

# Hooks in PrestaShop 1.5

## Table of content

- [Hooks in PrestaShop 1.5](#)
  - [New & updated hooks since v1.4](#)
    - [New hooks since v1.4](#)
    - [Updated hooks since v1.4](#)
  - [Front-office and back-office](#)
    - [Existing front-office hooks](#)
    - [Existing back-office hooks](#)

## Hooks in PrestaShop 1.5

Hooks in PrestaShop 1.5 have a new naming scheme, with a situation-specific prefix:

- **action**. These hooks are triggered by specific events that take place in PrestaShop.
- **display**. These hooks result in something being displayed, either in the front-end or the back-end.

This way, you will know right away what type of hook you are dealing with. Older hooks have been renamed to match this scheme.

### New & updated hooks since v1.4

All hooks in PrestaShop have been updated for version 1.5, and several new ones were added.

#### New hooks since v1.4

| Hook name                                 | Hook description                                                                                                     | What to expect in <code>\$params</code> ? (Pseudocode)                                               |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| actionAdminControllerUpdate_optionsBefore |                                                                                                                      |                                                                                                      |
| actionAdminMetaSave                       | After saving configuration in AdminMeta.                                                                             | N/A                                                                                                  |
| actionAuthentication                      | After authentication.                                                                                                | N/A                                                                                                  |
| actionBeforeAuthentication                | Before authentication.                                                                                               | N/A                                                                                                  |
| actionCartSave                            | After saving the Cart object.                                                                                        | N/A                                                                                                  |
| actionCustomerAccountAdd                  | Called when a new customer successfully creates account.                                                             | <pre>array(   '_POST' =&gt; (array) \$_POST,   'newCustomer' =&gt; (object) Customer object );</pre> |
| actionHtaccessCreate                      | After .htaccess creation.                                                                                            | N/A                                                                                                  |
| actionObjectCategoryDeleteAfter           | Not invoked by the PrestaShop core itself - can be used after deleting a category to notify the Horizontal Top Menu. | N/A                                                                                                  |
| actionObjectCategoryUpdateAfter           | Not invoked by the PrestaShop core itself - can be used after updating a category to notify the Horizontal Top Menu. | N/A                                                                                                  |
| actionObjectCMSDeleteAfter                | Not invoked by the PrestaShop core itself - can be used after deleting a CMS page to notify the Horizontal Top Menu. | N/A                                                                                                  |

|                                     |                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| actionObjectCmsUpdateAfter          | Not invoked by the PrestaShop core itself - can be used after deleting a CMS page to notify the Horizontal Top Menu.               | N/A                                                                                                                                                                                                                                                                                                                                                                               |
| actionObjectManufacturerDeleteAfter | Not invoked by the PrestaShop core itself - can be used after deleting a manufacturer to notify the Horizontal Top Menu.           | N/A                                                                                                                                                                                                                                                                                                                                                                               |
| actionObjectManufacturerUpdateAfter | Not invoked by the PrestaShop core itself - can be used after updating a manufacturer to notify the Horizontal Top Menu.           | N/A                                                                                                                                                                                                                                                                                                                                                                               |
| actionObjectProductDeleteAfter      | Not invoked by the PrestaShop core itself - can be used after deleting a product to notify the Horizontal Top Menu.                | N/A                                                                                                                                                                                                                                                                                                                                                                               |
| actionObjectProductUpdateAfter      | Not invoked by the PrestaShop core itself - can be used after updating a product to notify the Horizontal Top Menu.                | N/A                                                                                                                                                                                                                                                                                                                                                                               |
| actionObjectSupplierDeleteAfter     | Not invoked by the PrestaShop core itself - can be used after deleting a supplier to notify the Horizontal Top Menu.               | N/A                                                                                                                                                                                                                                                                                                                                                                               |
| actionObjectSupplierUpdateAfter     | Not invoked by the PrestaShop core itself - can be used after updating a supplier to notify the Horizontal Top Menu.               | N/A                                                                                                                                                                                                                                                                                                                                                                               |
| actionOrderDetail                   | To set the follow-up in Smarty when order detail is called.                                                                        | <pre>array(     'carrier' =&gt; (object) Carrier object,     'order' =&gt; (object) Order object );</pre>                                                                                                                                                                                                                                                                         |
| actionOrderReturn                   | Called after a new Order Return has been made.                                                                                     | <pre>array(     'orderReturn' =&gt; (object) OrderReturn object );</pre>                                                                                                                                                                                                                                                                                                          |
| actionOrderSlipAdd                  | Called when the quantity of a product changes in an order. WARNING: only invoked when a product is actually removed from an order. | <pre>array(     'order' =&gt; Order object,     'productList' =&gt; array(         (int) product ID 1,         (int) product ID 2,         ...,         (int) product ID n     ),     'qtyList' =&gt; array(         (int) quantity 1,         (int) quantity 2,         ...,         (int) quantity n     ) );</pre> <p><b>The order of IDs and quantities is important!</b></p> |
| actionOrderStatusPostUpdate         | Called after the status of an order changes.                                                                                       | <pre>array(     'newOrderStatus' =&gt; (object) OrderState object,     'id_order' =&gt; (int) Order ID );</pre>                                                                                                                                                                                                                                                                   |
| actionOrderStatusUpdate             | Called before the status of an order changes.                                                                                      | <pre>array(     'newOrderStatus' =&gt; (object) OrderState object,     'id_order' =&gt; (int) Order ID );</pre>                                                                                                                                                                                                                                                                   |
| actionPaymentCCAdd                  | Payment CC added                                                                                                                   | <pre>array(     'paymentCC' =&gt; (object) OrderPayment object );</pre>                                                                                                                                                                                                                                                                                                           |
| actionPaymentConfirmation           | Called after a payment has been validated                                                                                          | <pre>array(     'id_order' =&gt; (int) Order ID );</pre>                                                                                                                                                                                                                                                                                                                          |

|                              |                                                                                      |                                                                                                                                                                                                                           |
|------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| actionSearch                 | After the search in the store.<br>Includes both instant and normal search.           | array(<br>'expr' => (string) Search query,<br>'total' => (int) Amount of search results<br>);                                                                                                                             |
| actionShopDataDuplication    | After duplicating a shop.                                                            | array(<br>'old_id_shop' => (int) Old shop ID,<br>'new_id_shop' => (int) New shop ID<br>);                                                                                                                                 |
| actionTaxManager             | Not used by PrestaShop core.                                                         | N/A                                                                                                                                                                                                                       |
| actionUpdateQuantity         | After updating the quantity of a product.                                            | array(<br>'id_product' => (int) Product ID,<br>'id_product_attribute' => (int) Product attribute ID,<br>'quantity' => (int) New product quantity<br>);                                                                    |
| actionValidateOrder          | After an order has been validated. Doesn't necessarily have to be paid.              | array(<br>'cart' => (object) Cart object,<br>'order' => (object) Order object,<br>'customer' => (object) Customer object,<br>'currency' => (object) Currency object,<br>'orderStatus' => (object) OrderState object<br>); |
| actionWatermark              | After a watermark has been added to an image.                                        | array(<br>'id_image' => (int) Image ID,<br>'id_product' => (int) Product ID<br>);                                                                                                                                         |
| displayAdminCustomers        | Can be used by modules when the tab AdminCustomers is displayed in the Back Office.  | array(<br>'id_customer' = (int) Customer ID<br>);                                                                                                                                                                         |
| displayAdminOrder            | Can be used by modules when the tab AdminOrder is displayed in the Back Office.      | array(<br>'id_order' = (int) Order ID<br>);                                                                                                                                                                               |
| displayAdminStatsGraphEngine | Not used by PrestaShop core.                                                         | N/A                                                                                                                                                                                                                       |
| displayAdminStatsGridEngine  | Not used by PrestaShop core.                                                         | N/A                                                                                                                                                                                                                       |
| displayAdminStatsModules     | Used when the statistics page in the Back Office is shown.                           | N/A                                                                                                                                                                                                                       |
| displayBackOfficeFooter      | Displayed right before the Back Office footer.                                       | N/A                                                                                                                                                                                                                       |
| displayBackOfficeHeader      | Displayed between the <head></head> tags on every Back Office page (when logged in). | N/A                                                                                                                                                                                                                       |
| displayBackOfficeHome        | Displayed on the dashboard page of the Back Office.                                  | N/A                                                                                                                                                                                                                       |
| displayBackOfficeTop         | Shown above the actual content of a Back Office page                                 | N/A                                                                                                                                                                                                                       |

|                               |                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| displayBeforeCarrier          | This hook is displayed before the carrier list on the Front Office            | <pre> array(     'carriers' =&gt; array(         array(             'name' =&gt; (string) Name,             'img' =&gt; (string) Image URL,             'delay' =&gt; (string) Delay text,             'price' =&gt; (float) Total price with tax,             'price_tax_exc' =&gt; (float) Total price without tax,             'id_carrier' =&gt; (int) intified option delivery identifier,             'id_module' =&gt; (int) Module ID         )),         'checked' =&gt; (int) intified selected carriers,         'delivery_option_list' =&gt; array(array(             0 =&gt; array( // First address                 '12,' =&gt; array( // First delivery option available for this address                     carrier_list =&gt; array(                         12 =&gt; array( // First carrier for this option                             'instance' =&gt; Carrier Object,                             'logo' =&gt; &lt;url to the carrier's logo&gt;,                             'price_with_tax' =&gt; 12.4, // Example                             'price_without_tax' =&gt; 12.4, // Example                             'package_list' =&gt; array(                                 1, // Example                                 3, // Example                             ),                         ),                     ),                     is_best_grade =&gt; true, // Does this option have the biggest grade (quick shipping) for this shipping address                     is_best_price =&gt; true, // Does this option have the lower price for this shipping address                     unique_carrier =&gt; true, // Does this option use a unique carrier                     total_price_with_tax =&gt; 12.5,                     total_price_without_tax =&gt; 12.5,                     position =&gt; 5, // Average of the carrier position                 ),             ),         )),         'delivery_option' =&gt; array(             '&lt;id_address&gt;' =&gt; Delivery option,             ...         )     ); </pre> <p>NOTE: intified means an array of integers<br/>'intified' by Cart::intifier</p> |
| displayBeforePayment          | Redirect user to the module instead of displaying payment modules             | <pre> array(     'module' =&gt; (string) Module link [e.g. /module /test/front] ); </pre>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| displayCarrierList            | Display extra carriers in the carrier list.                                   | <pre> array(     'address' =&gt; (object) Address object ); </pre>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| displayCustomerAccount        | Display on page account of the customer.                                      | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| displayCustomerAccountForm    | Display some information on the form to create a customer account.            | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| displayCustomerAccountFormTop | Display some information on the top of the form to create a customer account. | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| displayFooter                 | Add block in footer.                                                          | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

|                             |                                                                                             |                                                                                                                                                                                                                        |
|-----------------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| displayFooterProduct        | Add new blocks under the product description.                                               | N/A                                                                                                                                                                                                                    |
| displayHeader               | A hook which allow you to do things in the header of every page.                            | N/A                                                                                                                                                                                                                    |
| displayHome                 | Display on content of home page.                                                            | N/A                                                                                                                                                                                                                    |
| displayInvoice              | Add blocks to invoice (order).                                                              | N/A                                                                                                                                                                                                                    |
| displayLeftColumn           | Display in left column.                                                                     | N/A                                                                                                                                                                                                                    |
| displayLeftColumnProduct    | Display in left column on product page (not to be confused with the general left column).   | N/A                                                                                                                                                                                                                    |
| displayMyAccountBlock       | Display extra information inside the "my account" block                                     | N/A                                                                                                                                                                                                                    |
| displayMyAccountBlockFooter | Display extra information inside the "my account" block footer                              | N/A                                                                                                                                                                                                                    |
| displayOrderConfirmation    | Called on order confirmation page                                                           | <pre>array(     'total_to_pay' =&gt; (float) Total amount with tax,     'currency' =&gt; (string) Currency sign,     'objOrder' =&gt; (object) Order object,     'currencyObj' =&gt; (object) Currency object );</pre> |
| displayOrderDetail          | Displayed on order detail on front office                                                   | <pre>array(     'order' =&gt; (object) Order object );</pre>                                                                                                                                                           |
| displayPayment              | Displayed on payment page                                                                   | N/A                                                                                                                                                                                                                    |
| displayPaymentReturn        | Displayed on payment return page                                                            | <pre>array(     'total_to_pay' =&gt; (float) Total amount with tax,     'currency' =&gt; (string) Currency sign,     'objOrder' =&gt; (object) Order object,     'currencyObj' =&gt; (object) Currency object );</pre> |
| displayPaymentTop           | Top of payment page                                                                         | N/A                                                                                                                                                                                                                    |
| displayPDFInvoice           | Allow the display of extra information into the PDF invoice                                 | N/A                                                                                                                                                                                                                    |
| displayProductButtons       | Put new action buttons on product page                                                      | N/A                                                                                                                                                                                                                    |
| displayProductComparison    | Extra Product Comparison                                                                    | N/A                                                                                                                                                                                                                    |
| displayProductTab           | Called on order product page tabs                                                           | N/A                                                                                                                                                                                                                    |
| displayProductTabContent    | Called on order product page tabs                                                           | <pre>array(     'product' =&gt; (object) Product object );</pre>                                                                                                                                                       |
| displayRightColumn          | Displayed in right column.                                                                  | <pre>array(     'cart' =&gt; (object) Cart object );</pre> <p><b>Note that the Cart object can also be retrieved from the current Context.</b></p>                                                                     |
| displayRightColumnProduct   | Display in right column on product page (not to be confused with the general right column). | N/A                                                                                                                                                                                                                    |

|                           |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------|-------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| displayShoppingCart       | Display some specific information                           | <pre>array(   'delivery' =&gt; \$delivery,   'delivery_state' =&gt; State::getNameById (\$delivery-&gt;id_state),   'invoice' =&gt; \$invoice,   'invoice_state' =&gt; State::getNameById(\$invoice- &gt;id_state),   'formattedAddresses' =&gt; \$formatted_addresses,   'products' =&gt; array_values(\$products),   'gift_products' =&gt; \$gift_products,   'discounts' =&gt; \$cart_rules,   'is_virtual_cart' =&gt; (int)\$this- &gt;isVirtualCart(),   'total_discounts' =&gt; \$total_discounts,   'total_discounts_tax_exc' =&gt; \$total_discounts_tax_exc,   'total_wrapping' =&gt; \$this-&gt;getOrderTotal(true, Cart::ONLY_WRAPPING),   'total_wrapping_tax_exc' =&gt; \$this-&gt;getOrderTotal (false, Cart::ONLY_WRAPPING),   'total_shipping' =&gt; \$total_shipping,   'total_shipping_tax_exc' =&gt; \$total_shipping_tax_exc,   'total_products_wt' =&gt; \$total_products_wt,   'total_products' =&gt; \$total_products,   'total_price' =&gt; \$base_total_tax_inc,   'total_tax' =&gt; \$total_tax,   'total_price_without_tax' =&gt; \$base_total_tax_exc,   'is_multi_address_delivery' =&gt; \$this- &gt;isMultiAddressDelivery()    ((int)Tools::getValue ('multi-shipping') == 1),   'free_ship' =&gt; \$total_shipping ? 0 : 1,   'carrier' =&gt; new Carrier(\$this-&gt;id_carrier, \$id_lang), );</pre> <p>Can be found in /classes/Cart.php</p> |
| displayShoppingCartFooter | Display some specific information on the shopping cart page | <pre>array(   'delivery' =&gt; \$delivery,   'delivery_state' =&gt; State::getNameById (\$delivery-&gt;id_state),   'invoice' =&gt; \$invoice,   'invoice_state' =&gt; State::getNameById(\$invoice- &gt;id_state),   'formattedAddresses' =&gt; \$formatted_addresses,   'products' =&gt; array_values(\$products),   'gift_products' =&gt; \$gift_products,   'discounts' =&gt; \$cart_rules,   'is_virtual_cart' =&gt; (int)\$this- &gt;isVirtualCart(),   'total_discounts' =&gt; \$total_discounts,   'total_discounts_tax_exc' =&gt; \$total_discounts_tax_exc,   'total_wrapping' =&gt; \$this-&gt;getOrderTotal(true, Cart::ONLY_WRAPPING),   'total_wrapping_tax_exc' =&gt; \$this-&gt;getOrderTotal (false, Cart::ONLY_WRAPPING),   'total_shipping' =&gt; \$total_shipping,   'total_shipping_tax_exc' =&gt; \$total_shipping_tax_exc,   'total_products_wt' =&gt; \$total_products_wt,   'total_products' =&gt; \$total_products,   'total_price' =&gt; \$base_total_tax_inc,   'total_tax' =&gt; \$total_tax,   'total_price_without_tax' =&gt; \$base_total_tax_exc,   'is_multi_address_delivery' =&gt; \$this- &gt;isMultiAddressDelivery()    ((int)Tools::getValue ('multi-shipping') == 1),   'free_ship' =&gt; \$total_shipping ? 0 : 1,   'carrier' =&gt; new Carrier(\$this-&gt;id_carrier, \$id_lang), );</pre> <p>Can be found in /classes/Cart.php</p> |

Most of these hooks are the same as they were in version 1.4 of PrestaShop, but have been renamed with either an "action" or "display" prefix in order to be compatible with the new 1.5 naming scheme.

The following "updated hooks" lists were automatically generated by a script. Hook descriptions appear as they are in the PrestaShop database, and can sometimes be missing.

| Old hook name             | New hook name                | Hook description                                                        |
|---------------------------|------------------------------|-------------------------------------------------------------------------|
| AdminStatsModules         | displayAdminStatsModules     |                                                                         |
| GraphEngine               | displayAdminStatsGraphEngine |                                                                         |
| GridEngine                | displayAdminStatsGridEngine  |                                                                         |
| PDFInvoice                | displayPDFInvoice            | Allow the display of extra information into the PDF invoice             |
| addproduct                | actionProductAdd             |                                                                         |
| adminCustomers            | displayAdminCustomers        | Launch modules when the tab AdminCustomers is displayed on back-office. |
| adminOrder                | displayAdminOrder            | Launch modules when the tab AdminOrder is displayed on back-office.     |
| afterCreateHtaccess       | actionHtaccessCreate         | After <code>.htaccess</code> creation                                   |
| afterDeleteAttribute      | actionAttributeDelete        | On deleting attribute feature value                                     |
| afterDeleteAttributeGroup | actionAttributeGroupDelete   | On deleting attribute group                                             |
| afterDeleteFeature        | actionFeatureDelete          | On deleting attribute feature                                           |
| afterDeleteFeatureValue   | actionFeatureValueDelete     | On deleting attribute feature value                                     |
| afterSaveAdminMeta        | actionAdminMetaSave          | After save configuration in AdminMeta                                   |
| afterSaveAttribute        | actionAttributeSave          | On saving attribute feature value                                       |
| afterSaveAttributeGroup   | actionAttributeGroupSave     | On saving attribute group                                               |
| afterSaveFeature          | actionFeatureSave            | On saving attribute feature                                             |
| afterSaveFeatureValue     | actionFeatureValueSave       | On saving attribute feature value                                       |
| afterSaveProduct          | actionProductSave            | On saving products                                                      |
| attributeForm             | displayAttributeForm         | Add fields to the form "attribute value"                                |

|                        |                               |                                                                   |
|------------------------|-------------------------------|-------------------------------------------------------------------|
| attributeGroupForm     | displayAttributeGroupForm     | Add fields to the form "attribute group"                          |
| authentication         | actionAuthentication          |                                                                   |
| backBeforePayment      | displayBeforePayment          | Redirect user to the module instead of displaying payment modules |
| backOfficeFooter       | displayBackOfficeFooter       |                                                                   |
| backOfficeHeader       | displayBackOfficeHeader       |                                                                   |
| backOfficeHome         | displayBackOfficeHome         |                                                                   |
| backOfficeTop          | displayBackOfficeTop          |                                                                   |
| beforeAuthentication   | actionBeforeAuthentication    | Before authentication                                             |
| beforeCarrier          | displayBeforeCarrier          | This hook is display before the carrier list on Front office      |
| cancelProduct          | actionProductCancel           | This hook is called when you cancel a product in an order         |
| cart                   | actionCartSave                |                                                                   |
| categoryAddition       | actionCategoryAdd             |                                                                   |
| categoryDeletion       | actionCategoryDelete          |                                                                   |
| categoryUpdate         | actionCategoryUpdate          |                                                                   |
| createAccount          | actionCustomerAccountAdd      | Called when a new customer successfully creates an account        |
| createAccountForm      | displayCustomerAccountForm    | Display some information on the form to create a customer account |
| createAccountTop       | displayCustomerAccountFormTop |                                                                   |
| customerAccount        | displayCustomerAccount        | Display on page account of the customer                           |
| deleteProductAttribute | actionProductAttributeDelete  |                                                                   |
| deleteproduct          | actionProductDelete           | This hook is called when a product is deleted                     |
| extraCarrier           | displayCarrierList            |                                                                   |
| extraLeft              | displayLeftColumnProduct      |                                                                   |
| extraProductComparison | displayProductComparison      | Extra Product Comparison                                          |
| extraRight             | displayRightColumnProduct     |                                                                   |



|                           |                                  |                                                                 |
|---------------------------|----------------------------------|-----------------------------------------------------------------|
| featureForm               | displayFeatureForm               | Add fields to the form "feature"                                |
| featureValueForm          | displayFeatureValueForm          | Add fields to the form "feature value"                          |
| footer                    | displayFooter                    | Add block in footer                                             |
| header                    | displayHeader                    | A hook which allow you to do things in the header of each pages |
| home                      | displayHome                      |                                                                 |
| invoice                   | displayInvoice                   | Add blocks to invoice (order)                                   |
| leftColumn                | displayLeftColumn                |                                                                 |
| myAccountBlock            | displayMyAccountBlock            | Display extra information inside the "my account" block         |
| newOrder                  | actionValidateOrder              |                                                                 |
| orderConfirmation         | displayOrderConfirmation         | Called on order confirmation page                               |
| orderDetail               | actionOrderDetail                | To set the follow-up in Smarty when order detail is called      |
| orderDetailDisplayed      | displayOrderDetail               | Displayed on order detail on front office                       |
| orderReturn               | actionOrderReturn                |                                                                 |
| orderSlip                 | actionOrderSlipAdd               | Called when a quantity of one product change in an order.       |
| payment                   | displayPayment                   |                                                                 |
| paymentCCAdded            | actionPaymentCCAdd               | Payment CC added                                                |
| paymentConfirm            | actionPaymentConfirmation        |                                                                 |
| paymentReturn             | displayPaymentReturn             |                                                                 |
| paymentTop                | displayPaymentTop                | Top of payment page                                             |
| postProcessAttribute      | actionAttributePostProcess       | On post-process in admin feature value                          |
| postProcessAttributeGroup | displayAttributeGroupPostProcess | On post-process in admin attribute group                        |
| postProcessFeature        | displayFeaturePostProcess        | On post-process in admin feature                                |
| postProcessFeatureValue   | displayFeatureValuePostProcess   | On post-process in admin feature value                          |
| postUpdateOrderStatus     | actionOrderStatusPostUpdate      |                                                                 |
| processCarrier            | actionCarrierProcess             |                                                                 |

|                        |                              |                                                                         |
|------------------------|------------------------------|-------------------------------------------------------------------------|
| productActions         | displayProductButtons        | Put new action buttons on product page                                  |
| productListAssign      | actionProductListOverride    | Assign product list to a category                                       |
| productOutOfStock      | actionProductOutOfStock      | Make action while product is out of stock                               |
| productTab             | displayProductTab            | Called on order product page tabs                                       |
| productTabContent      | displayProductTabContent     | Called on order product page tabs                                       |
| productfooter          | displayFooterProduct         | Add new blocks under the product description                            |
| rightColumn            | displayRightColumn           |                                                                         |
| search                 | actionSearch                 |                                                                         |
| shoppingCart           | displayShoppingCartFooter    | Display some specific information on the shopping cart page             |
| shoppingCartExtra      | displayShoppingCart          | Display some specific information                                       |
| taxManager             | actionTaxManager             |                                                                         |
| top                    | displayTop                   | A hook which allow you to do things at the top of each pages.           |
| updateCarrier          | actionCarrierUpdate          | This hook is called when a carrier is updated                           |
| updateOrderStatus      | actionOrderStatusUpdate      | Launch modules when the order's status changes.                         |
| updateProductAttribute | actionProductAttributeUpdate |                                                                         |
| updateQuantity         | actionUpdateQuantity         | Quantity is updated only when the customer effectively place his order. |
| updateproduct          | actionProductUpdate          |                                                                         |
| watermark              | actionWatermark              |                                                                         |

## Front-office and back-office

These hooks are valid for both v1.4 and 1.5 of PrestaShop.

### Existing front-office hooks

#### Home page and general site pages

| Hook name         | Description                                                                             | What to expect in \$params? (Pseudocode) |
|-------------------|-----------------------------------------------------------------------------------------|------------------------------------------|
| displayHeader     | Called within the HTML <head> tags. Ideal location for adding JavaScript and CSS files. | N/A                                      |
| displayTop        | Called in the page's header.                                                            | N/A                                      |
| displayLeftColumn | Called when loading the left column.                                                    | N/A                                      |

|                    |                                       |                                                                                                                                                                       |
|--------------------|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| displayRightColumn | Called when loading the right column. | <pre>array(     'cart' =&gt; (object) Cart object );</pre> <p>Note that the <code>Cart</code> object can also be retrieved from the current <code>Context</code>.</p> |
| displayFooter      | Called in the page's footer.          | N/A                                                                                                                                                                   |
| displayHome        | Called at the center of the homepage. | N/A                                                                                                                                                                   |

## Product page

| Hook name                 | Description                                                                                       | What to expect in <code>\$params?</code> (Pseudocode)            |
|---------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| displayLeftColumnProduct  | Called right before the "Print" link, under the picture.                                          | N/A                                                              |
| displayRightColumnProduct | Called right after the block for the "Add to Cart" button.                                        | N/A                                                              |
| displayProductButtons     | Called inside the block for the "Add to Cart" button, right after that button.                    | N/A                                                              |
| actionProductOutOfStock   | Called inside the block for the "Add to Cart" button, right after the "Availability" information. | N/A                                                              |
| displayFooterProduct      | Called right before the tabs.                                                                     | N/A                                                              |
| displayProductTab         | Called in tabs list, such as "More info", "Data sheet", "Accessories", etc.                       | N/A                                                              |
| displayProductTabContent  | Called when a tab is clicked.                                                                     | <pre>array(     'product' =&gt; (object) Product object );</pre> |

## Cart page

| Hook name      | Description                                   | What to expect in <code>\$params?</code> (Pseudocode) |
|----------------|-----------------------------------------------|-------------------------------------------------------|
| actionCartSave | Called right after a cart creation or update. | N/A                                                   |

|                               |                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------|----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| displayShoppingCartFooter     | Called right below the cart items table.                                                           | <pre>array(     'delivery' =&gt; \$delivery,     'delivery_state' =&gt; State::getNameById(\$delivery-&gt;id_state),     'invoice' =&gt; \$invoice,     'invoice_state' =&gt; State::getNameById(\$invoice-&gt;id_state),     'formattedAddresses' =&gt; \$formatted_addresses,     'products' =&gt; array_values(\$products),     'gift_products' =&gt; \$gift_products,     'discounts' =&gt; \$cart_rules,     'is_virtual_cart' =&gt; (int)\$this-&gt;isVirtualCart(),     'total_discounts' =&gt; \$total_discounts,     'total_discounts_tax_exc' =&gt; \$total_discounts_tax_exc,     'total_wrapping' =&gt; \$this-&gt;getOrderTotal(true, Cart::ONLY_WRAPPING),     'total_wrapping_tax_exc' =&gt; \$this-&gt;getOrderTotal( false, Cart::ONLY_WRAPPING),     'total_shipping' =&gt; \$total_shipping,     'total_shipping_tax_exc' =&gt; \$total_shipping_tax_exc,     'total_products_wt' =&gt; \$total_products_wt,     'total_products' =&gt; \$total_products,     'total_price' =&gt; \$base_total_tax_inc,     'total_tax' =&gt; \$total_tax,     'total_price_without_tax' =&gt; \$base_total_tax_exc,     'is_multi_address_delivery' =&gt; \$this-&gt;isMultiAddressDelivery()    ((int)Tools::getValue( 'multi-shipping') == 1),     'free_ship' =&gt; \$total_shipping ? 0 : 1,     'carrier' =&gt; new Carrier(\$this-&gt;id_carrier, \$id_lang), );</pre> <p>Can be found in /classes/Cart.php</p> |
| displayShoppingCart           | Called after the cart's table of items, right above the navigation buttons.                        | <pre>array(     'delivery' =&gt; \$delivery,     'delivery_state' =&gt; State::getNameById(\$delivery-&gt;id_state),     'invoice' =&gt; \$invoice,     'invoice_state' =&gt; State::getNameById(\$invoice-&gt;id_state),     'formattedAddresses' =&gt; \$formatted_addresses,     'products' =&gt; array_values(\$products),     'gift_products' =&gt; \$gift_products,     'discounts' =&gt; \$cart_rules,     'is_virtual_cart' =&gt; (int)\$this-&gt;isVirtualCart(),     'total_discounts' =&gt; \$total_discounts,     'total_discounts_tax_exc' =&gt; \$total_discounts_tax_exc,     'total_wrapping' =&gt; \$this-&gt;getOrderTotal(true, Cart::ONLY_WRAPPING),     'total_wrapping_tax_exc' =&gt; \$this-&gt;getOrderTotal( false, Cart::ONLY_WRAPPING),     'total_shipping' =&gt; \$total_shipping,     'total_shipping_tax_exc' =&gt; \$total_shipping_tax_exc,     'total_products_wt' =&gt; \$total_products_wt,     'total_products' =&gt; \$total_products,     'total_price' =&gt; \$base_total_tax_inc,     'total_tax' =&gt; \$total_tax,     'total_price_without_tax' =&gt; \$base_total_tax_exc,     'is_multi_address_delivery' =&gt; \$this-&gt;isMultiAddressDelivery()    ((int)Tools::getValue( 'multi-shipping') == 1),     'free_ship' =&gt; \$total_shipping ? 0 : 1,     'carrier' =&gt; new Carrier(\$this-&gt;id_carrier, \$id_lang), );</pre> <p>Can be found in /classes/Cart.php</p> |
| displayCustomerAccountFormTop | Called within the client account creation form, right above the "Your personal information" block. | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

|                             |                                                                                                                                                     |     |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| displayCustomerAccountForm  | Called within the client account creation form, right before the "Register" button.                                                                 | N/A |
| actionCustomerAccountAdd    | Called right after the client account creation.                                                                                                     | N/A |
| displayCustomerAccount      | Called on the client account homepage, after the list of available links. Ideal location to add a link to this list.                                | N/A |
| displayMyAccountBlock       | Called within the "My account" block, in the left column, below the list of available links. This is the ideal location to add a link to this list. | N/A |
| displayMyAccountBlockFooter | Displays extra information inside the "My account" block.                                                                                           | N/A |
| actionAuthentication        | Called right after the client identification, only if the authentication is valid (e-mail address and password are both OK).                        | N/A |
| actionBeforeAuthentication  | Called right before authentication.                                                                                                                 | N/A |

### Search page

| Hook name    | Description                                                                                             | What to expect in \$params? (Pseudocode)                                                                      |
|--------------|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| actionSearch | Called after a search is performed. Ideal location to parse and/or handle the search query and results. | <pre>array(     'expr' =&gt; (string) Search query,     'total' =&gt; (int) Amount of search results );</pre> |

### Carrier choice page

| Hook name | Description | What to expect in \$params? (Pseudocode) |
|-----------|-------------|------------------------------------------|
|-----------|-------------|------------------------------------------|

|                      |                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| displayBeforeCarrier | Displayed before the carrier list on front-office.                                                                            | <pre> array(   'carriers' =&gt; array(     array(       'name' =&gt; (string) Name,       'img' =&gt; (string) Image URL,       'delay' =&gt; (string) Delay text,       'price' =&gt; (float) Total price with tax,       'price_tax_exc' =&gt; (float) Total price without tax,       'id_carrier' =&gt; (int) intified option delivery identifier,       'id_module' =&gt; (int) Module ID     )),     'checked' =&gt; (int) intified selected carriers,     'delivery_option_list' =&gt; array(array(       0 =&gt; array( // First address         '12,' =&gt; array( // First delivery option available for this address           carrier_list =&gt; array(             12 =&gt; array( // First carrier for this option               'instance' =&gt; Carrier Object,               'logo' =&gt; &lt;url to the carrier's logo&gt;,               'price_with_tax' =&gt; 12.4, // Example               'price_without_tax' =&gt; 12.4, // Example               'package_list' =&gt; array(                 1, // Example                 3, // Example               ),             ),           ),           is_best_grade =&gt; true, // Does this option have the biggest grade (quick shipping) for this shipping address           is_best_price =&gt; true, // Does this option have the lower price for this shipping address           unique_carrier =&gt; true, // Does this option use a unique carrier           total_price_with_tax =&gt; 12.5,           total_price_without_tax =&gt; 12.5,           position =&gt; 5, // Average of the carrier position         ),       ),     ),     'delivery_option' =&gt; array(       '&lt;id_address&gt;' =&gt; Delivery option,       ...     )   ); </pre> <p>NOTE: intified means an array of integers 'intified' by Cart::intifier</p> |
| displayCarrierList   | Called after the list of available carriers, during the order process. Ideal location to add a carrier, as added by a module. | <pre> array(   'address' =&gt; (object) Address object ); </pre>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

## Payment page

| Hook name         | Description                                                                                                                                                                        | What to expect in \$params? (Pseudocode) |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| displayPaymentTop | Top of payment page.                                                                                                                                                               | N/A                                      |
| displayPayment    | Called when needing to build a list of the available payment solutions, during the order process. Ideal location to enable the choice of a payment module that you have developed. | N/A                                      |

|                          |                                                                                                                                                                                     |                                                                                                                                                                                                                                        |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| displayPaymentReturn     | Called when the user is sent back to the store after having paid on the 3rd-party website. Ideal location to display a confirmation message or to give some details on the payment. | <pre>array(     'total_to_pay' =&gt; (float)     Total amount with tax,     'currency' =&gt; (string)     Currency sign,     'objOrder' =&gt; (object)     Order object,     'currencyObj' =&gt; (object)     Currency object );</pre> |
| displayOrderConfirmation | A duplicate of paymentReturn.                                                                                                                                                       | <pre>array(     'total_to_pay' =&gt; (float)     Total amount with tax,     'currency' =&gt; (string)     Currency sign,     'objOrder' =&gt; (object)     Order object,     'currencyObj' =&gt; (object)     Currency object );</pre> |
| displayBeforePayment     | Called when displaying the list of available payment solutions. Ideal location to redirect the user instead of displaying said list (i.e., 1-click PayPal checkout).                | <pre>array(     'module' =&gt; (string)     Module link [e.g. /module/test     /front] );</pre>                                                                                                                                        |

## Order page

| Hook name         | Description                                                                                             | What to expect in \$params? (Pseudocode)                                     |
|-------------------|---------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| actionOrderReturn | Called when the customer request to send his merchandise back to the store, and if now error occurs.    | <pre>array(     'orderReturn' =&gt; (object)     OrderReturn object );</pre> |
| displayPDFInvoice | Called when displaying the invoice in PDF format. Ideal location to display content within the invoice. | N/A                                                                          |

## Mobile theme hooks

All these hooks are specific to PrestaShop's default mobile theme.

The four first ones are in PrestaShop's internal hooks database, so the user can attach an action /interface to these hooks using the Modules > Positions page.

All the other ones exist in the mobile theme TPL files, but are not in the internal hooks database. A developer can still use them to attach content to specific portion of the code.

| Hook name                           | Description |
|-------------------------------------|-------------|
| displayMobileTopSiteMap             |             |
| displayMobileHeader                 |             |
| displayMobileShoppingCartTop        |             |
| displayMobileAddToCartTop           |             |
| <i>displayMobileShoppingCartTop</i> |             |
| displayMobileShoppingCartBottom     |             |
| displayMobileTopSiteMap             |             |
| displayMobileFooterChoice           |             |
| displayMobileShoppingCartTop        |             |
| displayMobileShoppingCartBottom     |             |

|                                 |  |
|---------------------------------|--|
| displayMobileIndex              |  |
| mobileCustomerAccount           |  |
| displayMobileTop                |  |
| displayMobileAddToCartTop       |  |
| displayMobileShoppingCartTop    |  |
| displayMobileShoppingCartButton |  |
| displayMobileShoppingCartBottom |  |
| displayMobileShoppingCartTop    |  |
| displayMobileShoppingCartBottom |  |

## Existing back-office hooks

### General hooks

| Hook name               | Description                                                                       | What to expect in \$params? (Pseudocode) |
|-------------------------|-----------------------------------------------------------------------------------|------------------------------------------|
| displayBackOfficeTop    | Called within the header, above the tabs.                                         | N/A                                      |
| displayBackOfficeHeader | Called between the HEAD tags. Ideal location for adding JavaScript and CSS files. | N/A                                      |
| displayBackOfficeFooter | Called within the page footer, above the "Power By PrestaShop" line.              | N/A                                      |
| displayBackOfficeHome   | Called at the center of the homepage.                                             | N/A                                      |

### Orders and order details

| Hook name                   | Description                                                                    | What to expect in \$params? (Pseudocode)                                                                                                                                                                                                    |
|-----------------------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| actionValidateOrder         | Called during the new order creation process, right after it has been created. | <pre>array(   'cart' =&gt; (object) Cart object,   'order' =&gt; (object) Order object,   'customer' =&gt; (object) Customer object,   'currency' =&gt; (object) Currency object,   'orderStatus' =&gt; (object) OrderState object );</pre> |
| actionPaymentConfirmation   | Called when an order's status becomes "Payment accepted".                      | <pre>array(   'id_order' =&gt; (int) Order ID );</pre>                                                                                                                                                                                      |
| actionOrderStatusUpdate     | Called when an order's status is changed, right before it is actually changed. | <pre>array(   'newOrderStatus' =&gt; (object) OrderState object,   'id_order' =&gt; (int) Order ID );</pre>                                                                                                                                 |
| actionOrderStatusPostUpdate | Called when an order's status is changed, right after it is actually changed.  | <pre>array(   'newOrderStatus' =&gt; (object) OrderState object,   'id_order' =&gt; (int) Order ID );</pre>                                                                                                                                 |
| actionProductCancel         | Called when an item is deleted from an order, right after the deletion.        | <pre>array(   'order' =&gt; (object) Order object,   'id_order_detail' =&gt; (int) Order Detail ID );</pre>                                                                                                                                 |



|                    |                                                                                    |                                                                                                                                                                                                                                                                                                              |
|--------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| displayInvoice     | Called when the order's details are displayed, above the Client Information block. | N/A                                                                                                                                                                                                                                                                                                          |
| displayAdminOrder  | Called when the order's details are displayed, below the Client Information block. | array(<br>'id_order' = (int) Order ID<br>);                                                                                                                                                                                                                                                                  |
| actionOrderSlipAdd | Called during the creation of a credit note, right after it has been created.      | array(<br>'order' => Order object,<br>'productList' => array(<br>(int) product ID 1,<br>(int) product ID 2,<br>...,<br>(int) product ID n<br>),<br>'qtyList' => array(<br>(int) quantity 1,<br>(int) quantity 2,<br>...,<br>(int) quantity n<br>)<br>);<br><br>The order of IDs and quantities is important! |

## Products

| Hook name                        | Description                                                                                                                                               | What to expect in \$params? (Pseudocode)                                                                                                               |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| actionProductSave                | Called when saving products.                                                                                                                              | array(<br>'id_product' => (int) Product ID<br>);                                                                                                       |
| actionUpdateQuantity             | Called during an the validation of an order, the status of which being something other than "canceled" or "Payment error", for each of the order's items. | array(<br>'id_product' => (int) Product ID,<br>'id_product_attribute' => (int) Product attribute ID,<br>'quantity' => (int) New product quantity<br>); |
| actionProductAttributeUpdate     | Called when a product declination is updated, right after said update.                                                                                    | array(<br>'id_product_attribute' => (int) Product attribute ID<br>);                                                                                   |
| actionProductAttributeDelete     | Called when a product declination is deleted.                                                                                                             | array(<br>'product' => (object) Product object<br>);                                                                                                   |
| actionWatermark                  | Called when an image is added to a product, right after said addition.                                                                                    | array(<br>'id_image' => (int) Image ID,<br>'id_product' => (int) Product ID<br>);                                                                      |
| displayAttributeForm             | Add fields to the form "attribute value".                                                                                                                 | N/A                                                                                                                                                    |
| displayAttributeGroupForm        | Add fields to the form "attribute group".                                                                                                                 | N/A                                                                                                                                                    |
| displayAttributeGroupPostProcess | Called when post-process in admin attribute group.                                                                                                        | N/A                                                                                                                                                    |
| displayFeatureForm               | Add fields to the form "feature".                                                                                                                         | N/A                                                                                                                                                    |

|                                |                                                  |     |
|--------------------------------|--------------------------------------------------|-----|
| displayFeaturePostProcess      | Called when post-process in admin feature.       | N/A |
| displayFeatureValueForm        | Add fields to the form "feature value".          | N/A |
| displayFeatureValuePostProcess | Called when post-process in admin feature value. | N/A |

### Statistics

| Hook name                    | Description                                         | What to expect in \$params? (Pseudocode) |
|------------------------------|-----------------------------------------------------|------------------------------------------|
| displayAdminStatsGraphEngine | Called when a stats graph is displayed.             | N/A                                      |
| displayAdminStatsGridEngine  | Called when the grid of stats is displayed.         | N/A                                      |
| displayAdminStatsModules     | Called when the list of stats modules is displayed. | N/A                                      |

### Clients

| Hook name             | Description                                                                                                             | What to expect in \$params? (Pseudocode) |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| displayAdminCustomers | Called when a client's details are displayed, right after the list of the clients groups the current client belongs to. | N/A                                      |

### Carriers

| Hook name           | Description                                                | What to expect in \$params? (Pseudocode)                                                                          |
|---------------------|------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| actionCarrierUpdate | Called during a carrier's update, right after said update. | <pre>array(   'id_carrier' =&gt; (int) Current Carrier ID,   'carrier' =&gt; (object) New Carrier object );</pre> |