YUI Library: DataSource

2008-9-30 **v2.6**

Simple Use Case

Script:

```
var myDataSource = new YAHOO.util.DataSource
   ([{name:"a",id:"1"}, {name:"b",id:"2"}]);
myDataSource.responseType =
   YAHOO.util.DataSource.TYPE_JSARRAY;
myDataSource.responseSchema = [fields:["name","id"];
```

Instantiates a new DataSource object, `myDataSource`, which manages data retrieval for use by other widgets.

Constructors

```
YAHOO.util.LocalDataSource(mixed data[, obj
   configurations]);
```

(1) **data (array):** A JavaScript array of strings.
(2) **Configuration object (object):** An optional object literal defines property values of a DataSource instance.

```
YAHOO.util.FunctionDataSource(fn function[, obj
   configurations]);
```

(1) **JS Function (fn):** A JavaScript function which returns an array of strings.
(2) **Configuration object (object):** See above.

```
YAHOO.util.ScriptNodeDataSource(str uri[, obj
   configurations]);
```

(1) **URI:** URI to the script location that will return data.
(2) **Schema (array):** Schema description of server response data.
(3) **Configuration object (object):** See above.

```
YAHOO.util.XHRDataSource(str uri[, obj configurations]);
```

(1) **Script URI (string):** Server URI (local domains only – use a proxy for remote domains).
(2) **Schema (array):** Schema description of server response data.
(3) **Configuration object (object):** See above.

```
YAHOO.util.DataSource(mixed data[, obj configurations]);
```

(1) **Script URI (string):** Server URI (local domains only – use a proxy for remote domains).
(2) **Schema (array):** Schema description of server response data.
(3) **Configuration object (object):** See above.

Key Configuration Properties

Property	Description
responseType	Determines which parsing algorithm to use on response data.
responseSchema	Determines what data gets parsed out of response for consumption.

Interesting Moments

Event	oArgs passed to handler
cacheFlushEvent	none
cacheRequestEvent	oArgs.request {obj} The request object oArgs.callback {obj} The callback object
cacheResponseEvent	oArgs.request {obj} The request object oArgs.response {obj} The response object oArgs.callback {obj} The callback object
dataErrorEvent	oArgs.request {obj} The request object oArgs.callback {obj} The callback object oArgs.message {str} Error message
requestEvent	oArgs.request {obj} The request object oArgs.callback {obj} The callback object oArgs.tId {int} Unique transaction ID
responseCacheEvent	oArgs.request {obj} The request object oArgs.response {obj} The response object oArgs.callback {obj} The callback object
responseEvent	oArgs.request {obj} The request object oArgs.response {obj} The response object oArgs.callback {obj} The callback object oArgs.tId {int} Unique transaction ID
responseParseEvent	oArgs.request {obj} The request object oArgs.response {obj} The response object oArgs.callback {obj} The callback object

Subscribe to DataSource Custom Events on your DataSource instance:
`myDS.subscribe("requestEvent", myFn);`

Abstract Methods

Method	Description
doBeforeCallback	This overridable abstract method gives implementers an opportunity to access the data before it has been cached or returned to the callback. Implementers should be sure to return data in a ready-to-return state to avoid errors.
doBeforeParseData	This overridable abstract method gives implementers an opportunity to munge the data before it is schema-parsed. Implementers should be sure to return data in a ready-to-parse state to avoid errors.

Dependencies

DataSource requires the YAHOO Global Object and the Event Utility. Connection Manager (for XHRDataSource), the Get Utility (for ScriptNodeDataSource), and the JSON Utility (for JSON data) are optional.

YAHOO.util.DataSourceBase Properties:

dataType (int)
liveData (mixed)
responseSchema (obj)
responseType (int)

YAHOO.util.XHRDataSource Properties:

connMethodPost (b)
connMgr (YAHOO.util.Connection)
connTimeout (int)
connXhrMode ("queueRequests" | "cancelStaleRequests" | ignoreStaleResponses" | "allowAll")

YAHOO.util.ScriptNodeDataSource Properties:

asyncMode ("ignoreStaleResponses" | "allowAll")
getUtility (YAHOO.util.Get)
scriptCallbackParam (str)