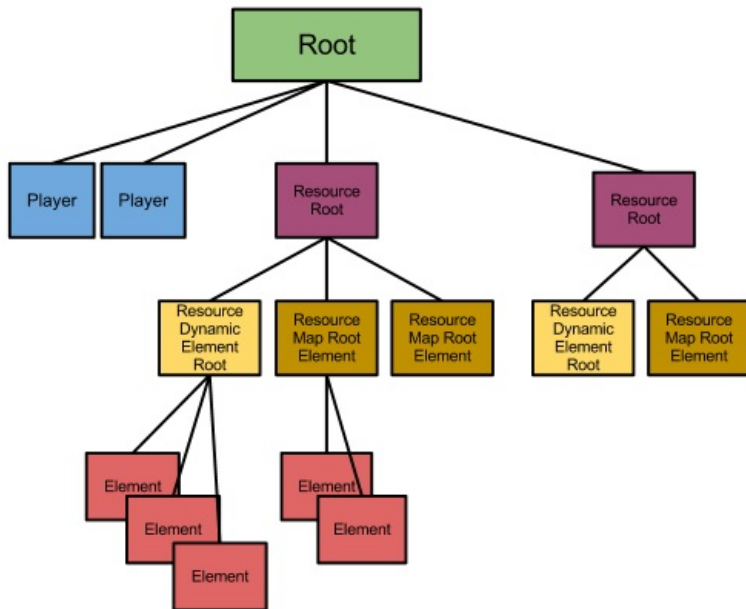# Element tree

Element tree

NRP uses a so-called *element tree* to store all the elements that exist on the server and the client. This is directly related to the set of running resources and their map files' XML layout, although it can be changed at run-time by scripts.

If you are familiar with the concept of *trees* in computer-science, this should be easy to understand. If you are not, think of it as a family tree - except everyone only has a single parent. Every element has a *parent* element.

All elements that are created within scripts or from .map files are child elements of the resource they belong to. Thus, most elements (except for clients) exist only within resources and are also destroyed as soon as their resource is stopped.

Contents

Tree elements

- **root**: This is at the very base of the tree - all elements are children (or descendants) of this element.

```
getRootElement()
```

- **resource**: These are direct children of the root element - with one for each *running* resource. This element is called the *resource root*. Its ID holds the name of the resource.

```
getResourceRootElement()
```

- **map**: Each resource element contains at least one map element, representing either a ".map" file in the resource or the one containing the elements created by scripts (this is called the *dynamic* map). Their IDs contain the maps' filenames, or *dynamic* for the dynamic map.
  - Map files can contain a number of other elements as well as an unlimited number of custom elements.