Event Handlers

Creating an event handler in Blesta consists of merely filling in a stubbed callback method, or returning an array of callbacks from a plugin's getEvents() method. Blesta offers a number of events that are automatically triggered when needed. The default handlers for these events may be found in the **/installdir/core/Util/Events/Observers/** directory (**/installdir/components/events/default/** in the old system). You can paste your event handler code directly into any of the default handler methods, or more preferably, create a plugin to handle the event.

Events

> ⓘ **Create a Plugin to Handle these Events**
>
> Any plugin can register an event handler. To see how, check out the Plugin Events section of this manual.

> ⚠ **Deprecated Handlers**
>
> As of v4.3.0 all of the old event handlers from the Events component (under **/installdir/components/events/default/**) have been deprecated. It is highly recommended that you update your custom events to use the new namespaced event system.
>
> If your plugin uses any of the events below, you need only be sure that your event handler support the deprecated **EventObject** event as well as the new **\Blesta\Core\Util\Events\Common\EventInterface** event.

> ⚠ **Refetching Data**
>
> When using data from events (especially add events), you may find that certain fields are not available. It is often useful to refetch data using one of [Model]::get() methods rather than using something like **vars**.

Event	Triggered When	Default Event Handler	Parameters	Returns	Since
Appcontroller. preAction	A URI is requested	\Blesta\Core\Util\Events\Observers\AppController::preAction() Deprecated: EventsAppControllerCallback::preAction()	void	void	3.0
Appcontroller. structure	A URI is requested without AJAX	\Blesta\Core\Util\Events\Observers\AppController::structure() Deprecated: EventsAppControllerCallback::structure()	• **controller** - The controller being requested • **action** - The action being requested • **portal** - The portal in use ('admin' or 'client') • **get** (*since version 4.3*) - The GET page arguments • **plugin** (*since version 4.3*) - The name of the plugin in the request, if any, otherwise *null*	array Key/value pairs to be set as variables in the structure view. Special keys include: • **head** - An array of markup to set in the <head> tag • **body_start** - An array of markup to set just after the <body> tag • **body_end** - An array of markup to set just before the </body> tag	3.3

CalendarEvents. addBefore	A calendar event is created	\Blesta\Core\Util\Events\Observers\CalendarEvents::addBefore()	• **vars** - An array of input data which may include:
			  ○ **company_id** - The ID of the company under which this event was added
			  ○ **staff_id** - The ID of the staff member that created this event
			  ○ **shared*** - Whether or not this event is shared among other staff members of this company
			  ○ **title** - The title of the event
			  ○ **url*** - The URL this event is linked to
			  ○ **start_date** - The start date of the event
			  ○ **end_date** - The end date of the event
			  ○ **all_day*** - Whether or not this event spans the entire day of the start/end dates
				array
				
				Key/value pairs to be set as variables in the CalendarEvents::add() method. Special keys include:
				
				• **vars** - An array of input data which may include:
				  ○ **company_id** - The ID of the company under which this event was added
				  ○ **staff_id** - The ID of the staff member that created this event
				  ○ **shared*** - Whether or not this event is shared among other staff members of this company
				  ○ **title** - The title of the event
				  ○ **url*** - The URL this event is linked to
				  ○ **start_date** - The start date of the event
				  ○ **end_date** - The end date of the event
				  ○ **all_day*** - Whether or not this event spans the entire day of the start/end dates
					5.3

CalendarEvents.addAfter
 	
Deprecated: CalendarEvents.add
	A calendar event is created	\Blesta\Core\Util\Events\Observers\CalendarEvents::addAfter()
		
		Deprecated:
		
		• \Blesta\Core\Util\Events\Observers\CalendarEvents::add()
		• EventsCalendarEventsCallback::add()
			• **calendar_event_id** - The ID of the calendar event that was created.
			• **vars** - An array of input data which may include:
			  ○ **company_id** - The ID of the company under which this event was added
			  ○ **staff_id** - The ID of the staff member that created this event
			  ○ **shared*** - Whether or not this event is shared among other staff members of this company
			  ○ **title** - The title of the event
			  ○ **url*** - The URL this event is linked to
			  ○ **start_date** - The start date of the event
			  ○ **end_date** - The end date of the event
			  ○ **all_day*** - Whether or not this event spans the entire day of the start/end dates
				void	4.1

CalendarEvents.editBefore	A calendar event is updated	\Blesta\Core\Util\Events\Observers\CalendarEvents::editBefore()	• **calendar_event_id** - The ID of the calendar event that was updated.
			• **vars** - An array of input data which may include:
			  ○ **company_id** - The ID of the company under which this event was added
			  ○ **staff_id** - The ID of the staff member that created this event
			  ○ **shared*** - Whether or not this event is shared among other staff members of this company
			  ○ **title** - The title of the event
			  ○ **url*** - The URL this event is linked to
			  ○ **start_date** - The start date of the event
			  ○ **end_date** - The end date of the event
			  ○ **all_day*** - Whether or not this event spans the entire day of the start/end dates
				array
				
				Key/value pairs to be set as variables in the CalendarEvents::edit() method. Special keys include:
				
				• **vars** - An array of input data which may include:
				  ○ **company_id** - The ID of the company under which this event was added
				  ○ **staff_id** - The ID of the staff member that created this event
				  ○ **shared*** - Whether or not this event is shared among other staff members of this company
				  ○ **title** - The title of the event
				  ○ **url*** - The URL this event is linked to
				  ○ **start_date** - The start date of the event
				  ○ **end_date** - The end date of the event
				  ○ **all_day*** - Whether or not this event spans the entire day of the start/end dates
					5.3

CalendarEvents.editAfter
 	
Deprecated: CalendarEvents.edit
	A calendar event is updated	\Blesta\Core\Util\Events\Observers\CalendarEvents::editAfter()
		
		Deprecated:
		
		• \Blesta\Core\Util\Events\Observers\CalendarEvents::edit()
		• EventsCalendarEventsCallback::edit()
			• **calendar_event_id** - The ID of the calendar event that was updated.
			• **vars** - An array of input data which may include:
			  ○ **company_id** - The ID of the company under which this event was added
			  ○ **staff_id** - The ID of the staff member that created this event
			  ○ **shared*** - Whether or not this event is shared among other staff members of this company
			  ○ **title** - The title of the event
			  ○ **url*** - The URL this event is linked to
			  ○ **start_date** - The start date of the event
			  ○ **end_date** - The end date of the event
			  ○ **all_day*** - Whether or not this event spans the entire day of the start/end dates
			• **old_calendar_event** (*since version 4.3*) - An object representing the previous state of the calendar object
			  ○ **company_id** - The ID of the company under which this event was added
			  ○ **staff_id** - The ID of the staff member that created this event
			  ○ **shared** - Whether or not this event is shared among other staff members of this company
			  ○ **title** - The title of the event
			  ○ **url** - The URL this event is linked to
			  ○ **start_date** - The start date of the event
			  ○ **end_date** - The end date of the event
			  ○ **all_day** - Whether or not this event spans the entire day of the start/end dates
			  ○ **staff_first_name** - The first name of the staff user that create the calendar event
			  ○ **staff_last_name** - The last name of the staff user that create the calendar event
				void	4.1

CalendarEvents.deleteBefore	A calendar event is removed	\Blesta\Core\Util\Events\Observers\CalendarEvents::deleteBefore()	• **calendar_event_id** - The ID of the calendar event that was removed.	void	5.3

CalendarEvents.deleteAfter
 	
Deprecated: CalendarEvents.delete
	A calendar event is removed	\Blesta\Core\Util\Events\Observers\CalendarEvents::deleteAfter()
		
		Deprecated:
		
		• \Blesta\Core\Util\Events\Observers\CalendarEvents::delete()
		• EventsCalendarEventsCallback::delete()
			• **calendar_event_id** - The ID of the calendar event that was removed.
			• **old_calendar_event** (*since version 4.3*) - An object representing the previous state of the calendar object
			  ○ **company_id** - The ID of the company under which this event was added
			  ○ **staff_id** - The ID of the staff member that created this event
			  ○ **shared** - Whether or not this event is shared among other staff members of this company
			  ○ **title** - The title of the event
			  ○ **url** - The URL this event is linked to
			  ○ **start_date** - The start date of the event
			  ○ **end_date** - The end date of the event
			  ○ **all_day** - Whether or not this event spans the entire day of the start/end dates
			  ○ **staff_first_name** - The first name of the staff user that create the calendar event
			  ○ **staff_last_name** - The last name of the staff user that create the calendar event
				void	4.1

Event	Description	Observer	Parameters	Return	Version
ClientGroups.addBefore	A client group is created	\Blesta\Core\Util\Events\Observers\ClientGroups::addBefore()	**vars** - An array of input data which may include: **name** - The name of this group **description*** - A description of this group **company_id** - The company ID this group belongs to **color*** - The HTML color that represents this group	array Key/value pairs to be set as variables in the ClientGroups::add() method. Special keys include: **vars** - An array of input data which may include: **name** - The name of this group **description*** - A description of this group **company_id** - The company ID this group belongs to **color*** - The HTML color that represents this group	5.3
ClientGroups.addAfter Deprecated: ClientGroups.add	A client group is created	\Blesta\Core\Util\Events\Observers\ClientGroups::add() Deprecated: \Blesta\Core\Util\Events\Observers\ClientGroups::add() - EventsClientGroupsCallback::add()	**client_group_id** - The ID of the client group that was created. **vars** - An array of input data which may include: **name** - The name of this group **description*** - A description of this group **company_id** - The company ID this group belongs to **color*** - The HTML color that represents this group	void	4.1
ClientGroups.editBefore	A client group is updated	\Blesta\Core\Util\Events\Observers\ClientGroups::editBefore()	**client_group_id** - The ID of the client group that was updated. **vars** - An array of input data which may include: **name** - The name of this group **description*** - A description of this group **company_id** - The company ID this group belongs to **color*** - The HTML color that represents this group	array Key/value pairs to be set as variables in the ClientGroups::edit() method. Special keys include: **vars** - An array of input data which may include: **name** - The name of this group **description*** - A description of this group **company_id** - The company ID this group belongs to **color*** - The HTML color that represents this group	5.3
ClientGroups.editAfter Deprecated: ClientGroups.edit	A client group is updated	\Blesta\Core\Util\Events\Observers\ClientGroups::edit() Deprecated: \Blesta\Core\Util\Events\Observers\ClientGroups::edit() - EventsClientGroupsCallback::edit()	**client_group_id** - The ID of the client group that was updated. **vars** - An array of input data which may include: **name** - The name of this group **description*** - A description of this group **company_id** - The company ID this group belongs to **color*** - The HTML color that represents this group **old_client_group** (*since version 4.3*) - An object representing the previous state of the group **id** - The ID of this group **name** - The name of this group **description** - A description of this group **company_id** - The company ID this group belongs to **color**- The HTML color that represents this group	void	4.1
ClientGroups.deleteBefore	A client group is removed	\Blesta\Core\Util\Events\Observers\ClientGroups::deleteBefore()	**client_group_id** - The ID of the client group that was removed.	void	5.3
ClientGroups.deleteAfter Deprecated: ClientGroups.delete	A client group is removed	\Blesta\Core\Util\Events\Observers\ClientGroups::delete() Deprecated: \Blesta\Core\Util\Events\Observers\ClientGroups::delete() - EventsClientGroupsCallback::delete()	**client_group_id** - The ID of the client group that was removed. **old_client_group** (*since version 4.3*) - An object representing the previous state of the group **id** - The ID of this group **name** - The name of this group **description** - A description of this group **company_id** - The company ID this group belongs to **color**- The HTML color that represents this group	void	4.1
Clients.addBefore	A client is added	\Blesta\Core\Util\Events\Observers\Clients::addBefore()	**vars** - An array of input data which may include: **id_code** - The client's reference ID code **user_id** - The client's user ID **client_group_id** - The client group this user belongs to **status*** - The status of this client	array Key/value pairs to be set as variables in the Clients::add() method. Special keys include: **vars** - An array of input data which may include: **id_code** - The client's reference ID code **user_id** - The client's user ID **client_group_id** - The client group this user belongs to **status*** - The status of this client	5.3

Clients. addAfter
 	
Deprecated: Clients. add
	A client is added	\Blesta\Core\Util\Events\Observers\Clients::addAfter()
		
		Deprecated:
		
		• \Blesta\Core\Util\Events\Observers\Clients::add()
		• EventsClientsCallback::add()
			• **client_id** - The ID of the client that was added.
			• **vars** - An array of input data which may include:
			  ○ **id_code** - The client's reference ID code
			  ○ **user_id** - The client's user ID
			  ○ **client_group_id** - The client group this user belongs to
			  ○ **status*** - The status of this client
				void	4.1

Clients. addNoteBefore	A note is created	\Blesta\Core\Util\Events\Observers\Clients::addNoteBefore()	• **vars** - An array of input data which may include:
			  ○ **title** - The title of the note
			  ○ **description** - The description of the note
			  ○ **stickied*** - Whether this note is sticked or not
				array
				
				Key/value pairs to be set as variables in the Clients::addNote() method. Special keys include:
				
				• **vars** - An array of input data which may include:
				  ○ **title** - The title of the note
				  ○ **description** - The description of the note
				  ○ **stickied*** - Whether this note is sticked or not
					5.3

Clients. addNoteAfter
 	
Deprecated: Clients. addNote
	A note is created	\Blesta\Core\Util\Events\Observers\Clients::addNoteAfter()
		
		Deprecated:
		
		• \Blesta\Core\Util\Events\Observers\Clients::addNote()
		• EventsClientsCallback::addNote()
			• **note_id** - The ID of the note that was created.
			• **vars** - An array of input data which may include:
			  ○ **title** - The title of the note
			  ○ **description** - The description of the note
			  ○ **stickied*** - Whether this note is sticked or not
				void	4.1

Clients. createBefore	A client is created	\Blesta\Core\Util\Events\Observers\Clients::createBefore()	• **vars** - An array of input data which may include:
			  ○ **username** - The username for this user
			  ○ **new_password** - The password for this user
			  ○ **confirm_password** - The password for this user
			  ○ **client_group_id** - The client group this user belongs to
			  ○ **status** - The status of this client ('active', 'inactive',' 'fraud')
			  ○ **first_name** - The first name of this contact
			  ○ **last_name** - The last name of this contact
			  ○ **title** - The business title for this contact
			  ○ **company** - The company/organization this contact belongs to
			  ○ **email** - This contact's email address
			  ○ **address1** - This contact's address
			  ○ **address2** - This contact's address line two
			  ○ **city** - This contact's city (optional)
			  ○ **state** - The 3-character ISO 3166-2 subdivision code
			  ○ **zip** - The zip/postal code for this contact
			  ○ **country** - The 2-character ISO 3166-1 country code
			  ○ **numbers** - An array of number data
			  ○ **custom** - An array of custom fields in key/value format
			  ○ **settings** - An array of client settings
			  ○ **send_registration_email** - 'true' to send client welcome email, 'false' otherwise
				array
				
				Key/value pairs to be set as variables in the Clients::create() method. Special keys include:
				
				• **vars** - An array of input data which may include:
				  ○ **username** - The username for this user
				  ○ **new_password** - The password for this user
				  ○ **confirm_password** - The password for this user
				  ○ **client_group_id** - The client group this user belongs to
				  ○ **status** - The status of this client ('active', 'inactive',' 'fraud')
				  ○ **first_name** - The first name of this contact
				  ○ **last_name** - The last name of this contact
				  ○ **title** - The business title for this contact
				  ○ **company** - The company/organization this contact belongs to
				  ○ **email** - This contact's email address
				  ○ **address1** - This contact's address
				  ○ **address2** - This contact's address line two
				  ○ **city** - This contact's city (optional)
				  ○ **state** - The 3-character ISO 3166-2 subdivision code
				  ○ **zip** - The zip/postal code for this contact
				  ○ **country** - The 2-character ISO 3166-1 country code
				  ○ **numbers** - An array of number data
				  ○ **custom** - An array of custom fields in key/value format
				  ○ **settings** - An array of client settings
				  ○ **send_registration_email** - 'true' to send client welcome email, 'false' otherwise
					5.3

Clients. createAfter Deprecated: Clients. create	A client is created	\Blesta\Core\Util\Events\Observers\Clients::createAfter() Deprecated: • \Blesta\Core\Util\Events\Observers\Clients::create() • EventsClientsCallback::create()	• **client** - An object representing the client that was created.	void	3.1

Clients.editBefore	A client is updated	\Blesta\Core\Util\Events\Observers\Clients::editBefore()	• **client_id** - The ID of the client that was updated.
			• **vars** - An array of input data which may include:
			  ○ **id_code** - The client's reference ID code
			  ○ **user_id** - The client's user ID
			  ○ **client_group_id** - The client group this user belongs to
			  ○ **status*** - The status of this client
				array
				
				Key/value pairs to be set as variables in the Clients::edit() method. Special keys include:
				
				• **vars** - An array of input data which may include:
				  ○ **id_code** - The client's reference ID code
				  ○ **user_id** - The client's user ID
				  ○ **client_group_id** - The client group this user belongs to
				  ○ **status*** - The status of this client
					5.3

Clients.editAfter
 	
Deprecated: Clients.edit
	A client is updated	\Blesta\Core\Util\Events\Observers\Clients::editAfter()
		
		Deprecated:
		• \Blesta\Core\Util\Events\Observers\Clients::edit()
		• EventsClientsCallback::edit()
			• **client_id** - The ID of the client that was updated.
			• **vars** - An array of input data which may include:
			  ○ **id_code** - The client's reference ID code
			  ○ **user_id** - The client's user ID
			  ○ **client_group_id** - The client group this user belongs to
			  ○ **status*** - The status of this client
			• **old_client** (*since version 4.3*) - An object representing the previous state of the client
			  ○ **id** - Internal ID of the group
			  ○ **id_format** - The format with which to display the ID
			  ○ **id_value** - The ID of the client to use for display
			  ○ **id_code** - The client's reference ID code
			  ○ **user_id** - The client's user ID
			  ○ **client_group_id** - The client group this user belongs to
			  ○ **status** - The status of this client
			  ○ **primary_account_id** - The ID of the primary payment account for this client
			  ○ **primary_account_type** - The type pf the primary payment account for this client
			  ○ **settings** - A list of client settings
				void	4.1

Clients.editNoteBefore	A note is updated	\Blesta\Core\Util\Events\Observers\Clients::editNoteBefore()	• **note_id** - The ID of the note that was updated.
			• **vars** - An array of input data which may include:
			  ○ **title** - The title of the note
			  ○ **description** - The description of the note
			  ○ **stickied*** - Whether this note is sticked or not
				array
				
				Key/value pairs to be set as variables in the Clients::editNote() method. Special keys include:
				
				• **vars** - An array of input data which may include:
				  ○ **title** - The title of the note
				  ○ **description** - The description of the note
				  ○ **stickied*** - Whether this note is sticked or not
					5.3

Clients.editNoteAfter
 	
Deprecated: Clients.editNote
	A note is updated	\Blesta\Core\Util\Events\Observers\Clients::editNoteAfter()
		
		Deprecated:
		• \Blesta\Core\Util\Events\Observers\Clients::editNote()
		• EventsClientsCallback::editNote()
			• **note_id** - The ID of the note that was updated.
			• **vars** - An array of input data which may include:
			  ○ **title** - The title of the note
			  ○ **description** - The description of the note
			  ○ **stickied*** - Whether this note is sticked or not
			• **old_client_note** (*since version 4.3*) - An object representing the previous state of the client note
			  ○ **id** - The ID of client note
			  ○ **client_id** - The ID the client to which this note is assign
			  ○ **staff_id** - The ID of the staff member that created this note
			  ○ **title** - The title of the note
			  ○ **description** - The full description of this note
			  ○ **stickied** - Whether to display this not on the client note
			  ○ **date_added** - The timestamp in UTC that the note was added
			  ○ **date_updated** - The timestamp in UTC that the note was last updated
				void	4.1

Clients.deleteBefore	A client is removed	\Blesta\Core\Util\Events\Observers\Clients::deleteBefore()	• **client_id** - The ID of the client that was removed.	void	5.3

Clients.deleteAfter
 	
Deprecated: Clients.delete
	A client is removed	\Blesta\Core\Util\Events\Observers\Clients::deleteAfter()
		
		Deprecated:
		• \Blesta\Core\Util\Events\Observers\Clients::delete()
		• EventsClientsCallback::delete()
			• **client_id** - The ID of the client that was removed.
			• **old_client** (*since version 4.3*) - An object representing the previous state of the client
			  ○ **id** - Internal ID of the group
			  ○ **id_format** - The format with which to display the ID
			  ○ **id_value** - The ID of the client to use for display
			  ○ **id_code** - The client's reference ID code
			  ○ **user_id** - The client's user ID
			  ○ **client_group_id** - The client group this user belongs to
			  ○ **status** - The status of this client
			  ○ **primary_account_id** - The ID of the primary payment account for this client
			  ○ **primary_account_type** - The type pf the primary payment account for this client
			  ○ **settings** - A list of client settings
				void	4.1

Clients.deleteNoteBefore	A note is removed	\Blesta\Core\Util\Events\Observers\Clients::deleteNoteBefore()	• **note_id** - The ID of the note that was removed.	void	5.3

Event	Description	Observer	Parameters	Return	Version
Clients. deleteNote After Deprecated: Clients. deleteNote	A note is removed	\Blesta\Core\Util\Events\Observers\Clients::deleteNoteAfter() Deprecated: • \Blesta\Core\Util\Events\Observers\Clients::deleteNote() • EventsClientsCallback::deleteNote()	• **note_id** - The ID of the note that was removed. • **old_client_note** - An object representing the previous state of the client note ○ **id** - The ID of client note ○ **client_id** - The ID the client to which this note is assign ○ **staff_id** - The ID of the staff member that created this note ○ **title** - The title of the note ○ **description** - The full description of this note ○ **stickied** - Whether to display this not on the client note ○ **date_added** - The timestamp in UTC that the note was added ○ **date_updated** - The timestamp in UTC that the note was last updated	void	4.1
Companies. addBefore	A company is created	\Blesta\Core\Util\Events\Observers\Companies::addBefore()	• **vars** - An array of input data which may include: ○ **name** - The name of the company ○ **hostname** - The hostname of the company ○ **address*** - The address of the company ○ **phone*** - The phone number of the company ○ **fax*** - The fax number of the company	array Key/value pairs to be set as variables in the Companies::add() method. Special keys include: • **vars** - An array of input data which may include: ○ **name** - The name of the company ○ **hostname** - The hostname of the company ○ **address*** - The address of the company ○ **phone*** - The phone number of the company ○ **fax*** - The fax number of the company	5.3
Companies.addAfter Deprecated: Companies.add	A company is created	\Blesta\Core\Util\Events\Observers\Companies::addAfter() Deprecated: • \Blesta\Core\Util\Events\Observers\Companies::add() • EventsCompaniesCallback::add()	• **company_id** - The ID of the company that was created. • **vars** - An array of input data which may include: ○ **name** - The name of the company ○ **hostname** - The hostname of the company ○ **address*** - The address of the company ○ **phone*** - The phone number of the company ○ **fax*** - The fax number of the company	void	4.1
Companies. editBefore	A company is updated	\Blesta\Core\Util\Events\Observers\Companies::editBefore()	• **company_id** - The ID of the company that was updated. • **vars** - An array of input data which may include: ○ **name** - The name of the company ○ **hostname** - The hostname of the company ○ **address*** - The address of the company ○ **phone*** - The phone number of the company ○ **fax*** - The fax number of the company	array Key/value pairs to be set as variables in the Companies::edit() method. Special keys include: • **vars** - An array of input data which may include: ○ **name** - The name of the company ○ **hostname** - The hostname of the company ○ **address*** - The address of the company ○ **phone*** - The phone number of the company ○ **fax*** - The fax number of the company	5.3
Companies.editAfter Deprecated: Companies.edit	A company is updated	\Blesta\Core\Util\Events\Observers\Companies::editAfter() Deprecated: • \Blesta\Core\Util\Events\Observers\Companies::edit() • EventsCompaniesCallback::edit()	• **company_id** - The ID of the company that was updated. • **vars** - An array of input data which may include: ○ **name** - The name of the company ○ **hostname** - The hostname of the company ○ **address*** - The address of the company ○ **phone*** - The phone number of the company ○ **fax*** - The fax number of the company • **old_company** (*since version 4.3*) - An object representing the previous state of the company ○ **id** - The ID of the company ○ **name** - The name of the company ○ **hostname** - The hostname of the company ○ **address** - The address of the company ○ **phone** - The phone number of the company ○ **fax** - The fax number of the company	void	4.1
Companies. deleteBefore	A company is removed	\Blesta\Core\Util\Events\Observers\Companies::deleteBefore()	• **company_id** - The ID of the company that was removed.	void	5.3

Companies.deleteAfter Deprecated: Companies.delete	A company is removed	\Blesta\Core\Util\Events\Observers\Companies::deleteAfter() Deprecated: • \Blesta\Core\Util\Events\Observers\Companies::delete() • EventsCompaniesCallback::delete()	• **company_id** - The ID of the company that was removed. • **old_company** (*since version 4.3*) - An object representing the previous state of the company ○ **id** - The ID of the company ○ **name** - The name of the company ○ **hostname** - The hostname of the company ○ **address** - The address of the company ○ **phone** - The phone number of the company ○ **fax** - The fax number of the company	void	4.1
Contacts.addBefore	A contact is added	\Blesta\Core\Util\Events\Observers\Contacts::addBefore()	• **vars** - An array of input data which may include: ○ **client_id** - The client ID this contact will be associated with ○ **user_id** - The user ID this contact belongs to if this contact has their own unique user record ○ **contact_type*** - The type of contact ○ **contact_type_id*** - The ID of the contact type if contact_type is 'other' ○ **first_name** - The first name of this contact ○ **last_name** - The last name of this contact ○ **title*** - The business title for this contact ○ **company*** - The company/organization this contact belongs to ○ **email** - This contact's email address ○ **address1*** - This contact's address ○ **address2*** - This contact's address line two ○ **city*** - This contact's city ○ **state*** - The 3-character ISO 3166-2 subdivision code, requires country ○ **zip*** - The zip/postal code for this contact ○ **country*** - The 2-character ISO 3166-1 country code, required if state is given ○ **numbers*** An array of phone number data	array Key/value pairs to be set as variables in the Contacts::add() method. Special keys include: • **vars** - An array of input data which may include: ○ **client_id** - The client ID this contact will be associated with ○ **user_id*** - The user ID this contact belongs to if this contact has their own unique user record ○ **contact_type*** - The type of contact ○ **contact_type_id*** - The ID of the contact type if contact_type is 'other' ○ **first_name** - The first name of this contact ○ **last_name** - The last name of this contact ○ **title*** - The business title for this contact ○ **company*** - The company/organization this contact belongs to ○ **email** - This contact's email address ○ **address1*** - This contact's address ○ **address2*** - This contact's address line two ○ **city*** - This contact's city ○ **state*** - The 3-character ISO 3166-2 subdivision code, requires country ○ **zip*** - The zip/postal code for this contact ○ **country*** - The 2-character ISO 3166-1 country code, required if state is given ○ **numbers*** An array of phone number data	5.3
Contacts.addAfter Deprecated: Contacts.add	A contact is added	\Blesta\Core\Util\Events\Observers\Contacts::addAfter() Deprecated: • \Blesta\Core\Util\Events\Observers\Contacts::add() • EventsContactsCallback::add()	• **contact_id** - The ID of the contact that was created. • **vars** - An array of input data which may include: ○ **client_id** - The client ID this contact will be associated with ○ **user_id*** - The user ID this contact belongs to if this contact has their own unique user record ○ **contact_type*** - The type of contact ○ **contact_type_id*** - The ID of the contact type if contact_type is 'other' ○ **first_name** - The first name of this contact ○ **last_name** - The last name of this contact ○ **title*** - The business title for this contact ○ **company*** - The company/organization this contact belongs to ○ **email** - This contact's email address ○ **address1*** - This contact's address ○ **address2*** - This contact's address line two ○ **city*** - This contact's city ○ **state*** - The 3-character ISO 3166-2 subdivision code, requires country ○ **zip*** - The zip/postal code for this contact ○ **country*** - The 2-character ISO 3166-1 country code, required if state is given ○ **numbers*** An array of phone number data	void	4.1
Contacts.editBefore	A contact is updated	\Blesta\Core\Util\Events\Observers\Contacts::editBefore()	• **contact_id** - The ID of the contact that was updated. • **vars** - An array of input data which may include: ○ **user_id*** - The user ID this contact belongs to if this contact has their own unique user record ○ **contact_type*** - The type of contact ○ **contact_type_id*** - The ID of the contact type if contact_type is 'other' ○ **first_name** - The first name of this contact ○ **last_name** - The last name of this contact ○ **title*** - The business title for this contact ○ **company*** - The company/organization this contact belongs to ○ **email** - This contact's email address ○ **address1*** - This contact's address ○ **address2*** - This contact's address line two ○ **city*** - This contact's city ○ **state*** - The 3-character ISO 3166-2 subdivision code, requires country ○ **zip*** - The zip/postal code for this contact ○ **country*** - The 2-character ISO 3166-1 country code, required if state is given ○ **numbers*** An array of phone number data	array Key/value pairs to be set as variables in the Contacts::edit() method. Special keys include: • **vars** - An array of input data which may include: ○ **user_id*** - The user ID this contact belongs to if this contact has their own unique user record ○ **contact_type*** - The type of contact ○ **contact_type_id*** - The ID of the contact type if contact_type is 'other' ○ **first_name** - The first name of this contact ○ **last_name** - The last name of this contact ○ **title*** - The business title for this contact ○ **company*** - The company/organization this contact belongs to ○ **email** - This contact's email address ○ **address1*** - This contact's address ○ **address2*** - This contact's address line two ○ **city*** - This contact's city ○ **state*** - The 3-character ISO 3166-2 subdivision code, requires country ○ **zip*** - The zip/postal code for this contact ○ **country*** - The 2-character ISO 3166-1 country code, required if state is given ○ **numbers*** An array of phone number data	5.3

Contacts. editAfter
 	
Deprecated: Contacts.edit
	A contact is updated	\Blesta\Core\Util\Events\Observers\Contacts::editAfter()
		
		Deprecated:
		• \Blesta\Core\Util\Events\Observers\Contacts::edit()
		• EventsContactsCallback::edit()
			• **contact_id** - The ID of the contact that was updated.
			• **vars** - An array of input data which may include:
			  ○ **user_id*** - The user ID this contact belongs to if this contact has their own unique user record
			  ○ **contact_type*** - The type of contact
			  ○ **contact_type_id*** - The ID of the contact type if contact_type is 'other'
			  ○ **first_name** - The first name of this contact
			  ○ **last_name** - The last name of this contact
			  ○ **title*** - The business title for this contact
			  ○ **company*** - The company/organization this contact belongs to
			  ○ **email** - This contact's email address
			  ○ **address1*** - This contact's address
			  ○ **address2*** - This contact's address line two
			  ○ **city*** - This contact's city
			  ○ **state*** - The 3-character ISO 3166-2 subdivision code, requires country
			  ○ **zip*** - The zip/postal code for this contact
			  ○ **country*** - The 2-character ISO 3166-1 country code, required if state is given
			  ○ **numbers*** An array of phone number data
			• **old_contact** (*since version 4.3*) - An object representing the previous state of the contact
			  ○ **user_id** - The user ID this contact belongs to if this contact has their own unique user record
			  ○ **contact_type** - The type of contact
			  ○ **contact_type_name** - The name or the language indentifier of the contact type
			  ○ **contact_type_is_lang** - Whether the contact type name is a language identifier
			  ○ **contact_type_id** - The ID of the contact type if contact_type is 'other'
			  ○ **first_name** - The first name of this contact
			  ○ **last_name** - The last name of this contact
			  ○ **title** - The business title for this contact
			  ○ **company** - The company/organization this contact belongs to
			  ○ **email** - This contact's email address
			  ○ **address1** - This contact's address
			  ○ **address2** - This contact's address line two
			  ○ **city** - This contact's city
			  ○ **state** - The 3-character ISO 3166-2 subdivision code, requires country
			  ○ **zip** - The zip/postal code for this contact
			  ○ **country** - The 2-character ISO 3166-1 country code, required if state is given
			  ○ **date_added** - The timestamp in UTC that the contact was added
				void	4.1

Contacts. deleteBefore	A contact is removed	\Blesta\Core\Util\Events\Observers\Contacts::deleteBefore()	• **contact_id** - The ID of the contact that was removed.	void	5.3

Contacts. deleteAfter
 	
Deprecated: Contacts.delete
	A contact is removed	\Blesta\Core\Util\Events\Observers\Contacts::deleteAfter()
		
		Deprecated:
		• \Blesta\Core\Util\Events\Observers\Contacts::delete()
		• EventsContactsCallback::delete()
			• **contact_id** - The ID of the contact that was removed.
			• **old_contact** (*since version 4.3*) - An object representing the previous state of the contact
			  ○ **user_id** - The user ID this contact belongs to if this contact has their own unique user record
			  ○ **contact_type** - The type of contact
			  ○ **contact_type_name** - The name or the language indentifier of the contact type
			  ○ **contact_type_is_lang** - Whether the contact type name is a language identifier
			  ○ **contact_type_id** - The ID of the contact type if contact_type is 'other'
			  ○ **first_name** - The first name of this contact
			  ○ **last_name** - The last name of this contact
			  ○ **title** - The business title for this contact
			  ○ **company** - The company/organization this contact belongs to
			  ○ **email** - This contact's email address
			  ○ **address1** - This contact's address
			  ○ **address2** - This contact's address line two
			  ○ **city** - This contact's city
			  ○ **state** - The 3-character ISO 3166-2 subdivision code, requires country
			  ○ **zip** - The zip/postal code for this contact
			  ○ **country** - The 2-character ISO 3166-1 country code, required if state is given
			  ○ **date_added** - The timestamp in UTC that the contact was added
				void	4.1

Emails. send	An email template is sent	\Blesta\Core\Util\Events\Observers\Emails::send()
		
		Deprecated: EventsEmailsCallback::send()
			• **action** - The action that specifies the email group being sent
			• **options** - An array of options passed to Emails::send(), which may include:
			  ○ **to_client_id** - The ID of the client the message was sent to
			  ○ **from_staff_id** - The ID of the staff member the message was sent from
			  ○ **from** - The from address override
			  ○ **from_name** - The from name override
			  ○ **reply_to** - The reply to address override
			• **tags** - A key/value pair of replacement tags for the email.
				array
				
				Key/value pairs to merge with tags.
					3.1

Emails. sendCustom	A non-template based email is sent	\Blesta\Core\Util\Events\Observers\Emails::sendCustom()
		
		Deprecated: EventsEmailsCallback::sendCustom()
			• **options** - An array of options passed to Emails::send(), which may include:
			  ○ **to_client_id** - The ID of the client the message was sent to
			  ○ **from_staff_id** - The ID of the staff member the message was sent from
			  ○ **reply_to** - The reply to address override
			• **tags** - A key/value pair of replacement tags for the email.
				array
				
				Key/value pairs to merge with tags.
					3.1

Event	Description	Observer Method	Parameters	Returns	Version

EmailVerifications. addBefore	An email verification is added	\Blesta\Core\Util\Events\Observers\EmailVerifications:: addBefore()	- **vars** - An array of verification data including:
			  ○ **contact_id** - The ID of the contact to verify
			  ○ **email** - The email address to verify
			  ○ **token** - The email verification token
			  ○ **verified** - Whether or not the email it's verified
			  ○ **redirect_url** - The url to redirect after a successfully verification
				void	

EmailVerifications. addAfter	An email verification is added	\Blesta\Core\Util\Events\Observers\EmailVerifications:: addAfter()	- **verification_id** - The ID of the added email verification
			- **vars** - An array of verification data including:
			  ○ **contact_id** - The ID of the contact to verify
			  ○ **email** - The email address to verify
			  ○ **token** - The email verification token
			  ○ **verified** - Whether or not the email it's verified
			  ○ **redirect_url** - The url to redirect after a successfully verification
				void	5.5

EmailVerifications. editBefore	An email verification is updated	\Blesta\Core\Util\Events\Observers\EmailVerifications:: editBefore()	- **verification_id** - The ID of the email verification to update
			- **vars** - An array of verification data including:
			  ○ **contact_id** - The ID of the contact to verify
			  ○ **email** - The email address to verify
			  ○ **token** - The email verification token
			  ○ **verified** - Whether or not the email it's verified
			  ○ **redirect_url** - The url to redirect after a successfully verification
				void	5.5

EmailVerifications. editAfter	An email verification is updated	\Blesta\Core\Util\Events\Observers\EmailVerifications:: editAfter()	- **verification_id** - The ID of the updated email verification
			- **vars** - An array of verification data including:
			  ○ **contact_id** - The ID of the contact to verify
			  ○ **email** - The email address to verify
			  ○ **token** - The email verification token
			  ○ **verified** - Whether or not the email it's verified
			  ○ **redirect_url** - The url to redirect after a successfully verification
				void	5.5

EmailVerifications. deleteBefore	An email verification is deleted	\Blesta\Core\Util\Events\Observers\EmailVerifications:: deleteBefore()	- **verification_id** - The ID of the email verification to delete	void	5.5
EmailVerifications. deleteAfter	An email verification is deleted	\Blesta\Core\Util\Events\Observers\EmailVerifications:: deleteAfter()	- **verification_id** - The ID of the deleted email verification	void	5.5
EmailVerifications. verifyBefore	An email verification is verified	\Blesta\Core\Util\Events\Observers\EmailVerifications:: verifyBefore()	- **verification_id** - The ID of the email verification to verify	void	5.5
EmailVerifications. verifyAfter	An email verification is verified	\Blesta\Core\Util\Events\Observers\EmailVerifications:: verifyAfter()	- **verification_id** - The ID of the verified email verification	void	5.5

GatewayManager. addBefore	A gateway is added	\Blesta\Core\Util\Events\Observers\GatewayManager:: addBefore()	- **vars** - An array of input data which may include:
			  ○ **company_id** - The ID of the company the gateway belongs to
			  ○ **class** - The class name for this gateway
			  ○ **type** - The type of gateway
				array
				
				Key/value pairs to be set as variables in the GatewayManager::add() method. Special keys include:
				
				- **vars** - An array of input data which may include:
				  ○ **company_id** - The ID of the company the gateway belongs to
				  ○ **class** - The class name for this gateway
				  ○ **type** - The type of gateway
					5.3

GatewayManager. addAfter
 	
Deprecated: GatewayManager. add
	A gateway is added	\Blesta\Core\Util\Events\Observers\GatewayManager:: addAfter()
		
		Deprecated:
		
		- \Blesta\Core\Util\Events\Observers\GatewayManager:: add()
		- Events GatewayManagerCallback:: add()
			- **gateway_id** - The ID of the gateway that was added.
			- **vars** - An array of input data which may include:
			  ○ **company_id** - The ID of the company the gateway belongs to
			  ○ **class** - The class name for this gateway
			  ○ **type** - The type of gateway
				void	4.1

GatewayManager. editBefore	A gateway is updated	\Blesta\Core\Util\Events\Observers\GatewayManager:: editBefore()	- **gateway_id** - The ID of the gateway that was updated.
			- **vars** - An array of input data which may include:
			  ○ **name** - The name of the gateway
			  ○ **class** - The class name for this gateway
			  ○ **type** - The type of gateway
			  ○ **currencies** - A numerically indexed array of accepted currencies codes (ISO 4217)
			  ○ **meta** - A key/value array of meta data
				array
				
				Key/value pairs to be set as variables in the GatewayManager::edit() method. Special keys include:
				
				- **vars** - An array of input data which may include:
				  ○ **name** - The name of the gateway
				  ○ **class** - The class name for this gateway
				  ○ **type** - The type of gateway
				  ○ **currencies** - A numerically indexed array of accepted currencies codes (ISO 4217)
				  ○ **meta** - A key/value array of meta data
					5.3

GatewayManager.editAfter Deprecated: GatewayManager.edit	A gateway is updated	\Blesta\Core\Util\Events\Observers\GatewayManager::editAfter() Deprecated: \Blesta\Core\Util\Events\Observers\GatewayManager::edit() - EventsGatewayManagerCallback::edit()	**gateway_id** - The ID of the gateway that was updated. **vars** - An array of input data which may include: **name** - The name of the gateway **class** - The class name for this gateway **type** - The type of gateway **currencies** - A numerically indexed array of accepted currencies codes (ISO 4217) **meta** - A key/value array of meta data **old_gateway** (*since version 4.3*) - An object representing the previous state of the gateway **id** - The ID of the gateway **company_id** - The ID of the company this gateway is installed for **name** - The name of the gateway **class** - The class name for this gateway **version** - The version of the gateway **type** - The type of gateway **meta** - A list of meta data for the gateway **currencies** - A list of objects representing currencies supported by this gateway	void	4.1
GatewayManager.deleteBefore	A gateway is removed	\Blesta\Core\Util\Events\Observers\GatewayManager::deleteBefore()	**gateway_id** - The ID of the gateway that was removed.	void	5.3
GatewayManager.deleteAfter Deprecated: GatewayManager.delete	A gateway is removed	\Blesta\Core\Util\Events\Observers\GatewayManager::deleteAfter() Deprecated: \Blesta\Core\Util\Events\Observers\GatewayManager::delete() - EventsGatewayManagerCallback::delete()	**gateway_id** - The ID of the gateway that was removed. **old_gateway** (*since version 4.3*) - An object representing the previous state of the gateway **id** - The ID of the gateway **company_id** - The ID of the company this gateway is installed for **name** - The name of the gateway **class** - The class name for this gateway **version** - The version of the gateway **type** - The type of gateway **meta** - A list of meta data for the gateway **currencies** - A list of objects representing currencies supported by this gateway	void	4.1
Invoices.addBefore	An invoice is created	\Blesta\Core\Util\Events\Observers\Invoices::addBefore()	**vars** - An array of input data which may include: **client_id** - The client ID the invoice belongs to **date_billed** - The date the invoice goes into effect **date_due** - The date the invoice is due **date_closed** - The date the invoice was closed **date_autodebit** - The date the invoice should be autodebited **status** - 'active','draft','proforma', or 'void' **currency** - The ISO 4217 3-character currency code of the invoice **note_public** - Notes visible to the client **note_private** - Notes visible only to staff members **lines** - A numerically indexed array of line item info including: **term** - The term for the recurring invoice as an integer 1-65535, if blank will not be considered for a recurring invoice **period** - The period for the recurring invoice ('day', 'week', 'month', 'year') **duration** - The duration of the recurring invoice ('indefinitely' for forever or 'times' for a set number of times) **duration_time** - The number of times an invoice should recur **recur_date_billed** - The date the next invoice will be created **delivery** - A numerically indexed array of delivery methods	array Key/value pairs to be set as variables in the Invoices::add() method. Special keys include: **vars** - An array of input data which may include: **client_id** - The client ID the invoice belongs to **date_billed** - The date the invoice goes into effect **date_due** - The date the invoice is due **date_closed** - The date the invoice was closed **date_autodebit** - The date the invoice should be autodebited **status** - 'active','draft','proforma', or 'void' **currency** - The ISO 4217 3-character currency code of the invoice **note_public** - Notes visible to the client **note_private** - Notes visible only to staff members **lines** - A numerically indexed array of line item info including: **term** - The term for the recurring invoice as an integer 1-65535, if blank will not be considered for a recurring invoice **period** - The period for the recurring invoice ('day', 'week', 'month', 'year') **duration** - The duration of the recurring invoice ('indefinitely' for forever or 'times' for a set number of times) **duration_time** - The number of times an invoice should recur **recur_date_billed** - The date the next invoice will be created **delivery** - A numerically indexed array of delivery methods	5.3
Invoices.addAfter Deprecated: Invoices.add	An invoice is created	\Blesta\Core\Util\Events\Observers\Invoices::addAfter() Deprecated: \Blesta\Core\Util\Events\Observers\Invoices::add() - EventsInvoicesCallback::add()	**invoice_id** - The ID of the invoice created	void	3.1

Event	Description	Observer	Parameters	Return	Ver.
Invoices. editBefore	An invoice is updated	\Blesta\Core\Util\Events\Observers\Invoices::editBefore()	**invoice_id** - The ID of the invoice updated **vars** - An array of input data which may include: **client_id** - The client ID the invoice belongs to **date_billed** - The date the invoice goes into effect **date_due** - The date the invoice is due **date_closed** - The date the invoice was closed **date_autodebit** - The date the invoice should be autodebited **status** - 'active','draft','proforma', or 'void' **currency** - The ISO 4217 3-character currency code of the invoice **note_public** - Notes visible to the client **note_private** - Notes visible only to staff members **lines** - A numerically indexed array of line item info including: **term** - The term for the recurring invoice as an integer 1-65535, if blank will not be considered for a recurring invoice **period** - The period for the recurring invoice ('day', 'week', 'month', 'year') **duration** - The duration of the recurring invoice ('indefinitely' for forever or 'times' for a set number of times) **duration_time** - The number of times an invoice should recur **recur_date_billed** - The date the next invoice will be created **delivery** - A numerically indexed array of delivery methods	array Key/value pairs to be set as variables in the Invoices::edit() method. Special keys include: **vars** - An array of input data which may include: **client_id** - The client ID the invoice belongs to **date_billed** - The date the invoice goes into effect **date_due** - The date the invoice is due **date_closed** - The date the invoice was closed **date_autodebit** - The date the invoice should be autodebited **status** - 'active','draft','proforma', or 'void' **currency** - The ISO 4217 3-character currency code of the invoice **note_public** - Notes visible to the client **note_private** - Notes visible only to staff members **lines** - A numerically indexed array of line item info including: **term** - The term for the recurring invoice as an integer 1-65535, if blank will not be considered for a recurring invoice **period** - The period for the recurring invoice ('day', 'week', 'month', 'year') **duration** - The duration of the recurring invoice ('indefinitely' for forever or 'times' for a set number of times) **duration_time** - The number of times an invoice should recur **recur_date_billed** - The date the next invoice will be created **delivery** - A numerically indexed array of delivery methods	5.3
Invoices. editAfter Deprecated: Invoices.edit	An invoice is updated	\Blesta\Core\Util\Events\Observers\Invoices::editAfter() Deprecated: \Blesta\Core\Util\Events\Observers\Invoices::edit() - EventsInvoicesCallback::edit()	**invoice_id** - The ID of the invoice updated **old_invoice** (*since version 4.3*) - An object representing the previous state of the invoice **id** - The ID of the invoice **id_format** - The format that the ID value should be displayed in **id_value** - The ID for display **client_id** - The client ID the invoice belongs to **date_billed** - The date the invoice goes into effect **date_due** - The date the invoice is due **date_closed** - The date the invoice was closed **date_autodebit** - The date the invoice should be autodebited **autodebit** - Whether the invoice can be autodebited **status** - The status of the invoice ('active','draft','proforma', or 'void') **subtotal** - The subtotal of the invoice **total** - The total of the invoice **paid** - The amount the user has already paid on this invoice **previous_due** - The amount that was due on this invoice before the last time it was edited **currency** - The ISO 4217 3-character currency code of the invoice **note_public** - Notes visible to the client **note_private** - Notes visible only to staff members **line_items** - A list of invoice line items **delivery** - The delivery type for this invoice **meta** - A list of meta data for this invoice **tax_subtotal** - The total of inclusive taxes on this invoice **tax_total** - The total of all taxes on this invoice **taxes** - The taxes applied to this invoice	void	3.1
Invoices. setClosedBefore	An invoice is closed	\Blesta\Core\Util\Events\Observers\Invoices::setClosedBefore()	**invoice_id** - The ID of the invoice closed	void	5.3
Invoices. setClosedAfter Deprecated: Invoices.setClosed	An invoice is closed	\Blesta\Core\Util\Events\Observers\Invoices::setClosedAfter() Deprecated: \Blesta\Core\Util\Events\Observers\Invoices::setClosed() - EventsInvoicesCallback::setClosed()	**invoice_id** - The ID of the invoice closed **old_invoice** (*since version 4.3*) - An object representing the previous state of the invoice **id** - The ID of the invoice **id_format** - The format that the ID value should be displayed in **id_value** - The ID for display **client_id** - The client ID the invoice belongs to **date_billed** - The date the invoice goes into effect **date_due** - The date the invoice is due **date_closed** - The date the invoice was closed **date_autodebit** - The date the invoice should be autodebited **autodebit** - Whether the invoice can be autodebited **status** - The status of the invoice ('active','draft','proforma', or 'void') **subtotal** - The subtotal of the invoice **total** - The total of the invoice **paid** - The amount the user has already paid on this invoice **previous_due** - The amount that was due on this invoice before the last time it was edited **currency** - The ISO 4217 3-character currency code of the invoice **note_public** - Notes visible to the client **note_private** - Notes visible only to staff members **line_items** - A list of invoice line items **delivery** - The delivery type for this invoice **meta** - A list of meta data for this invoice **tax_subtotal** - The total of inclusive taxes on this invoice **tax_total** - The total of all taxes on this invoice **taxes** - The taxes applied to this invoice	void	3.1
ModuleManager. addBefore	A module is installed	\Blesta\Core\Util\Events\Observers\ModuleManager::addBefore()	**vars** - An array of input data which may include: **company_id** - The ID of the company the module belongs to **class** - The class name for this module	array Key/value pairs to be set as variables in the ModuleManager::add() method. Special keys include: **vars** - An array of input data which may include: **company_id** - The ID of the company the module belongs to **class** - The class name for this module	5.3

ModuleManager.addAfter
 	
Deprecated: ModuleManager.add
	A module is installed	\Blesta\Core\Util\Events\Observers\ModuleManager::addAfter()
		
		Deprecated:
		
		• \Blesta\Core\Util\Events\Observers\ModuleManager::add()
		• EventsModuleManagerCallback::add()
			• **module_id** - The ID of the module that was added.
			• **vars** - An array of input data which may include:
			  ◦ **company_id** - The ID of the company the module belongs to
			  ◦ **class** - The class name for this module
				void	4.1

ModuleManager.deleteBefore	A module is uninstalled	\Blesta\Core\Util\Events\Observers\ModuleManager::deleteBefore()	• **module_id** - The ID of the module that was removed.	void	5.3

ModuleManager.deleteAfter
 	
Deprecated: ModuleManager.delete
	A module is uninstalled	\Blesta\Core\Util\Events\Observers\ModuleManager::deleteAfter()
		
		Deprecated:
		
		• \Blesta\Core\Util\Events\Observers\ModuleManager::delete()
		• EventsModuleManagerCallback::delete()
			• **module_id** - The ID of the module that was removed.
			• **old_module** (*since version 4.3*) - An object representing the previous state of the module
			  ◦ **id** - The ID of the module
			  ◦ **company_id** - Company ID to which this module is attached
			  ◦ **name** - The name of the module
			  ◦ **class** - The class name for this module
			  ◦ **version** - The current version of this module
			  ◦ **meta** - The meta data associated with this module
			  ◦ **rows** - The rows belonging to this module
			  ◦ **groups** - The module row groups
				void	4.1

Navigation.getSearchOptions	Staff search options are displayed	\Blesta\Core\Util\Events\Observers\Navigation::getSearchOptions() Deprecated: EventsNavigationCallback::getSearchOptions()	• **options** - A key/value pair of search options where each key is the URI to redirect search queries to and the value is the name of the search option. When implemented, the event handler should modify the options parameter using EventObject::setParams(). • **base_uri** - The base URI for the currently logged in user.	void	3.0

Packages.addBefore	A package is created	\Blesta\Core\Util\Events\Observers\Packages::addBefore()	• **vars** - An array of input data which may include:
			  ◦ **module_id** - The ID of the module this package belongs to
			  ◦ **name** - The name of the package
			  ◦ **description** - The description of the package
			  ◦ **description_html** - The HTML description of the package
			  ◦ **qty** - The maximum quantity available in this package, if any
			  ◦ **module_row** - The module row this package belongs to
			  ◦ **module_group** - The module group this package belongs to
			  ◦ **taxable** - Whether or not this package is taxable
			  ◦ **single_term** - Whether or not services derived from this package should be canceled at the end of term
			  ◦ **status** - The status of this package
			  ◦ **company_id** - The ID of the company this package belongs to
			  ◦ **prorata_day** - The prorated day of the month
			  ◦ **prorata_cutoff** - The day of the month pro rata should cut off
			  ◦ **email_content** - A numerically indexed array of email content
			  ◦ **pricing** - A numerically indexed array of pricing info
			  ◦ **groups** - A numerically indexed array of package group assignments
			  ◦ **option_groups** - A numerically indexed array of package option group assignments
			  ◦ (any other package field data passed to the module)
				array
				
				Key/value pairs to be set as variables in the Packages::add() method. Special keys include:
				
				• **vars** - An array of input data which may include:
				  ◦ **module_id** - The ID of the module this package belongs to
				  ◦ **name** - The name of the package
				  ◦ **description** - The description of the package
				  ◦ **description_html** - The HTML description of the package
				  ◦ **qty** - The maximum quantity available in this package, if any
				  ◦ **module_row** - The module row this package belongs to
				  ◦ **module_group** - The module group this package belongs to
				  ◦ **taxable** - Whether or not this package is taxable
				  ◦ **single_term** - Whether or not services derived from this package should be canceled at the end of term
				  ◦ **status** - The status of this package
				  ◦ **company_id** - The ID of the company this package belongs to
				  ◦ **prorata_day** - The prorated day of the month
				  ◦ **prorata_cutoff** - The day of the month pro rata should cut off
				  ◦ **email_content** - A numerically indexed array of email content
				  ◦ **pricing** - A numerically indexed array of pricing info
				  ◦ **groups** - A numerically indexed array of package group assignments
				  ◦ **option_groups** - A numerically indexed array of package option group assignments
				  ◦ (any other package field data passed to the module)
					5.3

| Packages.addAfter

Deprecated: Packages.add | A package is created | \Blesta\Core\Util\Events\Observers\Packages::addAfter()

Deprecated:
- \Blesta\Core\Util\Events\Observers\Packages::add()
- EventsPackagesCallback::add() | • **package_id** - The ID of the package that was created.
• **vars** - An array of input data which may include:
  ◦ **module_id** - The ID of the module this package belongs to
  ◦ **name** - The name of the package
  ◦ **description** - The description of the package
  ◦ **description_html** - The HTML description of the package
  ◦ **qty** - The maximum quantity available in this package, if any
  ◦ **module_row** - The module row this package belongs to
  ◦ **module_group** - The module group this package belongs to
  ◦ **taxable** - Whether or not this package is taxable
  ◦ **single_term** - Whether or not services derived from this package should be canceled at the end of term
  ◦ **status** - The status of this package
  ◦ **company_id** - The ID of the company this package belongs to
  ◦ **prorata_day** - The prorated day of the month
  ◦ **prorata_cutoff** - The day of the month pro rata should cut off
  ◦ **email_content** - A numerically indexed array of email content
  ◦ **pricing** - A numerically indexed array of pricing info
  ◦ **groups** - A numerically indexed array of package group assignments
  ◦ **option_groups** - A numerically indexed array of package option group assignments
  ◦ (any other package field data passed to the module) | void | 4.1 |
| Packages.editBefore | A package is updated | \Blesta\Core\Util\Events\Observers\Packages::editBefore() | • **vars** - An array of input data which may include:
  ◦ **module_id*** - The ID of the module this package belongs to
  ◦ **name** - The name of the package
  ◦ **description*** - The description of the package
  ◦ **description_html*** - The HTML description of the package
  ◦ **qty*** - The maximum quantity available in this package, if any
  ◦ **client_qty*** - The maximum quantity available per client in this package, if any
  ◦ **module_row*** - The module row this package belongs to
  ◦ **module_group*** - The module group this package belongs to
  ◦ **taxable*** - Whether or not this package is taxable
  ◦ **single_term*** - Whether or not services derived from this package should be canceled at the end of term
  ◦ **status*** - The status of this package
  ◦ **company_id** - The ID of the company this package belongs to
  ◦ **prorata_day*** - The prorated day of the month
  ◦ **prorata_cutoff*** - The day of the month pro rata should cut off
  ◦ **email_content** - A numerically indexed array of email content
  ◦ **pricing*** - A numerically indexed array of pricing info
  ◦ **groups*** - A numerically indexed array of package group assignments
  ◦ **option_groups*** - A numerically indexed array of package option group assignments
  ◦ (any other package field data passed to the module) | array

Key/value pairs to be set as variables in the Packages::edit() method. Special keys include:

• **vars** - An array of input data which may include:
  ◦ **module_id*** - The ID of the module this package belongs to
  ◦ **name** - The name of the package
  ◦ **description*** - The description of the package
  ◦ **description_html*** - The HTML description of the package
  ◦ **qty*** - The maximum quantity available in this package, if any
  ◦ **client_qty*** - The maximum quantity available per client in this package, if any
  ◦ **module_row*** - The module row this package belongs to
  ◦ **module_group*** - The module group this package belongs to
  ◦ **taxable*** - Whether or not this package is taxable
  ◦ **single_term*** - Whether or not services derived from this package should be canceled at the end of term
  ◦ **status*** - The status of this package
  ◦ **company_id** - The ID of the company this package belongs to
  ◦ **prorata_day*** - The prorated day of the month
  ◦ **prorata_cutoff*** - The day of the month pro rata should cut off
  ◦ **email_content** - A numerically indexed array of email content
  ◦ **pricing*** - A numerically indexed array of pricing info
  ◦ **groups*** - A numerically indexed array of package group assignments
  ◦ **option_groups*** - A numerically indexed array of package option group assignments
  ◦ (any other package field data passed to the module) | 5.3 |
| Packages.editAfter

Deprecated: Packages.edit | A package is updated | \Blesta\Core\Util\Events\Observers\Packages::editAfter()

Deprecated:
- \Blesta\Core\Util\Events\Observers\Packages::edit()
- EventsPackagesCallback::edit() | • **package_id** - The ID of the package that was updated.
• **vars** - An array of input data which may include:
  ◦ **module_id*** - The ID of the module this package belongs to
  ◦ **name** - The name of the package
  ◦ **description*** - The description of the package
  ◦ **description_html*** - The HTML description of the package
  ◦ **qty*** - The maximum quantity available in this package, if any
  ◦ **client_qty*** - The maximum quantity available per client in this package, if any
  ◦ **module_row*** - The module row this package belongs to
  ◦ **module_group*** - The module group this package belongs to
  ◦ **taxable*** - Whether or not this package is taxable
  ◦ **single_term*** - Whether or not services derived from this package should be canceled at the end of term
  ◦ **status*** - The status of this package
  ◦ **company_id** - The ID of the company this package belongs to
  ◦ **prorata_day*** - The prorated day of the month
  ◦ **prorata_cutoff*** - The day of the month pro rata should cut off
  ◦ **email_content** - A numerically indexed array of email content
  ◦ **pricing*** - A numerically indexed array of pricing info
  ◦ **groups*** - A numerically indexed array of package group assignments
  ◦ **option_groups*** - A numerically indexed array of package option group assignments
  ◦ (any other package field data passed to the module)
• **old_package** (*since version 4.3*) - An object representing the previous state of the package
  ◦ **id** - The ID of the package
  ◦ **id_format** - The format with which the ID value will be displayed
  ◦ **id_value** - The ID that will be displayed
  ◦ **id_code** - The formatted ID value
  ◦ **module_id** - The ID of the module this package belongs to
  ◦ **name** - The name of the package
  ◦ **description** - The description of the package
  ◦ **description_html** - The HTML description of the package
  ◦ **qty** - The maximum quantity available in this package, if any
  ◦ **module_row** - The module row this package belongs to
  ◦ **module_group** - The module group this package belongs to
  ◦ **taxable** - Whether or not this package is taxable
  ◦ **single_term** - Whether or not services derived from this package should be canceled at the end of term
  ◦ **status** - The status of this package
  ◦ **company_id** - The ID of the company this package belongs to
  ◦ **prorata_day** - The prorated day of the month
  ◦ **prorata_cutoff** - The day of the month pro rata should cut off
  ◦ **email_content** - A numerically indexed array of email content
  ◦ **pricing** - A numerically indexed array of pricing info
  ◦ **meta** - The meta data for this package
  ◦ **groups** - A numerically indexed array of package group assignments
  ◦ **option_groups** - A numerically indexed array of package option group assignments | void | 4.1 |

Packages.deleteBefore	A package is removed	\Blesta\Core\Util\Events\Observers\Packages::deleteBefore()	• **package_id** - The ID of the package that was removed.	void	5.3

Packages.deleteAfter
 	
Deprecated: Packages.delete
	A package is removed	\Blesta\Core\Util\Events\Observers\Packages::deleteAfter()
		
		Deprecated:
		• \Blesta\Core\Util\Events\Observers\Packages::delete()
		• EventsPackagesCallback::delete()
			• **package_id** - The ID of the package that was removed.
			• **old_package** (*since version 4.3*) - An object representing the previous state of the package
			  ○ **id** - The ID of the package
			  ○ **id_format** - The format with which the ID value will be displayed
			  ○ **id_value** - The ID that will be displayed
			  ○ **id_code** - The formatted ID value
			  ○ **module_id** - The ID of the module this package belongs to
			  ○ **name** - The name of the package
			  ○ **description** - The description of the package
			  ○ **description_html** - The HTML description of the package
			  ○ **qty** - The maximum quantity available in this package, if any
			  ○ **module_row** - The module row this package belongs to
			  ○ **module_group** - The module group this package belongs to
			  ○ **taxable** - Whether or not this package is taxable
			  ○ **single_term** - Whether or not services derived from this package should be canceled at the end of term
			  ○ **status** - The status of this package
			  ○ **company_id** - The ID of the company this package belongs to
			  ○ **prorata_day** - The prorated day of the month
			  ○ **prorata_cutoff** - The day of the month pro rata should cut off
			  ○ **email_content** - A numerically indexed array of email content
			  ○ **pricing** - A numerically indexed array of pricing info
			  ○ **meta** - The meta data for this package
			  ○ **groups** - A numerically indexed array of package group assignments
			  ○ **option_groups** - A numerically indexed array of package option group assignments
				void	4.1

Report.clientData	The Client Data Portability report is run	\Blesta\Core\Util\Events\Observers\Report::clientData() Deprecated: EventsReportCallback::clientData()	• **client_id** - The ID of the client for which this report is being generated	array A list of data to add to the report	4.3

Services.addBefore	A service is added	\Blesta\Core\Util\Events\Observers\Services::addBefore()	• **vars** - An array of input data which may include:
			  ○ **parent_service_id*** - The ID of the service this service is a child of
			  ○ **package_group_id*** - The ID of the package group this service was added from
			  ○ **pricing_id** - The package pricing schedule ID for this service
			  ○ **client_id** - The ID of the client this service belongs to
			  ○ **module_row*** - The module row to add the service under
			  ○ **coupon_id*** - The ID of the coupon used for this service
			  ○ **qty*** - The quanity consumed by this service
			  ○ **override_price*** - The price to set for this service, overriding the package pricing value for the selected term
			  ○ **override_currency*** - The currency to set for this service, overriding the package pricing value for the selected term
			  ○ **status*** - The status of this service
			  ○ **date_added*** - The date this service is added
			  ○ **date_renews*** - The date the service renews
			  ○ **date_last_renewed*** - The date the service last renewed
			  ○ **date_suspended*** - The date the service was last suspended
			  ○ **date_canceled*** - The date the service was last canceled
			  ○ **use_module*** - Whether or not to use the module for this request
			  ○ **prorate** - Whether or not to prorate price changes
			  ○ **configoptions*** - An array of key/value pairs of package options where the key is the package option ID and the value is the option value
			  ○ (any other service field data passed to the module)
			• **packages** - An array of packages ordered along with this service to determine if the given coupon may be applied
			• **notify** - True to notify the client by email regarding this service creation, false to not send any notification
				array
				
				Key/value pairs to be set as variables in the Services::add() method. Special keys include:
				
				• **vars** - An array of input data which may include:
				  ○ **parent_service_id*** - The ID of the service this service is a child of
				  ○ **package_group_id*** - The ID of the package group this service was added from
				  ○ **pricing_id** - The package pricing schedule ID for this service
				  ○ **client_id** - The ID of the client this service belongs to
				  ○ **module_row*** - The module row to add the service under
				  ○ **coupon_id*** - The ID of the coupon used for this service
				  ○ **qty*** - The quanity consumed by this service
				  ○ **override_price*** - The price to set for this service, overriding the package pricing value for the selected term
				  ○ **override_currency*** - The currency to set for this service, overriding the package pricing value for the selected term
				  ○ **status*** - The status of this service
				  ○ **date_added*** - The date this service is added
				  ○ **date_renews*** - The date the service renews
				  ○ **date_last_renewed*** - The date the service last renewed
				  ○ **date_suspended*** - The date the service was last suspended
				  ○ **date_canceled*** - The date the service was last canceled
				  ○ **use_module*** - Whether or not to use the module for this request
				  ○ **prorate** - Whether or not to prorate price changes
				  ○ **configoptions*** - An array of key/value pairs of package options where the key is the package option ID and the value is the option value
				  ○ (any other service field data passed to the module)
				• **packages** - An array of packages ordered along with this service to determine if the given coupon may be applied
				• **notify** - True to notify the client by email regarding this service creation, false to not send any notification
					5.3

Event	Description	Trigger	Parameters	Returns	Version

Services.addAfter
 	
Deprecated: Services.add
	A service is added	\Blesta\Core\Util\Events\Observers\Services::addAfter()
		
		Deprecated:
		
		• \Blesta\Core\Util\Events\Observers\Services::add()
		• EventsServicesCallback::add()
			• **service_id** - The ID of the service added
			• **vars** - An array of input data which may include:
			  ○ **parent_service_id*** - The ID of the service this service is a child of
			  ○ **package_group_id*** - The ID of the package group this service was added from
			  ○ **pricing_id** - The package pricing schedule ID for this service
			  ○ **client_id** - The ID of the client this service belongs to
			  ○ **module_row*** - The module row to add the service under
			  ○ **coupon_id*** - The ID of the coupon used for this service
			  ○ **qty*** - The quanity consumed by this service
			  ○ **override_price*** - The price to set for this service, overriding the package pricing value for the selected term
			  ○ **override_currency*** - The currency to set for this service, overriding the package pricing value for the selected term
			  ○ **status*** - The status of this service
			  ○ **date_added*** - The date this service is added
			  ○ **date_renews*** - The date the service renews
			  ○ **date_last_renewed*** - The date the service last renewed
			  ○ **date_suspended*** - The date the service was last suspended
			  ○ **date_canceled*** - The date the service was last canceled
			  ○ **use_module*** - Whether or not to use the module for this request
			  ○ **prorate** - Whether or not to prorate price changes
			  ○ **configoptions*** - An array of key/value pairs of package options where the key is the package option ID and the value is the option value
			  ○ (any other service field data passed to the module)
				void	3.4

Services.editBefore	A service is edited	\Blesta\Core\Util\Events\Observers\Services::editBefore()	• **service_id** - The ID of the service edited
			• **vars** - An array of input data which may include:
			  ○ **parent_service_id*** - The ID of the service this service is a child of
			  ○ **package_group_id*** - The ID of the package group this service was added from
			  ○ **pricing_id** - The package pricing schedule ID for this service
			  ○ **client_id** - The ID of the client this service belongs to
			  ○ **module_row*** - The module row to add the service under
			  ○ **coupon_id*** - The ID of the coupon used for this service
			  ○ **qty*** - The quanity consumed by this service
			  ○ **override_price*** - The price to set for this service, overriding the package pricing value for the selected term
			  ○ **override_currency*** - The currency to set for this service, overriding the package pricing value for the selected term
			  ○ **status*** - The status of this service
			  ○ **date_added*** - The date this service is added
			  ○ **date_renews*** - The date the service renews
			  ○ **date_last_renewed*** - The date the service last renewed
			  ○ **date_suspended*** - The date the service was last suspended
			  ○ **date_canceled*** - The date the service was last canceled
			  ○ **use_module*** - Whether or not to use the module for this request
			  ○ **prorate** - Whether or not to prorate price changes
			  ○ **configoptions*** - An array of key/value pairs of package options where the key is the package option ID and the value is the option value
			  ○ (any other service field data passed to the module)
			• **bypass_module** - $vars['use_module'] notifies the module of whether or not it should internally use its module connection to process the request, however in some instances it may be necessary to prevent the module from being notified of the request altogether. If true, this will prevent the module from being notified of the request.
			• **notify** - True to notify the client by email regarding this service creation, false to not send any notification
				array
				
				Key/value pairs to be set as variables in the Services::edit() method. Special keys include:
				
				• **vars** - An array of input data which may include:
				  ○ **parent_service_id*** - The ID of the service this service is a child of
				  ○ **package_group_id*** - The ID of the package group this service was added from
				  ○ **pricing_id** - The package pricing schedule ID for this service
				  ○ **client_id** - The ID of the client this service belongs to
				  ○ **module_row*** - The module row to add the service under
				  ○ **coupon_id*** - The ID of the coupon used for this service
				  ○ **qty*** - The quanity consumed by this service
				  ○ **override_price*** - The price to set for this service, overriding the package pricing value for the selected term
				  ○ **override_currency*** - The currency to set for this service, overriding the package pricing value for the selected term
				  ○ **status*** - The status of this service
				  ○ **date_added*** - The date this service is added
				  ○ **date_renews*** - The date the service renews
				  ○ **date_last_renewed*** - The date the service last renewed
				  ○ **date_suspended*** - The date the service was last suspended
				  ○ **date_canceled*** - The date the service was last canceled
				  ○ **use_module*** - Whether or not to use the module for this request
				  ○ **prorate** - Whether or not to prorate price changes
				  ○ **configoptions*** - An array of key/value pairs of package options where the key is the package option ID and the value is the option value
				  ○ (any other service field data passed to the module)
				• **bypass_module** - $vars['use_module'] notifies the module of whether or not it should internally use its module connection to process the request, however in some instances it may be necessary to prevent the module from being notified of the request altogether. If true, this will prevent the module from being notified of the request.
				• **notify** - True to notify the client by email regarding this service creation, false to not send any notification
					5.3

| Services. editAfter

Deprecated: Services.edit | A service is edited | \Blesta\Core\Util\Events\Observers\Services::editAfter()

Deprecated:
- \Blesta\Core\Util\Events\Observers\Services::edit()
- EventsServicesCallback::edit() | • **service_id** - The ID of the service edited
• **vars** - An array of input data which may include:
  ○ **parent_service_id*** - The ID of the service this service is a child of
  ○ **package_group_id*** - The ID of the package group this service was added from
  ○ **pricing_id** - The package pricing schedule ID for this service
  ○ **client_id** - The ID of the client this service belongs to
  ○ **module_row*** - The module row to add the service under
  ○ **coupon_id*** - The ID of the coupon used for this service
  ○ **qty*** - The quanity consumed by this service
  ○ **override_price*** - The price to set for this service, overriding the package pricing value for the selected term
  ○ **override_currency*** - The currency to set for this service, overriding the package pricing value for the selected term
  ○ **status*** - The status of this service
  ○ **date_added*** - The date this service is added
  ○ **date_renews*** - The date the service renews
  ○ **date_last_renewed*** - The date the service last renewed
  ○ **date_suspended*** - The date the service was last suspended
  ○ **date_canceled*** - The date the service was last canceled
  ○ **use_module*** - Whether or not to use the module for this request
  ○ **prorate** - Whether or not to prorate price changes
  ○ **configoptions*** - An array of key/value pairs of package options where the key is the package option ID and the value is the option value
  ○ (any other service field data passed to the module)
• **old_service** (*since version 4.3*) - An object representing the previous state of the service
  ○ **id** - The ID of the service
  ○ **parent_service_id** - The ID of the service this service is a child of
  ○ **package_group_id** - The ID of the package group this service was added from
  ○ **id_format** - The format with which the ID value will be displayed
  ○ **id_value** - The ID that will be displayed
  ○ **id_code** - The formatted ID value
  ○ **pricing_id** - The package pricing schedule ID for this service
  ○ **client_id** - The ID of the client this service belongs to
  ○ **module_row_id** - The ID of the module row this service was assigned to
  ○ **coupon_id** - The ID of the coupon used for this service
  ○ **qty** - The quanity consumed by this service
  ○ **override_price** - The price to set for this service, overriding the package pricing value for the selected term
  ○ **override_currency** - The currency to set for this service, overriding the package pricing value for the selected term
  ○ **status** - The status of this service
  ○ **suspension_reason** - The reason given (if any) for the last time this service was suspended
  ○ **date_added** - The date this service is added
  ○ **date_renews** - The date the service renews
  ○ **date_last_renewed** - The date the service last renewed
  ○ **date_suspended** - The date the service was last suspended
  ○ **date_canceled** - The date the service was last canceled
  ○ **fields** - A list of service fields
  ○ **package_pricing** - An object representing the pricing scheme applied to this service
  ○ **package** - An object representing the package this service was create from
  ○ **options** - A list of service options
  ○ **name** - The name of the service which is derived either from the package or the module this servie belongs to | void | 3.4 |
| Services. cancelBefore | A service is scheduled to be canceled, or is canceled | \Blesta\Core\Util\Events\Observers\Services::cancelBefore() | • **service_id** - The ID of the service canceled
• **vars** - An array of input data which may include:
  ○ **date_canceled** - The date this service is scheduled to be canceled
  ○ **status** - The status of the service (i.e. 'canceled')
  ○ **use_module** - Whether or not to use the module for this request | array

Key/value pairs to be set as variables in the Services::cancel() method. Special keys include:

• **vars** - An array of input data which may include:
  ○ **date_canceled** - The date this service is scheduled to be canceled
  ○ **status** - The status of the service (i.e. 'canceled')
  ○ **use_module** - Whether or not to use the module for this request | 5.3 |

Services.cancelAfter
 	
Deprecated: Services.cancel
	A service is scheduled to be canceled, or is canceled	\Blesta\Core\Util\Events\Observers\Services::cancelAfter()
		
		Deprecated:
		• \Blesta\Core\Util\Events\Observers\Services::cancel()
		• EventsServicesCallback::cancel()
			• **service_id** - The ID of the service canceled
			• **vars** - An array of input data which may include:
			  ◦ **date_canceled** - The date this service is scheduled to be canceled
			  ◦ **status** - The status of the service (i.e. 'canceled')
			  ◦ **use_module** - Whether or not to use the module for this request
			• **old_service** (*since version 4.3*) - An object representing the previous state of the service
			  ◦ **id** - The ID of the service
			  ◦ **parent_service_id** - The ID of the service this service is a child of
			  ◦ **package_group_id** - The ID of the package group this service was added from
			  ◦ **id_format** - The format with which the ID value will be displayed
			  ◦ **id_value** - The ID that will be displayed
			  ◦ **id_code** - The formatted ID value
			  ◦ **pricing_id** - The package pricing schedule ID for this service
			  ◦ **client_id** - The ID of the client this service belongs to
			  ◦ **module_row_id** - The ID of the module row this service was assigned to
			  ◦ **coupon_id** - The ID of the coupon used for this service
			  ◦ **qty** - The quanity consumed by this service
			  ◦ **override_price** - The price to set for this service, overriding the package pricing value for the selected term
			  ◦ **override_currency** - The currency to set for this service, overriding the package pricing value for the selected term
			  ◦ **status** - The status of this service
			  ◦ **suspension_reason** - The reason given (if any) for the last time this service was suspended
			  ◦ **date_added** - The date this service is added
			  ◦ **date_renews** - The date the service renews
			  ◦ **date_last_renewed** - The date the service last renewed
			  ◦ **date_suspended** - The date the service was last suspended
			  ◦ **date_canceled** - The date the service was last canceled
			  ◦ **fields** - A list of service fields
			  ◦ **package_pricing** - An object representing the pricing scheme applied to this service
			  ◦ **package** - An object representing the package this service was create from
			  ◦ **options** - A list of service options
			  ◦ **name** - The name of the service which is derived either from the package or the module this servie belongs to
				void	3.5

Services.suspendBefore	A service is suspended	\Blesta\Core\Util\Events\Observers\Services::suspendBefore()	• **service_id** - The ID of the service suspended
			• **vars** - An array of input data which may include:
			  ◦ **date_suspended** The date the service was suspended
			  ◦ **status** - The status of the service (i.e. 'suspended')
			  ◦ **use_module** - Whether or not to use the module for this request
			  ◦ **staff_id** - The ID of the staff member that issued the service suspension
				array
				
				Key/value pairs to be set as variables in the Services::suspend() method. Special keys include:
				
				• **vars** - An array of input data which may include:
				  ◦ **date_suspended** The date the service was suspended
				  ◦ **status** - The status of the service (i.e. 'suspended')
				  ◦ **use_module** - Whether or not to use the module for this request
				  ◦ **staff_id** - The ID of the staff member that issued the service suspension
					5.3

Services.suspendAfter
 	
Deprecated: Services.suspend
	A service is suspended	\Blesta\Core\Util\Events\Observers\Services::suspendAfter()
		
		Deprecated:
		• \Blesta\Core\Util\Events\Observers\Services::suspend()
		• EventsServicesCallback::suspend()
			• **service_id** - The ID of the service suspended
			• **vars** - An array of input data which may include:
			  ◦ **date_suspended** The date the service was suspended
			  ◦ **status** - The status of the service (i.e. 'suspended')
			  ◦ **use_module** - Whether or not to use the module for this request
			  ◦ **staff_id** - The ID of the staff member that issued the service suspension
			• **old_service** (*since version 4.3*) - An object representing the previous state of the service
			  ◦ **id** - The ID of the service
			  ◦ **parent_service_id** - The ID of the service this service is a child of
			  ◦ **package_group_id** - The ID of the package group this service was added from
			  ◦ **id_format** - The format with which the ID value will be displayed
			  ◦ **id_value** - The ID that will be displayed
			  ◦ **id_code** - The formatted ID value
			  ◦ **pricing_id** - The package pricing schedule ID for this service
			  ◦ **client_id** - The ID of the client this service belongs to
			  ◦ **module_row_id** - The ID of the module row this service was assigned to
			  ◦ **coupon_id** - The ID of the coupon used for this service
			  ◦ **qty** - The quanity consumed by this service
			  ◦ **override_price** - The price to set for this service, overriding the package pricing value for the selected term
			  ◦ **override_currency** - The currency to set for this service, overriding the package pricing value for the selected term
			  ◦ **status** - The status of this service
			  ◦ **suspension_reason** - The reason given (if any) for the last time this service was suspended
			  ◦ **date_added** - The date this service is added
			  ◦ **date_renews** - The date the service renews
			  ◦ **date_last_renewed** - The date the service last renewed
			  ◦ **date_suspended** - The date the service was last suspended
			  ◦ **date_canceled** - The date the service was last canceled
			  ◦ **fields** - A list of service fields
			  ◦ **package_pricing** - An object representing the pricing scheme applied to this service
			  ◦ **package** - An object representing the package this service was create from
			  ◦ **options** - A list of service options
			  ◦ **name**- The name of the service which is derived either from the package or the module this servie belongs to
				void	3.5

Event	Description	Observer	Parameters	Returns	Version
Services. unsuspen dBefore	A service is unsuspended	\Blesta\Core\Ut il\Events\Obser vers\Services:: unsuspendBefo re()	**service_id** - The ID of the service unsuspended **vars** - An array of input data which may include: **date_suspended** The date the service was suspended (i.e. null) **status** - The status of the service (i.e. 'active') **use_module** - Whether or not to use the module for this request **staff_id** - The ID of the staff member that issued the service unsuspension	array Key/value pairs to be set as variables in the Services::unsuspend() method. Special keys include: **vars** - An array of input data which may include: **date_suspended** The date the service was suspended (i.e. null) **status** - The status of the service (i.e. 'active') **use_module** - Whether or not to use the module for this request **staff_id** - The ID of the staff member that issued the service unsuspension	5.3
Services. unsuspen dAfter Deprecate d: Service s. unsuspend	A service is unsuspended	\Blesta\Core\Ut il\Events\Obser vers\Services:: unsuspendAfte r() Deprecated: \Blesta\ Core\Uti l\Events \Observ ers\Serv ices:: unsuspe nd() - EventsS ervices Callbac k:: unsuspe nd()	**service_id** - The ID of the service unsuspended **vars** - An array of input data which may include: **date_suspended** The date the service was suspended (i.e. null) **status** - The status of the service (i.e. 'active') **use_module** - Whether or not to use the module for this request **staff_id** - The ID of the staff member that issued the service unsuspension **old_service** (*since version 4.3*) - An object representing the previous state of the service **id** - The ID of the service **parent_service_id** - The ID of the service this service is a child of **package_group_id** - The ID of the package group this service was added from **id_format** - The format with which the ID value will be displayed **id_value** - The ID that will be displayed **id_code** - The formatted ID value **pricing_id** - The package pricing schedule ID for this service **client_id** - The ID of the client this service belongs to **module_row_id** - The ID of the module row this service was assigned to **coupon_id** - The ID of the coupon used for this service **qty** - The quanity consumed by this service **override_price** - The price to set for this service, overriding the package pricing value for the selected term **override_currency** - The currency to set for this service, overriding the package pricing value for the selected term **status** - The status of this service **suspension_reason** - The reason given (if any) for the last time this service was suspended **date_added** - The date this service is added **date_renews** - The date the service renews **date_last_renewed** - The date the service last renewed **date_suspended** - The date the service was last suspended **date_canceled** - The date the service was last canceled **fields** - A list of service fields **package_pricing** - An object representing the pricing scheme applied to this service **package** - An object representing the package this service was create from **options** - A list of service options **name** - The name of the service which is derived either from the package or the module this servie belongs to	void	3.5
Staff. addBefore	A staff is created	\Blesta\Core\Ut il\Events\Obser vers\Staff:: addBefore()	**vars** - An array of input data which may include: **user_id** - The user ID belonging to this staff member **first_name** - The first name of this staff member **last_name** - The last name of this staff member **email** - The email address of this staff member **email_mobile** - The mobile email address of this staff member **status*** - The status of this staff member **groups** - An array of staff group IDs this staff member belongs to	array Key/value pairs to be set as variables in the Staff::add() method. Special keys include: **vars** - An array of input data which may include: **user_id** - The user ID belonging to this staff member **first_name** - The first name of this staff member **last_name** - The last name of this staff member **email** - The email address of this staff member **email_mobile** - The mobile email address of this staff member **status*** - The status of this staff member **groups** - An array of staff group IDs this staff member belongs to	5.3
Staff. addAfter Deprecate d: Staff. add	A staff is created	\Blesta\Core\Ut il\Events\Obser vers\Staff:: addAfter() Deprecated: \Blesta\ Core\Uti l\Events \Observ ers\Staff ::add() - EventsS taffCallb ack:: add()	**staff_id** - The ID of the staff that was created. **vars** - An array of input data which may include: **user_id** - The user ID belonging to this staff member **first_name** - The first name of this staff member **last_name** - The last name of this staff member **email** - The email address of this staff member **email_mobile** - The mobile email address of this staff member **status*** - The status of this staff member **groups** - An array of staff group IDs this staff member belongs to	void	4.1

Staff.editBefore	A staff is updated	\Blesta\Core\Util\Events\Observers\Staff::editBefore()	• **staff_id** - The ID of the staff that was updated.
			• **vars** - An array of input data which may include:
			  ○ **user_id** - The user ID belonging to this staff member
			  ○ **first_name** - The first name of this staff member
			  ○ **last_name** - The last name of this staff member
			  ○ **email** - The email address of this staff member
			  ○ **email_mobile** - The mobile email address of this staff member
			  ○ **status*** - The status of this staff member
			  ○ **groups** - An array of staff group IDs this staff member belongs to
				array
				
				Key/value pairs to be set as variables in the Staff::edit() method. Special keys include:
				
				• **vars** - An array of input data which may include:
				  ○ **user_id** - The user ID belonging to this staff member
				  ○ **first_name** - The first name of this staff member
				  ○ **last_name** - The last name of this staff member
				  ○ **email** - The email address of this staff member
				  ○ **email_mobile** - The mobile email address of this staff member
				  ○ **status*** - The status of this staff member
				  ○ **groups** - An array of staff group IDs this staff member belongs to
					5.3

Staff.editAfter
 	
Deprecated: Staff.edit
	A staff is updated	\Blesta\Core\Util\Events\Observers\Staff::editAfter()
		
		Deprecated:
		• \Blesta\Core\Util\Events\Observers\Staff::edit()
		• EventsStaffCallback::edit()
			• **staff_id** - The ID of the staff that was updated.
			• **vars** - An array of input data which may include:
			  ○ **user_id** - The user ID belonging to this staff member
			  ○ **first_name** - The first name of this staff member
			  ○ **last_name** - The last name of this staff member
			  ○ **email** - The email address of this staff member
			  ○ **email_mobile** - The mobile email address of this staff member
			  ○ **status*** - The status of this staff member
			  ○ **groups** - An array of staff group IDs this staff member belongs to
			• **old_staff** (*since version 4.3*) - An object representing the previous state of the staff member
			  ○ **id** - The ID of this staff member
			  ○ **user_id** - The user ID belonging to this staff member
			  ○ **first_name** - The first name of this staff member
			  ○ **last_name** - The last name of this staff member
			  ○ **email** - The email address of this staff member
			  ○ **email_mobile** - The mobile email address of this staff member
			  ○ **status** - The status of this staff member
			  ○ **username** - The user name of this staff member
			  ○ **two_factor_mode** - Whether and how two factor authentication is being used for this staff member
			  ○ **two_factor_pin** - The two factor pin (if any) for this staff member
			  ○ **two_factor_key** - The two factor key (if any) for this staff member
			  ○ **groups** - An array of staff groups this staff member belongs to
			  ○ **settings** - A list of staff settings
			  ○ **notices** - A list of notices assigned to this staff member
				void	4.1

Transactions.addBefore	A transaction is created	\Blesta\Core\Util\Events\Observers\Transactions::addBefore()	• **vars** - An array of input data which may include:
			  ○ **id** - The ID of this transaction
			  ○ **client_id** - The ID of the client this transaction was applied for
			  ○ **amount** - The amount this transaction was for
			  ○ **currency** - The currency of this transaction
			  ○ **type** - The transaction type (cc, ach, other)
			  ○ **transaction_type_id** - The transaction type ID (if any)
			  ○ **account_id** - The ID of the payment account (if any) associated with this transaction
			  ○ **gateway_id** - The ID of the gateway this transaction was made through
			  ○ **gateway_name** - The name of the gateway this transaction was made through
			  ○ **gateway_type** - The type of gateway this transaction was made through (merchant or non-merchant)
			  ○ **reference_id** - The external ID stored for reference to the gateway records
			  ○ **transaction_id** - The gateway supplied transaction ID
			  ○ **parent_transaction_id** - The gateway supplied parent transaction ID
			  ○ **status** - The status of this transaction
			  ○ **date_added** - The date this transaction was received
				array
				
				Key/value pairs to be set as variables in the Transactions::add() method. Special keys include:
				
				• **vars** - An array of input data which may include:
				  ○ **id** - The ID of this transaction
				  ○ **client_id** - The ID of the client this transaction was applied for
				  ○ **amount** - The amount this transaction was for
				  ○ **currency** - The currency of this transaction
				  ○ **type** - The transaction type (cc, ach, other)
				  ○ **transaction_type_id** - The transaction type ID (if any)
				  ○ **account_id** - The ID of the payment account (if any) associated with this transaction
				  ○ **gateway_id** - The ID of the gateway this transaction was made through
				  ○ **gateway_name** - The name of the gateway this transaction was made through
				  ○ **gateway_type** - The type of gateway this transaction was made through (merchant or non-merchant)
				  ○ **reference_id** - The external ID stored for reference to the gateway records
				  ○ **transaction_id** - The gateway supplied transaction ID
				  ○ **parent_transaction_id** - The gateway supplied parent transaction ID
				  ○ **status** - The status of this transaction
				  ○ **date_added** - The date this transaction was received
					5.3

Transactions.addAfter Deprecated: Transactions.add	A transaction is created	\Blesta\Core\Util\Events\Observers\Transactions::addAfter() Deprecated: • \Blesta\Core\Util\Events\Observers\Transactions::add() • EventsTransactionsCallback::add()	• **transaction_id** - The ID of the transaction created	void	3.1

Transactions. editBefore	A transaction is updated	\Blesta\Core\Util\Events\Observers\Transactions::editBefore()	• **transaction_id** - The ID of the transaction updated
			• **staff_id** - The ID of the staff member that made the edit for logging purposes
			• **vars** - An array of input data which may include:
			  ○ **id** - The ID of this transaction
			  ○ **client_id** - The ID of the client this transaction was applied for
			  ○ **amount** - The amount this transaction was for
			  ○ **currency** - The currency of this transaction
			  ○ **type** - The transaction type (cc, ach, other)
			  ○ **transaction_type_id** - The transaction type ID (if any)
			  ○ **account_id** - The ID of the payment account (if any) associated with this transaction
			  ○ **gateway_id** - The ID of the gateway this transaction was made through
			  ○ **gateway_name** - The name of the gateway this transaction was made through
			  ○ **gateway_type** - The type of gateway this transaction was made through (merchant or non-merchant)
			  ○ **reference_id** - The external ID stored for reference to the gateway records
			  ○ **transaction_id** - The gateway supplied transaction ID
			  ○ **parent_transaction_id** - The gateway supplied parent transaction ID
			  ○ **status** - The status of this transaction
			  ○ **date_added** - The date this transaction was received
				array
				
				Key/value pairs to be set as variables in the Transactions::edit() method. Special keys include:
				
				• **vars** - An array of input data which may include:
				  ○ **id** - The ID of this transaction
				  ○ **client_id** - The ID of the client this transaction was applied for
				  ○ **amount** - The amount this transaction was for
				  ○ **currency** - The currency of this transaction
				  ○ **type** - The transaction type (cc, ach, other)
				  ○ **transaction_type_id** - The transaction type ID (if any)
				  ○ **account_id** - The ID of the payment account (if any) associated with this transaction
				  ○ **gateway_id** - The ID of the gateway this transaction was made through
				  ○ **gateway_name** - The name of the gateway this transaction was made through
				  ○ **gateway_type** - The type of gateway this transaction was made through (merchant or non-merchant)
				  ○ **reference_id** - The external ID stored for reference to the gateway records
				  ○ **transaction_id** - The gateway supplied transaction ID
				  ○ **parent_transaction_id** - The gateway supplied parent transaction ID
				  ○ **status** - The status of this transaction
				  ○ **date_added** - The date this transaction was received
					5.3

Transactions. editAfter
 	
Deprecated: Transactions.edit
	A transaction is updated	\Blesta\Core\Util\Events\Observers\Transactions::editAfter()
		
		Deprecated:
		• \Blesta\Core\Util\Events\Observers\Transactions::edit()
		• EventsTransactionsCallback::edit()
			• **transaction_id** - The ID of the transaction updated
			• **old_transaction** (*since version 4.3*) - An object representing the previous state of the transaction
			  ○ **id** - The ID of this transaction
			  ○ **client_id** - The ID of the client this transaction was applied for
			  ○ **amount** - The amount this transaction was for
			  ○ **currency** - The currency of this transaction
			  ○ **type** - The transaction type (cc, ach, other)
			  ○ **transaction_type_id** - The transaction type ID (if any)
			  ○ **account_id** - The ID of the payment account (if any) associated with this transaction
			  ○ **gateway_id** - The ID of the gateway this transaction was made through
			  ○ **gateway_name** - The name of the gateway this transaction was made through
			  ○ **gateway_type** - The type of gateway this transaction was made through (merchant or non-merchant)
			  ○ **reference_id** - The external ID stored for reference to the gateway records
			  ○ **transaction_id** - The gateway supplied transaction ID
			  ○ **parent_transaction_id** - The gateway supplied parent transaction ID
			  ○ **status** - The status of this transaction
			  ○ **date_added** - The date this transaction was received
				void	3.1

Users. delete	A user is deleted	\Blesta\Core\Util\Events\Observers\Users::delete()
		
		Deprecated: EventsUsersCallback::delete()
			• **user_id** - The ID of the user being deleted
			• **old_user** - An object representing the previous state of the user
			  ○ **id** - The ID of the user
			  ○ **username** - The username for this user
			  ○ **two_factor_mode** - The kind of two factor authentication being used by this user
			  ○ **date_added** - The date in UTC that this user was added
				void	4.3

Users. login	A user logs in	\Blesta\Core\Util\Events\Observers\Users::login() Deprecated: EventsUsersCallback::login()	• **user_id** - The ID of the user that successfully logged in	void	3.1
Users. logout	A user logs out	\Blesta\Core\Util\Events\Observers\Users::logout() Deprecated: EventsUsersCallback::logout()	• **user_id** - The ID of the user attempting to log out	void	3.1

* This field may not be included in the data since it is an optional parameter to submit to the function that calls this event

Working with Events

Each event handler that is invoked when the event is triggered is passed a *\Blesta\Core\Util\Events\Common\EventInterface* (previously an EventObject). An EventObject will still be passed to plugins for backward compatibility, but this is deprecated behavior.

You can modify the parameters or return value of this event object and the modified event will be passed along to each subsequent handler, and finally returned to the trigger.

To fetch parameters from the *\Blesta\Core\Util\Events\Common\EventInterface*, or EventObject, invoke the getParams() method. Similarly, to set parameters use the setParams() method.

To set the return value from the *\Blesta\Core\Util\Events\Common\EventInterface*, or EventObject, invoke the setReturnVal() method. Similarly, to fetch the return value use the getReturnVal() method.