



## backend API

# cpaint

start()
register()
return\_data()
add\_node()
get\_attribute()
get\_name()
set\_attribute()
set\_data()
set\_data()
set\_data()
set\_name()

## cpaint\_node

add\_node()
get\_attribute()
get\_data()
get\_name()
set\_attribute()
set\_data()
set\_name()

### common mistakes

- PHP4: add\_node() returns the node object by reference. Use \$var =& \$cp->add\_node().
- CPAINT assumes incoming data to be UTF-8. Use \$cp->start(`ISO-8859-1') or similar if that's not the case.
- backend functions must first
  be registered through
  \$cp->register(`funcname')

# creating the response

#### unstructured response:

\$cp->set\_data('my data');

## collections:

## creating nested nodes:

## available response types

## TEXT

Most useful for non-structured responses. The fastest response type.

#### **OBJECT**

The default response type. Useful for complex data structures. Data is sent as XML, parsed by CPAINT frontend.

## **XML**

Useful for external data sources. Websites, HTML, SOAP services, RSS / RDF feeds, ... OBJECT is often the more comfortable response type if data is not too complex.

#### E4X

As of now supported by Firefox 1.5 only! Offers a more scripty approach to XML traversal.

## call() parameter order

- 1) backend URL
- 2) remote method name
- 3) local callback function
- 4) 1st remote argument
- 5) 2nd remote argument
- 6) ...

# **CPAINT defaults**

proxy URL: none transfer mode: GET asynchronous: yes response type: OBJECT persistent conn.: no CPAINT API: yes

# frontend API

# cpaint

call()
set\_debug()
set\_proxy\_url()
set\_transfer\_mode()
set\_async()
set\_response\_type()
set\_persistent\_connection()
set\_use\_cpaint\_api()

## cpaint\_result\_object

find\_item\_by\_id()
get\_attribute()
set\_attribute()

#### common mistakes

- Opera can't do POST prior to v8.
- set\_async(true) freezes the browser while request is underway.
- requests that follow too fast are dropped when persistent\_connection(true) is used
- cpaint.call() does not return the response. You must set up a callback function that takes the response as single parameter.
- when using E4X, use <script type="text/javascript;e4x=1"> and avoid HTML comments within.

## working with the response

# finding a specific node:

```
r.find_item_by_id('nodename',
'nodeid');
```

# accessing node attributes: r.get\_attribute('name');

```
walking through a collection:
for (i=0; i<r.col.length; i++) {
   alert(r.col[i].data);</pre>
```

# accessing nested node data:

r.child[0].data