COMPACT TALK

Configuration Manual

Document version 1.0

WELAND
SOLUTIONS

Contents

1 Introduction

Compact Talk Configuration Tool is used to setup and configure Compact Talk after installation. It allows you to configure your setup of elevators and devices as well as the configuration of general settings such as database and formatting import- and export files.

1.1 Conventions

Bold   Bold text denotes fields or parameters to be entered by the user.

Italic   Italic text denotes options for parameters.

[Brackets]   Brackets denotes a button.

2 Compact Talk Configuration Tool

When launching the Compact Talk Configuration Tool the start window will appear, see Figure 1. The configurables are separated in General, Server and Devices. These sections will be described separately in the following chapters.

Note: The button Save must be pressed before closing the Configuration Tool, in order for the changes to be applied!
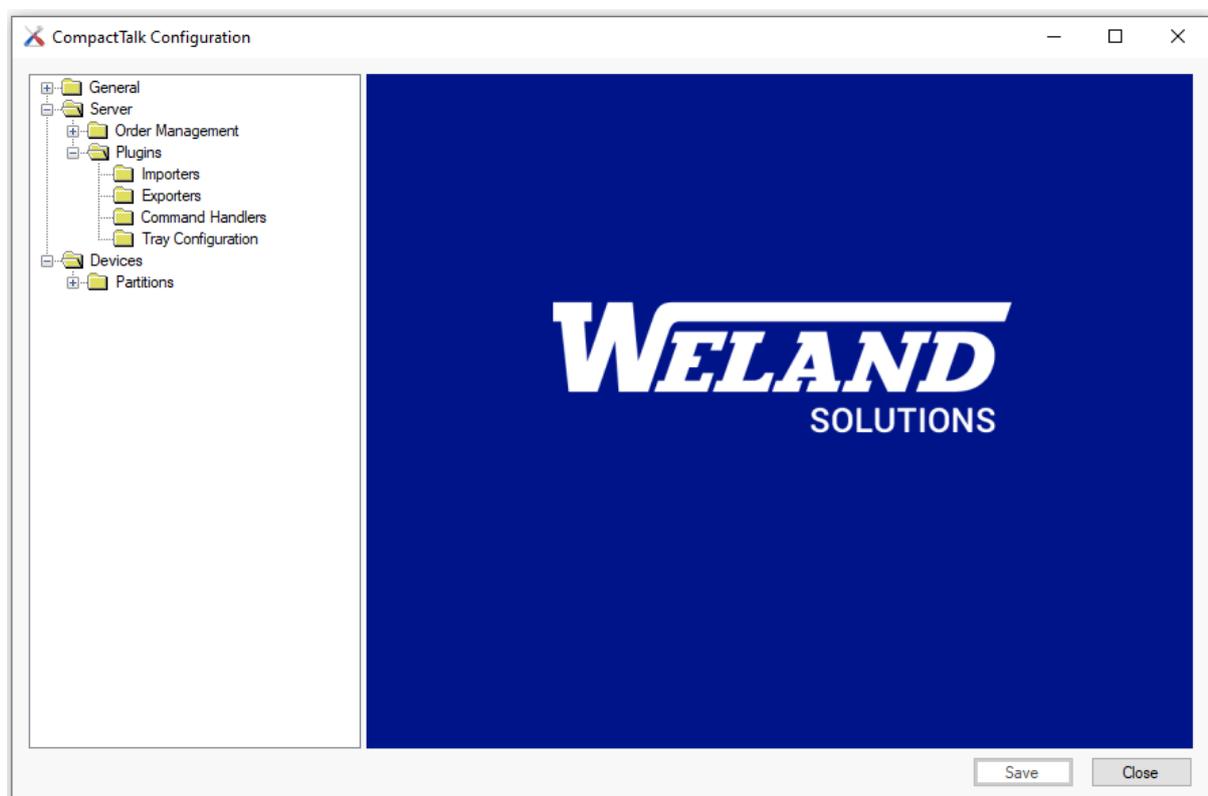

Figure 1, Compact Talk Configuration Tool

2.1 General configuration

The General configurations section is divided in Communication, License and Logging.

2.1.1 Communication

The section for Communication settings contains fields for entering the port numbers for the different interfaces. This configuration can be used to simplify configuration of firewalls by turning of unused protocols. If you for example have Compact Talk installed on the same machine as the WMS(client), only IPC needs to be active.
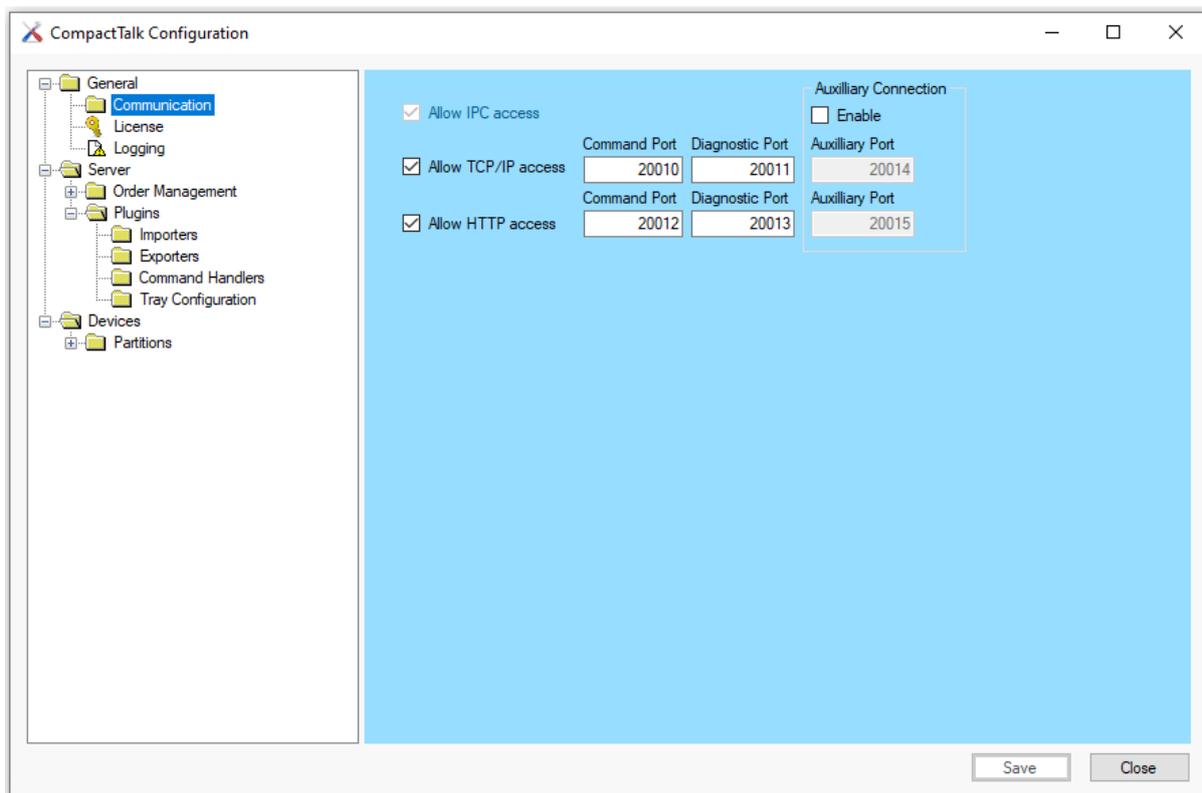

Figure 2, Communication settings

IPC	This protocol is always available since it doesn't affect the firewall. No ports needs to be configured for this protocol.
TCP/IP	This protocol is needed when the client is on another machine and TCP/IP is the chosen protocol.
HTTP	This is for solutions where the client is on another machine and uses standard WB-Service interface.
Command	This interface is always used.
Diagnostic	This interface is used by CTMonitor and CTTest.

| Auxiliary | This interface is only used by distributed accessories and is by default disabled. |

2.1.2 License

The section for License configurations contains a field for entering a license key, see Figure 3. Without a valid license key it will not be possible to use Compact Talk. The license key also controls which functionality that is available in the installation.
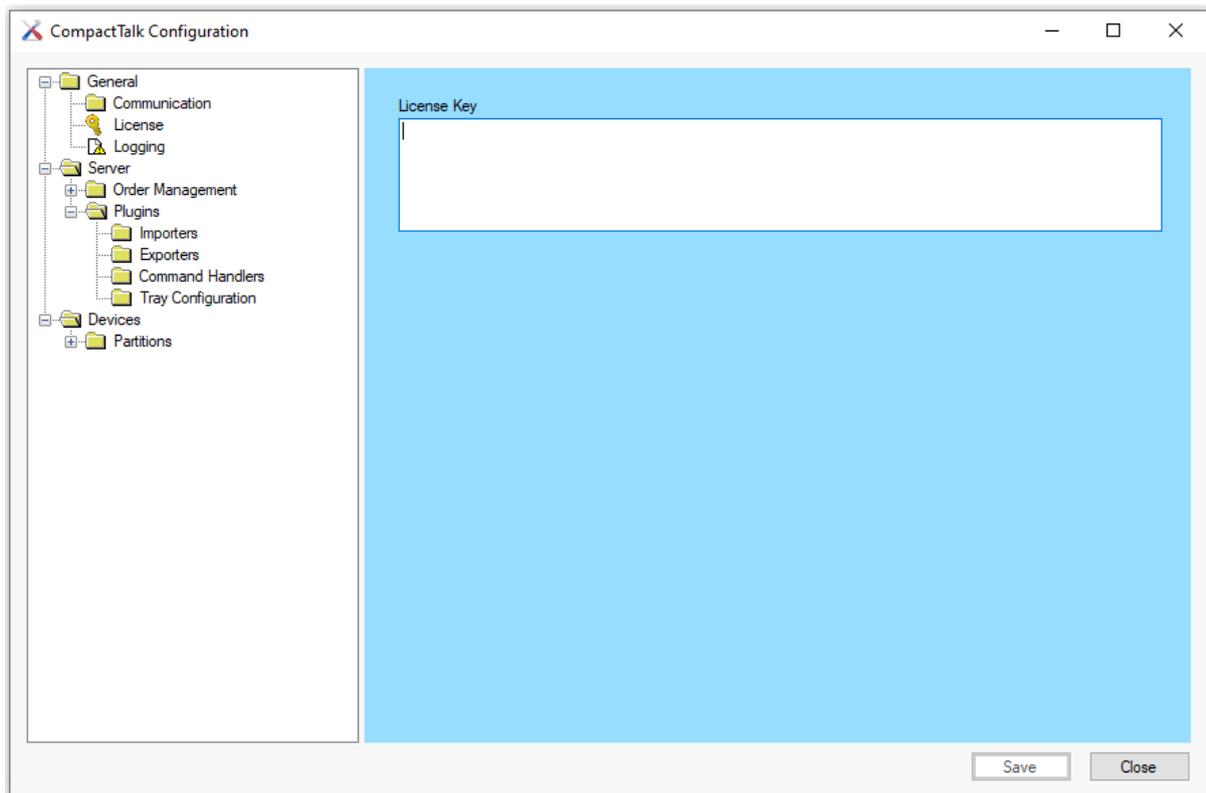

Figure 3, License settings

| License Key | Field for entering a valid license key. |

2.1.3 Logging

The section for Logging configurations contains settings for the application log.
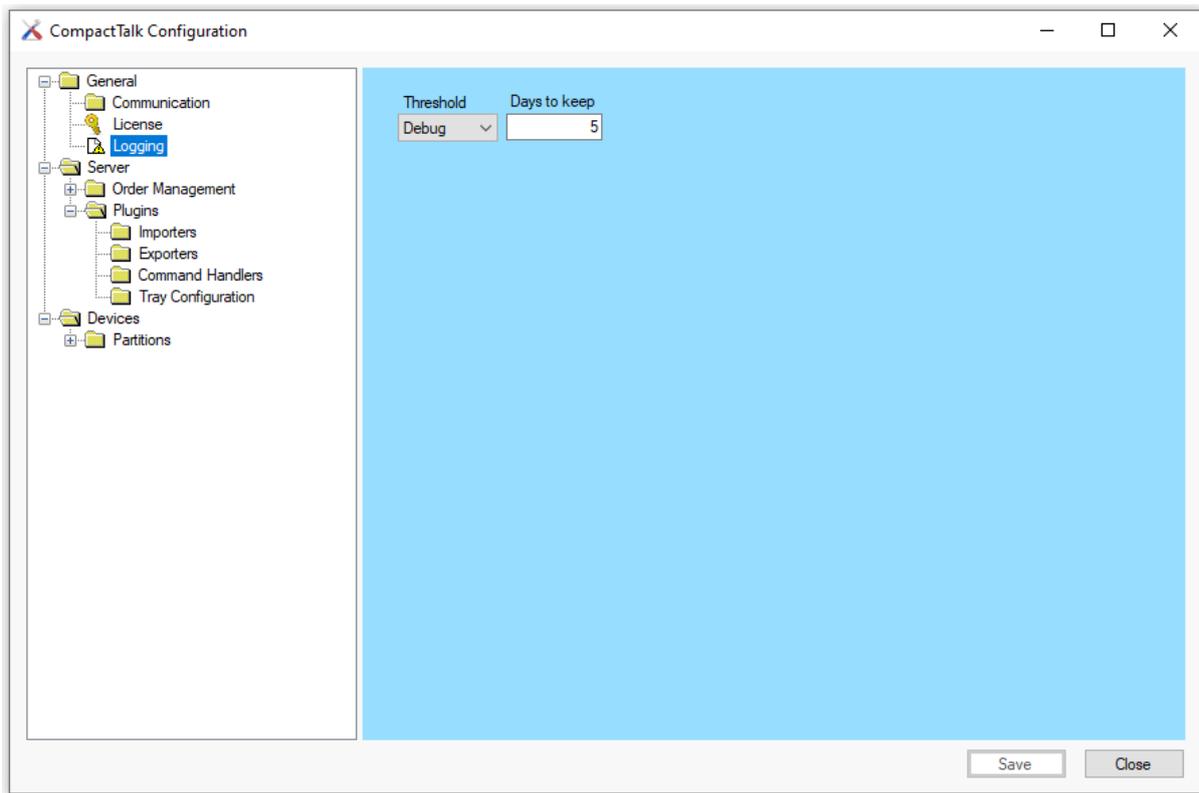
Figure 4, Logging settings

Threshold		Field for setting the level of information written to the application log. The options are listed below.
	Debug	Used for debugging, all information is saved.
	Info	Information, Warnings, Errors and Fatal errors are all written to the application log.
	Warning	Warnings, Errors and Fatal errors are all written to the application log.
	Error	Errors and Fatal errors are written to the application log.
	Fatal	Fatal errors are written to the application log.
Days to keep		Number of days to keep the application log before it is deleted.

2.2 Server configuration

The Server configuration section is separated in Order Management and Import and Export.

2.2.1 Order Management

The Order Management section is separated in Storage and Queue.

2.2.1.1 STORAGE

The Storage configuration section defines how Compact Talk will store orders, e.g. by using a database.
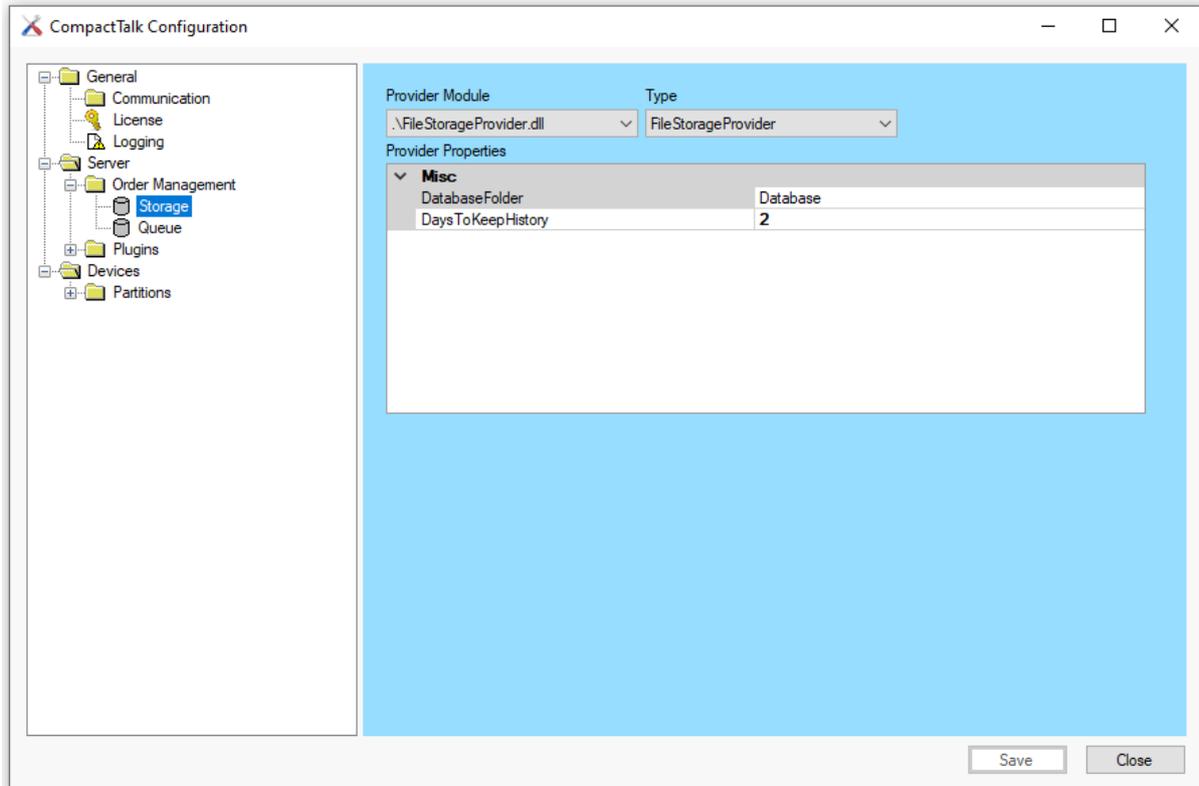

Figure 5, Storage settings

Provider Module	List of all storage providers included in your Compact Talk installation.
Type	List of all storage types associated with the selected storage provider.
Provider Properties	Custom properties for the selected storage type.

2.2.1.2 QUEUE

The section Queue contains a check box for External Confirmation. This is only applicable when using the Compatibility Mode.
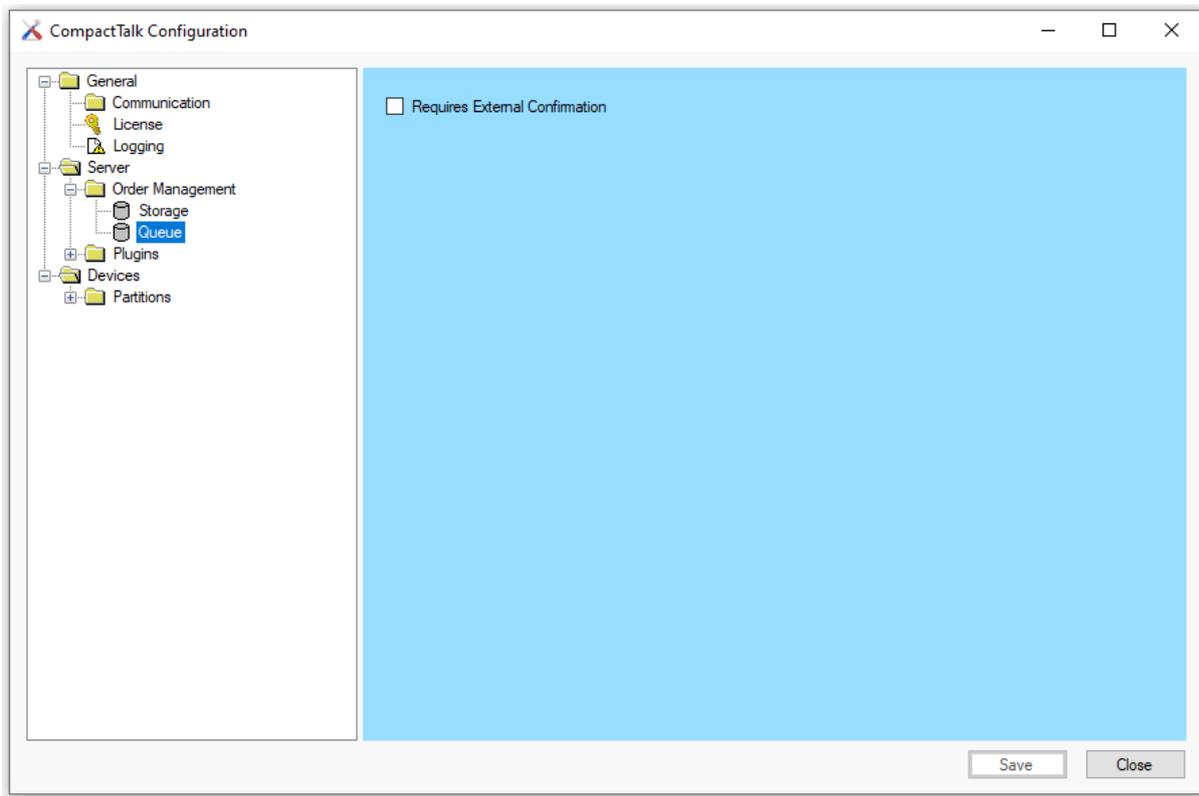
Figure 6, Queue settings

Requires	When checked an event will be fired with a request
External	for external confirmation before the order is
Confirmation	removed from the queue.

2.2.2 Plugins

The Import and Export section contains configuration settings for the formatting of textbased order files for import and export. In order to use the import function of Compact Talk, an Importer must be created and configured, defining the format of the import files. To use the export function, an Exporter has to be created and configured, defining the format of the export files.

2.2.2.1 IMPORTERS

In the Importers section, Importers are created and configured. The import files can be of two different types, delimited or of fixed width. The configuration of each importer will be saved in an xml-file associated with it. If no xml-file exists, one will be created with the applicable default values for the import module selected.

Note: If more than one Importer is created, it is important to distinguish the different types by giving them different file extensions, or using different Inbox Folders.
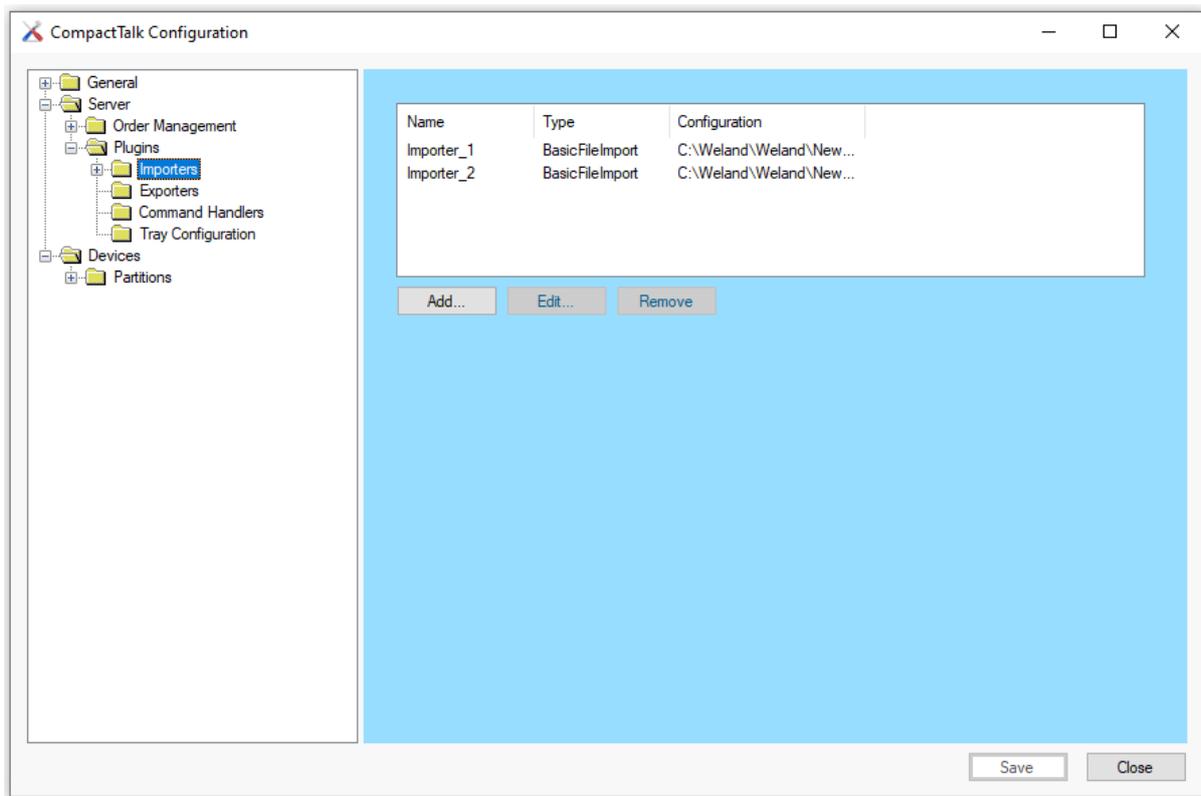
Figure 7, Importers settings

In the Importer section, the existing Importers are listed.

When the button [Add] is pressed, the Importer dialog opens, see Figure 8, allowing the user to create a new importer.

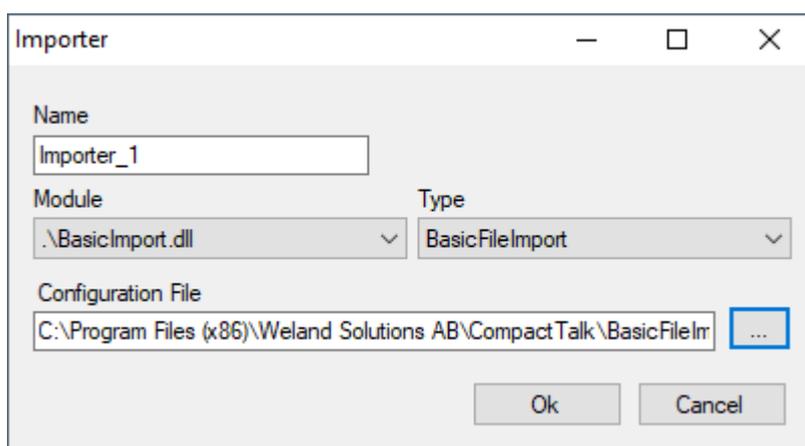The button [Remove] deletes a selected Importer.

Figure 8, Importer dialog

Name   A unique name for this instance of the selected importer.

Module	List of all import modules included in your Compact Talk installation.
Type	List of all import types associated with the selected import module.
Configuration	File path to the configuration file where the configuration will be saved.

Once an importer has been created its properties can be changed, see Figure 9. These changes will be saved in the xml-file associated with the importer.
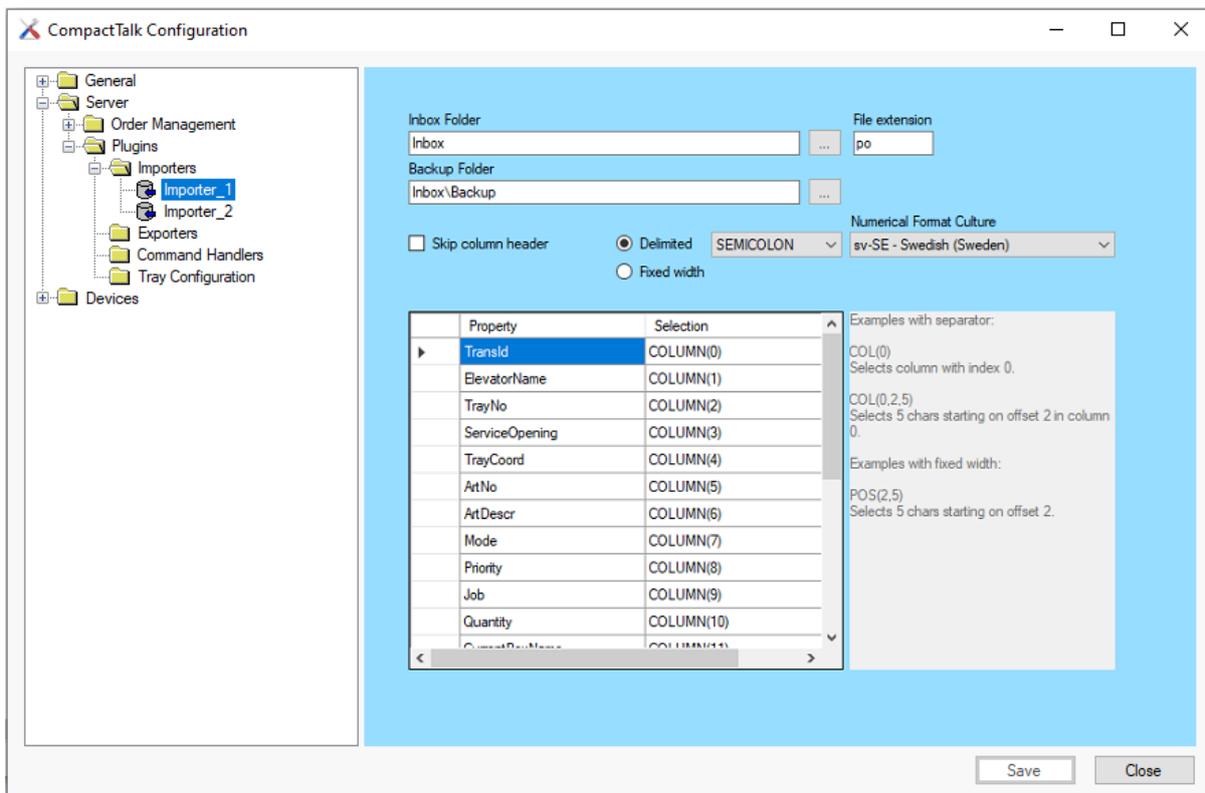

Figure 9, Example of Importer

Inbox Folder	Field for entering a folder which Compact Talk should scan for import files. If it is not a full path, it is relative to the installation folder where Compact Talk is located. The default value is "Inbox". **Note:** If you wish to use a path other than the local hard drive, you'll need to use UNC path's and the compact talk service needs to be configured to run under a user account that has permissions to the chosen path.

File extension	File extension which Compact Talk should interpret as valid import files.
Backup Folder	Folder where Compact Talk stores the already imported files. If it is not a full path, it is relative to the installation folder where Compact Talk is located. The default value is "Backup/Inbox".
Skip column header	When checked, Compact Talk expects a column header in the import files.
Delimited/Fixed Width	Specifies the basic format of the import file. If delimited is selected, a delimiter should also be selected in the drop list. Options are semicolon, comma, tab, space and pipe.
Numerical Format Culture	Specifies the numerical decimal format. I.e which type of decimal separator (, or .).

The property/selection table lists the properties of the order, and the corresponding

formatting of the import file.

TransId	An identification number that will identify the transaction for future references. If left empty Compact Talk will provide a unique value.
ElevatorName	The storage elevator that is the target for the order. Should equal the id that is set in the device configuration for that elevator.
TrayNo	The number of the tray. Must be an existing tray in the elevator.
ServiceOpening	The number of the service opening on the elevator. Valid numbers are 1-3.
TrayCoord	Coordinates for the requested tray. Displayed on screen to guide the operator. Optional.
ArtNo	Article number. Displayed on screen to guide the operator. Optional.
ArtDescr	Article description. Displayed on screen to guide the operator. Optional.
Mode	The order mode. The normal valid values are *IN* or *OUT*. Note! There is also two other modes available, BORROWIN and BORROWOUT these are only used in special solution and demands extra hardware.

Priority	Priority for the order. The priority is handled in descending order. Optional, set to 0 if not used.
	Note! When using the BORROWIN and BORROWOUT mode. This field cannot be used at all in this kind of solution.
Job	Name of the job the order is a part of. Displayed on screen to guide the operator. Optional.
Quantity	Number of articles to be picked. Displayed on screen to guide the operator.
CurrentBoxName	Location on tray. Only used by picking display, laser pointer and light bar.
Info1-Info5	Additional order information displayed on panel and picking display. Leave blank if not used.

The following six parameters describe the configuration of a box in the tray layout. This can be used as an alternative to a global tray configuration. If any of the first four parameters has a non-zero value, a tray configuration box will be created and used for the order.

BoxXPos	X coordinate of the top left corner. If not used, set to 0.
BoxXSize	The width of the box. If not used, set to 0.
BoxYPos	Y coordinate of the top left corner. If not used, set to 0.
BoxYSize	The height of the box. If not used, set to 0.
BoxParam1	Implementation dependent numerical value. Set to -1 if not used.
BoxParam2	Implementation dependent text value. Optional.

If a row in the Selection column is marked, a dialog will open. If **Delimited** is selected the Column Selection Dialog will appear. If **Fixed Width** is selected the Fixed Pos Selection dialog will open instead.
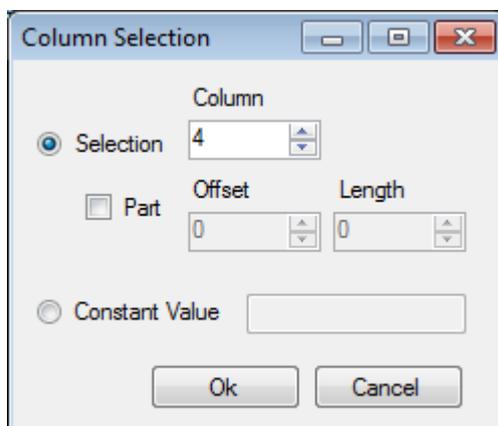

Figure 10, Column Selection Dialog

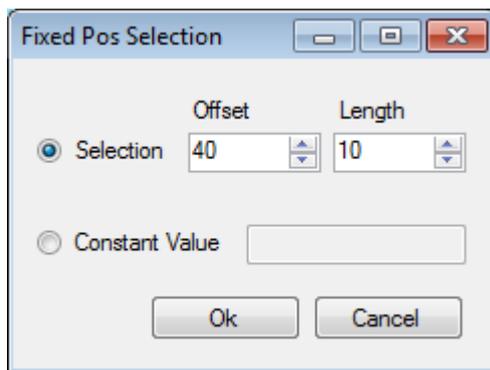|	
Selection	Specifies in which column the selected parameter should be found.
Part	Specifies the offset and length of the parameter (optional).
Constant Value	Specifies that the parameter should be set to a constant value instead of a column in the import file.

Figure 11, Fixed Pos Selection dialog

Selection	Specifies the offset and length of the parameter.
Constant Value	Specifies that the parameter should be set to a constant value instead of defined in the import file.

2.2.2.1.1 Example of delimited importer

The delimited format uses a character to separate the columns of order data on one row per order. The format can include a column header which contains the property names, if this is the case the option **Skip column header** should be checked. If the created importer is delimited, the set of properties for it could look like the example Importer_2, see Figure 12.

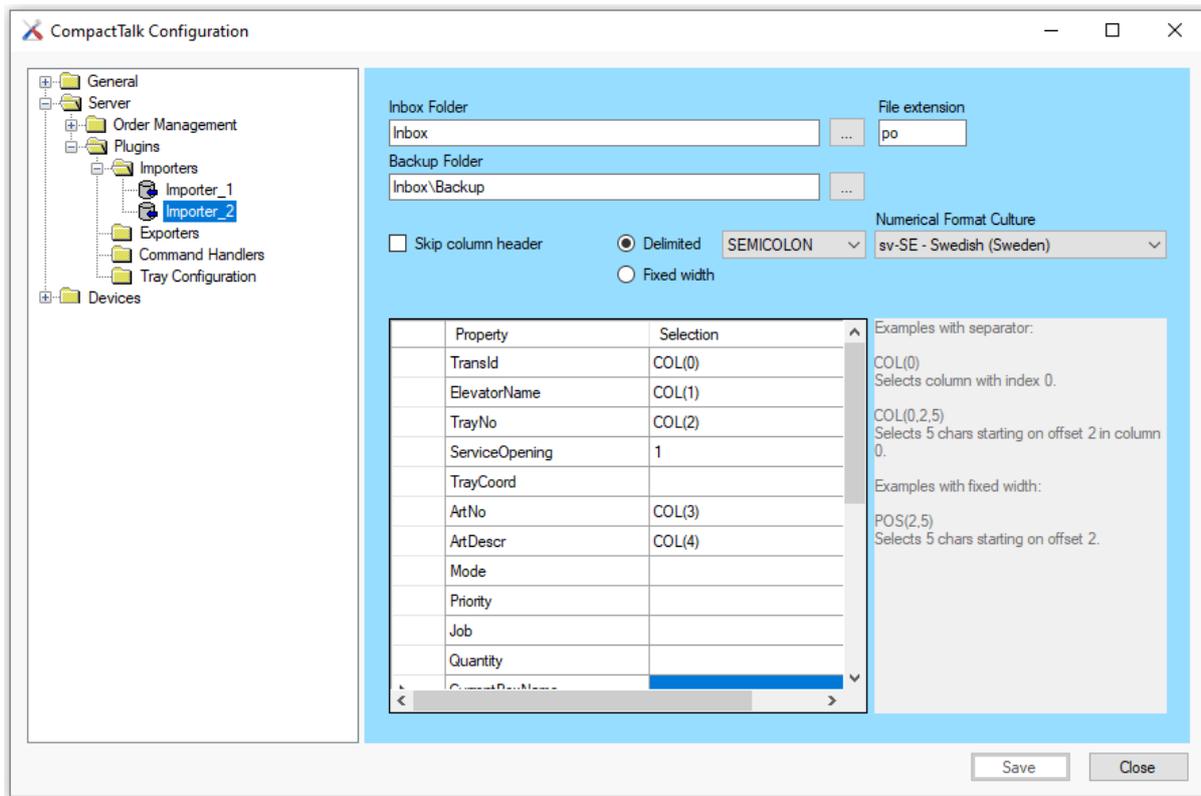**Figure 12, Example of delimited importer, Importer_2**

The selection column can either contain a constant value, or a function that gives the index of the column the order property value should be retrieved from in the order file.

The function COL is used to give the index of the column the value should be retrieved from, the index is zero based. If a constant is used the associated order property will be set to that value. Selections for order properties that is optional and of the text type can be left empty.

The example pictured in Figure 13 would correspond to the following order row in the import file:

15;Elevator_110;5517;5

The values for TransId, ElevatorName, TrayNumber, ArticleNr and Quantity are read from the import file in columns 0, 1, 2 and 3. Note that ElevatorName (Elevator_1) and TrayNumber (10) are read from the same column with different offsets. The values for ServiceOpening, Mode, NoReturnOfTray, and Priority are constant.

2.2.2.1.2 Example of importer with fixed width

The fixed width format lays out the columns of data at fixed character positions. If the created importer is of fixed width, the set of properties for it could look like the example Importer_1, see Figure 14.
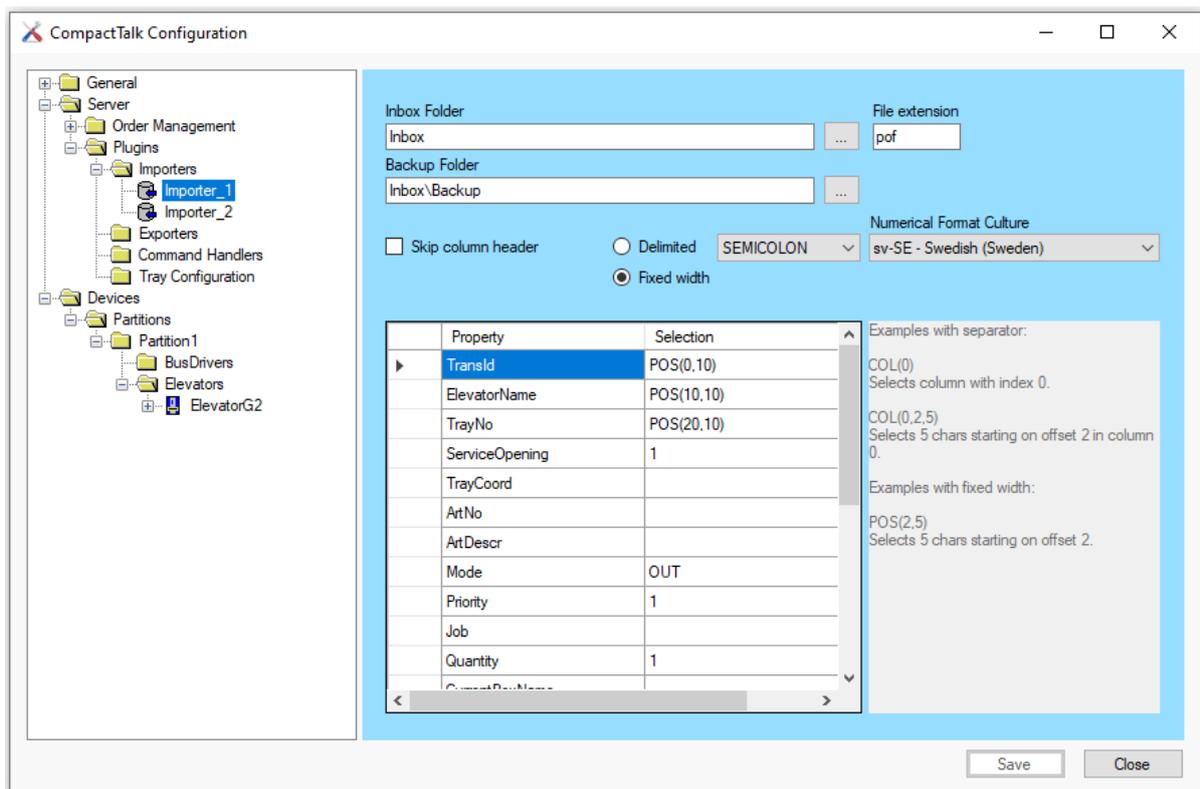
Figure 14, Example of importer with fixed width, Importer_1

A function called POS is used instead if COL. POS takes two arguments of which the first gives the character position on the text row where the data value starts and the second argument is the length of the data value in number of characters. Numerical values are expected to be aligned to the right and padded with zeros to the left, text values are expected to be aligned to the left and padded with space character to the right.

The example pictured in Figure 14 would correspond to the following order row in the import file:

15 Elevator_1   10 5

The values for TransId, ElevatorName, TrayNumber and Quantity are read from the import file with the offet and length defined in the configuration. The values for ServiceOpening, Mode, NoReturnOfTray and Priority are constant.

2.2.2.2 EXPORTERS

In the Exporters section, Exporters are created and configured. An order export file contains status information on orders, as defined in this section. The configuration of each exporter will be saved in the xml-file associated with it. If no xml-file exists, one will be created with the applicable default values for the export module selected.
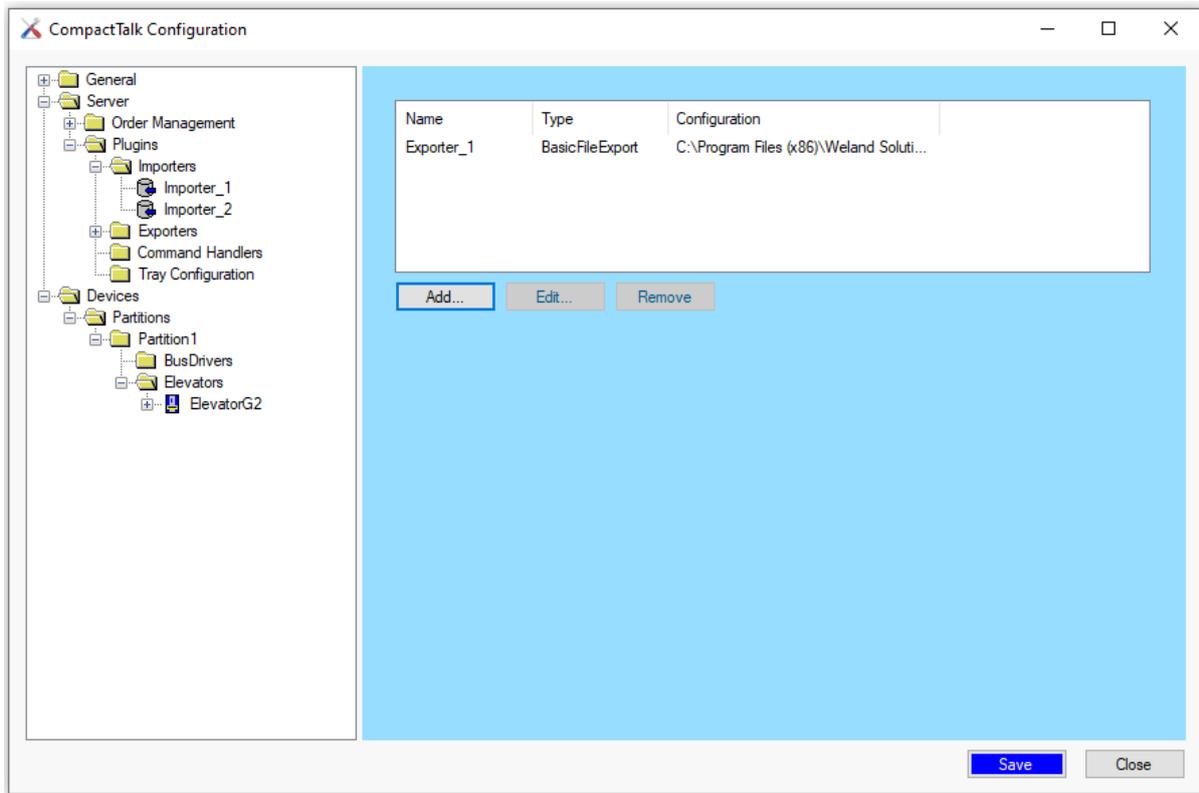
Figure 15, Exporters settings

In the Exporter section, the existing Exporters are listed.

When the button [Add] is pressed, the Exporter dialog opens, see Figure 16, allowing the user to create a new Exporter.
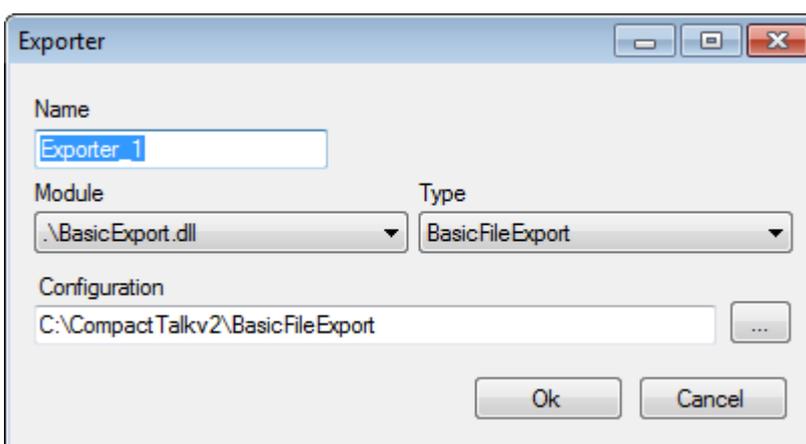
The button [Remove] deletes a selected Exporter.

Figure 16, Exporter dialog

Name   A unique name for this instance of the selected exporter.

Module	List of all export modules included in your Compact Talk installation.
Type	List of all export types associated with the selected export module.
Configuration	File path to the configuration file where the configuration will be saved.

Once an exporter has been created, the properties for it can be changed. These changes will be saved in the xml-file associated with the exporter.

The export module BasicExport uses template text which contains placeholders for order properties. A placeholder has the format @<property name>@. The placeholder @TRANSID@ will be replaced with the value of the TransId for the order.
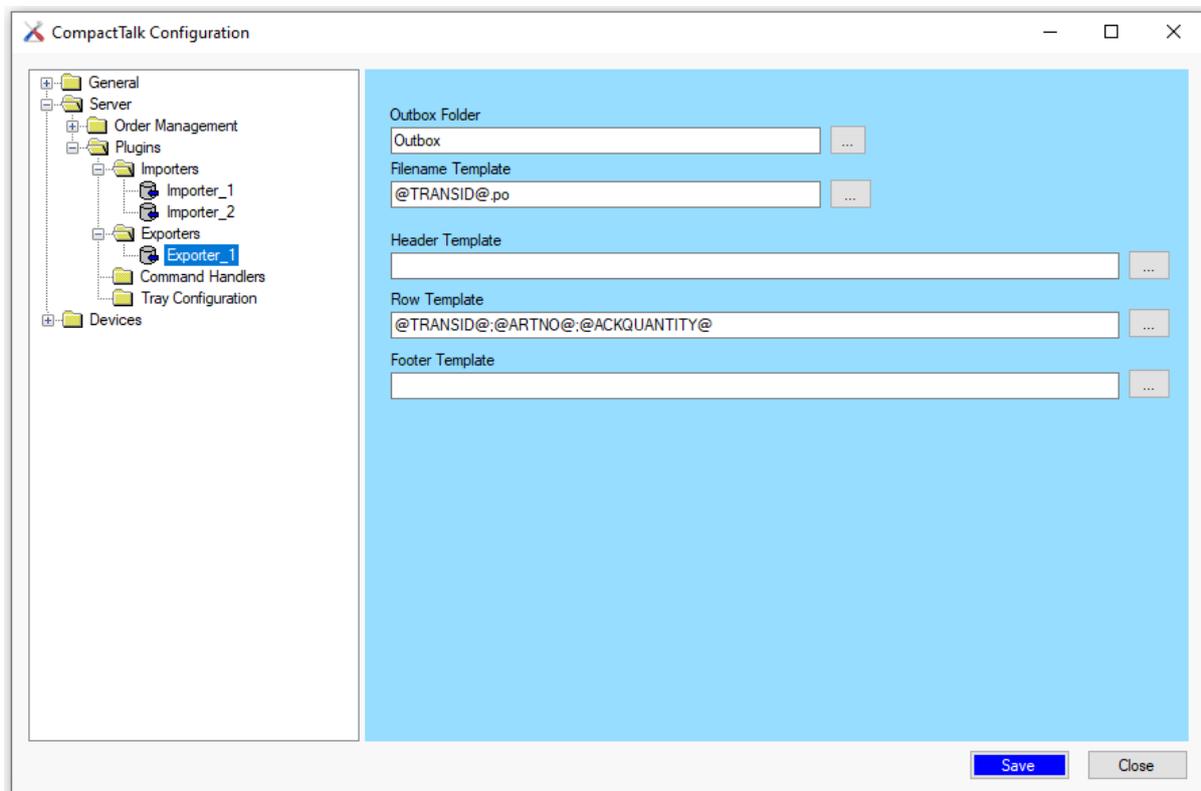

Figure 17, Example of exporter

Outbox Folder	Path to the target folder for the generated files. If it is not a full path, it is relative to the installation folder where Compact Talk is located. The default value is "Outbox".
Filename Template	The template text to be used as name of the export file. Can contain placeholders for order parameters.
Header Template	The template text to be used as an optional header. Can contain placeholders for order parameters.

Row Template	The template text that represents the order data. Can contain placeholders for order parameters.
Footer Template	The template text to be used as a optional footer. Can contain placeholders for order parameters.

When the button […] after one of the templates is pressed, the Template dialog opens, see Figure 18. This allows the user to create a template text without entering it manually.
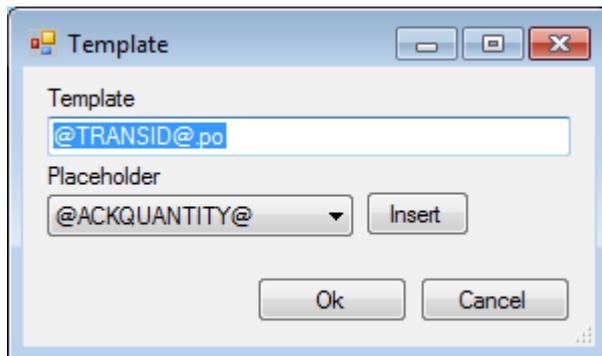

Figure 18, Template Dialog

Template	Contains the template text.
Placeholder	Listbox of placeholders to select from. These correspond to the available properties of an order.
Insert	Inserts the selected placeholder at the cursor position in the Template textbox.

2.2.2.2.1 Example of exporter
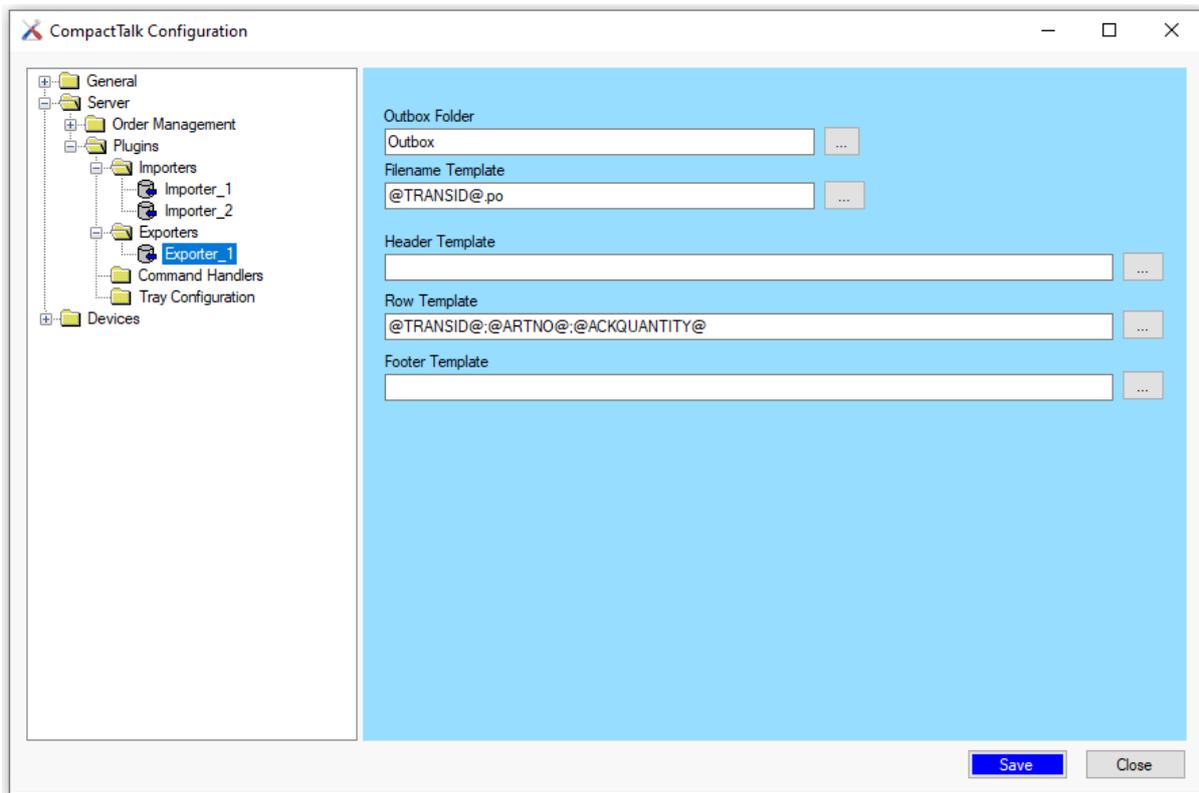An example of an Exporter could look like Exporter_1, see Figure 19.

Figure 19, Example of exporter, Exporter_1

The example pictured in Figure 19 would correspond to the following export file:

15;5517;5

for a pick-order with TransId 15 for 5 articles with article number 5517. The exportfile would be named 15.po.

2.2.2.3 COMMAND HANDLERS

Command handlers are an optional way to execute commands with the help of files. Currently only XML-files is supported.

When using a command handler CT will force the use of a single order queue which will handle automatic acknowledgement of orders.
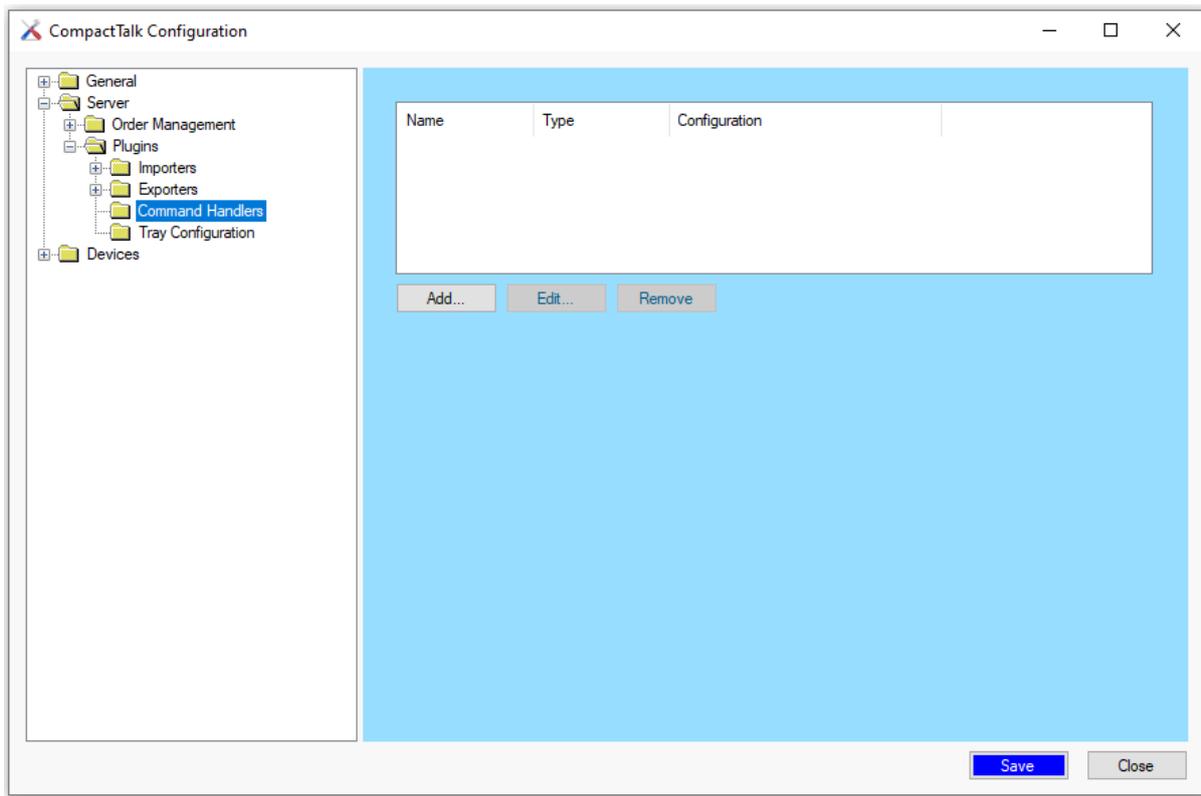
Figure 33, Command Handler settings

In the Command Handler section, the existing handlers are listed.

When the button [Add] is pressed, the Command Handler dialog opens, see Figure 34, allowing the user to create a new handler.

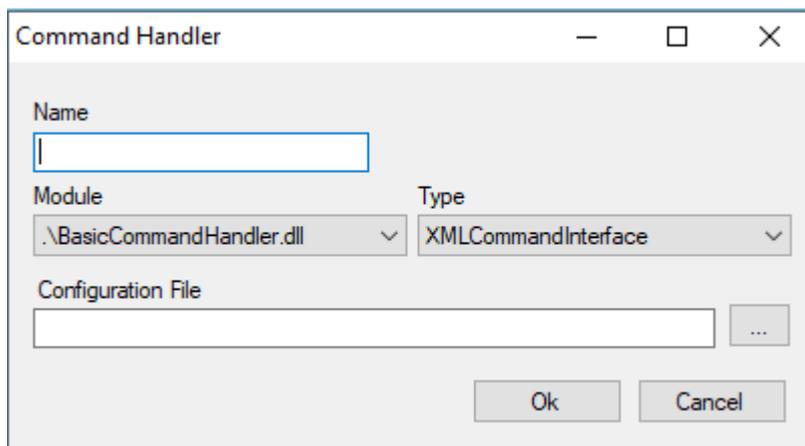The button [Remove] deletes a selected Handler.

Figure 34, Command Handler dialog

Name	A unique name for this instance of the selected handler.
Module	List of all Command Handler modules included in your Compact Talk installation.

Type	List of all Command Handler types associated with the selected handler module.
Configuration	File path to the configuration file where the configuration will be saved.

Once a Command Handler has been created its properties can be changed, see Figure 35. These changes will be saved in the xml-file associated with the handler.

2.2.2.3.1 Example of a Command Handler
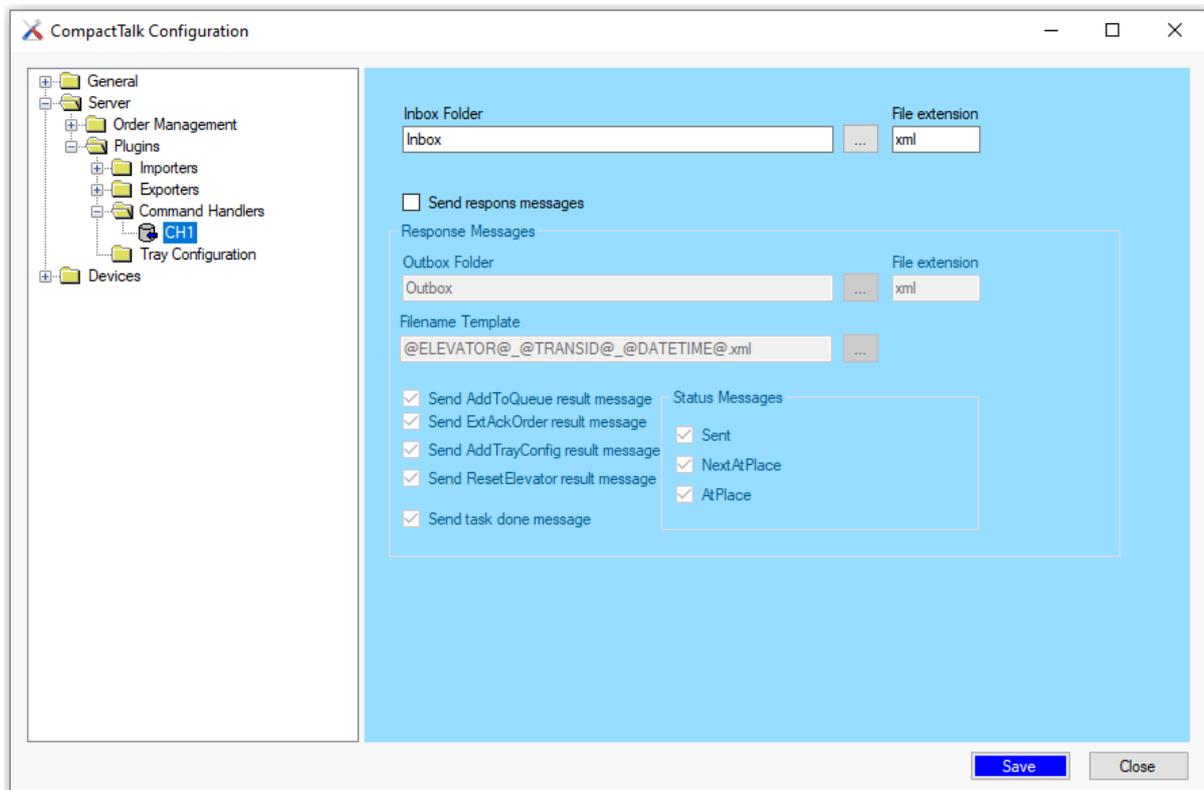In Figure 35 the Command Handler CH1 is added as an example.

Figure 35, Example of a Command Handler

Inbox Folder	Field for entering a folder which Compact Talk should scan for command files. If it is not a full path, it is relative to the installation folder where Compact Talk is located. The default value is "Inbox". **Note:** If you wish to use a path other than the local hard drive, you'll need to use UNC path's and the Compact Talk service needs to be configured to run under a user account that has permissions to the chosen path.
File extension	File extension which Compact Talk should interpret as valid command files.
Send response messages	Set if response message files should be created.

Outbox Folder   Path to the target folder for the generated files. If it is not a full path, it is relative to the installation folder where Compact Talk is located. The default value is "Outbox".

Filename Template   The template text to be used as name of the response file. Can contain placeholders for order parameters.

Send AddToQueue result message

Send ExtAckOrder result message

Send AddTrayConfig result message

Send ResetElevator result message

Select which, if any, result messages to be sent.

Send task done message   Check this to get a message file when a task is done.

Status messages   Select which, if any, status messages to be sent.

2.2.2.4 TRAY CONFIGURATION
The tray configuration file is an optional way of providing Compact Talk with information about the tray layout.
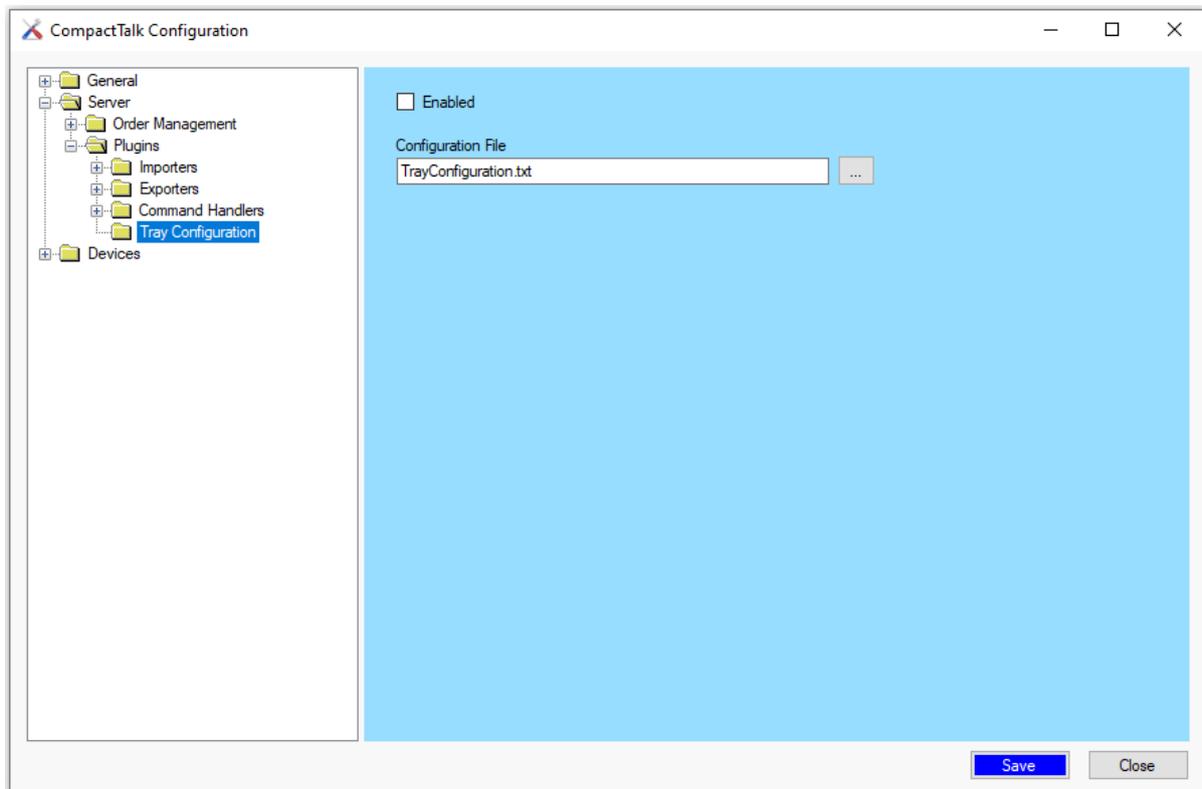

Figure 20, Tray configuration

Enabled	If this feature is used or not.
Configuration File	Path to the tray configuration file. If it is not a full path, it is relative to the installation folder where Compact Talk is located.

2.3 Devices configuration

The system can consist of one or several elevators with accessories, divided in one or several partitions. The elevators and their accessories are listed under the partition they belong to.

2.3.1 Partitions

In the Partitions section the elevators and accessories in your system are created and configured.

Partitions are added by pressing the button [Add], Figure 21, which opens the Partition dialog, Figure 22. The partitions created will appear under Partitions in the tree structure. In this example there are three partitions. Partitions can also be removed by pressing the button [Remove].
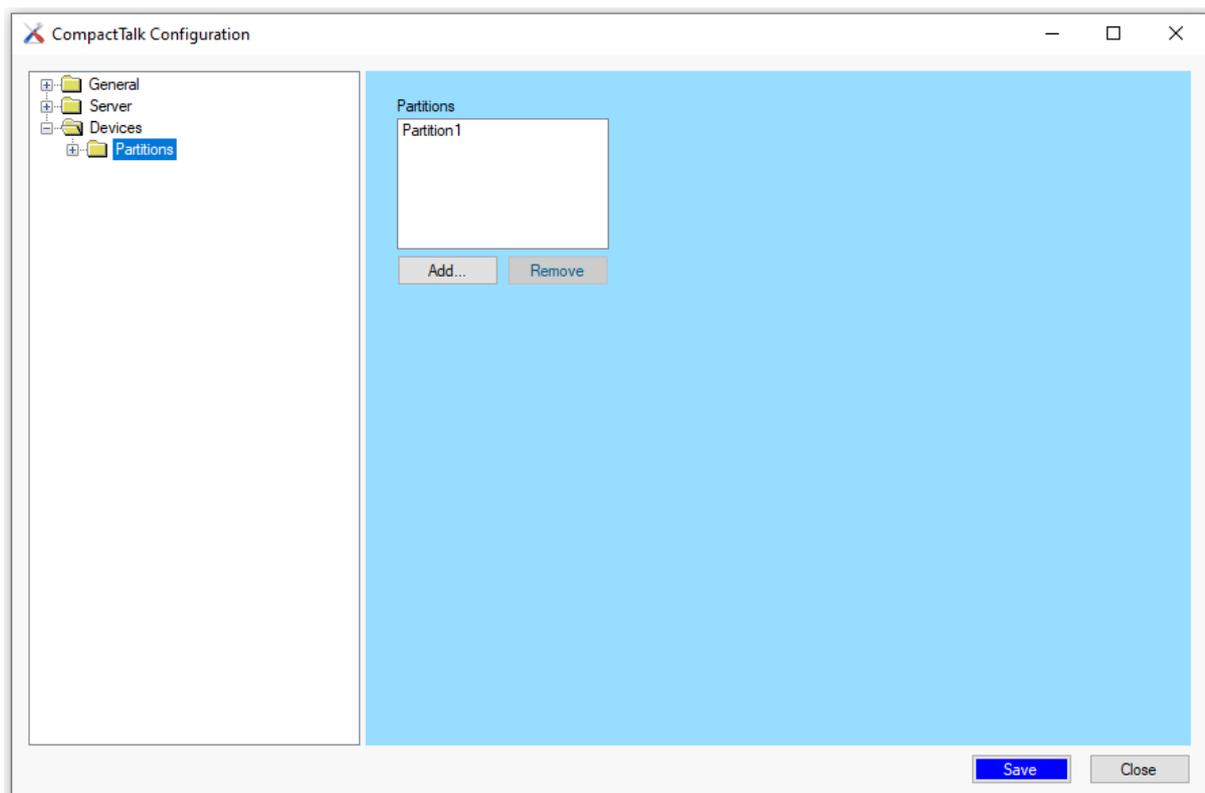

Figure 21, Partitions settings

Add	Opens the Partition dialog.
Remove	Removes the selected partition.

Figure 22, Partition dialog

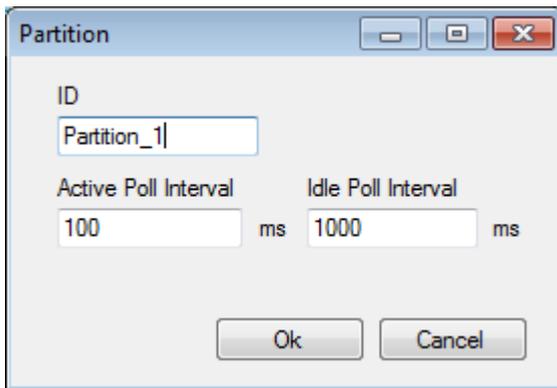|	
ID	A unique ID identifying the partition.
Active Poll Interval	The poll interval of the devices when the devices are in the Running state. The default value is set to 100 ms.
Idle Poll Interval	The poll interval of the devices when the devices are not in the Running state. The default value is set to 1000 ms.

2.3.1.1 EXAMPLE OF A CREATED PARTITION

In this example, as seen in Figure 23, we have a partition with the ID Partition_1, consisting of one elevator, Elevator_1.
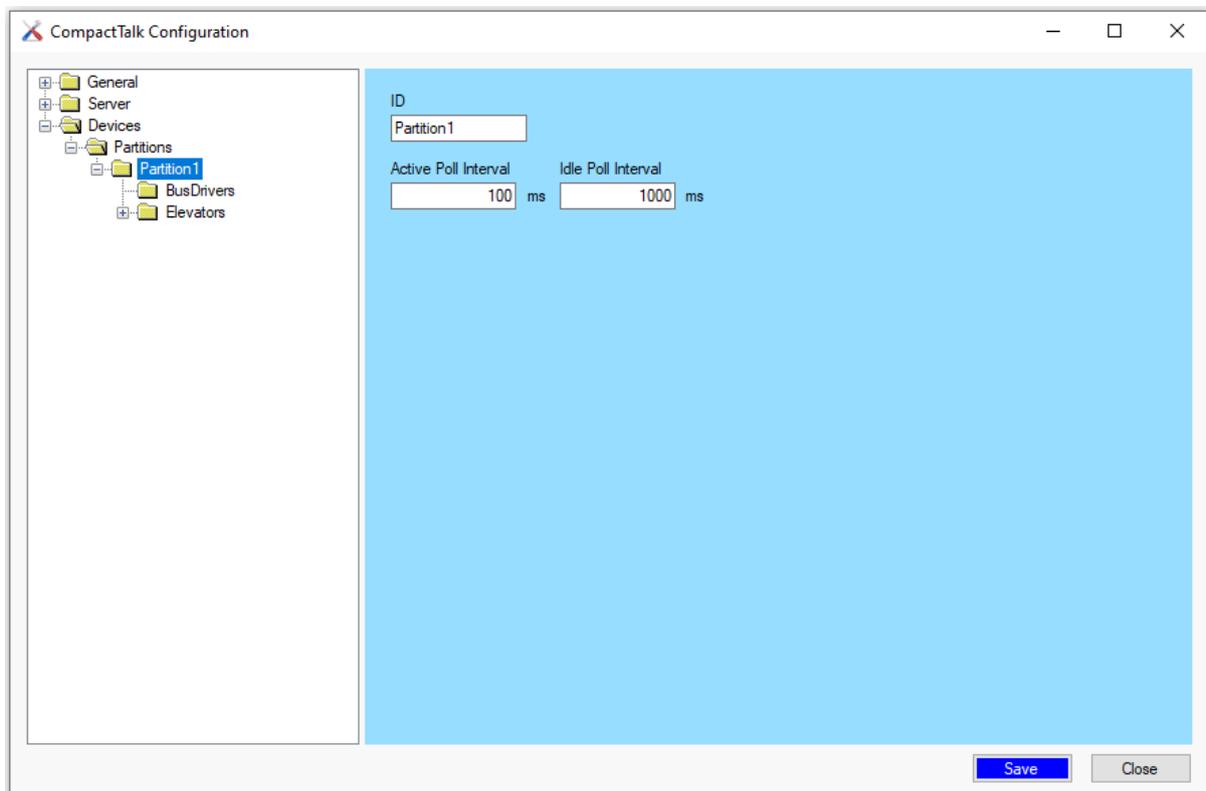

Figure 23, Created partition

2.3.1.1.1 BusDrivers

If one of the elevators in your partition is of a type that needs a bus driver for communication (e.g. G1), a bus driver must be added before the elevator is created.
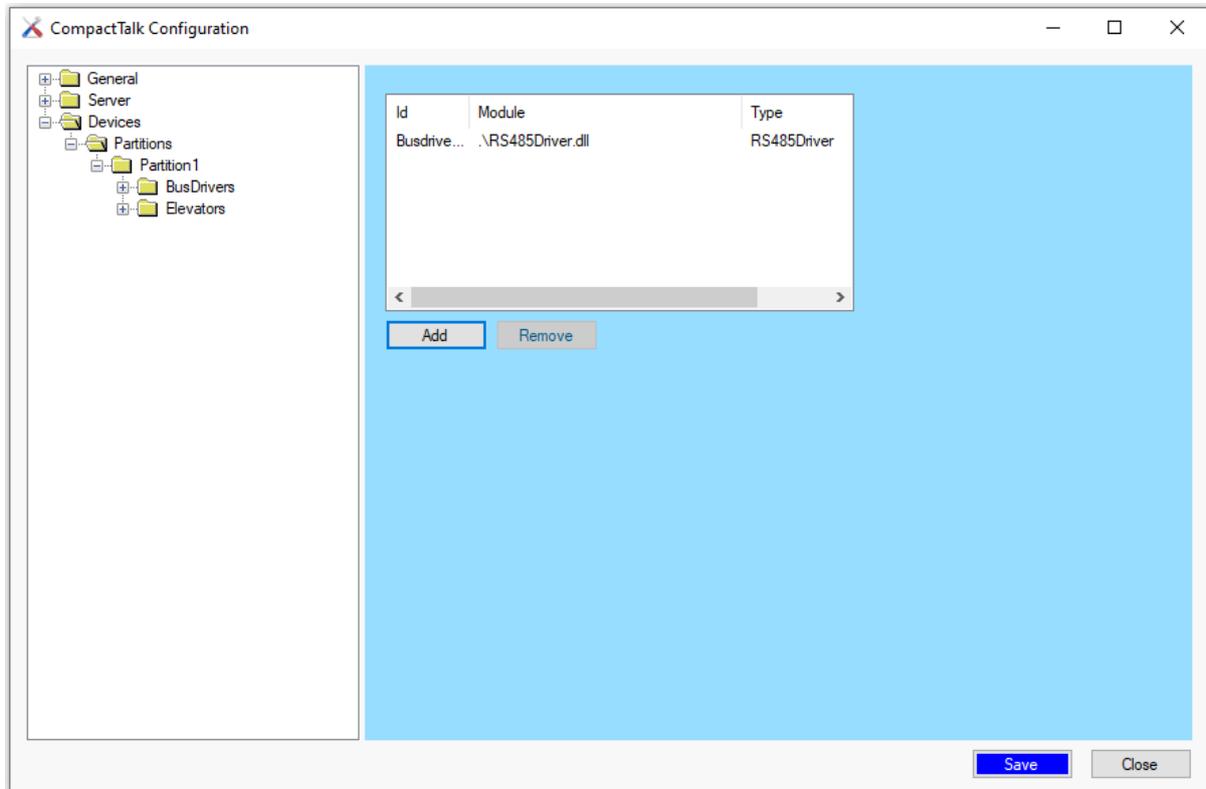

Figure 5, Bus Drivers settings

Add   Opens the Bus Driver dialog.

Remove   Removes the selected bus driver.

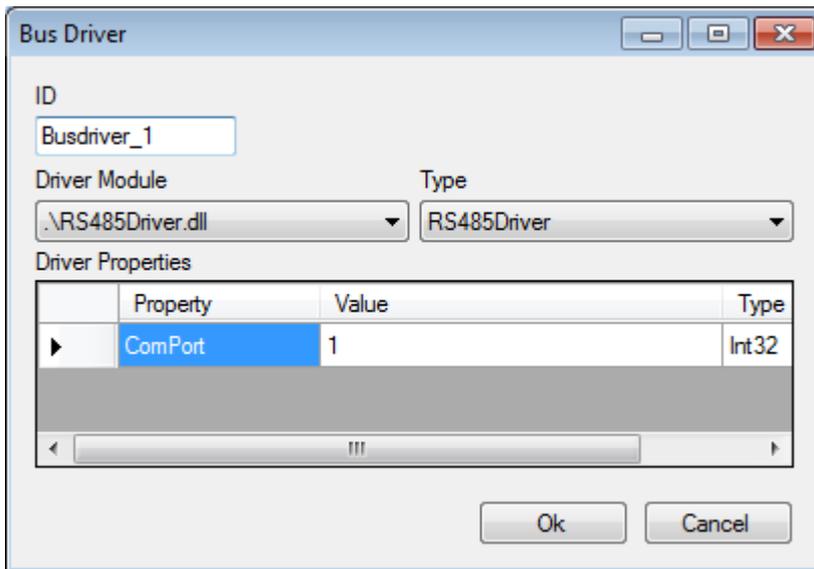When pressing the button [Add], the Bus Driver dialog, see Figure 6, is opened.

Figure 6, Bus Driver dialog

ID A unique id of this instance of the driver module.

Driver List of all driver modules included in your Compact Talk installation.

Type List of all export types associated with the selected driver module.

Driver Properties Custom properties for the driver type selected.

2.3.1.1.2 Elevators

In the elevators settings, the defined elevators with accompanying accessories are listed, see Figure 7.
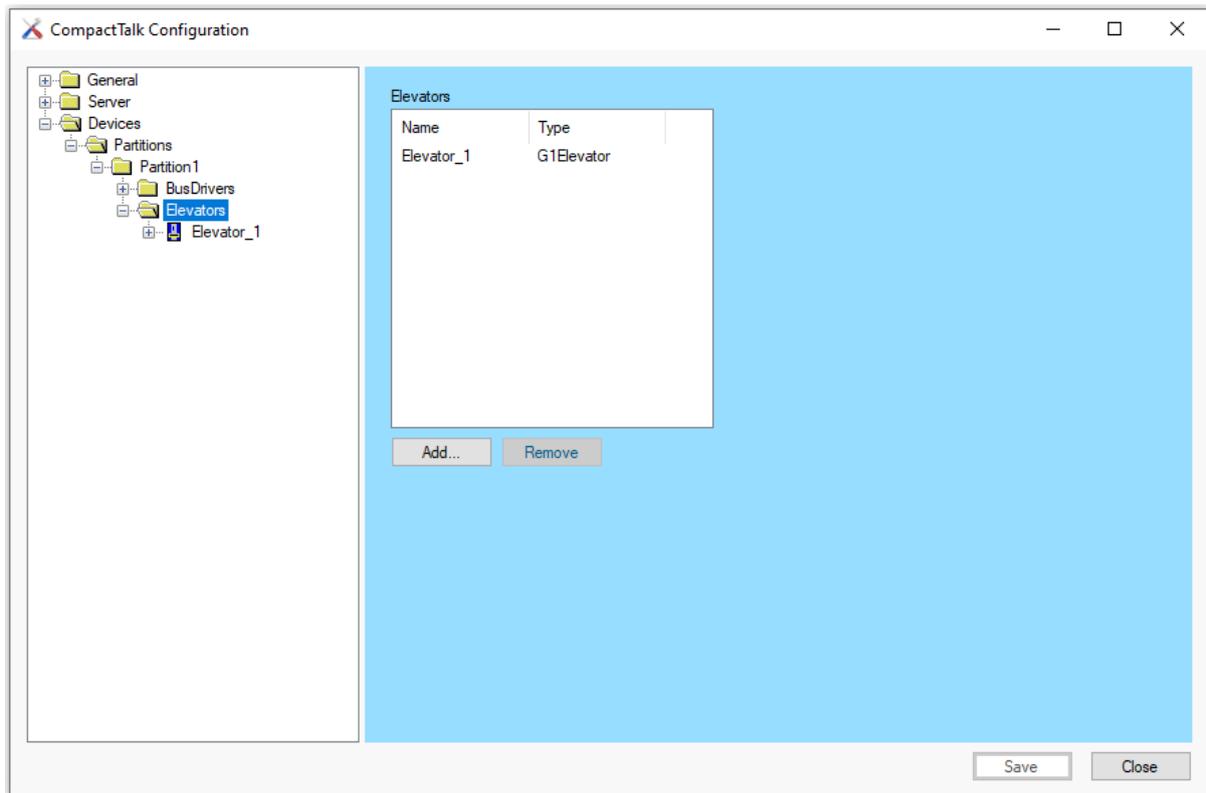
Figure 7, Elevators settings

Add   Opens the Elevator dialog.

Remove   Removes the selected elevator.

When the button [Add] is pressed, the Elevator dialog opens, see Figure 27.
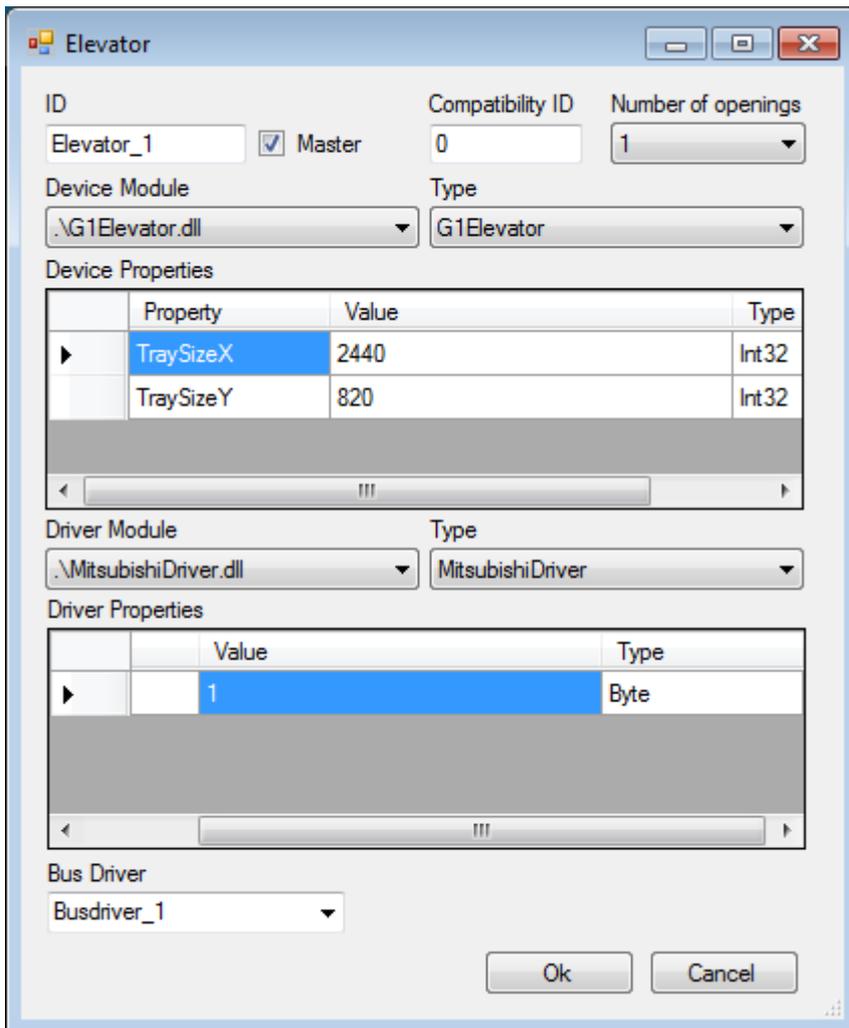
Figure 8, Elevator dialog

ID	A globally unique ID of the elevator.
Master	Checkbox to indicate that this elevator is the master. Used for license evaluation. There can be only one master in the system and if no elevator is appointed master the first one created will be master.
Compatibility ID	Used to give the elevator a globally unique numeric id when running in backwards compatibility mode.
Number of openings	Decides the number of openings the elevator is configured for.
DeviceModule	List of all device modules included in your Compact Talk installation.
Type	List of all device types associated with the selected device module.

Device Properties	Custom properties for the device selected.
Driver Module	List of all driver modules included in your Compact Talk installation.
Type	List of all export types associated with the selected driver module.
Driver Properties	Custom properties for the driver type selected.
Bus Driver	The unique id of the busdriver used for this elevator.

Once the elevator has been created it will appear in the tree structure with the properties defined when created (entered in the Elevator dialog). In this example we have Elevator_1 defined for Partition_1, see Figure . A set of standard accessories are automatically added to the elevator.
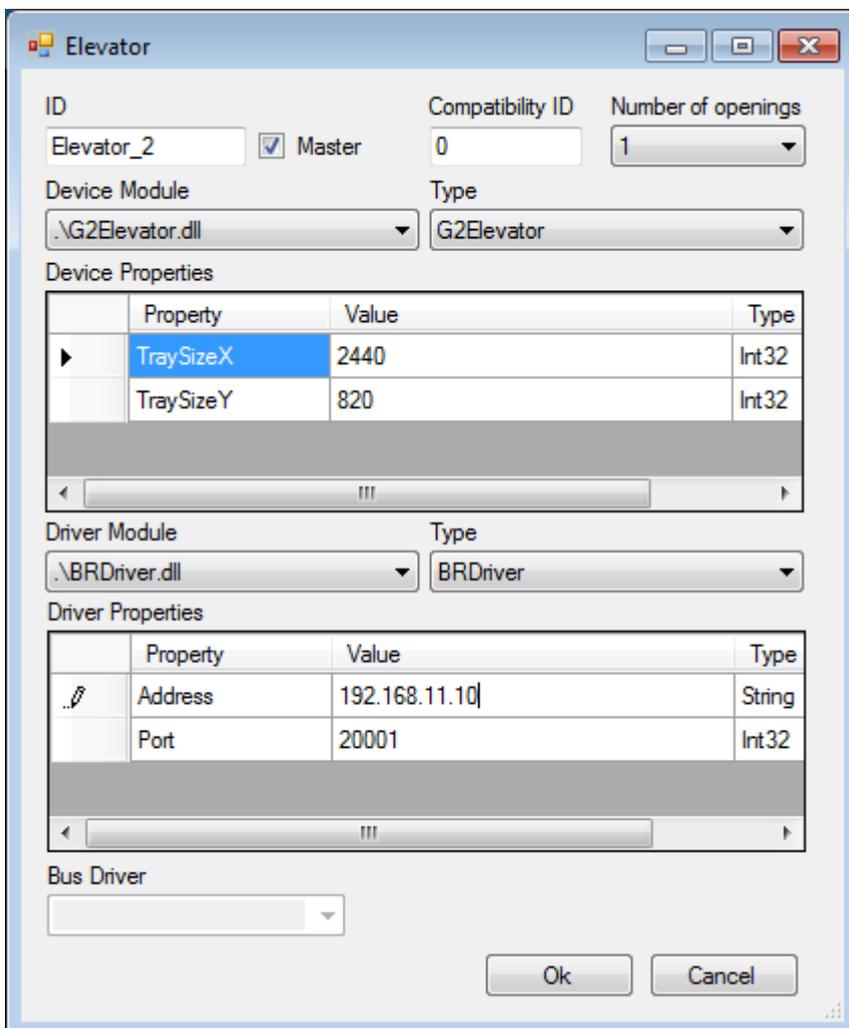

Figure 28, Created Elevator, Elevator_2

Under each created elevator, the associated Accessories are listed, see Figure 29.
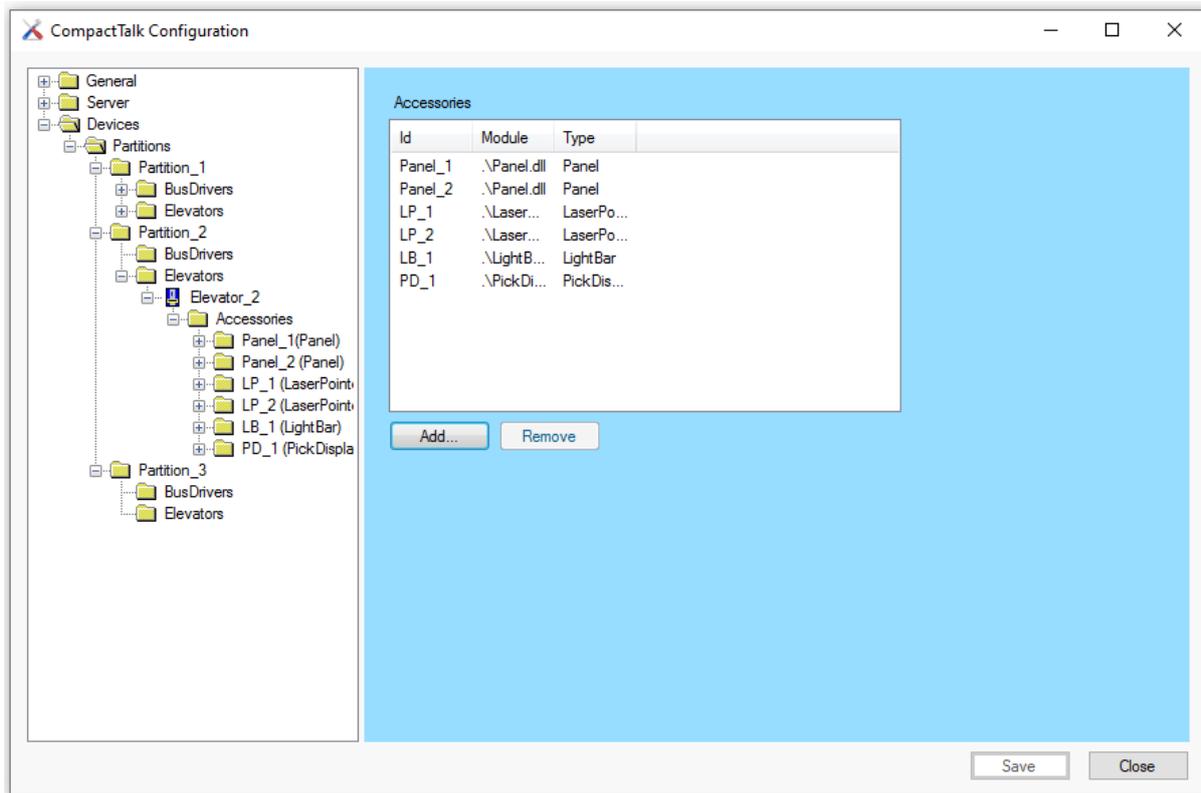
Figure 29, Accessories

Add   Opens the Accessory dialog.

Remove   Removes the selected Accessory.
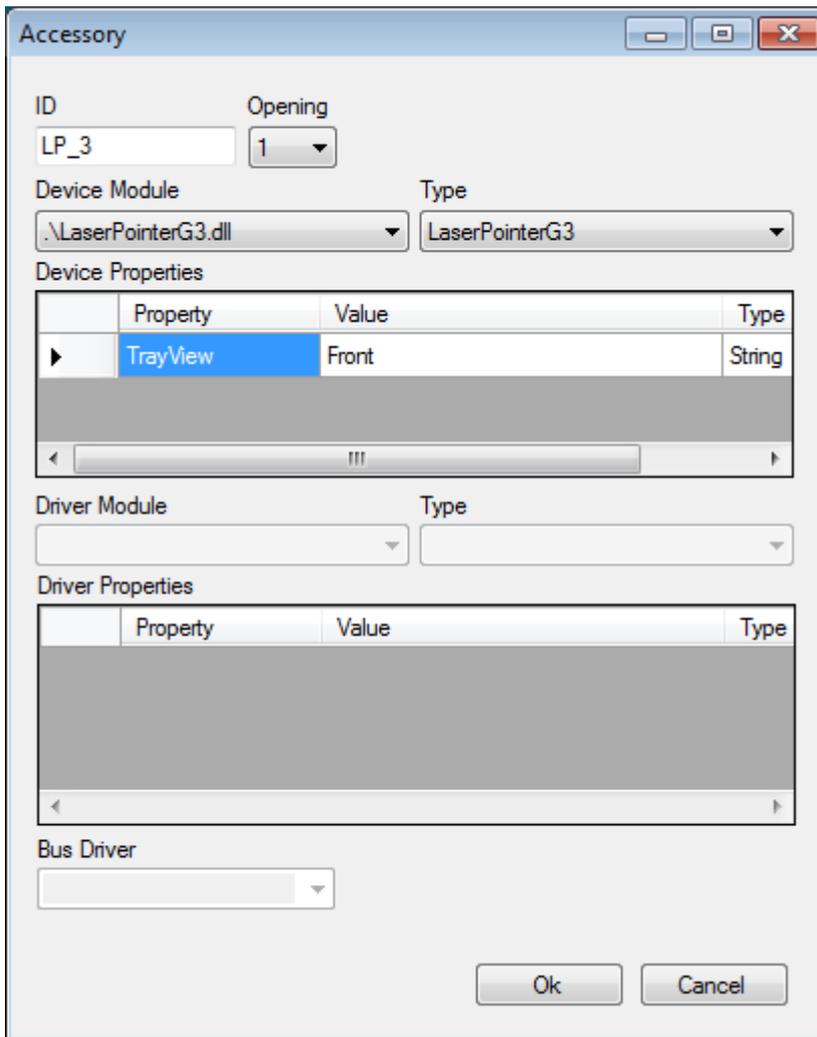
When the button [Add] is pressed, the Accessory dialog opens.

Figure 30, Accessory dialog

ID	An id that is unique among the accessories under the current elevator.
Opening	The opening the accessory is associated with.
Device	List of all device modules included in your Compact Talk installation.
Type	List of all device types associated with the selected device module.
Device Properties	Custom properties for the device selected.
Driver Module	List of all driver modules included in your Compact Talk installation.
Type	List of all export types associated with the selected driver module.

Driver Properties   Custom properties for the driver type selected.

Bus Driver   The unique id of the busdriver used.

When a new Accessory has been created, it appears in the tree structure under the elevator it belongs to, and with the properties defined when created (entered in the Accessory dialog). See example in Figur 31.

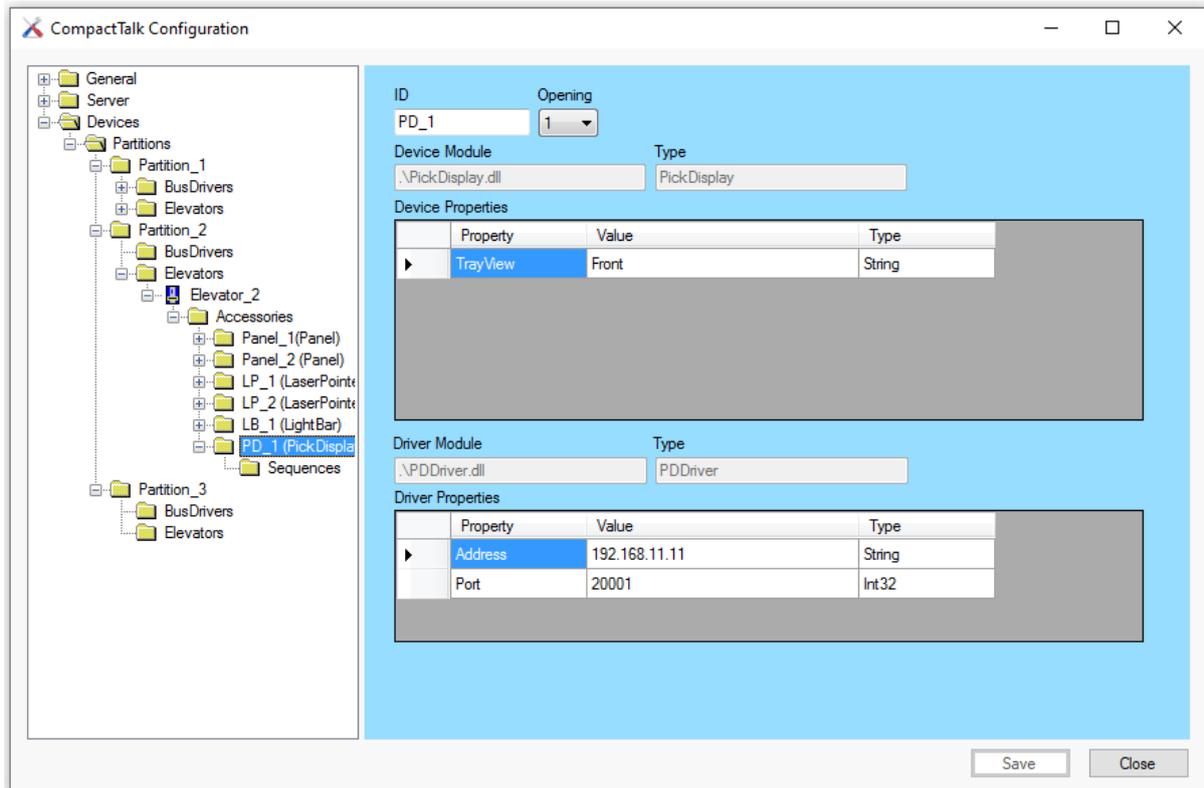A standard sequence is automatically added to the accessory.

Figure 31, Created accessory, PD_1

For each created accessory a number of sequence steps must be defined to determine how the accessory should behave. The sequences will appear in the tree structure under each accessory, see Figure .
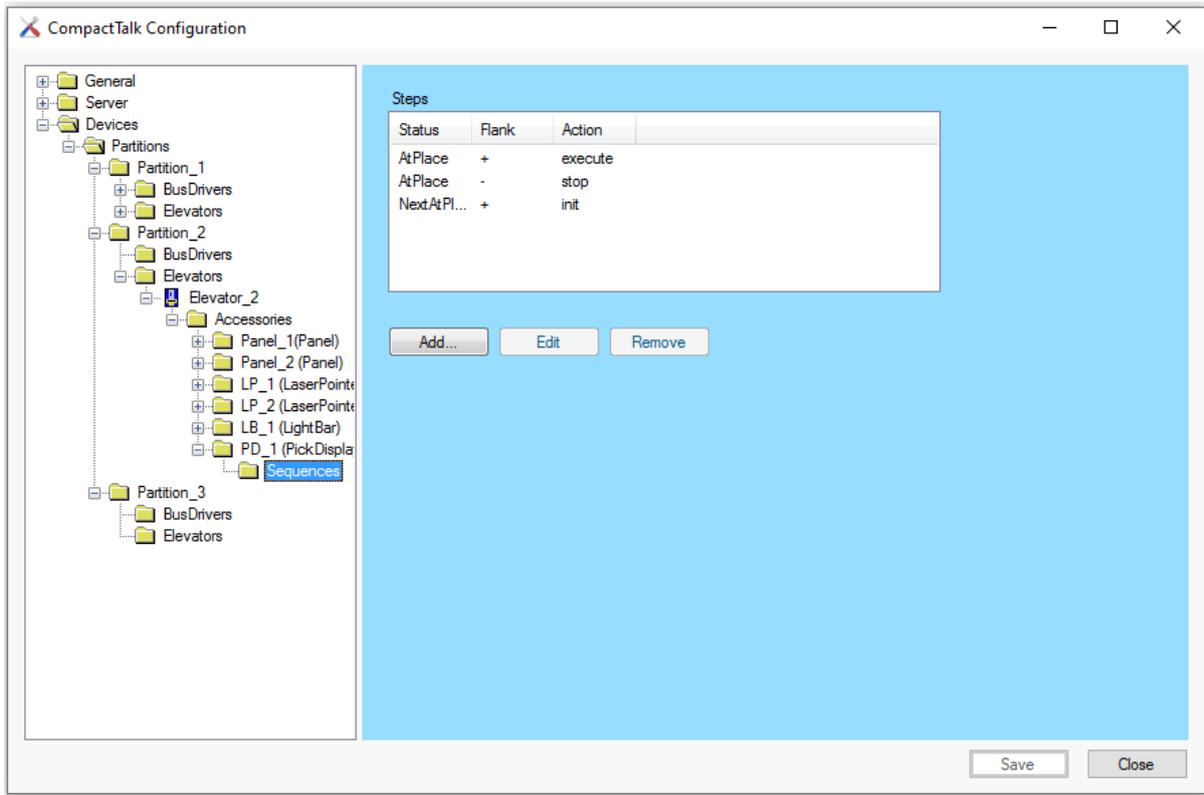
Figure 32, Sequences for PD_1

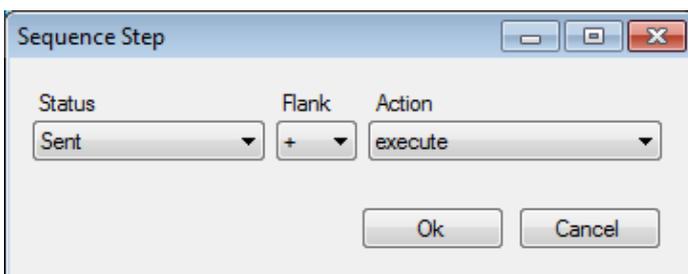|	
Add	Opens the Sequence Step dialog to add a new sequence step.
Edit	Opens the Sequence Step dialog to edit an existing sequence step.
Remove	Removes the selected sequence step.

Figure 33, Sequence step dialog

Status		The order status that should trigger the sequence step.
Flank	+	The trigger will fire when the order status changes to the specified status
	-	The trigger will fire when the order status changes from the specified status.

Opening   The opening the order needs to be targeted to.

Action   The action the accessory device should execute.