

# Using the HelperList class

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## Using the HelperList class

This Helper is used to generate a table of elements. The elements can belong to ObjectModel-type objects, but they do not have to. Example: client list, order status list.

### List declaration

Fields inside [brackets] are optional as per the HTML standard.

Values between {curly braces} list the possible values for this field.

```
$this->fields_list = array(
    'country' => array(
        'title' => $this->l('Country'), // First column.
        'width' => 100, // Column name.
        // Column width. At least one field should be set to 'auto'
in order to grow with window size.
        ['align'] => {'left', 'center', 'right'}, // Content position inside the column (default 'left',
optional).
        ['type'] => {'select', 'bool', 'date', // Column format.
        'datetime', 'decimal', 'float', 'percent',
        'editable', 'price'},
        ['list'] => $this->countries_array, // For type == select only. Content for the select drop down
filter list (optional).
        ['filter_key'] => 'cl\!id_country'), // Define a custom filter key to be used by the filter SQL
request
// (optional, default uses the array key name, i.e.
'country').
        ['orderby'] => {true, false}, // If true, list will be alphabetically ordered using this
column values (optional, default false).
        ['search'] => {true, false}, // If true, this column will have a search field (optional,
default true).
        ['image'] => 's', // If set, an image will be displayed in this field located
in the '/img' subfolder defined as value here (optional).
        ['image_id'] => 3, // If 'image' is set and if 'image_id' is set, it will be
used as the image filename,
// else the record item id will be used (optional)
        ['icon'] => array( // If set, an icon will be displayed with icon key
matching the field value.
            0 => 'disabled.gif', // Used in combination with type == bool (optional).
            1 => 'enabled.gif',
            'default' => 'disabled.gif'
        ),
        ['active'] => 'status', // If set, the field will be replaced by a clickable boolean
switch for the item field (i.e. 'status').
// An icon will display the current status.
        ['activeVisu'] => 'new_window', // If set, the field will be replaced by an icon depending
on the boolean value
```

```

// of the field specified (i.e. 'new_window') (optional).
['callback'] => 'getOrderTotalUsingTaxCalculationMethod', // If set, the return value of the defined method
call

// will be used as the field content (optional).
['callback_object'] => $cart, // If set in combination with 'callback', the method will be
called from the provided object

['prefix'] => '0x', // instead of the current controller (optional).
(optional). // If set, it will be displayed before the field value
['suffix'] => 'kg', // If set, it will be displayed after the field value
(optional).
['currency'] => {true, false}, // If set and type == price, the currency displayed
// will use
the item currency and not the default currency (optional).
['maxlength'] => 90, // If set, the field value will be truncated if it has more
characters than the numeric value set (optional).
['position'] => 'position', // If set to position, the field will display arrows
// and be
drag and droppable, which will update position in db (optional).
['tmpTableFilter'] => {true, false}, // If set to true, the WHERE clause used to filter results
// will use
the $_tmpTableFilter variable (optional, default false).
['havingFilter'] => {true, false}, // If set to true, the WHERE clause used to filter results
// will use
the $_filterHaving variable (optional, default false).
['filter_type'] => {'int', 'bool', 'decimal'}, // Specify the value format when used in the filter where
clause.
// Useful when "filter_type" is different from "type" (i.e.
type == select) (optional).
['color'] => 'color', // If set, the field value will appear inside a colored
element.
// The color used is the "color" index of the record and is
in HTML name or hexadecimal format (optional).
['hint'] => $this->l('This is the quantity available in the current shop/group.'), // The hint will appear
on column name hover (optional).
['ajax'] => {true, false} // if the type is bool, you
use ajax
),
'another_field' => array( // Second column.
...
),
'another_field' => array( // Third column.
...
),
);

```

## Basic declaration

Removing all the optional fields, this is how to build a basic HelperList element:

```

private function initList()
{
    $this->fields_list = array(
        'id_category' => array(
            'title' => $this->l('Id'),
            'width' => 140,
            'type' => 'text',
        ),
        'name' => array(
            'title' => $this->l('Name'),
            'width' => 140,
            'type' => 'text',
        ),
    );
    $helper = new HelperList();

    $helper->shopLinkType = '';

    $helper->simple_header = true;































    // Actions to be displayed in the "Actions" column
    $helper->actions = array('edit', 'delete', 'view');

    $helper->identifier = 'id_category';
    $helper->show_toolbar = true;
    $helper->title = 'HelperList';
    $helper->table = $this->name.'_categories';

    $helper->token = Tools::getAdminTokenLite('AdminModules');
    $helper->currentIndex = AdminController::$currentIndex.'&configure='.$this->name;
    return $helper;
}

```

This specific code generates this list:

Id	Name	Actions
1	Root	  
1	Root	  
2	Home	  
2	Home	  
3	iPods	  
3	iPods	  
4	Accessories	  
4	Accessories	  
5	Laptops	  
5	Laptops	  

## Enabling specific features































### Sortable header

By default, the list's header simply displays the name of each column.

In order to make the column sortable and searchable, you only have to disable one option:

```
$helper->simple_header = false;
```

By disabling the `simple_header` option, the list displays a more complex header:

Id ▼ ▲	Name ▼ ▲	Actions
<input type="text"/>	<input type="text"/>	--
1	Root	  
1	Root	  
2	Home	  
2	Home	  
3	iPods	  
3	iPods	  
4	Accessories	  
4	Accessories	  
5	Laptops	  
5	Laptops	  

## Adding an "Actions" column

The above example directly builds a table with an action column, which comprises three actions: edit, delete, view.

```
$helper->actions = array('edit', 'delete', 'view');
```

Note that they will not work out of the box: while the action icons are there and can be clicked, nothing will happen when the user clicks until you have assigned proper code to these actions.

## Adding a "Details" row action

### Principle

You can define a "Details" action (or "+" action) in each row of a list. This action is useful if you want to show other information about the row (for example, the details of a sum).

This action is represented by a "+" if the details is shown and by a "-" if the details is hidden. The content is obtained through an Ajax request.

### Example

There are two possible ways to displays:

- The easy one is to re-use the table structure. See for instance the "Stock instant state" page, under the "Stock" menu (when the "Advanced Stock Management" option is enabled).
- You can define your own structure (for example, to display a new table within the table). See for instance the "Stock Management" page, under the "Stock" menu (when the "Advanced Stock Management" option is enabled).

### Add the action

To add the "Details" action, use the following function in the target AdminController:

```
$this->addRowAction('details');
```

## Ajax generalities

Ajax requests must be generated by the `ajaxProcess()` method in your AdminController.

Only one element is sent to the request: the table row's `id`. You can get it by using:

```
(int)Tools::getValue('id');
```

This `id` is defined either in the `$identifier` class attribute, or by the table name (`$table` attribute), prefixed by "id\_".

This function must display the result in JSON format.

## Performing an Ajax request on the table's structure

The expected JSON format:

```
{
  use_parent_structure: true, // Optional.
  data:                 // Here is the SQL result.
  [
    {field_name: 'value'}
  ],
  fields_display:      // $fieldsDisplay attribute for the AdminController.
}
```

Sample Ajax request code:

```
public function ajaxProcess()
{
  $query = 'SELECT * FROM mytable';
  echo Tools::jsonEncode(array(
    'data' => Db::getInstance(_PS_USE_SQL_SLAVE_)->executeS($query),
    'fields_display' => $this->fieldsDisplay
  ));
  die();
}
```

## Performing an Ajax request using your own structure

The expected JSON format:

```
{
  use_parent_structure: false,
  data: '<p>My HTML content</p>'
}
```