

Manuel de zenon

Gestion d'équipe

v. 7.60



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1. Bienvenue dans l'aide de COPA-DATA

TUTORIELS VIDÉO DE ZENON.

Des exemples concrets de configurations de projets dans zenon sont disponibles sur notre chaîne YouTube (https://www.copadata.com/tutorial_menu). Les tutoriels sont regroupés par sujet et proposent un aperçu de l'utilisation des différents modules de zenon. Les tutoriels sont disponibles en anglais.

AIDE GÉNÉRALE

Si vous ne trouvez pas certaines informations dans ce chapitre de l'aide, ou si vous souhaitez nous suggérer d'intégrer un complément d'information, veuillez nous contacter par e-mail : documentation@copadata.com (<mailto:documentation@copadata.com>).

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2. Gestion d'équipe

Shift Management is a module in zenon for the modeling and organization of shifts. This module is not available in global projects and CE projects.



Informations concernant la licence

Composante de la licence standard d'Editor et du Runtime.

You can do the following locally and in the network with the help of Shift Management:

- ▶ Create and apply shift modules
- ▶ Create shifts
- ▶ Enter shift times
- ▶ Administer shift times
- ▶ Export shifts to SQL
- ▶ Inform users who are assigned to a shift via **Message Control**

3. Terminology

Term	Definition
Gestion d'équipe	A module in zenon for the modeling and organization of shifts.
Shift	Represents the course of an individual shift. This also contains more in-depth information, such as a free-text name and description, assignment to the equipment model and user administration, as well as breaks.
Break	Shifts can contain breaks to show an interruption to productivity.
Shift model	Represents the mode of a recurring configuration of shifts, such as "2-shift operation" or "3-shift operation". To do this, the shift model combines at least one or more shifts. In addition, the shift model contains more in-depth information, such as a free-text name and description.
Shift calendar	Is a visualization component for selective display in zenon. It allows, among other things, the creation and editing of shift occurrences.
Staff	Is the people selected for a shift.

4. Configure Shift Management

Shift Management is operated in Runtime by means of a Shift Management screen.

To be able to display and manage events in Runtime, the following must be configured in the Editor:

- ▶ A Shift Management screen (à la page 7).
- ▶ A screen switch (à la page 11) to this screen

This screen is called up and configured in Runtime.

4.1 Creating a screen of the type Shift management

CREATING A SCREEN OF THE TYPE SHIFT MANAGEMENT

DÉVELOPPEMENT

Étapes de création du synoptique :

1. Créez un nouveau synoptique :

Dans la barre d'outils ou le menu contextuel du nœud **Synoptiques**, sélectionnez la commande **Nouveau synoptique**.

Un synoptique vide Standard est créé.

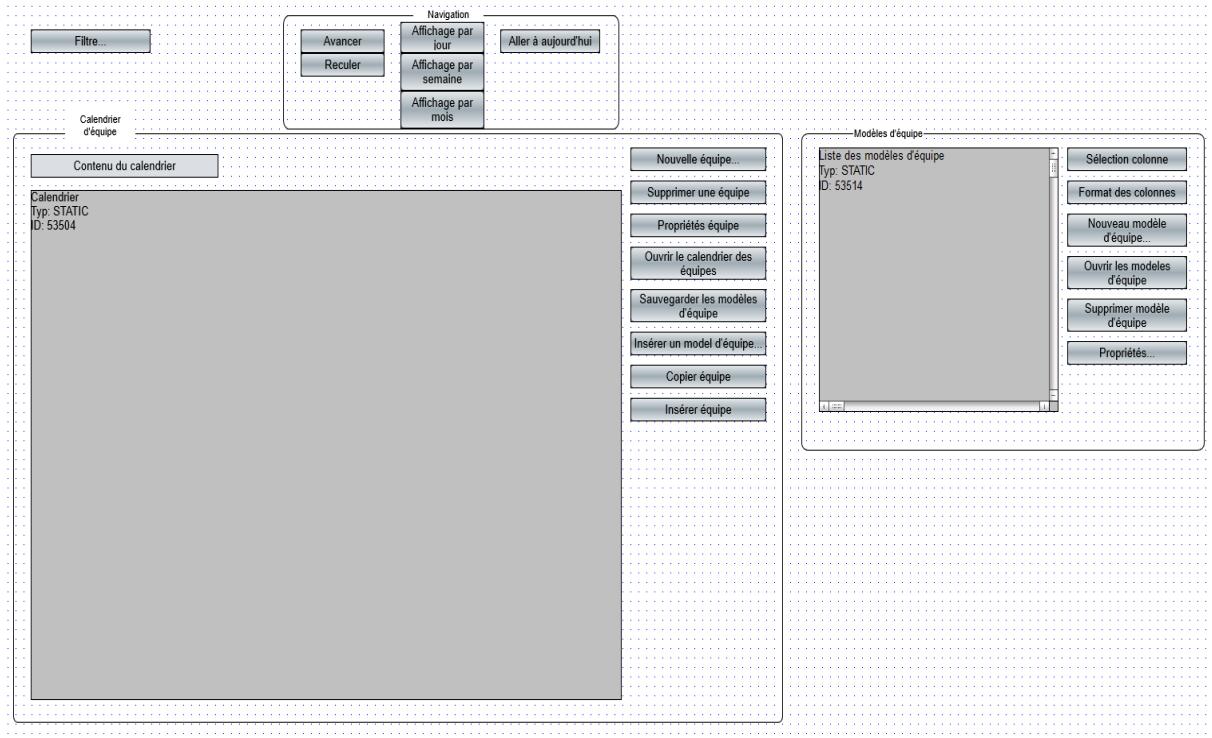
2. Modifiez les propriétés du synoptique :

- a) Nommez le synoptique dans la propriété **Nom**.
- b) Select Shift management in the **Type de synoptique** property.
- c) Sélectionnez le cadre souhaité dans la propriété **Gabarit**.

3. Configurez le contenu du synoptique :

- a) Sélectionnez l'option de menu **Éléments de contrôle** dans la barre de menus
- b) Sélectionnez Insérer un modèle dans la liste déroulante.
La boîte de dialogue de sélection de mises en forme prédéfinies s'affiche à l'écran. Certains éléments de contrôle sont insérés dans le synoptique à des positions prédéfinies.
- c) Supprimez les éléments superflus du synoptique.
- d) Si nécessaire, sélectionnez des éléments supplémentaires dans la liste déroulante **Éléments**. Placez-les aux emplacements souhaités sur le synoptique.

4. Créez une fonction d'appel de synoptique.



4.2 Control elements

INSERT TEMPLATE

Parameter	Description
Insert template	Ouvre la boîte de dialogue de sélection de modèle pour le type de synoptique correspondant. Des modèles sont fournis avec zenon, et peuvent également être créés par l'utilisateur. Modèles ajoutent des éléments de contrôle prédéfinis à des positions prédéfinies sur le synoptique. Les éléments qui ne sont pas nécessaires peuvent également être supprimés individuellement après leur création. Les éléments supplémentaires peuvent être sélectionnés dans la liste déroulante, puis insérés dans le synoptique zenon. Les éléments peuvent être déplacés et disposés individuellement sur le synoptique.

CONTROL ELEMENTS

Element	Description
Filter	Opens the dialog (à la page 11) with the filter settings for screen switching.
Calendar	Calendar module that shows the calendar with the shifts or a shift model in Runtime.
Calendar content	Text element that shows the currently-displayed data range of the shift calendar in Runtime.

SHIFTS

Element	Description
New shift	Opens the dialog (à la page 38) to create a new shift.
Delete shift	Deletes the selected shift. Multiple selection possible with the CTRL key.
Shift properties	Opens dialog for editing the selected shift.
Copy shift	Copies the selected shift.
Insert shift	Pastes a copied shift from the clipboard into the selected day.

SHIFT CALENDAR

Element	Description
Open shift calendar	Opens the shift calendar. Only available if a shift model is displayed in the calendar.
Insert shift model	Opens the dialog (à la page 50) to paste a shift model into the shift calendar.

NAVIGATION

Element	Description
Forwards	Goes one element forward in the calendar according to the entered value (one day, one week or one month).
Backwards	Goes one element back in the calendar according to the entered value (one day, one week or one month).
Day view	Shows the selected day in the calendar.
Week view	Shows the selected week in the calendar.
Month view	Shows the selected month in the calendar.
Go to today	Shows the current day in the calendar.

SHIFT MODELS

Elements	Description
Shift models list	List of existing shift models.
Column selection	Opens the dialog (à la page 16) to select the columns to be displayed in the list.
Format columns	Opens a dialog (à la page 18) to format the columns.
New shift model	Opens the dialog (à la page 55) for creating a shift model.
Open shift model	Changes the calendar view to the display of shift models and opens the selected shift model there.
Save shift model	Saves the shift model opened in the calendar. Only available if a shift model is open in the shift calendar and there are unsaved changes.
Delete shift model	Deletes the selected shift model after a confirmation message.
Properties	Configuration of the properties of the shift model: Name and description

4.3 Amend the appearance of the calendar

You can amend the appearance of the calendar using the properties of the **Calendar** control element.

4.3.1 Calendar properties

COLORS FOR WORKING TIME AND WORK-FREE TIME

To configure the colors for working time and work-free time:

1. Click on the calendar element in the Editor.
2. Select the **Remplissage** group in properties.
3. Configure the color for work-free time using the **Couleur de remplissage période d'inactivité** property.
Clicking on button ... opens the dialog for selecting a color.
4. Configure the color for working time using the **Couleur de remplissage période de travail** property.
Clicking on button ... opens the dialog for selecting a color.

4.4 Configuring screen switching

To open a Shift management screen in Runtime:

1. Create a screen of type Shift management.
2. Create a screen switch function for this screen

CONFIGURE SCREEN SWITCHING

To create a screen switch to a Shift management screen:

1. In the context menu of node **function** select command **New function**.
2. Click on **screen switch**.
The dialog for the screen selection will be opened.
3. Create a **Shift Management** screen.
The filter dialog is opened.

FILTER DIALOG

Several tabs are available in the dialog for configuration.

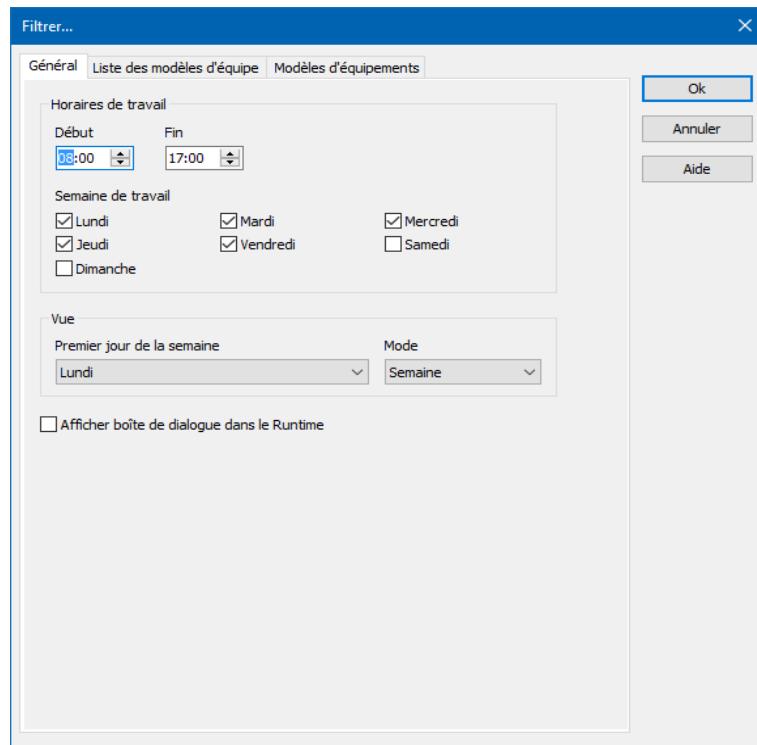
- ▶ General: (à la page 12) Configuration of the calendar.
- ▶ List of shift models (à la page 15): Configuration of the list of the shift models.
- ▶ Equipment modeling (à la page 20): Selection of the equipment model.

When calling up the configuration again, tabs for the replacement of links and indices are also offered.

Note: The dialog can be called up in Runtime using the **Filter** button.

4.4.1 General

The pre-settings for the shift calendar are configured in this tab. The settings made here determine the display and requirements of the calendar in Runtime. The settings can only be modified in Runtime if the **Show this dialog in Runtime** option has been activated.



WORK TIME

Configuration of the working time.

Option	Description
Work time	You use these properties to configure the working time prescribed in the calendar.
Start	Enter the time for the start of the working time here. Input in the field directly or by means of the arrow keys. Default: 8 :00 AM
End	Enter the time for the end of the work time. Entry in the field directly or configuration by means of the arrow keys. Default: 5 :00 PM
Work week	You use this checkbox to stipulate which days constitute a working week. Selection by activating the checkbox beside of the respective weekday. Default: Monday to Friday.

VIEW

Configuration of the view.

Option	Description
View	Configuration of the standard view of the calendar in Runtime.
First week day	Selection of the week day with which the Calendar starts the working week. Select from drop-down list. Default: Monday
Mode	Selection of the default view in which the calendar is opened in Runtime. Select from drop-down list: ▶ day ▶ Week ▶ Month Default: Week

GENERAL

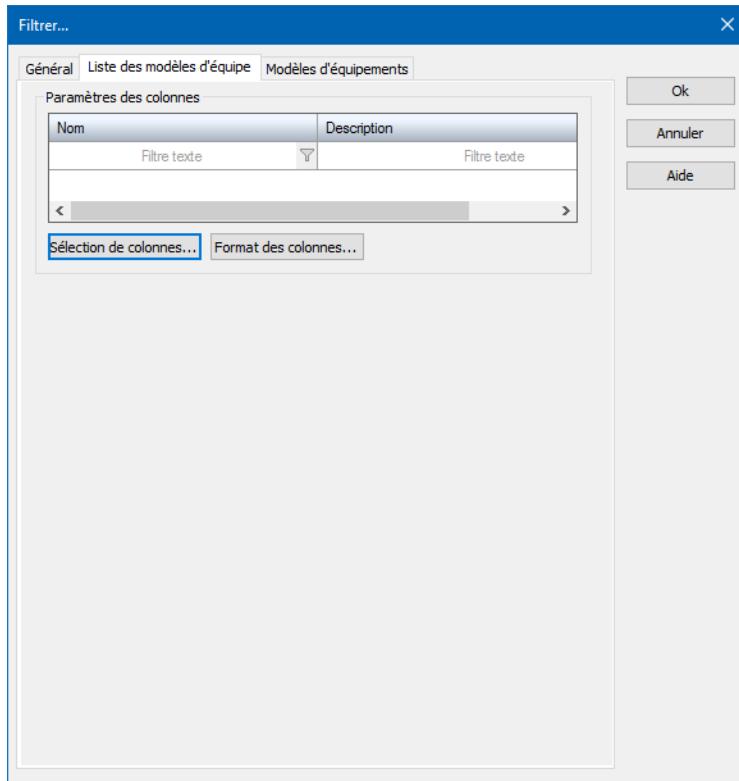
Option	Description
Show this dialog in the Runtime	Selection of whether the dialog is offered when the screen is called up in Runtime. ▶ Active: The dialog will be shown in the Runtime. Settings can be edited before screen switching. ▶ Inactive: Dialog is not offered in Runtime. The settings configured here are applied.

FERMER BOÎTE DE DIALOGUE

Options	Description :
OK	Applique toutes les modifications effectuées sur tous les onglets, puis ferme la boîte de dialogue.
Annuler	Annule toutes les modifications effectuées sur tous les onglets, puis ferme la boîte de dialogue.
Aide	Ouvre l'aide en ligne.

4.4.2 Shift models list

You configure the columns of the shift model list in this tab. These settings are used for the display of the model list in Runtime. The dialogs to configure the columns can also be called up in Runtime using the corresponding buttons.



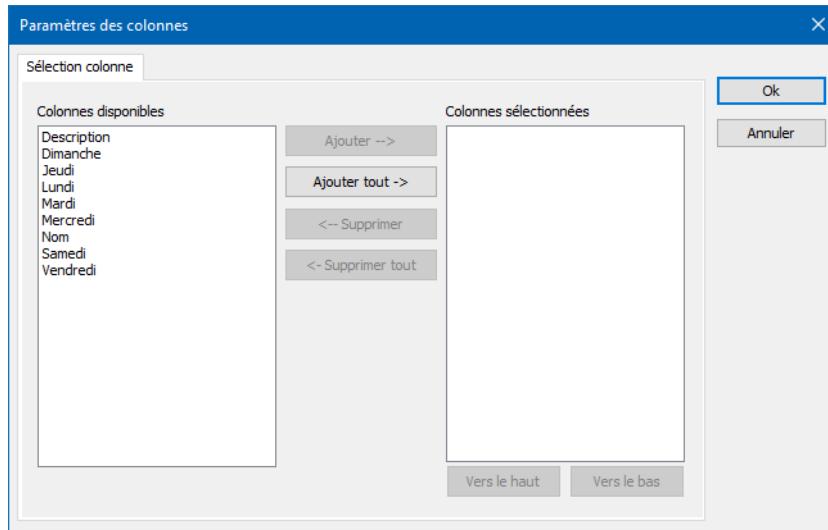
Option	Description
List	Shows configured columns.
Column selection	Clicking on button opens the dialog to select (à la page 16) the columns to be displayed.
Column format	Clicking on the button opens the dialog to format (à la page 18) the columns.

FERMER BOÎTE DE DIALOGUE

Options	Description :
OK	Applique toutes les modifications effectuées sur tous les onglets, puis ferme la boîte de dialogue.
Annuler	Annule toutes les modifications effectuées sur tous les onglets, puis ferme la boîte de dialogue.
Aide	Ouvre l'aide en ligne.

Column selection

Selection of the columns to be displayed.



COLUMN SELECTION

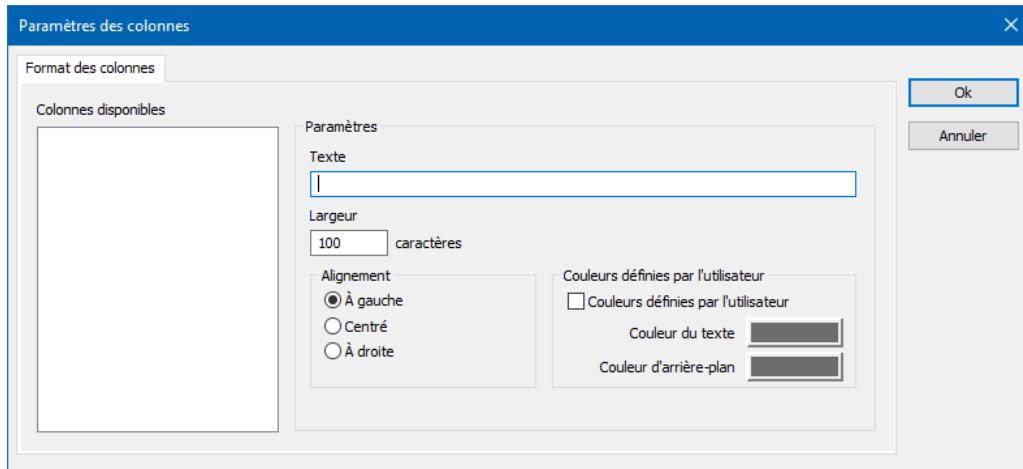
Options	Fonction
Colonnes disponibles	Liste de colonnes pouvant être affichées dans la table.
Colonnes sélectionnées	Colonnes affichées dans la table.
Ajouter ->	Déplace la colonne sélectionnée des colonnes disponibles vers les éléments sélectionnés. Lorsque vous confirmez la boîte de dialogue en cliquant sur OK, ces colonnes sont affichées dans la vue de détail.
Ajouter toutes ->	Déplace toutes les colonnes disponibles vers les colonnes sélectionnées.
<- Supprimer	Supprime les colonnes marquées des éléments sélectionnés et les affiche dans la liste des colonnes disponibles. Lorsque vous confirmez la boîte de dialogue en cliquant sur OK, ces colonnes sont supprimées de la vue de détail.
<- Supprimer tout	Toutes les colonnes sont supprimées de la liste des colonnes sélectionnées.
Haut	Déplace l'entrée sélectionnée vers le haut. Cette fonction est uniquement disponible pour les entrées uniques ; les sélections multiples ne sont pas autorisées dans ce cas.
Bas	Déplace l'entrée sélectionnée vers le bas. Cette fonction est uniquement disponible pour les entrées uniques ; les sélections multiples ne sont pas autorisées dans ce cas.

CLOSE DIALOG

Option	Description
OK	Applique les paramètres et ferme la boîte de dialogue.
Cancel	Annule toutes les modifications et ferme la boîte de dialogue.

Column format

Graphical configuration of the column display.



COLONNES DISPONIBLES

Options	Description :
Colonnes disponibles	Liste de colonnes disponibles avec la fonction de sélection de colonnes . La configuration de la colonne sélectionnée se déroule via les options de la section Paramètres .

PARAMÈTRES

Option	Description :
Paramètres	Paramètres de la colonne sélectionnée.
Intitulé	Nom de l'intitulé de colonne. Cet intitulé de colonne est compatible avec la fonction de changement de langue en ligne. Pour cela, le caractère @ doit être saisi devant le nom.
Largeur	Largeur de la colonne en caractères. Calcul : nombre de caractères multiplié par la largeur moyenne des caractères de la police sélectionnée.
Alignement	Alignement. La sélection de l'attribution s'effectue au moyen des cases d'option. Paramètres possibles : <ul style="list-style-type: none"> ▶ Gauche : Le texte est justifié contre le bord gauche de la colonne. ▶ Centré : Le texte est centré dans la colonne. ▶ Droite : Le texte est justifié contre le bord droit de la colonne.
Couleurs définies par l'utilisateur	Propriétés permettant de sélectionner des couleurs définies par l'utilisateur pour le texte et l'arrière-plan. Les paramètres ont une incidence dans Editor et dans le Runtime. Remarque : <ul style="list-style-type: none"> ▶ Ces paramètres sont uniquement disponibles pour les listes configurables. ▶ En outre, le focus correspondant dans la liste peut être indiqué par différentes couleurs de texte et d'arrière-plan dans le Runtime. Celles-ci sont configurées dans les propriétés du projet.
Couleurs définies par l'utilisateur	Active : Les couleurs définies par l'utilisateur sont appliquées.
Couleur du texte	Couleur d'affichage du texte. Cliquez sur la couleur pour la palette de sélection de couleurs.

Couleur d'arrière-plan	Couleur d'affichage de l'arrière-plan de la cellule. Cliquez sur la couleur pour la palette de sélection de couleurs.
Désactiver le filtre de colonnes dans le Runtime	<ul style="list-style-type: none"> ▶ Active : Le filtre de cette colonne ne peut pas être modifié dans le Runtime. <p>Remarque : Uniquement disponible pour :</p> <ul style="list-style-type: none"> ▶ Batch Control ▶ Extended Trend ▶ Synoptiques de filtre ▶ Message Control ▶ Gestionnaire de groupe de recettes (Recipe Group Manager) ▶ Gestion d'équipes ▶ Liste contextuelle

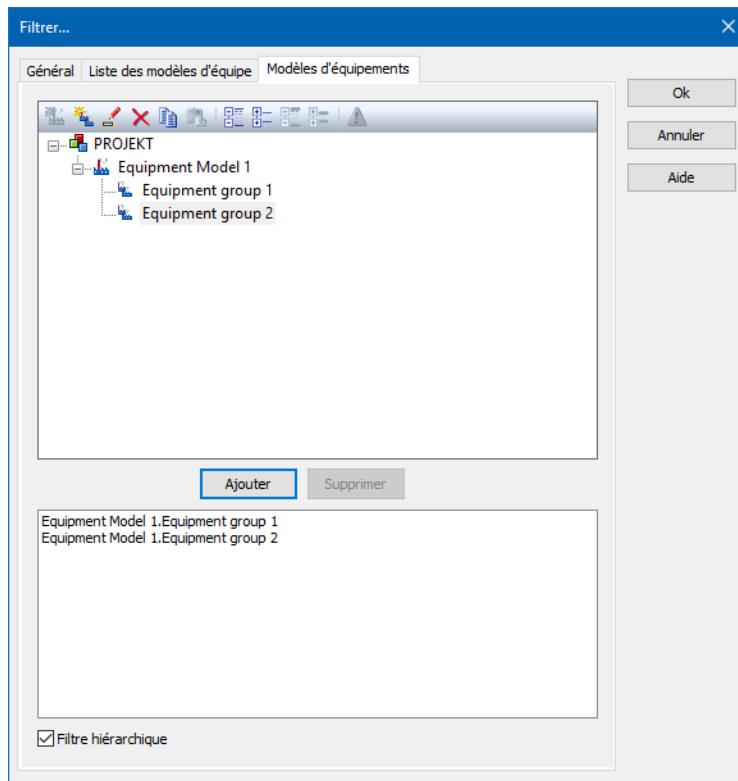
FERMER BOÎTE DE DIALOGUE

Options	Description :
OK	Applique les paramètres et ferme la boîte de dialogue.
Annuler	Annule toutes les modifications et ferme la boîte de dialogue.
Aide	Ouvre l'aide en ligne.

4.4.3 Equipment Modeling

Each shift can be linked to as many equipment groups as desired. The shifts are filtered according to equipment groups using the screen switch function. The dialog can be called up in Runtime using the **Filter** button.

All pre-existing equipment models and their equipment groups are displayed in the filter. Via the context menu or via toolbar, you can create new models and groups.



EQUIPMENT MODELING

Option	Description :
Barre d'outils	<p>Symboles pour:</p> <ul style="list-style-type: none"> ▶ Modifier les modèles d'équipement locaux ▶ Agrandir ou réduire l'affichage ▶ Afficher des informations
Liste de modèles d'équipements	<p>Autorise la sélection de modèles et de groupes. La liste distingue les modèles d'équipement issus du projet global et des projets locaux.</p> <p>Les modèles d'équipement locaux peuvent être créés, modifiés ou supprimés.</p> <p>Remarque : Les modèles d'équipement du projet global ne peuvent pas être affichées si des modèles portant le même nom que dans le projet local. Les modèles affectés sont affichés en cliquant sur le symbole d'avertissement (triangle avec point d'exclamation). Pour plus de détails, reportez-vous au manuel Modèles d'équipement, chapitre Modification de modèles d'équipement locaux.</p>
Ajouter	Ajoute les groupes sélectionnés à la liste de filtres.
Supprimer	Supprime tous les groupes sélectionnés de la liste de filtres.
Filtre hiérarchique	<p>Case à cocher pour l'activation du filtre hiérarchique de modèle d'équipement.</p> <ul style="list-style-type: none"> ▶ Activé : les variables liées à une sous-hierarchie du groupe d'équipement sélectionné sont prises en compte dans le filtre et sont incluses dans l'affichage du Runtime. ▶ Inactif : lors du filtre, seules les variables liées au groupe d'équipement sélectionné sont prises en compte. Par défaut : Actif
Liste de filtres	Affiche tous les groupes d'équipements devant être filtrés.

FERMER LA BOÎTE DE DIALOGUE

Options	Description :
OK	Applique les paramètres et ferme la boîte de dialogue.
Annuler	Annule la sélection et ferme la boîte de dialogue.
	Attention : Toute modification apportée à la structure des équipements locaux est conservée.
Aide	Ouvre l'aide en ligne.

CONFIGURATION

De nouveaux modèles et groupes peuvent être créés pour le projet actif et les modèles et groupes existants peuvent être supprimés.

AJOUTER UN MODÈLE AU PROJET

Pour ajouter un nouveau modèle :

1. Cliquez sur le projet.
2. Dans la barre d'outils, sélectionnez **Nouveau modèle d'équipement**

SUPPRIMER UN MODÈLE

Pour supprimer un modèle existant :

1. Cliquez sur le modèle.
2. Sélectionnez **Supprimer** dans la barre d'outils.

AJOUTER DES GROUPES AU MODÈLE

Pour ajouter un groupe au modèle :

1. Sélectionnez le modèle d'équipement de votre choix.
Attention : Si des conflits de nom existent entre les modèles d'équipement globaux et locaux, les modèles d'équipement locaux sont affichés et les modèles locaux sont ignorés. Vous pouvez obtenir des informations concernant d'éventuels conflits en cliquant sur le symbole correspondant (un triangle avec un point d'exclamation) dans la barre d'outils.
2. Sélectionnez un groupe ou un niveau d'équipements.
3. Ajoutez le nouveau groupe à la liste affichée dans la partie inférieure de la boîte de dialogue en cliquant sur le bouton **Ajouter**.

Remarque :

- Les sous-groupes ne sont pas ajoutés automatiquement.
- Vous pouvez sélectionner autant de groupes que vous le souhaitez.

SUPPRIMER UN GROUPE DU MODÈLE

Pour supprimer un groupe d'un modèle :

1. Sélectionnez les éléments souhaités dans la liste affichée dans la partie inférieure de la boîte de dialogue (les sélections multiples sont autorisées).
2. Cliquez sur le bouton **Supprimer**.

Remarque : les modifications apportées à un élément dans l'arborescence sont conservées, même si vous cliquez sur le bouton **Annuler**. **Annuler** signifie uniquement qu'aucun élément n'a été sélectionné.

GROUPS TO ADD FILTERS OR REMOVE THEM

To add groups to the filter:

1. Select the desired element.
2. Click on the **Add** button.
3. Repeat the process until all necessary groups are available in the list
(Multi-select is not possible)

To remove groups from the filter:

1. Select the desired element
(multiselect: Hold down the `Ctrl` key or `shift` key and click on the desired element.)
2. Click the **Delete** button.

4.5 Function SQL export

Shifts and breaks can be exported to SQL in Runtime (à la page 59). To do this, a corresponding function must be created in the Editor and executed in Runtime.

CREATE THE FUNCTION IN THE EDITOR

Pour créer une fonction :

1. Créez une nouvelle fonction :
Dans la barre d'outils ou le menu contextuel du nœud Fonctions, sélectionnez **Nouvelle fonction**.
La boîte de dialogue de sélection d'une fonction s'affiche à l'écran.
2. Navigate to node **Batch Control**
3. Select the **Calendrier de transfert d'exports SQL** function.
The dialog for configuration is opened.
4. Configure:
 - Connection to the SQL database.
 - Time period from which shifts should be exported.
 - Equipment groups for which the shifts are to be exported.
5. Name the function in the **Nom** property.

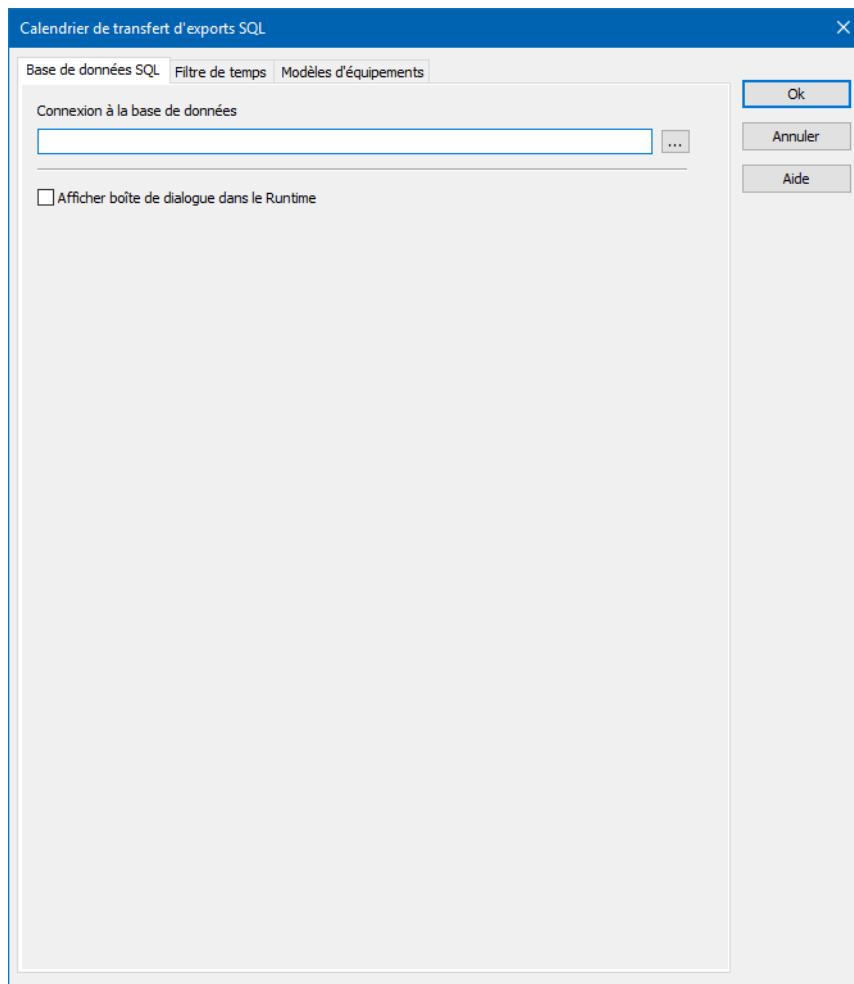
SQL SHIFT CALENDAR DIALOG

SQL export is configured using the following tabs:

- ▶ SQL database (à la page 25): Configuration of the connection to the SQL database.
- ▶ Time (à la page 28): Selection of the time filter.
- ▶ Equipment modeling (à la page 30): Selection of the equipment groups.

4.5.1 SQL database

In this tab, you establish the connection to an SQL database.



SQL DATABASE

Option	Description
Database connection	Selection of the database connection. Entry in the field or configuration by means of a dialog. Clicking on the ... button opens the configuration dialog.
Show this dialog in the Runtime	Active: In Runtime, when the function is called up, this dialog to change the configuration is offered before execution.

FERMER BOÎTE DE DIALOGUE

Options	Description :
OK	Applique toutes les modifications effectuées sur tous les onglets, puis ferme la boîte de dialogue.
Annuler	Annule toutes les modifications effectuées sur tous les onglets, puis ferme la boîte de dialogue.
Aide	Ouvre l'aide en ligne.

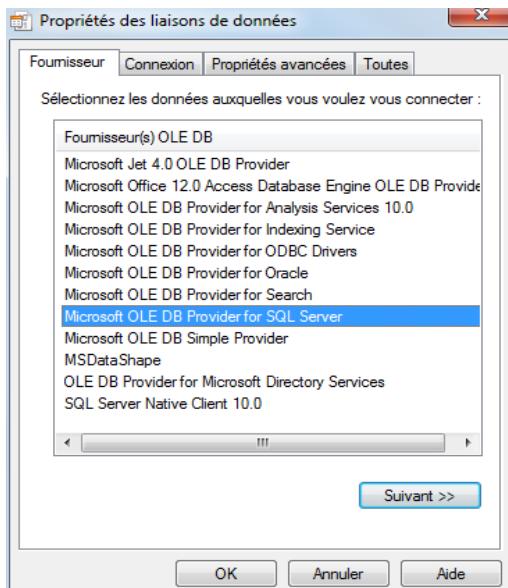
CONFIGURE CONNECTION

The dialog for connecting to a database originates from the operating system.

How the database connection is carried out in general, you can see at the folowing example. You can get information about the individual settings for each tab from the Microsoft help funktion by clicking button **Help**.

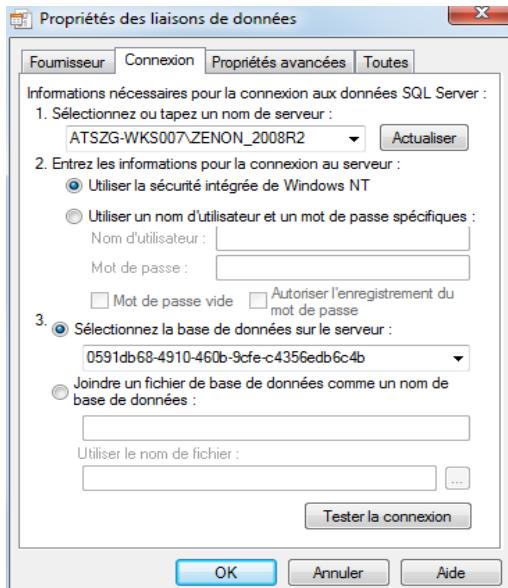
1. The dialog starts with tab **Conenction**.

2. Open tab **Provider**



3. Select the provider **Microsoft OLE DB Provider for SQL Server**.
4. Apply this by double clicking or clicking on the entry or the **Continue** button.

The **Verbindung** tab is opened.



5. Select the required server from the drop-down list.
6. Select the login information.
Tip: **Integrated security** is generally used.
7. Select the database.

8. Click on **test connection**.

Optional settings:

- Tab **Extended**: Configuration of network settings, timeout and access rights (not generally necessary for this connection).
- **All** tab Configuration of individual details (not generally necessary for this connection).

9. Confirm your selection by clicking **OK**.

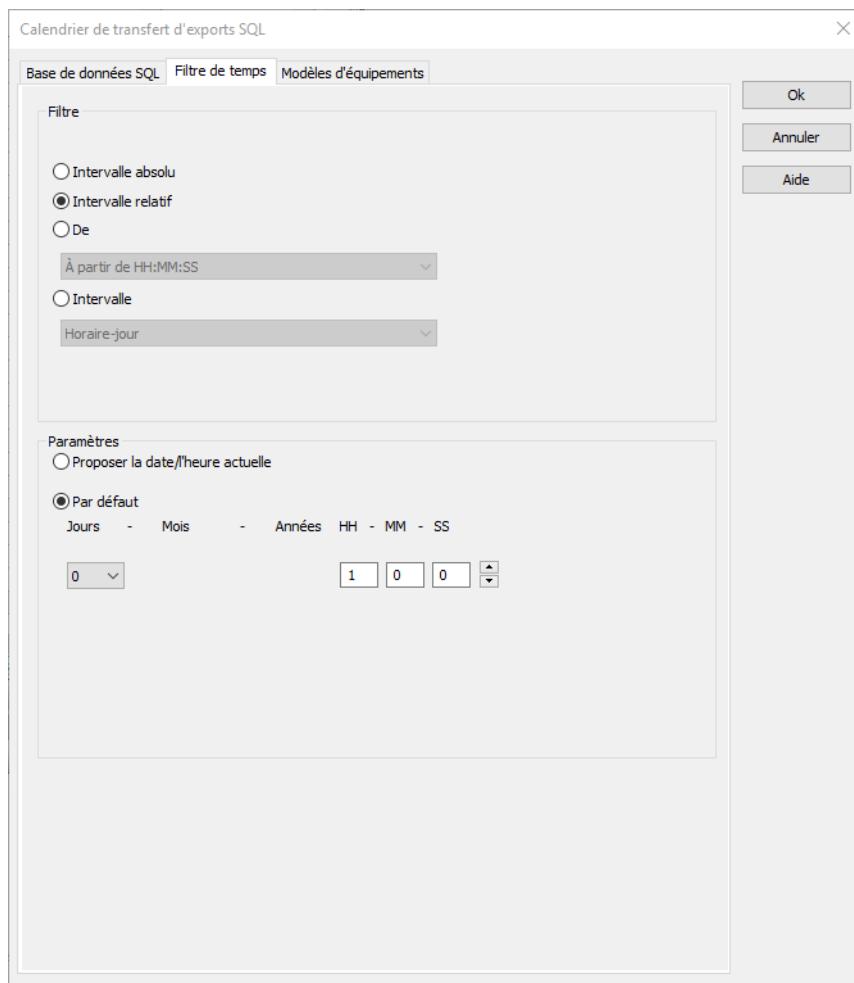
The connection to the SQL Server is entered.

4.5.2 Time

You configure the time period for the export in this tab.

Note: A time period must be stipulated. Only the completed shifts that are in this time period are exported.

Standard: **Relative time period, 1 h**



FILTER

Selection of the filter.

Parameter	Description
Absolute filter	<p>Active: A fixed period of time is entered in the editor. When the function is executed, the defined absolute time period is exactly used.</p> <p>In the settings section, the corresponding options can be shown and configured there.</p> <p>Remarque : L'heure est enregistrée au format UTC. Pour plus de détails, reportez-vous au chapitre Gestion de la date et de l'heure, dans le chapitre Runtime.</p>
Relative time period	<p>Active: A relative time period is entered.</p> <p>In the settings section, the corresponding options can be shown and configured there.</p> <p>Attention: this filter is constantly updated.</p>
From	<p>Active: A time from which the filter is effective is stated. If the time is not reached on the current day, filtering takes place from the corresponding time the previous day.</p> <p>Selection of the area mode from drop-down list:</p> <ul style="list-style-type: none"> ▶ Starting from HH:MM:SS ▶ Starting from day - HH:MM:SS ▶ Starting from day, month - at HH:MM:SS <p>In the settings section, the corresponding options can be shown and configured there.</p> <p>Attention: The start point of this filter is not updated automatically. Only the existing times are used when shown. The end time point is not defined with this filter, it is carried over.</p>
Time period	<p>Active: A fixed time period is entered. Selection of the area mode from drop-down list:</p> <ul style="list-style-type: none"> ▶ One day ▶ One week ▶ Two weeks ▶ One month ▶ One Year ▶ 15 minutes ▶ 30 minutes ▶ 60 minutes <p>In the settings section, the corresponding options can be shown and configured there.</p>

CLOSE DIALOG

Parameter	Description
OK	Applique toutes les modifications effectuées sur tous les onglets, puis ferme la boîte de dialogue.
Cancel	Annule toutes les modifications effectuées sur tous les onglets, puis ferme la boîte de dialogue.
Help	Ouvre l'aide en ligne.

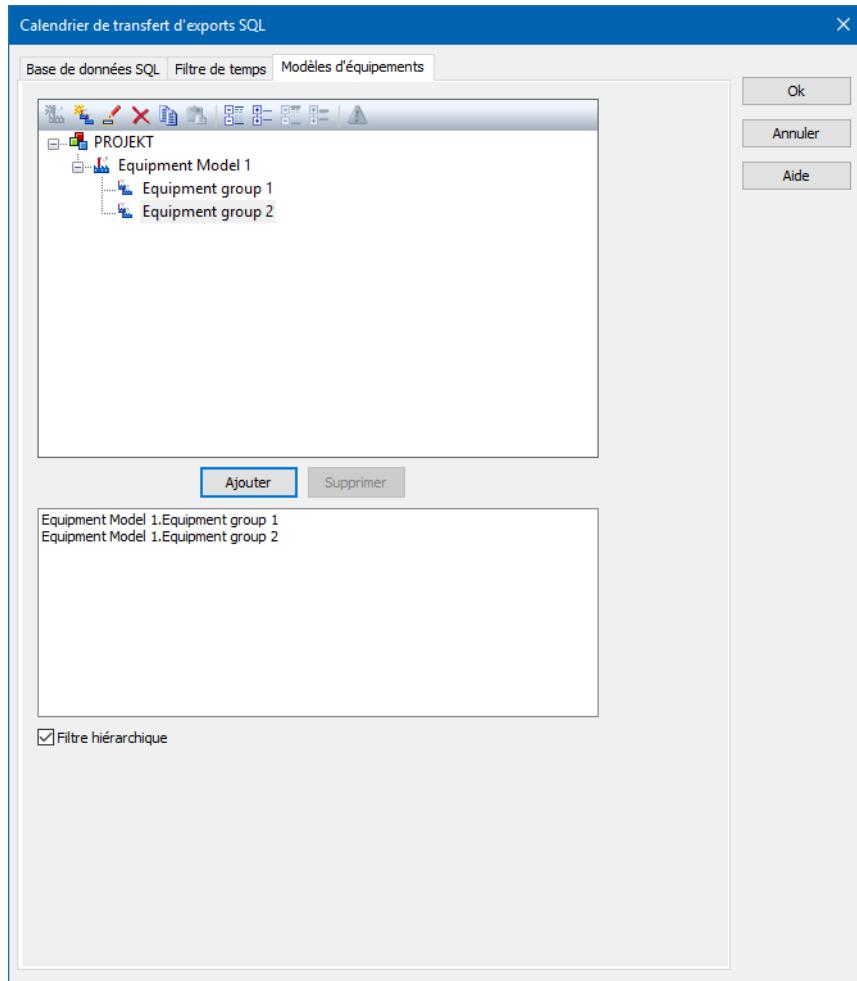
4.5.3 Equipment Modeling

In this tab you select the desired equipment group.

 **Attention**

The following is applicable for SQL export:

- ▶ In general, only shifts that are linked to an equipment model are exported.
- ▶ If no equipment groups have been selected, all shifts that correspond to the time filter and are linked to an equipment model are exported.



EQUIPMENT MODELING

Option	Description
List of equipment models	<p>Autorise la sélection de modèles et de groupes. La liste distingue les modèles d'équipement issus du projet global et des projets locaux.</p> <p>Les modèles d'équipement locaux peuvent être créés, modifiés ou supprimés.</p> <p>Remarque : Les modèles d'équipement du projet global ne peuvent pas être affichées si des modèles portant le même nom que dans le projet local. Les modèles affectés sont affichés en cliquant sur le symbole d'avertissement (triangle avec point d'exclamation). Pour plus de détails, reportez-vous au manuel Modèles d'équipement, chapitre Modification de modèles d'équipement locaux.</p>
Add	<p>Adds the selected groups to the filter list.</p> <p>The shifts that are linked to one of the selected equipment groups are exported.</p>
Remove	Removes all selected groups from the filter list.
Filter list	Shows all equipment groups that are to be filtered.

FERMER BOÎTE DE DIALOGUE

Options	Description :
OK	Applique toutes les modifications effectuées sur tous les onglets, puis ferme la boîte de dialogue.
Annuler	Annule toutes les modifications effectuées sur tous les onglets, puis ferme la boîte de dialogue.
Aide	Ouvre l'aide en ligne.

SELECT EQUIPMENT GROUPS

To select equipment group for the export:

1. Select the desired equipment groups.
2. Click on the **Add** button.
3. Repeat the process until all necessary groups are available in the list (Multi-select is not possible.)

To remove equipment groups:

1. Select the desired equipment group.
(multiselect: Hold down the **Ctrl** key or **shift** key and click on the desired element)

2. Click the **Delete** button.

ADDING OR DELETING EQUIPMENT GROUPS

Actions in the window of the existing equipment model can be controlled using the toolbar.
Description of the symbols, starting from the left:



Symbol	Description
New Equipment Model	(Creates a new Equipment model. (for local equipment models only)
New group	(Creates a new equipment group below the highlighted entry. (for local equipment models only)
Edit	(Makes it possible to edit the name. (for local equipment models only)
Delete	(Deletes the selected entry. (for local equipment models only)
Copy	(Copies the selected entry.
Coller	(Pastes copied entries from the clipboard below the highlighted entry. If a group with the same name already exists, the inserted group receives the prefix Copy of (for local equipment models only)
	Attention : Si des modèles d'équipement sont copiés depuis le projet global vers le projet local et ne sont pas renommés, deux modèles avec le même nom seront présents. Les deux modèles peuvent être sélectionnés ; toutefois, aucun lien ne sera créé lors de la confirmation.
	Conseil : Renommez toujours les modèles copiés depuis le projet global vers le projet local.
Expand all	All nodes are expanded.
Collapse all	All nodes are collapsed.
Expand selection	The selected node is expanded.
Collapse selection	The selected entry is collapsed.
Warnings	Displays warnings. For example, equipment models from the global project that are not displayed because models with the same name from the local project are preferred.



Conseil

You can find further information in the **Equipment modeling** manual, in the **Equipment modeling dialog** chapter.

5. Shift management in Runtime

Shift Management makes the following possible in Runtime:

- ▶ Creation and administration of shifts and shift models
- ▶ Informing users in a shift by means of Message Control

Shift models (à la page 55) provide templates for shifts. Shifts are created in the calendar directly or derived from a shift model.

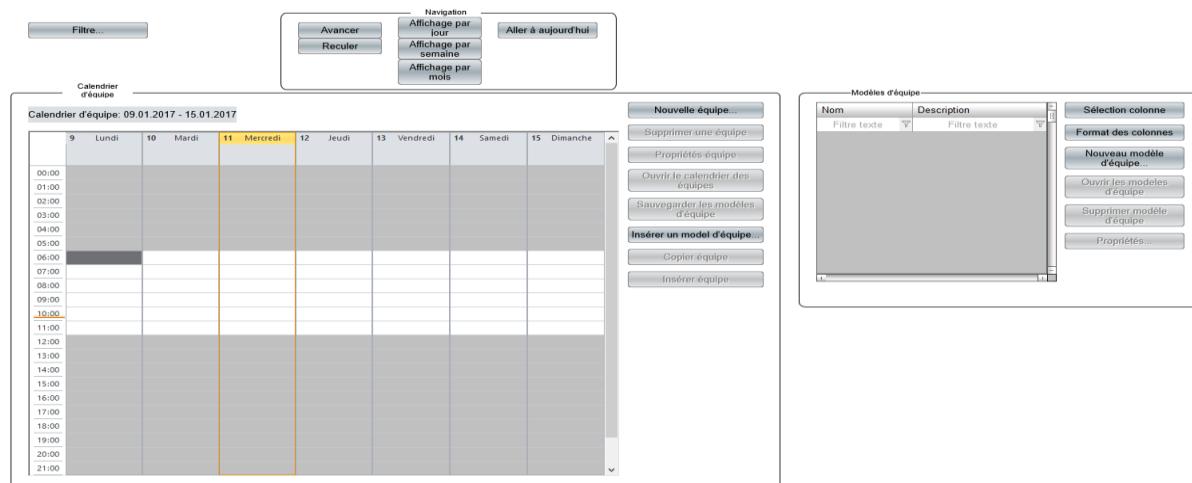
The calender (à la page 37) makes the following possible:

- ▶ Creating shifts
- ▶ Editing shifts
- ▶ Displaying shifts in filtered form
- ▶ Editing shift models

Note:

- ▶ In order for shifts and shift models to be administered on a client or zenon Web Client, the **Primary Server** must be available.
- ▶ In order for users to be able to create, edit and delete shifts and shift models, you must have the corresponding function authorization.

STANDARD VIEW OF SHIFT MANAGEMENT IN RUNTIME



The screenshot displays two windows of the Shift Management application:

- Calendrier d'équipe:** Shows a weekly calendar from January 9 to January 15, 2017. The day **Mercredi** (Wednesday) is highlighted in orange. The interface includes a header with "Filtre...", "Avancer Reculer", "Aller à aujourd'hui", and navigation buttons for "Affichage par jour", "Affichage par semaine", and "Affichage par mois". The left side shows a vertical timeline from 00:00 to 21:00.
- Modèles d'équipe:** Shows a list of shift models. The columns are "Nom" (Name) and "Description". Buttons for managing models include "Nouvelle équipe...", "Supprimer une équipe", "Propriétés équipe", "Ouvrir le calendrier des équipes", "Sauvegarder les modèles d'équipe", "Insérer un modèle d'équipe...", "Copier équipe", and "Insérer équipe". A sidebar on the right provides options for column selection, format, and properties.

ELEMENTS

Element	Description
Filter	Opens the dialog (à la page 11) with the filter settings for screen switching.
Calendar	Calendar module that shows the calendar with the shifts or a shift model in Runtime.
Calendar content	Text element that shows the currently-displayed data range of the shift calendar in Runtime.

SHIFTS

Element	Description
New shift	Opens the dialog (à la page 38) to create a new shift.
Delete shift	Deletes the selected shift. Multiple selection possible with the CTRL key.
Shift properties	Opens dialog for editing the selected shift.
Copy shift	Copies the selected shift.
Insert shift	Pastes a copied shift from the clipboard into the selected day.

SHIFT CALENDAR

Element	Description
Open shift calendar	Opens the shift calendar. Only available if a shift model is displayed in the calendar.
Insert shift model	Opens the dialog (à la page 50) to paste a shift model into the shift calendar.

NAVIGATION

Element	Description
Forwards	Goes one element forward in the calendar according to the entered value (one day, one week or one month).
Backwards	Goes one element back in the calendar according to the entered value (one day, one week or one month).
Day view	Shows the selected day in the calendar.
Week view	Shows the selected week in the calendar.

Month view	Shows the selected month in the calendar.
Go to today	Shows the current day in the calendar.

SHIFT MODELS

Elements	Description
Shift models list	List of existing shift models.
Column selection	Opens the dialog (à la page 16) to select the columns to be displayed in the list.
Format columns	Opens a dialog (à la page 18) to format the columns.
New shift model	Opens the dialog (à la page 55) for creating a shift model.
Open shift model	Changes the calendar view to the display of shift models and opens the selected shift model there.
Save shift model	Saves the shift model opened in the calendar. Only available if a shift model is open in the shift calendar and there are unsaved changes.
Delete shift model	Deletes the selected shift model after a confirmation message.
Properties	Configuration of the properties of the shift model: Name and description

Hint: Insert the **Calendar content** control element into the calendar. You thus see at a glance which time period from the calendar is currently being displayed.

5.1 Calendar

The calendar shows the shift calendar or shift models, according to the selection. Switching is carried out using the **Open shift model** button or the **Open shift calendar** button.

The view is scaled depending on the selected time range:

- ▶ Day and week view: 1 hour
- ▶ Month view: 1 day
- ▶ Shift models only show one day and are displayed scaled to 1 hour.

Shifts and shift models are configured using the context menu or the respective buttons.

EMPTY CELL CALENDAR CONTEXT MENU

Menu item	Action
New shift	Opens the dialog to create a new shift.
Insert shift model	Opens the dialog (à la page 50) for inserting a shift model.
Today	Shows the current day in the calendar.
Day	Shows the selected day in the calendar.
Week	Shows the selected week in the calendar.
Month	Shows the selected month in the calendar.
Forwards	Goes one element forward in the calendar according to the entered value (one day, one week or one month).
Backwards	Goes one element back in the calendar according to the entered value (one day, one week or one month).

CALENDAR SHIFT ENTRY CONTEXT MENU

Menu item	Action
Shift properties	Shows the dialog with the given shift information.
Delete shift	Deletes the selected shift. Multiple selection is also possible with the Ctrl key.

SHIFT MODEL LIST CONTEXT MENU

Menu item	Action
New shift model	Opens the dialog to create a new shift model.
Open shift model	Changes the calendar view to a display of shift models and opens the selected shift model.

5.1.1 Shifts

Create shift

To create a new shift:

1. In the calendar, click in a new time point that has not yet been assigned.

2. Create a new shift:

- Context menu: Click on **New shift** in the context menu.
- Button in the screen: Click on the **New shift** button.
- Keyboard: Press the **Ins** key.

The dialog to create a new shift is opened.

3. Configure the shift with:

- Shift times (General tab)
- Breaks
- Equipment Groups
- User

Note: It is possible to create shifts on any client computer. If Shift Management is used on different client computers at the same time, all newly-created shifts are saved and updated on all client computers.

General properties

Configuration of the general shift properties.

To configure general properties:

1. Give the shift a name.
2. Configure the start and end time.
3. Enter a description (optional).
4. Configure breaks and equipment groups if necessary.
5. Close the dialog by clicking on **OK**.

Shifts must meet the following rules:

- ▶ A valid name must be given.
- ▶ The start time must not be after the end time.

Attention: If you change shift times, amend the break times in the **Breaks** tab too.

GENERAL DIALOG

Option	Description
Name	<p>Please enter a name for the shift.</p> <ul style="list-style-type: none"> ▶ Maximum length: 256 characters ▶ The following special characters are not permitted: ~!@#\$%^&*?<>!
Start	<p>Select the start time for the shift:</p> <ul style="list-style-type: none"> ▶ Day: Selection from calendar element or entry in the field directly. ▶ Time: Selection by means of arrow keys or entry in the field directly.
End	<p>Select the end time for the shift:</p> <ul style="list-style-type: none"> ▶ Day: Selection from calendar element or entry in the field directly. ▶ Time: Selection by means of arrow keys or entry in the field directly.
Description	<p>Optional description of the shift. Maximum length: 32.000 characters</p>

FERMER BOÎTE DE DIALOGUE

Options	Description
OK	Applique toutes les modifications effectuées sur tous les onglets, puis ferme la boîte de dialogue.
Annuler	Annule toutes les modifications effectuées sur tous les onglets, puis ferme la boîte de dialogue.

Breaks

Configuration of the break times.

All breaks are shown in a list and can be edited in the list directly.

To configure breaks:

1. Click on the New button.

A new break is created.

2. Amend the name.

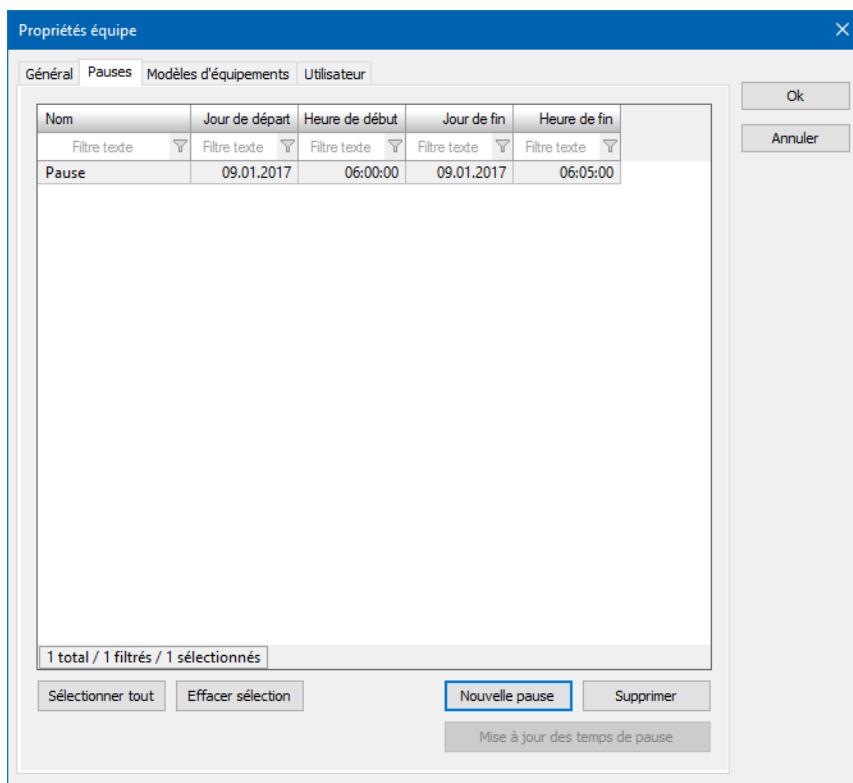
3. Issue a date and time for the start and end of the break.
4. Click on **OK**.

Note: If the shift times are amended, you may need to also amend the break times under certain circumstances. You can do that manually or automatically by clicking on the **Update break times** button.

Breaks must meet the following rules:

- ▶ For names, the same rules as for shift names are applicable.
- ▶ The start time must not be after the end time.
- ▶ They must not overlap.
- ▶ They must be within a shift.

BREAKS DIALOG



Nom	Jour de départ	Heure de début	Jour de fin	Heure de fin
Pause	09.01.2017	06:00:00	09.01.2017	06:05:00

1 total / 1 filtrés / 1 sélectionnés

Sélectionner tout Effacer sélection Nouvelle pause Supprimer Mise à jour des temps de pause

Option	Description
Name	<p>Display and configuration of the break name.</p> <p>Default: Break</p> <p>To change the name:</p> <ol style="list-style-type: none"> 1. Click in the cell twice or press the F2 button after selection. 2. Enter the name. <p>The following is applicable for break names:</p> <ul style="list-style-type: none"> ▶ Maximum length: 256 characters ▶ The following special characters are not permitted: !@#\$%^&*?<>!
Start day	<p>Select the day for the start of the break here.</p> <p>Default: First day of the shift.</p> <p>To change the day:</p> <ol style="list-style-type: none"> 1. Click in the cell twice or press the F2 button after selection. 2. Select the required day from the drop-down list. <p>The following applies for the start day:</p> <ul style="list-style-type: none"> ▶ All days configured for the shift are available. ▶ The date must not be higher than the date for the End day option.
Start Time	<p>Select the time for the start of the break here.</p> <p>Default: Start time of the shift.</p> <p>To change the time:</p> <ol style="list-style-type: none"> 1. Click in the cell twice or press the F2 button after selection. 2. Enter the time or configure the time with the arrow keys. <p>The following is applicable for the start time:</p> <ul style="list-style-type: none"> ▶ All times configured for the shift are available. ▶ The time must not be later than the time configured for the End time option.
End day	<p>Select the day for the end of the break here.</p> <p>Default: First day of the shift.</p> <p>To change the day:</p>

	<ol style="list-style-type: none"> 1. Click in the cell twice or press the F2 button after selection. 2. Select the required day from the drop-down list. <p>The following applies for the end day:</p> <ul style="list-style-type: none"> ▶ All days configured for the shift are available. ▶ The date must not be earlier than the date for the Start day option.
End time	<p>Select the time for the end of the break here.</p> <p>Default: Start time of the shift plus 5 minutes.</p> <p>To change the time:</p> <ol style="list-style-type: none"> 1. Click in the cell twice or press the F2 button after selection. 2. Enter the time or configure the time with the arrow keys. <p>The following is applicable for the end time:</p> <ul style="list-style-type: none"> ▶ All times configured for the shift are available. ▶ The time must not be later than the time configured for the Start time option.
Select all	Selects all configured breaks.
Clear selection	Clears the selection. No more breaks are selected.
New	Adds a new break to the list.
Delete	Deletes all selected entries after requesting confirmation.
Update break times	<p>Clicking on the button automatically amends the break times to the amended shift times. In doing so, all breaks are moved so that their start is at the same length to the shift start as before the change to the shift time.</p> <p>Only available if, in the General properties (à la page 39) tab, shift times have been amended and the change has an effect on the configured breaks.</p>

FERMER BOÎTE DE DIALOGUE

Options	Description
OK	Applique toutes les modifications effectuées sur tous les onglets, puis ferme la boîte de dialogue.
Annuler	Annule toutes les modifications effectuées sur tous les onglets, puis ferme la boîte de dialogue.

Equipment Modeling

Shifts can be linked to equipment groups.

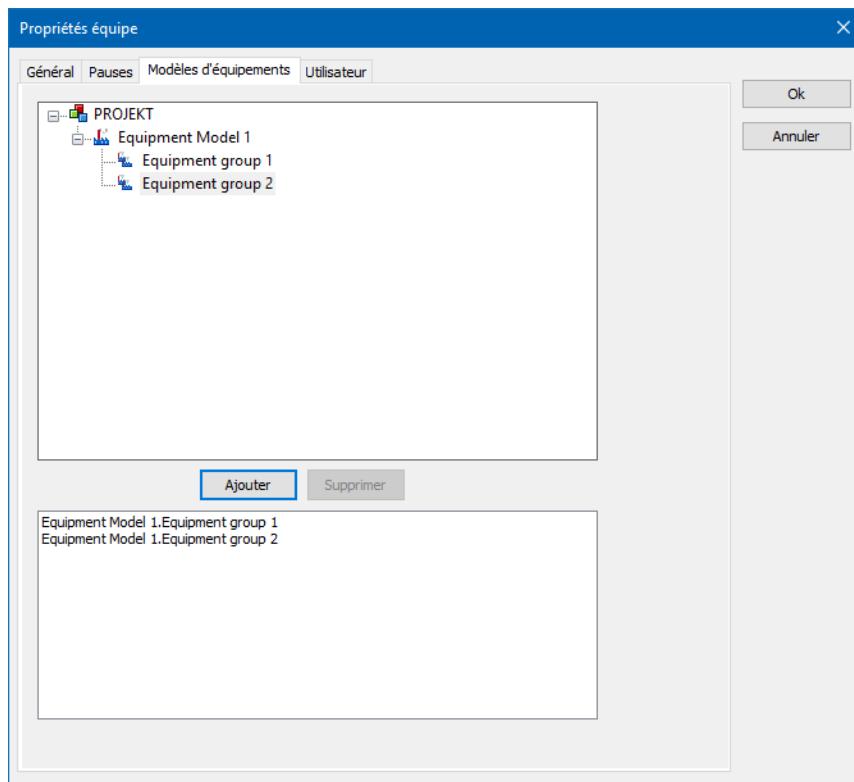
To assign equipment groups in a created shift:

1. Select the desired element.
2. Click on the **Add** button.
3. Repeat the process until all necessary groups are available in the list (Multi-select is not possible.)

To remove groups from a shift:

1. Select the desired element
(multiselect: Hold down the **Ctrl** key or **shift** key and click on the desired element)
2. Click the **Delete** button.

EQUIPMENT MODELING DIALOG



Option	Description
List of equipment models	<p>Autorise la sélection de modèles et de groupes. La liste distingue les modèles d'équipement issus du projet global et des projets locaux.</p> <p>Les modèles d'équipement locaux peuvent être créés, modifiés ou supprimés.</p> <p>Remarque : Les modèles d'équipement du projet global ne peuvent pas être affichées si des modèles portant le même nom que dans le projet local. Les modèles affectés sont affichés en cliquant sur le symbole d'avertissement (triangle avec point d'exclamation). Pour plus de détails, reportez-vous au manuel Modèles d'équipement, chapitre Modification de modèles d'équipement locaux.</p>
Add	Adds the selected groups to the filter list.
Remove	Removes all selected groups from the filter list.
Filter list	Shows all equipment groups that are to be filtered.

CLOSE DIALOG

Option	Description
OK	Applique toutes les modifications effectuées sur tous les onglets, puis ferme la boîte de dialogue.
Cancel	Annule toutes les modifications effectuées sur tous les onglets, puis ferme la boîte de dialogue.

In the Editor, new models and groups can be created for the active project and existing ones can be deleted. It is only possible to work with pre-existing equipment models in Runtime.

Users

You link users to shifts in this tab.

These users can be selected as the recipient of messages by the **Message Control** module.

LINK USERS TO A SHIFT

To link users to a shift:

1. Click on the **Add** button in the dialog.
Alternatively, you can also use the **Add user** command in the context menu.
The **user selection** dialog is opened.
 2. Highlight the desired users in the list of existing users.
- Note:** Users must already be created in order to be able to be selected.

3. Add the selection to the list of selected users with **Add**.

4. Confirm the selection by clicking **OK**.

The users are added in the **shift properties** dialog.

5. Confirm the settings with **OK**.

The users are linked to the shift.

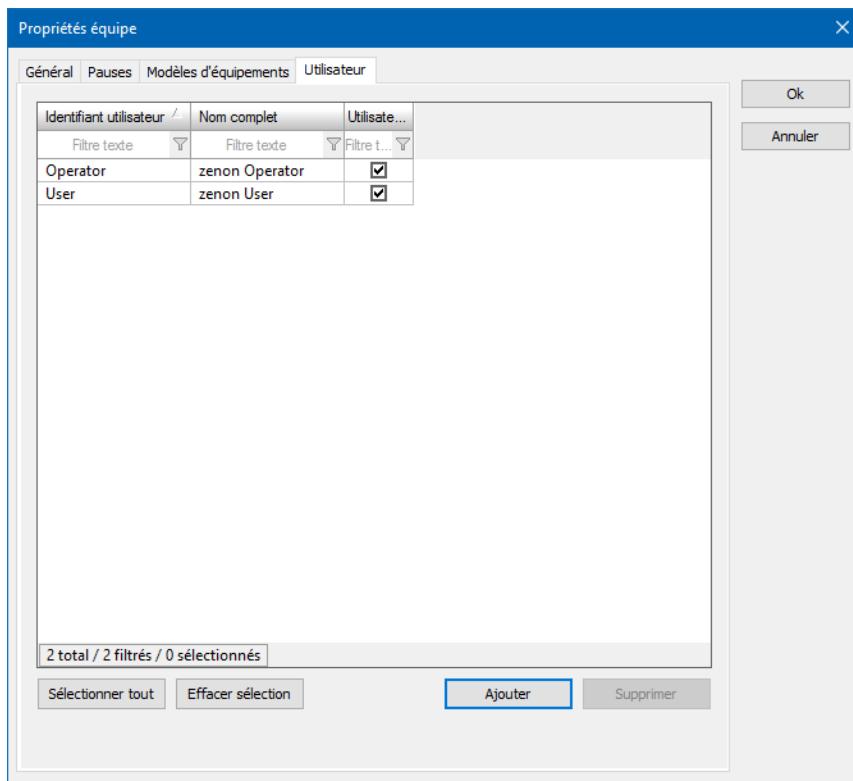
NOTIFY USERS

The following conditions must be met in order for users to be notified:

- ▶ The user must be linked to an active shift at the time of sending the message.
- ▶ The **Utilisateur Message Control** property must be activated for the user.
In the user list of the dialog, it shows whether the property is active or inactive.
Note: If the checkbox is not active, it can be activated in the respective user profile.
- ▶ In the **Envoi d'un message** function, the **User** group with **shift filter** property must be selected for the **Type** option.

Note: The users are notified in accordance with the settings in the Message Control module. The notification is only carried out if the shift is also active on the corresponding day.

USER DIALOG



Option	Description
User List	<p>Shows the user that is linked to the shift.</p> <p>The following is displayed for each user:</p> <ul style="list-style-type: none"> ▶ User name ▶ Complete name ▶ Message Control user <p>The users can be sorted and filtered according to these criteria.</p>
User name	Displays the short name of the user.
Complete name	Displays the complete name of the user.
Message Control user	Shows whether the user has been configured for notification via Message Control.
Select all	Selects all users in the list.
Clear selection	Resets the selection.
Add	Opens the dialog to select users and adds the selected users to the user list.
Remove	Removes all selected users from the user list.
Filter list	Shows all criteria that are to be filtered.

FERMER BOÎTE DE DIALOGUE

Options	Description
OK	Applique toutes les modifications effectuées sur tous les onglets, puis ferme la boîte de dialogue.
Annuler	Annule toutes les modifications effectuées sur tous les onglets, puis ferme la boîte de dialogue.

Edit shift

In order to edit a shift:

1. Click on a shift that you want to edit in the calendar.

Edit the shift using

- Double-click Double click on the shift to be edited.
- Context menu: Click on **Shift properties** in the context menu.
- Button in the screen: Click on the **Edit shift** button.
- Keyboard: Press the **Enter** key.

Note: It is possible to edit shifts on any client computer. If Shift Management is used by several client computers at the same time, when editing a shift, the changes that were made last are applied and updated.

Delete shift

To delete a shift:

1. Click on a shift that you want to delete in the calendar.

Note: Multiple selection with the **CTRL** key is also possible.

2. You can choose to delete the selected shifts by means of:

- Context menu: Click on **Delete shift** in the context menu.
- Button in the screen: Click on the **Delete shift** button.
- Keyboard: Press the **Del** key.

Before deletion, a dialog is opened requesting confirmation.

3. Confirm the dialog with **Yes**, or **Yes to all** with multiple items selected.

Note: It is possible to delete shifts on any client computer. If Shift Management is used by several users on different client computers at the same time, the shifts first deleted on a client computer are also no longer visible on all other client computers.

Filtering shifts

Shifts can be displayed with a filter in Runtime. Filtering is carried out using the linked equipment groups.

To filter the display in the calendar in Runtime:

1. Click on the button **Filter**.

The dialog for screen switching is opened.

2. Select the equipment groups (à la page 20) that are to be used.
3. Confirm the configuration by clicking on the **OK** button.

In the calendar, only shifts that correspond to the equipment model filter are displayed.

EQUIPMENT GROUPS

It is possible to choose configuration of the filter for the equipment group by means of:

- ▶ Screen switch to a screen of type Shift management.
- ▶ Screen of type Equipment model

SCREEN SWITCH TO A SCREEN OF TYPE SHIFT MANAGEMENT.

Configuration is carried out in the screen switching or in the filter dialog in the **Equipment modeling** (à la page 20) tab.

In order for shifts to be displayed in Runtime:

- ▶ The shift must have at least one equipment group together with the filter
or
- ▶ The shift must not be linked to an equipment group

Note: If no equipment modeling is configured in the screen filter, all shifts are displayed.

SCREEN OF TYPE EQUIPMENT MODEL

When screen switching, the **Screen to be updated** option is used to select the desired Shift Management screen. In Runtime, the filter set in the screen is applied to the selected shift model screen.

Note: If filtering is via the equipment model screen, it replaces the configurations set in the shift model screen.

Highlight time ranges

Time ranges can be highlighted via the configuration of times to be displayed. Time ranges outside the time filter are shown in gray, but can be edited.

To configure time ranges in the calendar:

1. Click on the button **Filter**.
The dialog for screen switching is opened.
2. Define the desired time range in the **General** (à la page 12) tab.
3. Confirm the configuration by clicking on the **OK** button.

Insert shift model

To add a shift model to a calendar:

1. Highlight the day on which the shift calendar is to be added in the shift calendar.
2. Click on the button or the **Insert shift model**.
Note: When engineering in the network, there must be operating authorizations on the computer.
The dialog to select a shift model is opened.
3. Select the desired model.

4. Click on **OK**.

The model is inserted into the first day of selection in the calendar.

Note:

- ▶ When inserting onto the calendar, a check is carried out to see if the respective day is also envisaged for the shift.
- ▶ The shift model is inserted on the server. The clients are notified by means of the new shift.
- ▶ The shifts created have no relation or linking to the model.
- ▶ If the shift model has been added on the wrong day, all shifts created must be deleted manually.

⚠ Attention

If a day in the monthly shift is selected in the shift model, this day lasts from 00:00 to 24:00. Midnight is also the starting point for the next day. 2 days are therefore selected in practice.

The shift is thus inserted for 2 days when inserting a shift model into a calendar.

To insert the shift for just one day:

- ▶ Insert the shift model.
- ▶ For the **To** option, stipulate the same date as for **From**.

Example

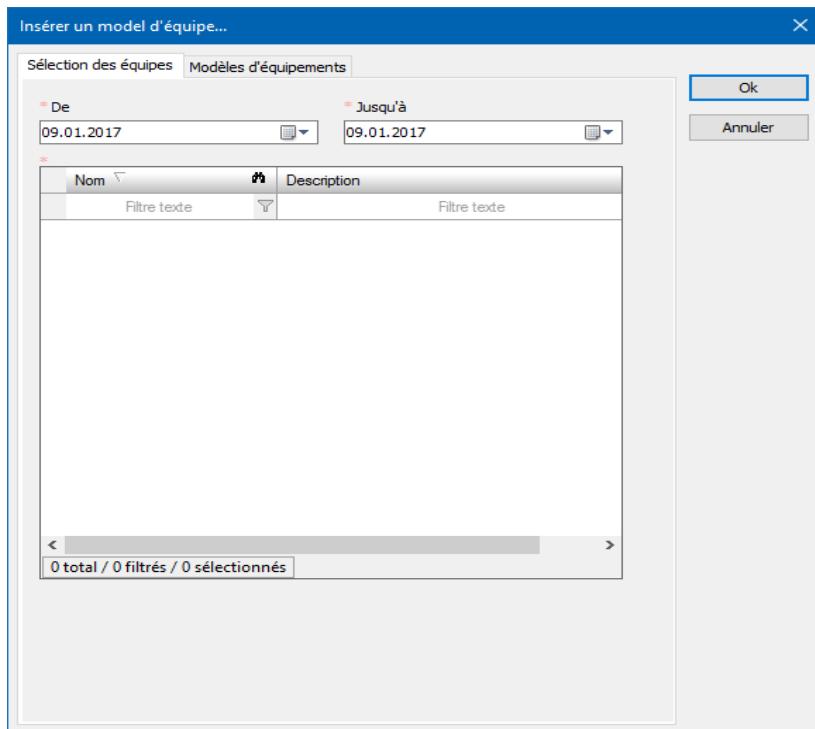
Object	Start:	End
Shift in the shift model:	3:00 AM	4:00 AM
Selection in the calendar:	03.04.2017, 02:00 AM	03.04.2017, 8:00 AM
Result in the calendar:	03.04.2017, at 3:00	03.04.2017, at 4:00 AM

INSERT NEW SHIFT MODEL

The insertion of a shift model is configured using two tabs:

- ▶ Shift model selection: Selection of the shift model and the time range.
- ▶ Selection equipment modeling: Selection of equipment groups

SHIFT MODEL SELECTION



Option	Description
From	Definition of the start date by direct input in the field or selection from a calendar. Clicking on the cursor key opens the calendar.
Until	Definition of the end day by direct entry into the field or selection from the calendar. Clicking on the cursor key opens the calendar.
Shift models list	Lists all configured shift models. Selection by clicking on a shift model. After closing the dialog with OK, the shift model is entered into the calendar on the highlighted day.

CLOSE DIALOG

Option	Description
OK	Applique les paramètres et ferme la boîte de dialogue.
Cancel	Annule toutes les modifications et ferme la boîte de dialogue.

EQUIPMENT MODELING

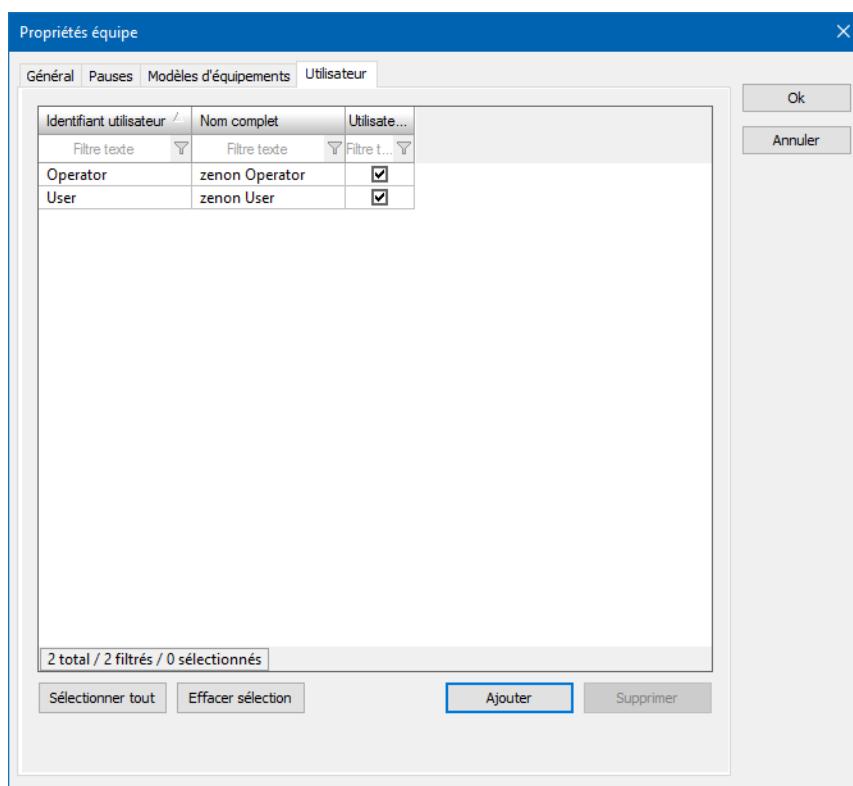
Equipment modeling is configured in a similar manner to the equipment modeling for shifts (à la page 44).

Assign users a shift

Users can be assigned a shift. The Message Control module can use this link to send messages.

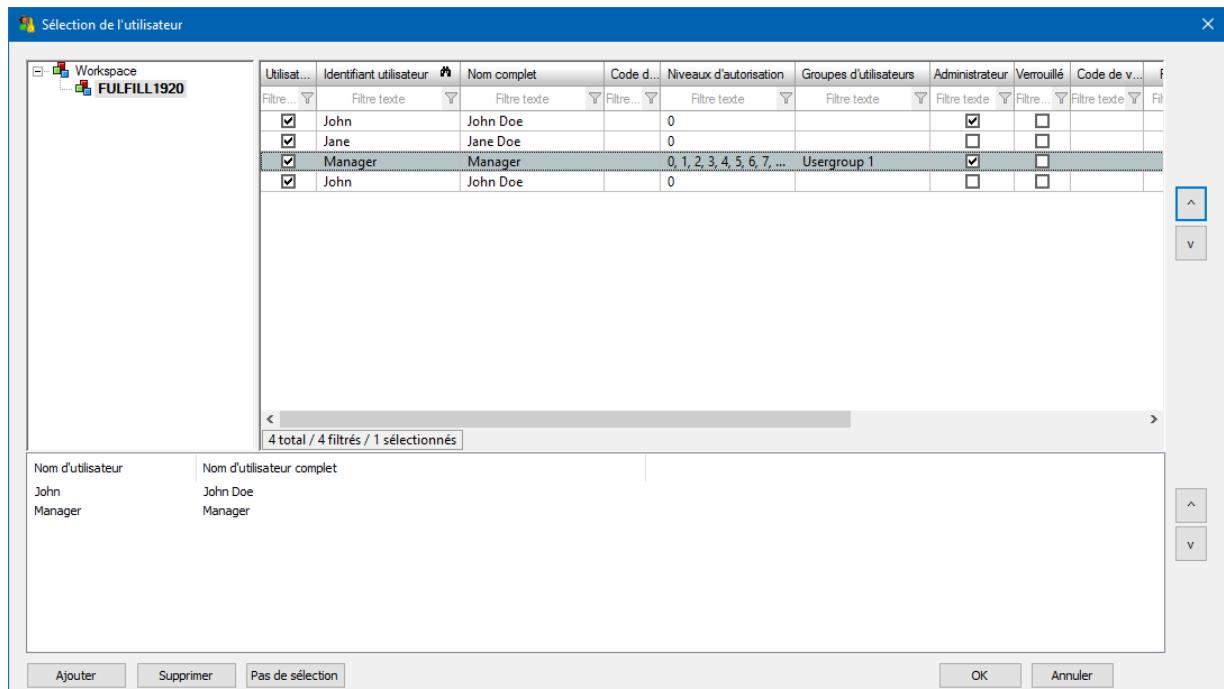
To assign users a shift:

1. Select the shift in the calendar.
2. Open the dialog **Shift properties**.
3. Switch to the **User** tab.



4. Click on the **Add** button or select this entry in the context menu.

The **user selection** dialog is opened. All users in the active project who have been created are shown.



5. Highlight the desired users.
6. Click on the **Add** button.
The selected users are added to the list.
7. Confirm the settings with **OK**.
The users are added in the **Users** tab.
8. Close the **Shift properties** dialog by clicking on **OK**.
The selected users are now linked to the shift.

Note: To use the users linked here in the **Message Control** module, the users must be assigned to a certain user group. This user group can be defined as a target in the **Envoi d'un message**.

5.1.2 Shift models

Shift models can be created and edited in Runtime. To do this, the corresponding control elements (à la page 9) must have been configured in the screen.



SHIFT MODELS

Elements	Description
Shift models list	List of existing shift models.
Column selection	Opens the dialog (à la page 16) to select the columns to be displayed in the list.
Format columns	Opens a dialog (à la page 18) to format the columns.
New shift model	Opens the dialog (à la page 55) for creating a shift model.
Open shift model	Changes the calendar view to the display of shift models and opens the selected shift model there.
Save shift model	Saves the shift model opened in the calendar. Only available if a shift model is open in the shift calendar and there are unsaved changes.
Delete shift model	Deletes the selected shift model after a confirmation message.
Properties	Configuration of the properties of the shift model: Name and description

Creating a shift model

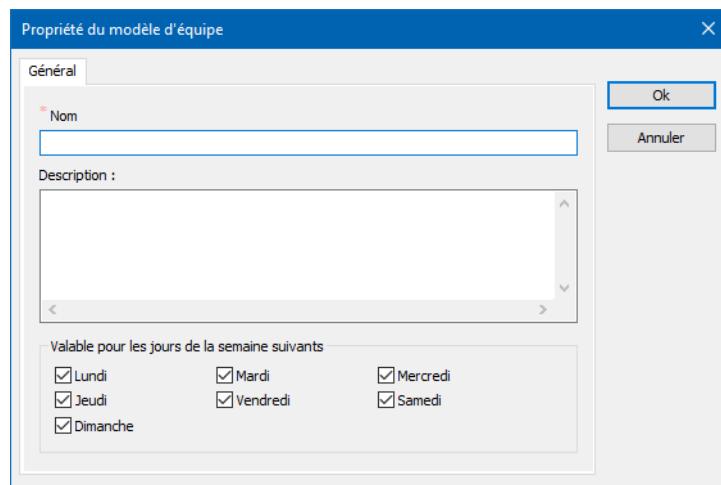
To create a new shift model:

1. In the **Shift models** area, click on the **New shift model** button.
Alternatively, right-click in the list of the shift models and select **New shift model** in the context menu or press the **Insert** key.
The dialog to create a new shift model is opened.
2. Give it a name and, optionally, a description.
3. If necessary, configure the weekdays on which the model is to be applied.

Note: If the model is limited to certain week days, when adding the model to the calendar, a shift is only entered for the days that have been selected in the model. When checking whether a model can be inserted on a certain week day in the calendar, the first day of the model is taken into account. If this is not valid, shifts from the second day are not entered into the calendar. If the first day is valid, shifts from the second day are also entered into the calendar, even if this day is invalid.

Example: A shift in the model lasts from 20:00 to 04:00. Thursday is an invalid day. If the model is added on a Wednesday, the shift is entered in full. If the model is added on a Thursday, the shift is not entered.

NEW SHIFT MODEL DIALOG



Option	Description
Name	<p>Entry of the name.</p> <p>The following applies for names:</p> <ul style="list-style-type: none"> ▶ must be unique ▶ must not be empty ▶ must not contain one of the following characters: \.:!*?<>! ""#% ▶ must not consist of more than 256 characters
Description	<p>Entry of an optional description.</p> <p>Maximum length: 32000 characters</p>
Valid for the following weekdays	<p>Configuration of the week days on which the shift model is applied in the shift calendar.</p> <p>Selection by activating the checkbox beside of the respective weekday.</p> <p>Default: all</p>

CLOSE DIALOG

OK	<p>Applique les paramètres et ferme la boîte de dialogue.</p> <p>If errors are established during validation, the dialog is opened again and a notice of possible causes of errors is shown.</p>
Cancel	Annule toutes les modifications et ferme la boîte de dialogue.

Configure shift model

To configure a shift model:

1. Click, in the list of the shift models, on the button or the **Open shift model** context menu entry or double-click on a shift model.
The shift model is displayed in the calendar.
2. Configure the shift model.
3. Click on **Save shift model**.

EDIT PROPERTIES

The name and property of a shift model can be edited.

To change a property:

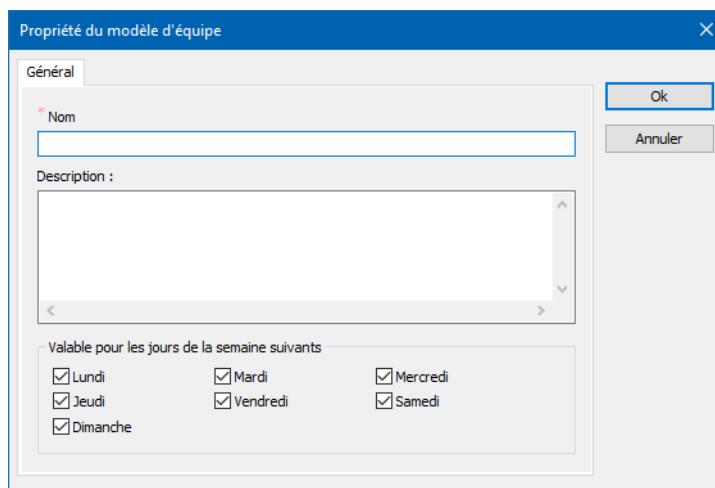
1. Highlight the shift model.

2. Click on the **Properties** button.

This must have been configured for the screen.

Alternatively: Select the **Properties** entry in the context menu.

The dialog with the shift model properties is opened.



3. Edit the desired entries:

- **Name:** Name of the shift model.

The name must be unique. For further limitations, see the Create shift model (à la page 55) chapter.

- **Description:** Optional description.

Maximum length: 32000 characters

4. Save by clicking on **OK**.

The changes are applied immediately, saved on the server and distributed to all clients. This is also applicable if the model is edited at the same time on another client. The content of the model - the shift configurations - is not changed in the process. These are also saved and distributed. You can find detailed details on this in the **Behavior in the network** (à la page 60) chapter.

Delete shift model

To delete a shift model:

1. Select the desired shift model in the **shift models** area.

Multiple selection is possible.

2. Click on the **Delete shift model** button.

Alternatively, right click in the list of the shift models and select **Delete shift model** in the context menu or press the Del key.

The dialog to confirm the deletion process is displayed.

3. Confirm this when requested to do so.

The shift model is deleted.

If the shift model is shown in the calendar, it is switched to the normal calendar view. If the shift model is deleted from another computer, a corresponding message is shown.

Note: The deletion of shift models is documented by means of an entry in the Chronological Event List.

5.2 Copy and paste shifts and shift models

Shifts can be copied and pasted in the calendar.

To copy and paste shifts, use:

- ▶ The **Copy shift** and **Insert shift** buttons
- ▶ The **Copy shift** and **Insert shift** commands in the context menu
- ▶ The keyboard shortcut **Ctrl+C** and **Ctrl+V**

Buttons/commands:

- ▶ **Copy shift:** Copies the selected shift to the clipboard.
- ▶ **Insert shift:** Pastes a copied shift from the clipboard into the selected day.

Insertion is always only possible in the same project and in the same view.

That means: Shifts from shift models can only be inserted into shift models, shifts from the calendar only in the calendar.

5.3 Carry out SQL export

Shifts and breaks can be exported to SQL.

To export shifts and breaks in Runtime:

1. Create a function (à la page 24) **Calendrier de transfert d'exports SQL**.
 2. Execute the function in the Runtime.
- The shifts that correspond to the configuration are exported.

The following is applicable for SQL export:

- ▶ Naming of the target tables: **[project GUID]_SHIFT_[GUID of the equipment model group]**.
- ▶ Only connected groups are exported.
That means: If a shift is in a time filter, but not yet concluded, it is not exported.
- ▶ Each shift is only exported once.
It is inserted into the respective table once. Subsequent changes to a shift are not applied to the pre-existing table.

- ▶ Errors are logged.

Attention

If the export fails, the shifts to be exported are not transferred again during the next export. Gaps can thus occur.

Recommendation: Configure the export as overlapping. To do this, call up the function every day, for example, and export the shifts for 2 days.

*Or activate the **Show this dialog in Runtime** option in order to allow the user to reconfigure the time range in Runtime.*

6. Behavior in the network

FUNCTION AUTHORIZATIONS

In principle, all buttons and context menus are available, regardless of the required rights. The first time it is executed, a check is carried out to see whether the logged-in user is authorized to carry out the action. The properties of the shifts and shift models can always be displayed. This is also applicable if the rights for editing are missing.

Procedure:

- ▶ A check is carried out to see whether the token for editing is present in the network.
If there is no authorization, the process is canceled with an error message.
- ▶ A check is carried out to see whether the logged-in user has the necessary rights.
If there is no function authorization, the process is canceled with an error message.
Exception: If a temporary login has been activated, the login dialog is shown. If this login is unsuccessful, the process is ended with an error.

SHIFTS AND SHIFT MODELS

When creating and editing shifts and shift models in the network, the following is applicable:

- ▶ Editing is not carried out on the server directly, but with a local copy.
All changes are sent to the **Serveur 1** and to the **Serveur 2** and updated there.
This concerns the creation, changing and deletion of shifts and shift models, as well as the insertion of shift models into the shift calendar.

- ▶ If several users are editing the same shift or the same shift model, the changes made by the user who has saved last are applied.
- ▶ When the model is saved, only the content is saved, not the name and description.

7. Time zones and date limits

Rules have been defined for the behavior of shift management with regard to time zones, time switch and date limits.

7.1 Display of date limits

When creating a shift, the end of which is the limit of two days, Shift management acts as follows:

- ▶ 24:00 is understood as 00:00 of the following day.
- ▶ This 00:00 is shown as its own day in the shift properties.
 - This day only permits the time 00:00.
 - If an attempt to select another time for this day is made, a corresponding message is shown.

EXAMPLE

- ▶ Configured shift time:
 - 11. 11. 2017
 - from 4:00 p.m. - 24:00 p.m.
- ▶ Display:
 - Start: 11. 11. 09:00 a.m. - 4:00 p.m.
 - End: 12. 11. 09:00 a.m. - 12:00 p.m.

7.2 Time zones and time switches

Shifts are automatically amended to the switch from daylight saving time to standard time in accordance with certain rules.

When inserting a shift, a dialog is opened in which the start time and end time are shown according to the selection. If an unavailable time point is selected when switching, it is then corrected automatically. The times can be amended in the dialog. Times that are not available are always corrected however.

- ▶ Switch from standard time to daylight saving time:
A time indication of 02:00 is automatically corrected to 01:00.
Background information: Because there is a switch at 02:00 to 03:00, 02:00 does not exist for the calendar. Entry of 02:00 is not possible.
- ▶ Switch from daylight saving time to standard time:
A time indication of 3:00 is automatically corrected to 2:00.
The display in the calendar can depend on the time zone in which the calendar is displayed. For example, in the local calendar with a standard time switch, the shift can be shown with a length of 2 hours. In another calendar, the shift - depending on the time zone - can also be shown for 3 hours. In Yakutsk, for example, where there is no time switch.

8. Keyboard shortcuts for Shift Management

The following keyboard shortcuts are available for Shift Management in zenon:

RUNTIME

Action	Key
Create new shift or shift model	Ins
Edit shift or shift model	Enter
Delete shift or shift model	Del