

AsyncLoadingStatus.js

The screenshot shows a web form titled "Maintain Order Factor - Add". The form contains several input fields and buttons. Annotations in red and blue text with arrows point to specific elements:

- Asynchronous request in progress (webbean/svt/getjson)**: A red text annotation with an arrow pointing to a loading spinner icon next to the "Department" field.
- loading spinner gif**: A red text annotation with an arrow pointing to the same loading spinner icon.
- validation for department code**: A blue text annotation with an arrow pointing to the "Department" input field.
- disabled buttons**: A red text annotation with two arrows pointing to the "Save" and "Cancel" buttons at the bottom right of the form.

The form fields include: Holding Company (AMY), Company (AMY - AMY CO (M) BHD), Order Factor Type, Order Factor Apply To, Order Factor, Department (1), Effective Start Date, Effective End Date, and Deleted (checkbox). The "Save" and "Cancel" buttons are at the bottom right.

given

- one event handler which performs one or more asynchronous requests
- callbacks attached to those asynchronous requests
- buttons (to be disabled to prevent premature form submission)
- reference to a loading gif(s)

will

- disable buttons and show loading gif when event is triggered
- renable buttons and hide loading gif when *all* callbacks have returned

Usage

constructor `AsyncLoadingStatus` takes one (optional) configuration object as argument

CONFIGURATION OBJECT PROPERTIES

- **all options are optional**
 - o even the configuration object is optional
 - o but then you need to call `.getHandler()` and `.getCallback()` to do anything at all

options

- **buttons**
 - o an array of buttons / a jquery object
 - o if an array, each button can be any value accepted by the jQuery constructor e.g. element, selector, jQuery object
 - o if unspecified: **defaults to all buttons on page**
- **loadingGif**
 - o any value accepted by the jQuery constructor e.g. element, selector, jQuery object
 - o if unspecified: **defaults to all instances of profit/images/ajax-loader.gif on the page**
- **handler**
 - o the name of a handler (usually for 'change' event) to modify
 - o if specified then you don't need to use `asyncLoadingStatus.getHandler()`

- callbacks
 - o the name of a callback, or of a list of callbacks to modify
 - o if specified then you don't need to use `asyncLoadingStatus.getCallback()`

INSTANCE METHODS

- `getCallback`
 - o returns a modified callback
 - o which will hide the loading gif and enable buttons when it's called
- `getHandler`
 - o returns a modified handler
 - o which will show the loading gif and disable buttons when it returns
- `done`
 - o call this method if within your handler you abort and do not initiate the asynchronous request(s)
 - o (so that the callbacks are never called)

Example usage

importing the external js file

Note that you need to also include jquery.

```
<script language="javascript" src="<%=BaseURL%>/profit/JScript/jquery-1.4.4.min.js"></script>
<script language="javascript"
src="<%=BaseURL%>/profit/JScript/AsyncLoadingStatus.min.js"></script>
```

placing the gif

by specifying element within which to append the gif

```
AsyncLoadingStatus({
  placeGifIn: $('.place_gif_store'),
  baseURL: '<%=BaseURL%>' // you are required to specify baseURL when using placeGifIn
});

<tr>
  <td class="caption"><%=jbWResGUI.getRes("From Store")%></td>

  <td><input name="fromStore" maxlength="<%=SYSStoreLength%>"></td>
  <td class="place_gif_store">
    "
    onclick="SearchCriteria('<%=BaseURL%>/profit/MT/StrmstSearch.jsp', 'FROM_STORE')"
    style='cursor:hand;'>
  </td>
</tr>
```

manual placement: put the ajax loading gif wherever you want it

```
AsyncLoadingStatus({
  loadingGif: $('#ajax-loader')
});


```

async method

SvltGetJson

```
function onChangeStore(store) {
    var query = "...";

    // this function is redefined each time onChangeStore is called
    var callback = function(data) {
        // has access to 'store' via closure
    };

    // use .getCallback(callback, true) if the callback is defined each time the handler is
    // called
    $.getJSON("<%=BaseURL%>/servlet/SvltGetJson", {query: query},
    asyncLoadingStatus.getCallback(callback, true));
}

var asyncLoadingStatus; // make this global so that we can see it in onChangeStore

$(document).ready(function() {
    asyncLoadingStatus = AsyncLoadingStatus({
        handler: 'onChangeStore'
    });
});
```

webbean

```
function onChangeStore() {
    // ...
}

function onChangeStoreCalledBack() {
    // ...
}

$(document).ready(function() {
    AsyncLoadingStatus({
        handler: 'onChangeStore',
        callbacks: 'onChangeStoreCalledBack'
    });
});
```

use of .done()

```
function onChangeStore() {

    // nonasynchronous checking
    // e.g. check if form field value is a number
    if (badvalue()) {
        asyncLoadingStatus.done(); // if within the onchange method the asynchronous requests
        // are not made
        return;
    }

    // asynchronous checking
    checkAutostrmstByPrimaryKey();
}
```

multiple asynchronous requests per handler

```

function onChangeStore() {
    // ...
}

function onChangeStoreCalledBack1() {
    // ...
}

function onChangeStoreCalledBack2() {
    // ...
}

$(document).ready(function() {
    AsyncLoadingStatus({
        handler: 'onChangeStore',
        callbacks: ['onChangeStoreCalledBack1', 'onChangeStoreCalledBack2']
    });
});

```

only disable some buttons

```

var asyncLoadingStatus = AsyncLoadingStatus({
    buttons: ['cmdSave', 'cmdAdd'] // only disable save buttons
});

```

features

- supports multiple callbacks per handler
 - o will only hide gif/re-enable buttons when all callbacks have returned
- supports different instances of AsyncLoadingStatus sharing the same gif/buttons
 - o will only hide gif/re-enable button when all callbacks in all instances involving the gif/button have returned
- supports callbacks which are defined each time the handler is called
 - o often the case for the SvltGetJson method
 - o use .getCallback(callback, true)
- supports cancellation of the request(s)
 - o use .done()

issues

- due to webbean/SvltGetJson not responding upon some type of errors, callbacks may never be called
 - o so the program will hide the gif and re-enable buttons after 60 seconds
 - o you can always call .done() to make it happen sooner