Subject: GetProperty() / SetProperty() for Ctrl
Posted by kohait00 on Wed, 17 Nov 2010 16:46:52 GMT
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hi guys

in my struggle with a 'scriptable' layout for OSC interfaces i came along the need / idea to make the controls more open to manipulation in terms of their properties (not the hardwired things like callbacks).

so one could imagine a uniform interface like

```
void Ctrl::SetProperty(const String& name, const Value& v);
void Ctrl::GetProperty(const String& name, Value& v);
```

now this would enable / map things like

```
c.SetProperty("background", Black);
c.GetProperty("background", v);

c.SetProperty("min", 123);
c.GetProperty("max", v);

c.SetProperty("xalign", "left");
c.SetProperty("xpos", 123);
c.SetProperty("yalign", "center");
c.SetProperty("ypos", 45);

c.SetProperty("pattern", "%.g");
c.SetProperty("grid" ValueArray(Vector<int>() << 5 << 6));

//would map to GetData / SetData directly i.e.
c.SetProperty("data", 345);
c.GetProperty("data", v);

c.GetProperty("count", v);

c.SetProperty("enable", true);
c.GetProperty("enable, v);

c.SetProperty("show", false);
c.SetProperty("title", "MyTitle");
c.SetProperty("tip", "GoHelp");

//query all getable properties
c.GetProperty("rprops", v);
//query all setable properties
```

c.GetProperty("wprops", v);

..
and many more..

this would ease things like a custom gui creation / live edit of controls..

this is just an idea, where std Ctrl could already map to a lot of things by itself.. and derived Ctrls simply extending the 'dictionary' of properties and managing the properties..

i imagine to extend it on template base if not desired in upp, but having a uniform polymorphic interface already from Ctrl level would help a great deal in this.

i might provide an example implementation soon..
just wanted to know your opinion.

cheers
