A MITEL PRODUCT GUIDE

Unify OpenScape Accounting

OpenScape Accounting V5

Administration and Usage, Administrator Documentation

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Mitel

Contents

1 General Part

Openscape Accounting

Openscape Accounting consists of the modules Accounting, Welcome, and Device Management. The Accounting module offers the possibility to distribute the PBX system costs in the company in a way that is justified. Utilization and call statistics provide support to optimize the flow. The Welcome module is used in hospitals, nursing homes and hotels for guest / patient management and allows the authorization switching of the assigned telephones. Device management is the central inventory of devices, SIM cards and associated contracts. Devices may be mobile (e.g., smartphones, tablets, notebooks) and stationary (e.g., deskphone).

1.1 Basic Operating Concepts

This part of the manual is intended as a reference for the basic usage of OpenScape Accounting , and as a more detailed reference of its web interface. The manual explains all basic control elements.

It expressly does not include any explanations of the functionality of individual views. More detailed information on these topics can be found in the Reference and Administration Manuals.

1.1.1 Starting the Application

This chapter explains the basic steps required to access the OpenScape Accounting application and start a work session. You will learn how to change your password and log out of the application again.

Step by Step

1) Calling the OpenScape Accounting Application

After installation and commissioning, you can access the application via Start/Program Files/OpenScape Accounting or the Desktop icon on the application server.

To invoke the application via the web client, the name or the IP address of the server must be entered in a browser, for example `https://ip_of_server/`. Please ask your administrator for the exact name or IP address.

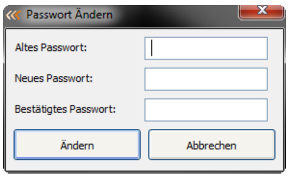
2) Starting a Work Session

NOTICE: Enter your user name and password in the intended fields. Then select the schema you want to authenticate against. As a rule, this is the preselection `atradis`

Log into the system to start a work session. On starting the OpenScape Accounting application or web page, the login screen is directly displayed.

1.1.2 Changing the Password

Users are set up and assigned specific rights to work with the system in the User Administration. The system checks the access authorization via the user name and password. On creating a user, the user name is initially assigned as a password. You are free to change this initial password.



Step by Step

1) To change the password, click on the key after logging in or on the menu item **Administration** in the web application. The emergent menu displays the **Change Password** options.
2) First enter the old password.
3) The enter the new password.

4) Finally, re-enter the new password to confirm it.

> **NOTICE:** When entering a password, the display is suppressed through neutral characters.

1.1.3 Closing the Work Session

To close the work session, select the Logout icon or the Logout item from the top navigation bar of the web application.

You are returned to the logon screen. This procedure is strongly recommended, although the session is exited automatically after a certain idle time or on closing the web browser.

1.1.4 Opening the Help

Opening the Help from within the Application

In the main window, there is a button **Help**. If it is getting pressed, the interactive help function opens a new window. All topics can be searched. The help function will be opened in the system's default browser.

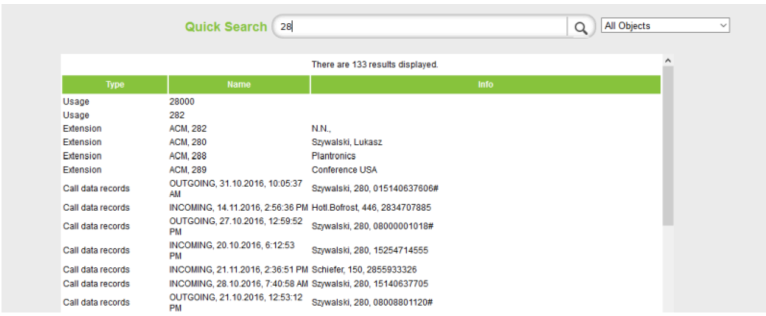
Opening the Help from a Table

If the **Help** button gets pressed from within a table, the help opens and leads to the related topic.

1.1.5 Quick Search

Activate Quick Search

The icon for the quick search is located under the tab **Login/Logout** in the native client. In the web application, the icon for the **Quick Search** is located in the upper navigation bar. If it is activated, the search dialog box opens. If the table Charges, Subscribers, Extensions, ETB or Organization are opened when activating the Quick Search, the corresponding entry is displayed next to the search window. This means, if you are looking for a term, it is only searched for in this table.



Type	Name	Info
Usage	28000	
Usage	282	
Extension	ACM, 282	N.N.,
Extension	ACM, 280	Szywalski, Lukasz
Extension	ACM, 288	Plantronics
Extension	ACM, 289	Conference USA
Call data records	OUTGOING, 31.10.2016, 10:05:37 AM	Szywalski, 280, 015140637606#
Call data records	INCOMING, 14.11.2016, 2:56:36 PM	Hotl.Bofrost, 446, 2834707885
Call data records	OUTGOING, 27.10.2016, 12:59:52 PM	Szywalski, 280, 08000001018#
Call data records	INCOMING, 20.10.2016, 6:12:53 PM	Szywalski, 280, 15254714555
Call data records	INCOMING, 21.11.2016, 2:36:51 PM	Schiefer, 150, 2855933326
Call data records	INCOMING, 28.10.2016, 7:40:58 AM	Szywalski, 280, 15140637705
Call data records	OUTGOING, 21.10.2016, 12:53:12 PM	Szywalski, 280, 08008801120#

Perform Quick Search

A search term can be entered in the input field and an entry can be selected next to the input field in the combo box in which the entered search term is to be searched. The entry All objects in the combo box means that all the entries, which are in the combo box, are searched for. To start the search, use the Enter / Return key.

NOTICE: The search is case-insensitive. In the search term, wildcards can be used, that is, % Stands for any number of characters or _ for exactly one character.

Found entry

The result of the search is displayed below the quick search bar. The headline shows the number of entries found. A maximum of 200 entries are listed per table in which they were searched. If you select an entry and double-click it, the table with the search term is opened with used filter.

NOTICE: If more than 200 entries were found in a table, the 201th entry is displayed separately (written in bold format). If this entry is double-clicked, the corresponding table opens with the filter line activated for further seaching directly in the table.

Table 1: Quick Search - Parameter

Table/Entry	Table column in which to search
Extensions	Extension number or subscriber lastname
Subscriber	Lastname or firstname
Organization/Area	Organization name
Connection/Charges	Dialed number or Caller-ID or extension number
ETB	Extension number or subscriber lastname

1.1.6 Table views and functions

Table windows provide an overview of the objects of a certain application area and functions to add, edit and delete objects. The object overview is designed as a table.

Use the toolbars to activate functions. These refer either to a single object of the table or the entire table content.

Table 2: Object functions

	Creates a new object
	Changes / Displays a new object

	Deletes an object
	Copies an object
	Inserts an object

Table 3: Table functions

	Shows one or several filtering levels
	Hides filtering levels
	Updated table content
	Loads the updated table content
	Print preview and printing of the table
	Help on operation

The status bar and the filter bar contain combo boxes for preset filters and sort orders as well as buttons for ascending or descending order, for setting an editing or filtering mode, and for calculation and saving.

1) Combo box for preset filters
2) Switch between ascending and descending order
3) Calculations within a table
4) Saves the current state of the table window

Table 4: Table functions

alle Zeilen	Combo box for predefined filters
keine Reihenfolge or ⇧ ⇩ In the web application	Switch between ascending and descending order
	Switch between edit and filter modes
	Change between ascending and descending sorting (only in the native application)
	Calculations within a table
	Saves the current state of the table window
	Save the tables settings

A table is flexible in its format. You can alter the width of the columns and determine the information content of the table. During a work session, data may change due to interventions of other users or automatic retrieval processes. A control window can be updated at any time. You can thus register every event that affects data.

If you want to select a record, click on the first field on the left next to the record. A selected record is marked with an arrow.

If you want to select more than one record, hold down the Control key (CTRL or STRG) while selecting the records.

INFO: The multiple selection does not work in the web application!

1.1.7 Show or hide columns

In the table views, individual columns can be displayed or hidden. Hidden columns are not included in exports and table expressions. Click on the header of the table and press the right mouse button to enter the menu. All table columns appear. Those columns that have a check mark before the name are displayed.By clicking on the name, a column can be displayed or hidden.

Only those columns that are allowed by the group definition are available.

1.1.8 Navigating through Table Pages

Since table windows with many data records are hard to handle, the tables are divided into individual pages. The list box beside the table name in the title bar enables you to determine how many items to display per page. Please note that a larger number will lead to higher loading and waiting times. The page selector beside the table name lets you branch to a certain page of the table quickly and directly.

1.1.9 Adding New Objects

Clicking on the icon **Add** opens the corresponding window to add new objects. Several different tabs may be present in every window.

Step by Step

1) Enter the required entries in all the data collection forms.

2) Click **Save** to accept the changes or click **Cancel** to undo the changes.

NOTICE: Some table windows contain information on the validity period of objects above the form itself. The buttons there allow you to scroll through the history of an object and thus track the changes. Please observe that you can only edit those objects which do not have a **valid until** date.

1.1.10 Copying Created Objects

It may be rather complex to create new objects, depending on the number and extent of the data collection forms. You can speed up this process using the **Copy** and **Paste** functions with already existing and similar objects.

Step by Step

1) Mark the object to be copied and then click on the **Copy** icon.
2) Click **Paste**. The associated data collection window for this object type is opened.
3) Change the name and any other settings, as appropriate. Clicking on **Save** accepts the new object.

1.1.11 Editing Created Objects

Prerequisites

You can change already created objects any time. To do this, select the object to be changed in your table and start editing.

Step by Step

1) By clicking on **Edit / Display an object** you activate the screen with the desired object data. Only the **Modify** button is enabled here.
2) Set the change mode by clicking on the **Edit** button. All entries where a change is allowed are displayed with a light background, and a cursor for the input becomes visible. On entering data, the **Save** and **Cancel** buttons are enabled.
3) After you have edited your entry, you can either save or discard your changes.

NOTICE: If an entry is already being edited by a different user, you cannot edit it simultaneously. However, you are informed of this by a corresponding message.

1.1.12 Deleting Created Objects

Every created object can be deleted if required. To do this, select the object to be deleted in the table window and start the deletion process.

Step by Step

1) Clicking the icon **Delete** starts the deletion process. To prevent you from unintentional deleting, a window with a note on the deletion process is displayed.

2) If you confirm the deletion, the selected object is deleted.

IMPORTANT:

Objects that are still being used in other contexts cannot be deleted. The deletion is rejected with an appropriate error message.

Some objects are not deleted directly, but only marked as invalid. For details on this history function, see the Reference Manual.

Exception: Press and hold down the control key (CTRL or STRG). Now click on the Delete icon. This causes all the associated data related to this record to be deleted as well.

1.1.13 Filtering Table Contents

Under normal circumstances, you will usually not need to view all table entries, but will only want to see and edit a certain subset. You can restrict your selection by using the filtering functions and setting individual selection criteria.

Step by Step

1) Click on **Filter+** to activate the filtering row.
2) Click on the filter type icon to open the operator menu. A list will show up containing the available filter operators.
3) After having selected the operator and optionally entered the arguments, click the **Filter** icon from within the table's action bar. The current table contents will be filtered according to the specified operator and arguments. It is possible to specify additional filters in order to continue restricting the amount of data. In order to disable any filter, you may select the no filter operator from within the filter operator menu. To release all filters, just click the reload button.
4) If you want to remove a complete filter line, which you have created with the *Add filter* click on the icon **Filter-** .

1.1.13.1 Specifying Individual Selection Criteria

Adding a Filter Row

Click on the **Add filter row** icon

A filter row is inserted beneath the header of a table. This filter row contains two input fields for every column that can be filtered. The first is to specify the filter operator:

Selection of Filtering Operators

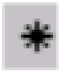
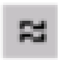
Click on an item in the filter row.

This opens a window with the filter operators.

The exact structure of the filter menu is determined by the type of data found in the selected column.

NOTICE: The administrator can exclude individual fields from filtering via the Group Administration.

Table 5: Filteroperatoren

Operator	Name	Meaning
	Starts with	Displays all entries starting with a specified string.
	Does not start with	Displays all entries not starting with a specified string.
	Contains the pattern	Displays all entries containing a specified string.
	Does not contain the pattern	Displays all entries not containing a specified string.
	Matches the pattern	Displays all entries matching a specified pattern. % is used as a wildcard for unspecified characters. The syntax of patterns corresponds to the syntax of the SQL operator `like`.
	Does not match the pattern	Displays all entries that do not match a specified pattern. % is used as a wildcard for unspecified characters.
	Equal to	Displays all entries that exactly match a specified string or numerical value.
	Not equal to	Displays all entries except those exactly matching a specified string or numerical value.
	Belongs to the set	Displays all entries exactly matching the elements in a set of one or more strings or numerical values.

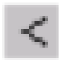
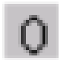
Operator	Name	Meaning
	Does not belong to the set	Displays all entries that do not exactly match the elements in a set of one or more strings or numerical values.
	Greater than or equal to	Displays all entries greater than or equal to a certain numerical value.
	Strictly greater than	Displays all entries greater than a certain numerical value.
	Less than or equal to	Displays all entries less than or equal to a certain numerical value.
	Strictly less than	Displays all entries less than a certain numerical value.
	Is between	Displays all entries between two values or matching one of these values.
	Equal to zero	Displays all entries with the value zero
	Not equal to zero	Displays all entries with a non-zero value.

Table 6: Example Search Patterns

Name	Pattern	Match
Starts with	Al	Albert, Alice, ...
Does not start with	Pau	Bob, Gina, ...
Contains the pattern	ard	Richards, Warden, ...
Does not contain the pattern	ard	Smith, Viterby, ...
Matches the pattern (SQL `like`)	[4-6]_6%	416,526,636,6761, ...
Does not contain the pattern	[4-6]_6%	123,1234,12345,223,2234,...
Equal to	Smith	Smith
Not equal to	Smith	Richards, Warden, ...
Belongs to the set	Peter; James	Peter

Name	Pattern	Match
Does not belong to the set	Peter; James	Albert, Alice, ...
Greater than or equal to	25	25,26,27,28, ...
is strictly greater than	25	26,27,28, ...
is less than or equal to	16	16,15,14, ...
is strictly less than	15	14,13,12, ...
is between	Albert; Gina	Alice, Bob, ...

The filter operators in a filter row are ANDed. This means that only those values from a table column that satisfy all conditions stated in the filter row are shown.

If multiple filter rows are used, the filter rows are ORed. This means that the table rows that match the conditions in at least one filter row are displayed.

You can use more than one filter row in the native application, but only one filter row is possible in the web application.

1.1.13.2 Deactivating a Filter

Prerequisites

Proceed as follows to deactivate a set filter: Click on the selected operator. The filtering field appears.

Step by Step

1) Select the topmost empty entry in the operator field and click on the **Filter table** button. The remaining operators are applied, and the results of the table are restricted accordingly.
2) Select the filter row that you want to remove and then click on the **Remove filter** icon..
3) Clicking on the **Reload table** icon removes all filter rows and displays the full contents of the table.

1.1.13.3 Working with Preset Filters

You can also optionally save filters you set and access these preset filters again at a later date.

To do this, first set a filter and then click on the **Save setting** icon. Select the **Filters too** check box and assign a name for this filter. Click **Save**. The filter will then be available to you in the selection list.

When you select a preset filter from the selection list, the filtered table contents are immediately displayed. To return to the initial contents, select the filter "**all rows**".

NOTICE: New preset filters can be defined by the administrator.

1.1.13.4 Updating Table Contents

You can update the table window to ensure that the table contents are always up to date and valid. All sorting criteria, change and data retrieval transactions in the database are taken into account, and the current table content is updated and displayed.

Step by Step

1) Click on the **Reload table** icon to update your control window.
2) Um die Tabelleninhalte innerhalb der eingestellten Filter zu aktualisieren, klicken Sie das Symbol **Filtern der Tabelle.** erneut an.

1.1.14 Sorting Table Contents

You can sort the contents of a table by different criteria. In the toolbar are the ícons **Sort Up/Down** which can be used to sort the table entries.

In the Web application, you can sort the table columns by the icons ⇧ ⇩ and sort them.

NOTICE: The sorting options are defined after system installation and specified within the Administration.

1.1.15 Calculations

Calculations within tables allow for particularly quick and easy evaluation of information. The calculation functions support you in performing a summation over a data field or determining maximum and minimum amounts. The filter functions and the calculation functions complement each other. You can select the desired result set with a filter and then evaluate this according to the appropriate criteria.

To activate the calculation function, click the symbol **Calculator on/off**.

NOTICE: You can activate the calculation functions in every table window.

1.1.15.1 Selecting Calculation Criteria

You can activate the calculation window by clicking on the **Calculator on/ off** icon in the settings bar of a control window. This adds a row to the bottom edge of a screen. This row contains a selection box for every column that can be evaluated.

Step by Step

When you click on a selection box, a list box with the possible calculations appears. Selecting an entry from this list automatically runs the calculation.

You can select from the following criteria:

- Count
- Maximum
- Minimum

Furthermore, additional criteria are available for some columns:

- Total
- Average
- Standard deviation
- Variance

Depending on the type of field, the selection criteria listed in table are available.

Table 7: Calculations

Function	Description
Count	Determines the number of entries in a table
Total	Determines the total of the numeric values of the selected column
Maximum	Determines the maximum value of the selected column.
Minimum	Determines the minimum value of the selected column.
Average	Determines the average value of the selected column
Standard deviation	Computes the standard deviation as a measure of the variability of the numeric values of the selected column.
Variance	Computes the variance as the mean square deviation of the numeric values determined from the average of a column.

NOTICE: If you are unable to set a selection criterion for all columns, the administrator has blocked the evaluation for certain columns.

1.1.16 Printing

It only takes one keystroke to display your system data on the screen. But often you will also need comprehensive evaluation reports and supporting documents on paper. The system offers output functions to meet these needs. You can print reports on a single object or on a set of objects or convert them to an export format. To do this, click on the **Print** icon.

1.1.16.1 Printer Settings

Clicking on the **Print** icon opens the Printer Properties dialog. You can specify the desired output format there.

Step by Step

1) In the opened window you will see two tabs at the top. Select whether you want to print or export the data.
2) Under the Print tab, you now have three icons to choose from. Click on the **Preview** icon to have a preview of the selected data displayed. Clicking on the **Print** icon sends the job directly to the printer. Click on the **Save as PDF file** icon to save the print job as a PDF file. In the choice field below, select which type of report is to be used.
3) Under the Export tab you will find a choice field. You can choose in which format you want to export the data from this selection. A number of different formats are available. Then select then the time period for the data to be exported. You can then optionally click on the **Start DDE export** icon to export the selected data or on the **Print after transfer** icon to print the exported data after the export.

NOTICE: For each table, you can define which reports for the tables and objects are available. For details on configuration, see the Administration Guide.

1.1.17 Instant Graphic

This function makes it possible to quickly display the data fields of a table in a grouped or summarized graphical or tabular format. If a table e.g. connection table is in use a bar **Instant graphic** is automatically displayed on the right. You can use the function by clicking the arrow icon.

1.1.17.1 Analysis

The *Configuration*, *Table* and *Chart* settings can be used in the **Analysis** dialog box. When the Analysis dialog box is opened, the configuration parameters are displayed by default.

At the top of the dialog box, the currently used filters of the opened table are displayed. Connection table with filter on date (yesterday) and call direction (outgoing).

1.1.17.2 Configuration

The **Type of analysis** of the chart that is to be used can be selected in the combo box. Dot, line, bar and circle charts are offered. Select the chart you want to use. It is also possible to display a **Legend** in the chart by activating the checkbox and specifying it at the **Maximum** of the values to be displayed in the chart.

NOTICE: *Maximum 0* means that all values of the open table are displayed.

If a table e.g. connection table is in use a bar **Instant Graphic** is automatically displayed on the right. You can use the function by clicking the arrow icon.

In the lower part of the dialog box (for the first call, two lines), columns from the opened table, as well as their sorting and calculation can be defined. You can add or remove rows by clicking **Insert element** or **Remove element**.

The following specifications can be used for the calculation:

- Grouping
- No. of
- Sum
- Average
- Maximum
- Minimum

The following can be used for sorting:

- No sorting
- Ascending order
- Descending order

Once the configuration is complete, you can now display the result using the **Table** or **Chart** buttons.

1.1.17.3 Template

It is possible to save all graphic display settings as a **Template**.To do this, click on the **Template** tab and enter the name under which the template should be saved. Then click **Save**.

To use an existing template, click on the **Template** tab and select the corresponding template from the Template selection box. Then click on Apply.

To delete an existing template, click on the **Template** tab and select the corresponding template from the Template selection box. Then click on **Delete**.

INFO: All templates are saved according to the user.

1.1.17.4 Table

If the button **Table** is activated, the settings made under Configuration are now displayed in tabular form. The option to save the displayed data in *CSV* format is given.

1.1.17.5 Chart

If the button **Chart** is activated, the settings made under *Configuration* are now displayed graphically. During the graphical display, the options **Type of analysis**, *Maximum* and the activation of the *legend* can be adapted.

The option to save the displayed graphic as image (*PNG*) is given.

NOTICE: If a graphical representation is selected as the Type of analysis *circuit chart*, a further circuit chart is always created for each calculation (No. of, Sum, Average, Minimum or Maximum). You can use the *Next chart* button to view the other circuit chart.

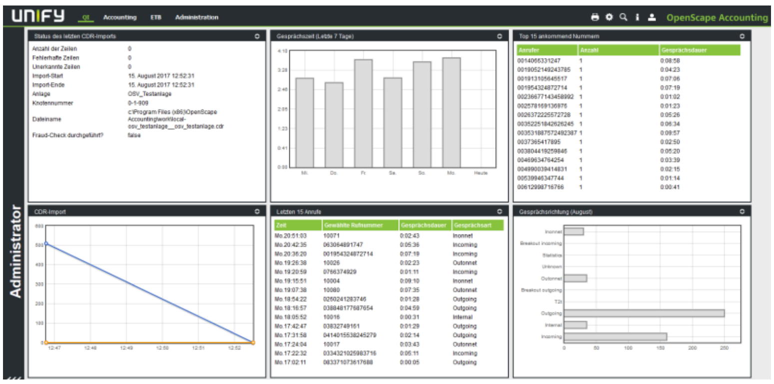
1.2 Quick Information (QI)

The Quick Information (QI) allows a quick and easy overview over the personal information within your System. The information can be presented as a table and/or a chart. Administrators can quickly access comprehensive statistical data from the OpenScape Accounting system. Users may have access their personal information only.

The **Quick Information** is part of the web application and is only available there. They can be activated by clicking on the tab **QI**. Each user can configure a separate and personal **QI** view.

In QI, all costs are displayed in the current currency. For more information on currency, see Currency.

For users, the following QIs are available:



QI Name	Modul	visible for user when Yes	period

Personal Informationen	All	No	actual
Reports	All	No	Last 15 entries
Monthly telephone costs	OpenScape Accounting	Yes	Last and actual month
Call direction	OpenScape Accounting	Yes	Last and actual month
Call direction chart	OpenScape Accounting	Yes	actual month
Top 15 dialed number	OpenScape Accounting	Yes	actual month
Last 15 calls	OpenScape Accounting	Yes	Last 15 entries
Limits/exemption	OpenScape Accounting	Yes	Last and actual month
Call duration chart (last 7 days)	OpenScape Accounting	Yes	Last 7 days
Top 15 Caller ID (incoming)	OpenScape Accounting	Yes	actual month
Alarms	OpenScape Accounting	No	Last 24 hours
Status of last CDR import	OpenScape Accounting	No	Last import
No. of mobile devices per contract	OpenScape Accounting/ Device Management	No	actual
No. of manufactures	OpenScape Accounting/ Device Management	No	actual
No. of OS per device	OpenScape Accounting/ Device Management	No	actual
No. of mobile device type	OpenScape Accounting/ Device Management	No	actual
No. of mobile owner	OpenScape Accounting/ Device Management	No	actual
No. of mobile devices status	OpenScape Accounting/ Device Management	No	actual

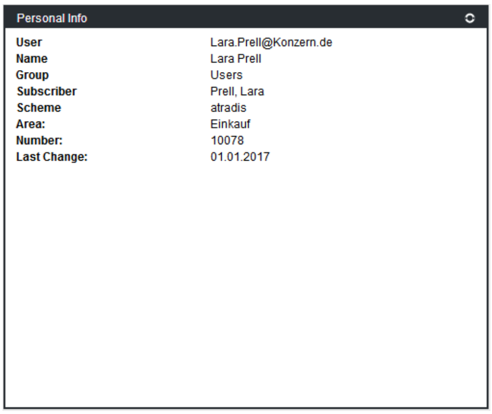
Postgres - Top 15 biggest tables	Administration/ Postgres SQL	No	actual
Postgres status	Administration/ Postgres SQL	No	actual

NOTICE: The user's quick information, which is assigned to the Syscable group, displays the information of all participants. The table remains empty for all other users without assigned subscriber.

1.2.1 QIs (all module)

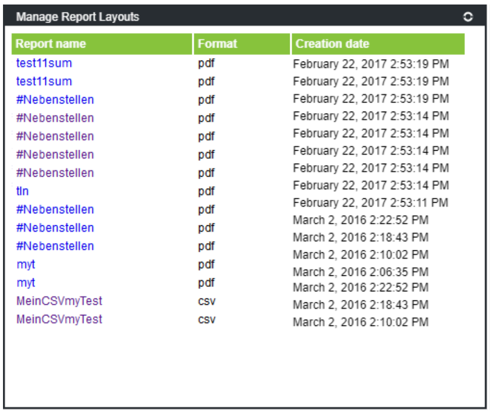
Personal informationen

The personal information (**QI**) is used to display the user's personal data. These include the login name of the user assigned, the user group membership and the time of the last login.



Last 15 report entries

The last fifteen printed reports of the user are displayed.This overview allows you to determine which report was created at which point in time.


Manage Report Layouts

Report name	Format	Creation date
test11sum	pdf	February 22, 2017 2:53:19 PM
test11sum	pdf	February 22, 2017 2:53:19 PM
#Nebenstellen	pdf	February 22, 2017 2:53:19 PM
#Nebenstellen	pdf	February 22, 2017 2:53:14 PM
#Nebenstellen	pdf	February 22, 2017 2:53:14 PM
#Nebenstellen	pdf	February 22, 2017 2:53:14 PM
#Nebenstellen	pdf	February 22, 2017 2:53:14 PM
tln	pdf	February 22, 2017 2:53:14 PM
#Nebenstellen	pdf	February 22, 2017 2:53:11 PM
#Nebenstellen	pdf	March 2, 2016 2:22:52 PM
#Nebenstellen	pdf	March 2, 2016 2:18:43 PM
myt	pdf	March 2, 2016 2:10:02 PM
myt	pdf	March 2, 2016 2:06:35 PM
MeinCSVmyTest	csv	March 2, 2016 2:22:52 PM
MeinCSVmyTest	csv	March 2, 2016 2:18:43 PM
		March 2, 2016 2:10:02 PM

1.2.2 QIs of OpenScape Accounting

Monthly telephone costs

The QI lists the telephone costs of the current and past month per tariff category used. So you have a simple overview, in which category which telephony costs have arisen.

Monthly Telephony Costs

Tariff	July	August
CY	20.39232 EUR	10.82016 EUR
Default Zone	0.00000 EUR	0.00000 EUR
D1	148.13252 EUR	116.82250 EUR
EP	6.04800 EUR	12.00600 EUR
GE	60.96636 EUR	49.77168 EUR
GlobalCall	7.18230 EUR	17.93911 EUR
O2	1.74600 EUR	1.31400 EUR
R5	9.63060 EUR	3.07580 EUR
SD	0.00000 EUR	2.11250 EUR
SO	0.00000 EUR	0.00000 EUR
Sum	**254.09810 EUR**	**213.86176 EUR**

Top 15 dialed number

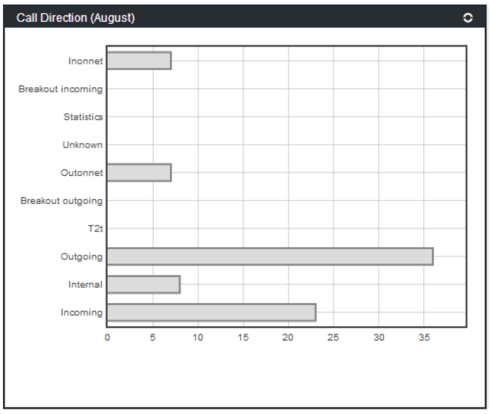
Overview of the fifteen most dialed external phone numbers for the current month.

Top 15 Dialed Numbers

Dialed Number	Number	Duration
0019596259154272	1	0:07:47
002381755621567	1	0:00:11
003519554732275	1	0:01:35
003864619474743847	1	0:00:13
004161389165854	1	0:03:57
00686789456475	1	0:01:03
00881736716788725	1	0:09:23
0088174936413495819	1	0:05:30
0223742596222984	1	0:06:49
0255792566838572	1	0:07:01
03360765694333	1	0:03:22
03422418692	1	0:04:09
0356143323983	1	0:05:23
035931105726556	1	0:06:48
0368197283	1	0:01:35

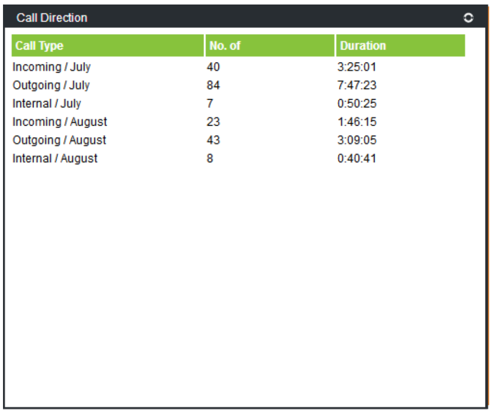
Call direction chart

The QI shows a graph: Amount of calls per call direction in the current month.



Call direction

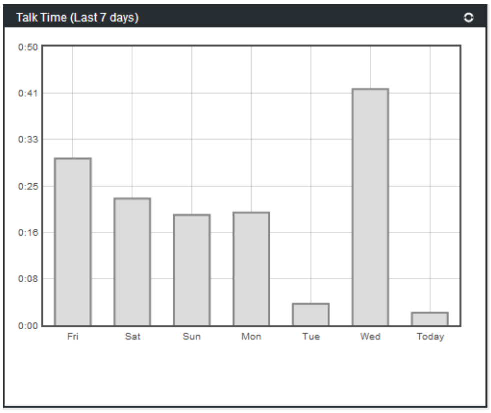
The QI provides an overview of amount of calls and sum of duration per call direction during the current and last month.


Call Direction

Call Type	No. of	Duration
Incoming / July	40	3:25:01
Outgoing / July	84	7:47:23
Internal / July	7	0:50:25
Incoming / August	23	1:46:15
Outgoing / August	43	3:09:05
Internal / August	8	0:40:41

Call duration chart (last 7 days)

The QI graphically shows the summed daily duration of the last seven days.



Last 15 calls

The QI shows the user's last 15 calls depending on the call direction.The overview shows you th last caller ID (incoming) and/or dialed number (outgoing).

Last 15 Calls

Time	Dialed Number	Duration	Call Type
Thu9:03:23 PM	067019387433777	0:08:36	Incoming
Thu9:02:27 PM	033239132269	0:04:46	Incoming
Thu8:58:44 PM	10099	0:03:10	Inonnet
Thu8:58:23 PM	10035	0:07:44	Inonnet
Thu8:56:13 PM	10000	0:09:19	Inonnet
Thu8:54:47 PM	10026	0:00:35	Inonnet
Thu8:53:32 PM	0240733495877	0:08:04	Outgoing
Thu8:48:58 PM	10097	0:01:50	Internal
Thu8:47:56 PM	0075038732429	0:09:51	Outgoing
Thu8:42:14 PM	08324416536412	0:09:58	Outgoing
Thu8:40:09 PM	0367662457957799	0:08:51	Outgoing
Thu8:37:34 PM	0431561628263	0:09:24	Outgoing
Thu8:31:51 PM	0334734428	0:00:28	Incoming
Thu8:31:43 PM	04724249394453	0:04:28	Incoming
Thu8:22:55 PM	047784942334	0:02:00	Outgoing

Limits/exemption

The QI shows the sum of the monthly call costs per call type and, if applicable, a defined limit/exemption.Thus, for example, the user can view the current status of his private conversation credit

Exemption/Limits

Call Type	July	August
Dienst	58.39100 € / 5.00000 €	26.44108 € / 5.00000 €
Fremd	0.00000 € / unlimited	0.00000 € / unlimited
Patient	0.00000 € / unlimited	0.00000 € / unlimited
Privat	8.47026 € / 10.00000 €	38.18624 € / 10.00000 €
Sum	**66.86126 €**	**64.62732 €**

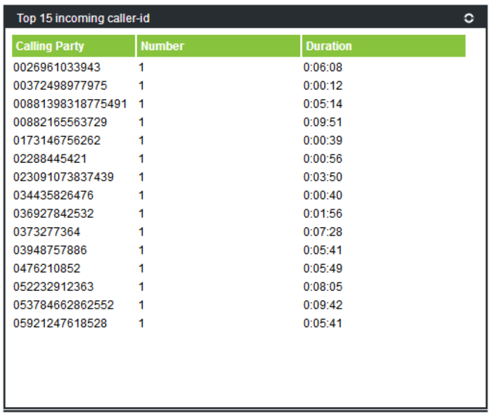
Users of the syscable group can see all call costs, but without limit/exemption.

Exemption/Limits

Call Type	July	August
Dienst	3000.23808 €	2009.28432 €
Fremd	0.00000 €	0.00000 €
Patient	0.00000 €	0.00000 €
Privat	1655.06384 €	1137.69184 €
Sum	**4655.30176 €**	**3146.97600 €**

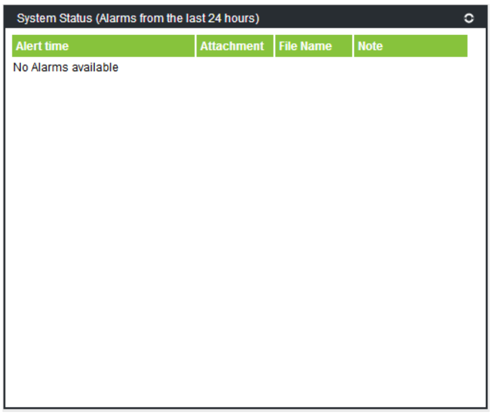
Top 15 Caller ID (incoming)

Overview of the last 15 incoming caller IDs.



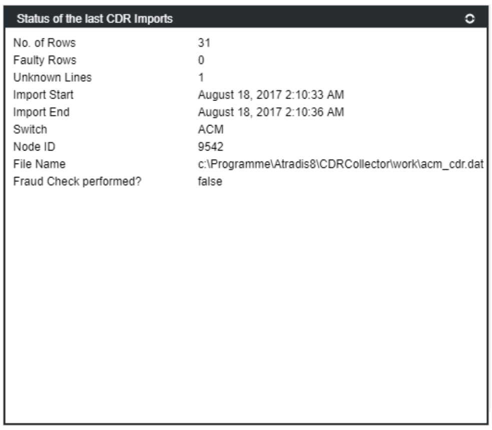
Alarms

Overview of all defined alarms of the last 24 hours.



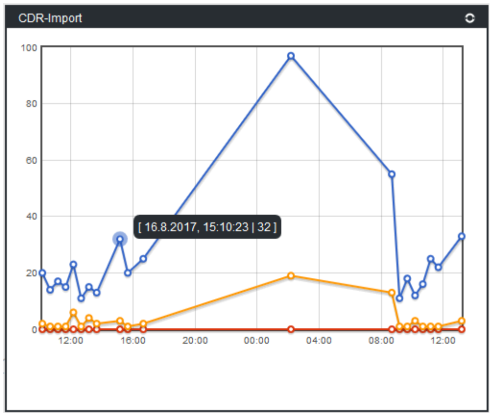
Status of last CDR import

Overview of the last CDR import.



Last 20 entries of Status of last CDR import

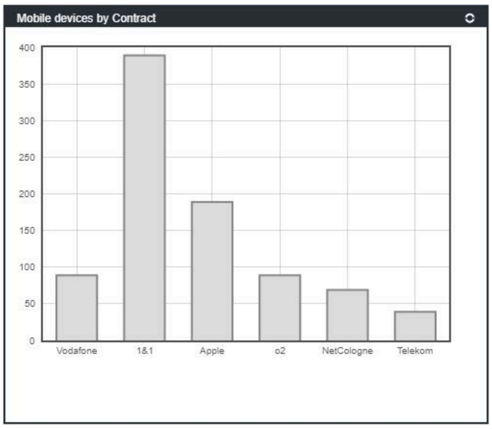
Graphical overview of the last 20 CDR import entries.



1.2.3 QIs on Device Management

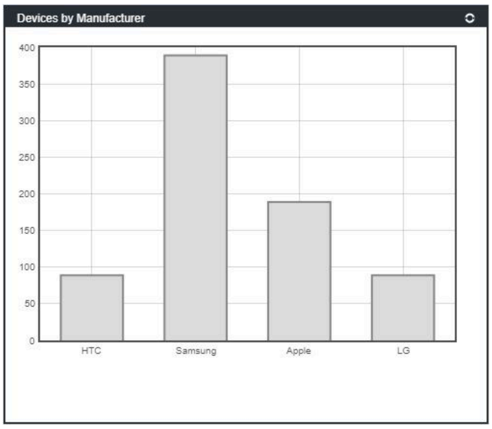
No. of mobile devices per contract

The QI shows the number of devices by contract as chart.



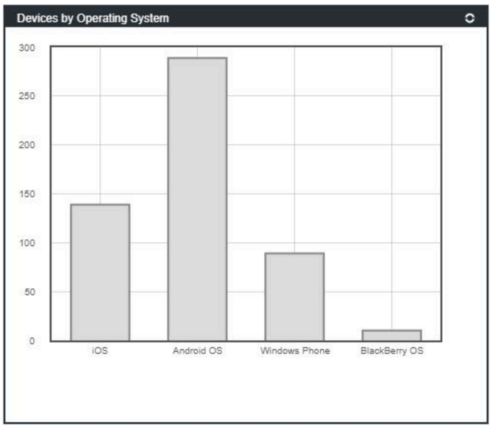
No. of manufactures per mobile device

The QI shows the number of mobile devices by manufacturer as chart.



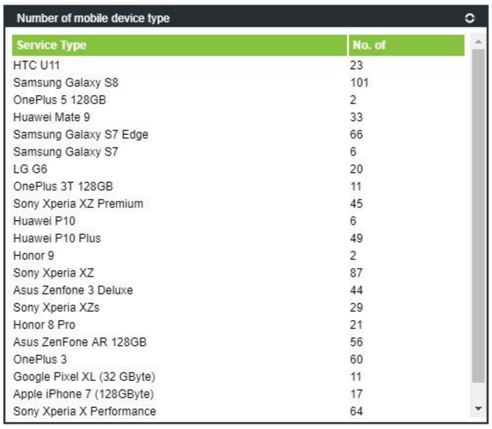
No. of OS per mobile device

In the QI, the number of mobile devices by operating system is displayed graphically.



No. of mobile device type

The QI shows the number of mobile devices by device type in tabular form.

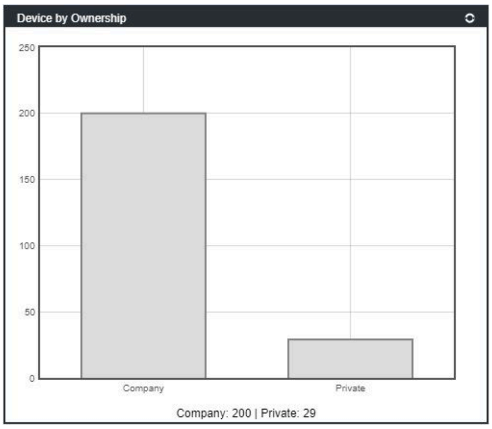


Number of mobile device type

Service Type	No. of
HTC U11	23
Samsung Galaxy S8	101
OnePlus 5 128GB	2
Huawei Mate 9	33
Samsung Galaxy S7 Edge	66
Samsung Galaxy S7	6
LG G6	20
OnePlus 3T 128GB	11
Sony Xperia XZ Premium	45
Huawei P10	6
Huawei P10 Plus	49
Honor 9	2
Sony Xperia XZ	87
Asus Zenfone 3 Deluxe	44
Sony Xperia XZs	29
Honor 8 Pro	21
Asus ZenFone AR 128GB	56
OnePlus 3	60
Google Pixel XL (32 GByte)	11
Apple iPhone 7 (128GByte)	17
Sony Xperia X Performance	64

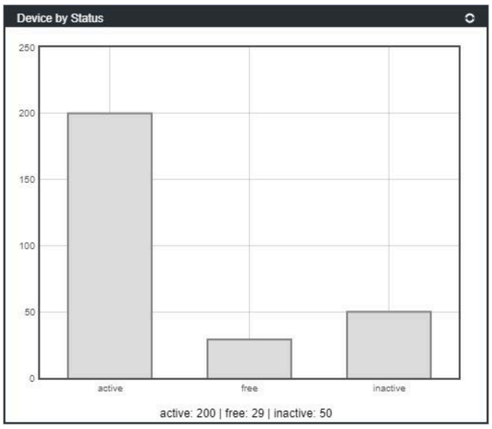
No. of mobile ownernzahl

The QI shows the number of mobile devices per owner graphically.



No. of mobile devices status

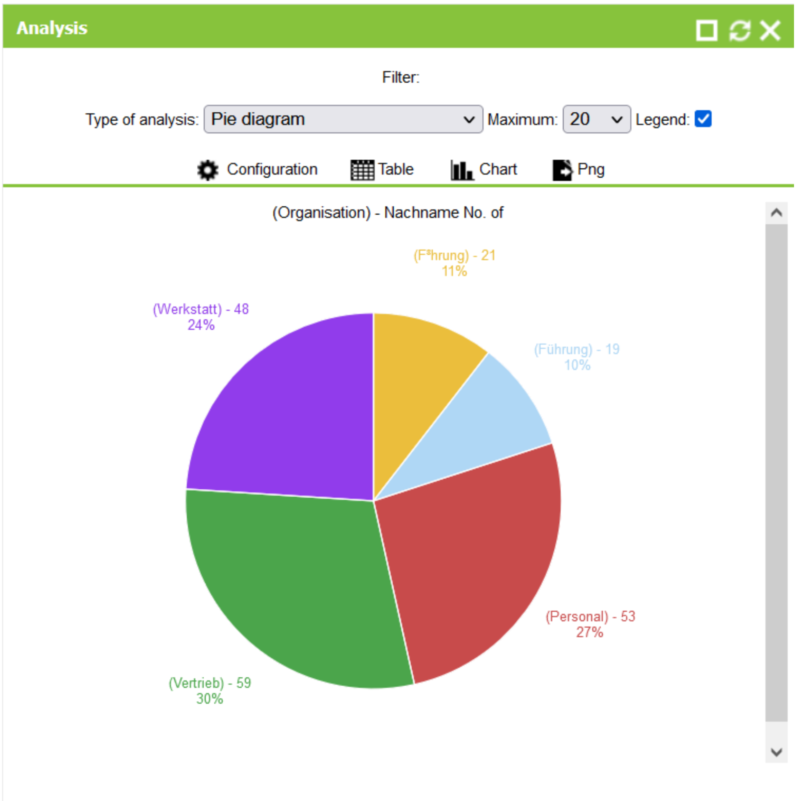
In the QI, the number of mobile devices is graphically displayed according to their status.



1.2.4 QIs for Graphic Illustration

Amount of subscriber per organisation unit

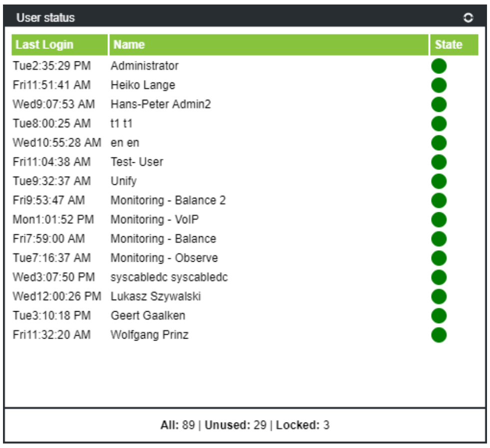
In the QI configuration, the Table graphic entry can be used to use your own templates from **graphic illustration**. Save your own created graphic as template and you can use it the QI configuration.



1.2.5 QIs of Administration

User status

Under User Status (**QI**)the administrator sees the status of all Atradis users. These are shown as Active, Unused or Locked.



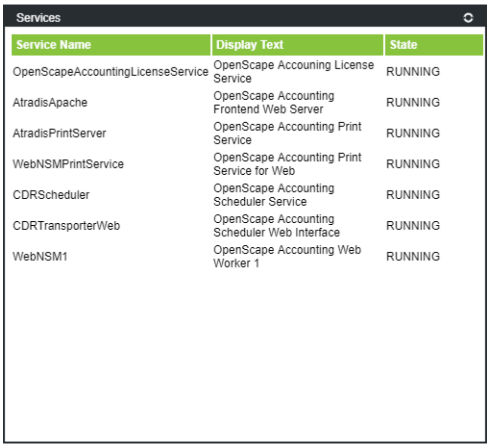
User status

Last Login	Name	State
Tue2:35:29 PM	Administrator	
Fri11:51:41 AM	Heiko Lange	
Wed9:07:53 AM	Hans-Peter Admin2	
Tue8:00:25 AM	t1 t1	
Wed10:55:28 AM	en en	
Fri11:04:38 AM	Test- User	
Tue9:32:37 AM	Unify	
Fri9:53:47 AM	Monitoring - Balance 2	
Mon1:01:52 PM	Monitoring - VoIP	
Fri7:59:00 AM	Monitoring - Balance	
Tue7:16:37 AM	Monitoring - Observe	
Wed3:07:50 PM	syscabledc syscabledc	
Wed12:00:26 PM	Lukasz Szywalski	
Tue3:10:18 PM	Geert Gaalken	
Fri11:32:20 AM	Wolfgang Prinz	

All: 89 | **Unused:** 29 | **Locked:** 3

Services

Under Services (**QI**) the administrator sees the status of all OpenScape Accounting Services.

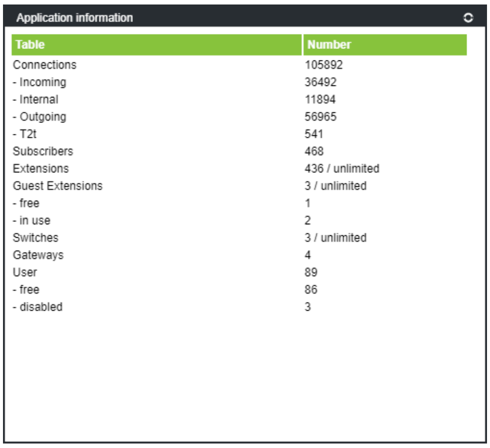


Services

Service Name	Display Text	State
OpenScapeAccountingLicenseService	OpenScape Accouning License Service	RUNNING
AtradisApache	OpenScape Accounting Frontend Web Server	RUNNING
AtradisPrintServer	OpenScape Accounting Print Service	RUNNING
WebNSMPrintService	OpenScape Accounting Print Service for Web	RUNNING
CDRScheduler	OpenScape Accounting Scheduler Service	RUNNING
CDRTransporterWeb	OpenScape Accounting Scheduler Web Interface	RUNNING
WebNSM1	OpenScape Accounting Web Worker 1	RUNNING

Application information

In the application information (**QI**) the administrator sees a listing of the resources used. These include z.b. the number of connections, subscribers, extensions and gateways.

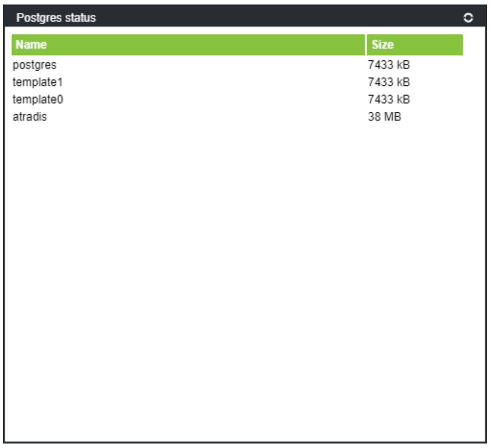


Application information

Table	Number
Connections	105892
- Incoming	36492
- Internal	11894
- Outgoing	56965
- T2t	541
Subscribers	468
Extensions	436 / unlimited
Guest Extensions	3 / unlimited
- free	1
- in use	2
Switches	3 / unlimited
Gateways	4
User	89
- free	86
- disabled	3

Postgres status

Under Postgres Status (**QI**) he administrator sees the fill level of the Postgres Database tablespaces listed in KB.

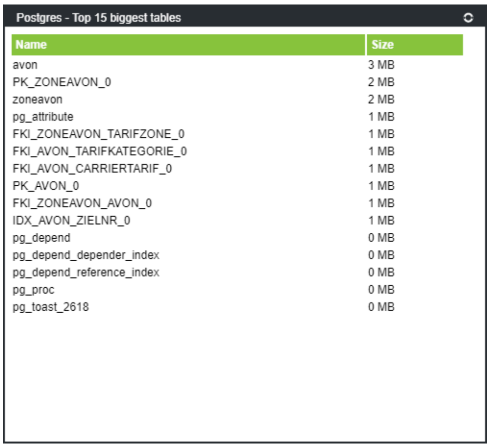


Postgres status

Name	Size
postgres	7433 kB
template1	7433 kB
template0	7433 kB
atradis	38 MB

Postgres - Top 15 biggest tables

In the application information (**QI**) the administrator sees the 15 postgres Database tables with the highest fill level in MB.

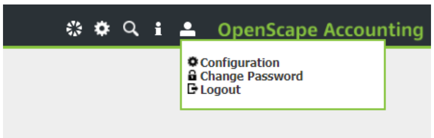


Postgres - Top 15 biggest tables

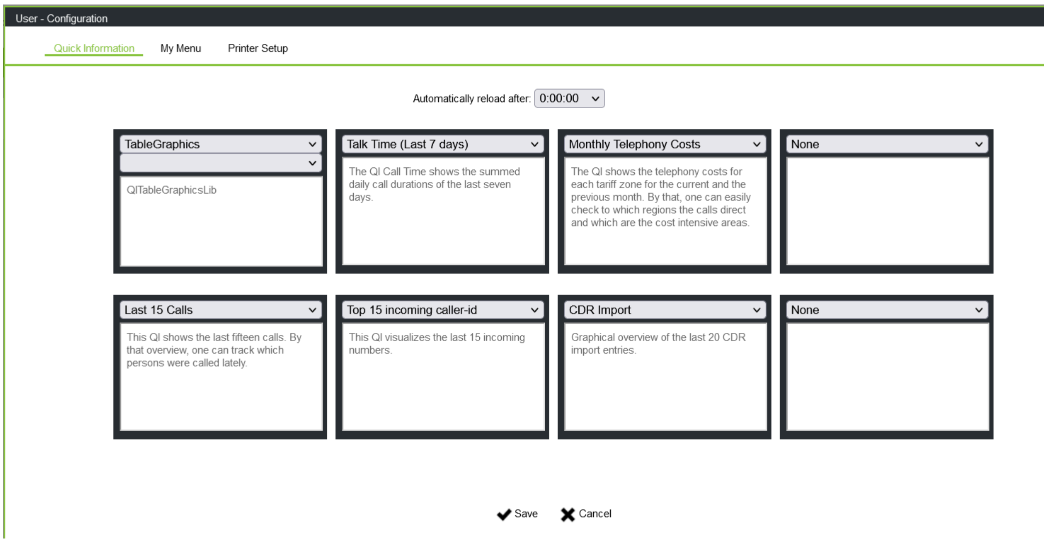
Name	Size
avon	3 MB
PK_ZONEAVON_0	2 MB
zoneavon	2 MB
pg_attribute	1 MB
FKI_ZONEAVON_TARIFZONE_0	1 MB
FKI_AVON_TARIFKATEGORIE_0	1 MB
FKI_AVON_CARRIERTARIF_0	1 MB
PK_AVON_0	1 MB
FKI_ZONEAVON_AVON_0	1 MB
IDX_AVON_ZIELNR_0	1 MB
pg_depend	0 MB
pg_depend_depender_index	0 MB
pg_depend_reference_index	0 MB
pg_proc	0 MB
pg_toast_2618	0 MB

1.2.6 QIs configuration

The user-defined configuration of the QI is done via the **User** icon in the *Configuration* entry .



The following configurations are available for users, depending on which modules / licenses are used:



Different QI information can be selected in the individual dialog windows.You can also specify in which cycle the view is to be updated.

1.3 Reportwriter

Overview of the Report Editor

This part of the manual describes how to create or modify report layouts. This module is available only on the native client. Consequently, the description also contains some screenshots. The handling of the Print function has already been dealt with in the Basic Operating Concepts chapter. This description is thus intended for experienced users who want to customize or expand existing reports or create new report layouts.

A menu and a toolbar (buttons) are available for operating the Report Editor.

The layouts are not loaded from the database on starting the program. Before you can begin processing, the layouts must first be loaded from the database by using **Reload Reports**. Changes or new reports are first stored locally and must then be written to the database. The reports can be written to a file or reloaded from there.

NOTICE: Before changing or creating reports, you should always export the report to a file, since the database is altered on saving/uploading a report. This enables the earlier version to be reloaded if required.

NOTICE: This special function is available in the native client only.

1.3.1 Overview Report Editor

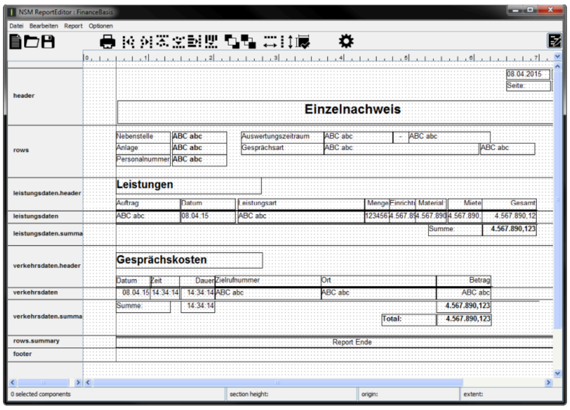
This part of the manual describes how to create or modify report layouts. Therefore, the description also contains some screenshots. The handling of the printing function is already included in the Basic Operating Concepts section. Thus, this description is intended for advanced users who want to make adjustments or extensions to existing reports or create new report layouts.

NOTICE: This special function is available in the native client only.

1.3.1.1 Structure of Reports

All reports have a similar structure. In addition to page header and footer, a report consists of one or several main sections. Every section can be divided into several sub-sections. Furthermore, header and footer areas can be defined for each section.

Screenshot of a Connection Order:



This screenshot of a connection order from the Report Editor shows the structuring options. The report has a header, a footer, the main section (rows) and several sub-sections (routing, subscriber, port data). The "routing" sub-section has a further sub-section (connecting points) as well as an alternative section if no routing is available (routing.empty). The "subscriber" and "port data" sections have an additional section header (e.g. subscriber.title). The main section has also a section for accumulations.

1.3.1.1.1 Data Sources

Basically, the Report Editor has two options for determining data sources:

- SQL query

- Object query

The SQL query is directly linked to the database. A so called Query Editor is available for creating SQL queries with which the desired data set can be easily defined.

The object query, by contrast, uses the OpenScape Accounting object model. More powerful methods, which are essentially predefined, are available here.

1.3.1.1.2 Templates

One of the major advantages of this Report Editor is the use of templates. This makes it easy to create reports of a similar design. Furthermore, using templates ensures a uniform appearance for printouts.

1.3.1.2 Report Editor

The report editor is used to modify existing report layouts or create new layouts.

NOTICE: Before you change or create reports, you should always export the reports to a file because the database is changed when you save a report.

A menu and a toolbar (buttons) are available for operating the report editor.

1.3.1.2.1 Menu Structure

The main menu is structured as follows:

File, Edit, Report, Options, Mode and Help

Elements of the **File** menu:

New... Alt+N	Creates a new report
Open... Alt+O	Opens an existing report
Save... Alt+S	Saves the current report
Preview... Alt+E	Switches to the preview
Print... Alt+P	Prints the current report
Close... Alt+Q	Exits the Report Editor

Elements of the **Edit** menu:

Copy Alt+C	Copies highlighted fields
Cut Alt+X	Cuts out highlighted fields
Paste Alt+V.	Pastes copied/cut-out fields

Elements of the **Report** menu:

Template	The current report is a template
Page header	Turns a page header on/off
Page footer	Turns a page footer on/off
New root section	Adds a new root section
Remove root section	Removes a root section

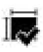
Page setup	Page settings (paper size, landscape format, ...)

Elements of the **Options** menu:

Grid on	Shows / hides grid in the working area
Snap to grid	Enables / disables the snap-to grid function
Grid size	Specifies the grid size
Show Ruler	Ruler display on / off

1.3.1.2.2 Toolbar Elements

In addition to the menu, the following, partly redundant functions are available via the toolbar:

	Creates a new report
	Opens an existing report
	Saves the current report
	Prints the report
	Aligns highlighted fields to the left
	Aligns highlighted fields to the right
	Aligns highlighted fields to the top
	Aligns highlighted fields to the bottom
	Same width for highlighted fields
	Same height for highlighted fields
	Highlighted fields are brought to the foreground
	Highlighted fields are placed in the background
	Spaces highlighted fields equally in horizontal position
	Spaces highlighted fields equally in vertical position
	Optimizes field size
	Specifies properties

1.3.1.2.3 Section properties

The following functions can be used in the context menu (right mouse button) above the section name (left, gray background)

Which entries of a existing report are displayed in the context menu depents on the structure and properties of the report:

id: *section name*	Name of section
section properties	Properties of section
section properties - id:	edit ID (*section name*)
section properties - Object Query	Method which used for this section (Object or SQL)
section properties - SQL Query	Method which used for this section (Object or SQL)
section properties - Page break before	Page break before the this section
section properties - Page break after	Page after before the this section
Delete	Delete section
Add title	Creates a new section called *section name*.title
Add section header	A new header for the section will be created
Groups	Section groupping
Groups - add	A new section which can used to group items will be created
Delete sub section	To delete the sub section
Add sub section	A new sub section will be created
Add section footer	A footer for the section will be created
Delete summary	Delete the calculation (summary) for the section
Add alternative if empty	In the event that there is no data for the section, an alternative section can be added
SQL Query	Activate or deactivate the option - SQL Query
Object Query	Activate or deactivate the option - Object Query
Summary	Determination of the summed values used in the *section name*.summary
Summary - Add	Add summation

1.3.1.2.4 Add Component

The following functions are available in the context menu (Activate with the right mouse button within the design view):

Add component	Field from the selection box

Delete selection	Delete marked field from design view

The following fields can be used:

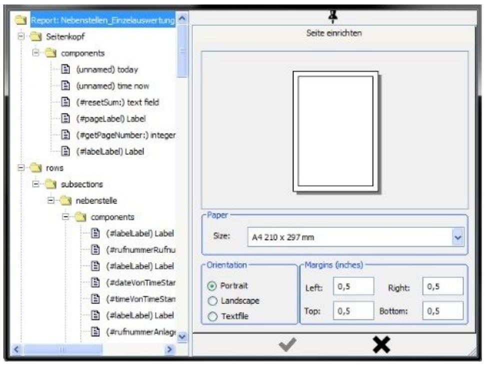
BFTField (Automatic field)	Select this field and place it in design view, then the used table and its fields will be automatically displayed
Text field	Select this field and place it in design view. *Mark* it and use the *property button* on further settings.
Integer field	Select this field and place it in design view. *Mark* it and use the *property button* on further settings.
Float field	Select this field and place it in design view. *Mark* it and use the *property button* on further settings.
Money field	Select this field and place it in design view. *Mark* it and use the *property button* on further settings.
Date field	Select this field and place it in design view. *Mark* it and use the *property button* on further settings.
Time field	Select this field and place it in design view. *Mark* it and use the *property button* on further settings.
Text box	Select this field and place it in design view. *Mark* it and use the *property button* on further settings.
Group field	Select this field and place it in design view. *Mark* it and use the *property button* on further settings.
List	Select this field and place it in design view. *Mark* it and use the *property button* on further settings.
Label	Select this field and place it in design view. *Mark* it and use the *property button* on further settings.
Smalltalk Bitmap	Select this field and place it in design view. *Mark* it and use the *property button* on further settings.
Bitmap	Select this field and place it in design view. *Mark* it and use the *property button* on further settings.
Rectangle	Select this field and place the Rectangle in design view.
Ellipse	Select this field and place the Ellipse in design view.

Rounded rectangle	Select this field and place the rounded in design view.
Line	Select this field and place the line in design view.
Today field	Select this field and place it in design view. The *current date* is displayed. *Mark* it and use the *property button* on further settings.
Now field	Select this field and place it in design view. The *current time* is displayed. *Mark* it and use the *property button* on further settings.
Check box	Select this field and place it in design view. *Mark* it and use the *property button* on further settings.
Text field with dynamic height	Select this field and place it in design view. *Mark* it and use the *property button* on further settings.
dynamic Smalltalk bitmap	Select this field and place it in design view. *Mark* it and use the *property button* on further settings.
Cable attribut field	Select this field and place it in design view. *Mark* it and use the *property button* on further settings.
Image field	Select this field and place it in design view. *Mark* it and use the *property button* on further settings.
sequential number field	Select this field and place it in design view. *Mark* it and use the *property button* on further settings.
Business graphics	Select this field and place it in design view. *Mark* it and use the *property button* on further settings.

1.3.1.3 Report Properties

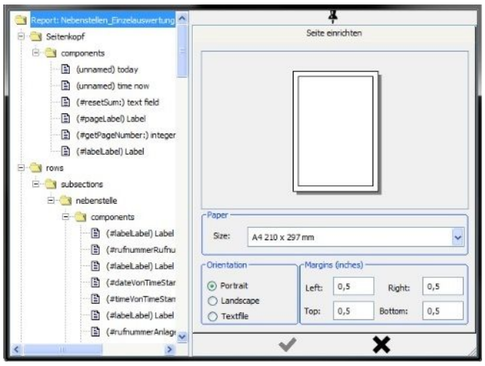
The properties of a report can be edited by clicking on the **Properties** icon .

The property tree can be used to define the properties of the report, its sections, and individual fields.



1.3.1.3.1 Report Properties

The page settings of the report are displayed for editing. The page settings can also be opened via the menu (Report - Page Settings).

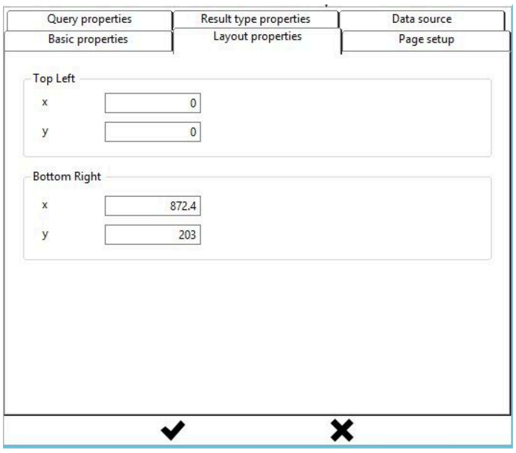


Size	Paper format
Orientation	Portrait, Landscape and Text file (output to file)
Text file	Portrait, Landscape
Margins	Margin settings in inches - Left (left margin), Right (right margin), Top (top margin), Bottom (bottom margin)

1.3.1.3.2 Section Properties

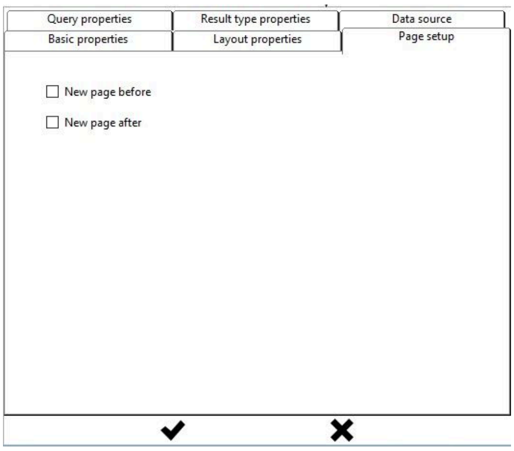
The tabs offered for a section depend on its basic settings. Depending on the kind of query, the data source switches to SQL or object data. All tabs for determining the data source are omitted for headline, title and accumulation and alternative sections. Only the section ID is shown in the **Basis** tab. This ID can only be changed via the Context menu or the **Data Source** tab.

Layout properties



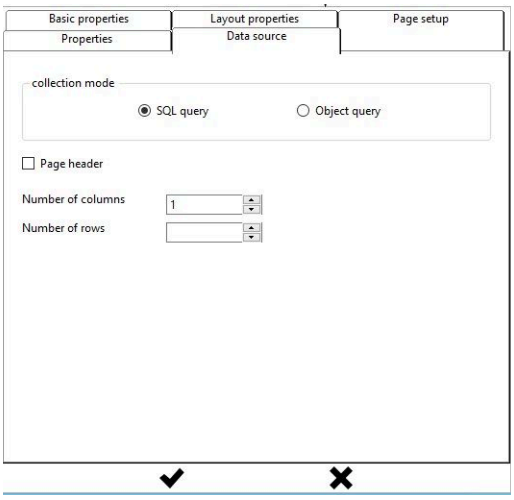
The bounds of the section are determined by its layout specification, which is displayed here. The values are pixel values and can be changed for fine adjustment. The section itself is defined by a box with coordinates for the top left and bottom right corners.

Page setup



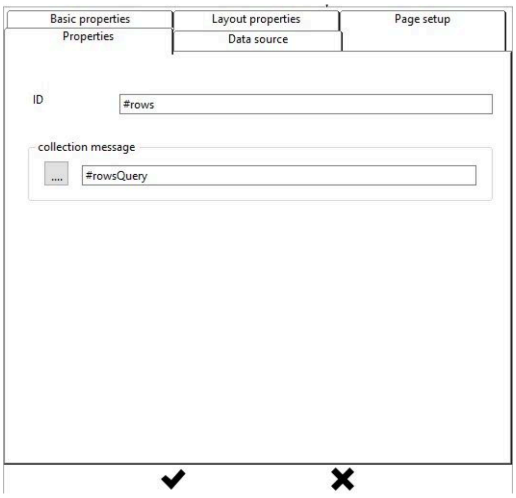
For each section of the report, it is possible to specify if a page break should be inserted before or after the section.

Data source



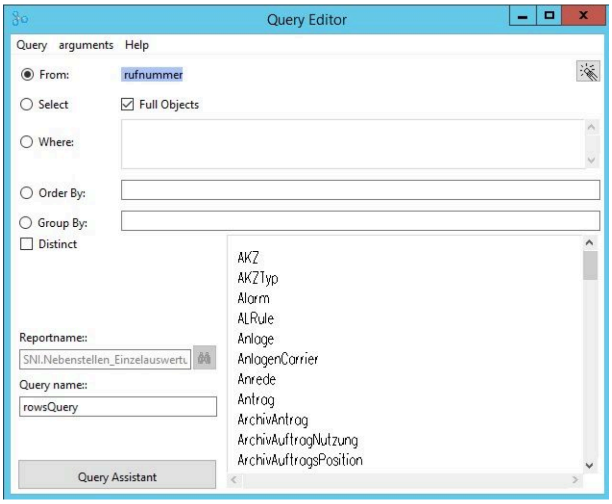
The basic setting made here determines whether data is to be retrieved via the data model (using an SQL query) or the object model (Smalltalk code). In addition, the page header and number of columns options can be changed.

Properties - SQL data source



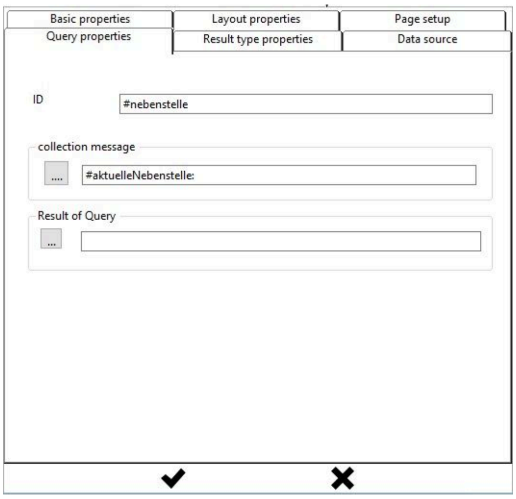
This is the starting point for the creation of an SQL query. The SQL query editor is opened using the button in the SQL Query area:

SQL Query Editor



The function selectors (From:, Select:, Where, ...) can be used to activate the individual parts of a database query. The data model is displayed in a scroll area at the bottom right of the window and can be used to assist in the input.

Query properties - Object Data Source - collection message



In contrast to SQL queries, the objects to be retrieved are determined via program code, i.e., the object model. For routing representations, in particular, this is the only way to query objects, since no corresponding SQL query is possible. An existing method can be chosen or new methods created using the "Query Database" button.

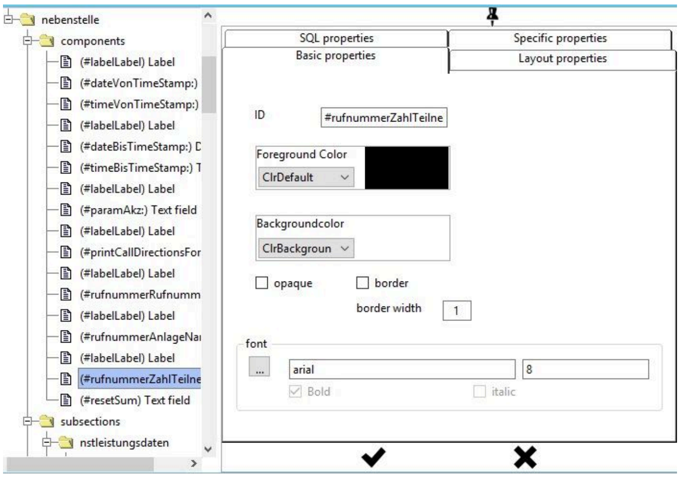
When creating new methods, a distinction must be made between methods with one or two variables. The parent section is used as the first variable, and the current section is used as the second variable. The current element in the parent section can be accessed via currentObject

NOTICE: When using "Data-Source Object" the result type, i.e. the class of the result set, is to be entered in the "Result Type" tab.

1.3.1.3.3 Field Properties

As with the section properties, the number and content of the individual tabs for the field properties depend on the selected field type.

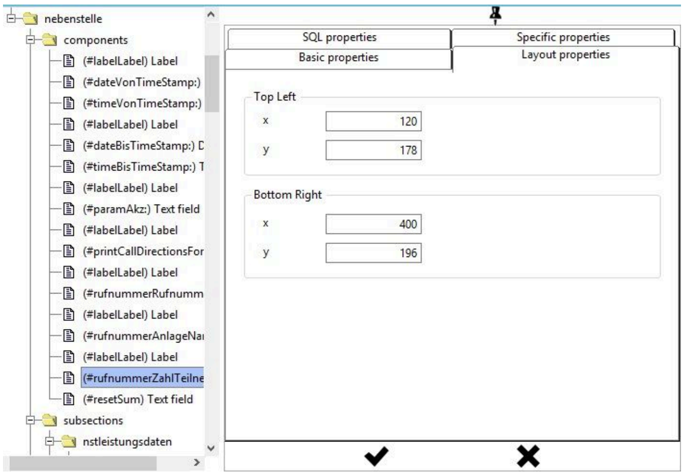
Basic properties



The basic settings for colors and font types are entered here. In addition, the ID generated by the system can also be changed here. A meaningful ID helps to quickly find a field in the Properties tree. Furthermore, the following settings can be specified:

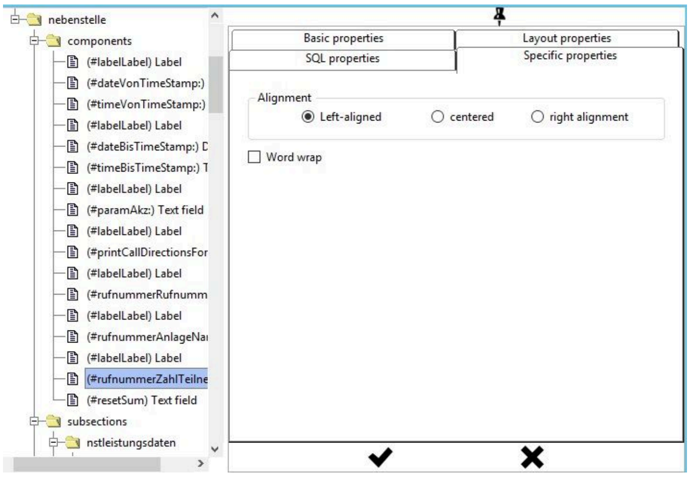
Foreground color	Color selection for the foreground (font)
Background color	Color selection for the background
Opaque	The field covers the underlying information
Frame	A frame is drawn corresponding to the field size
Frame width	Width of the frame in pixels
Font	Selection of font, font size, as well as bold and italics settings

Layout properties



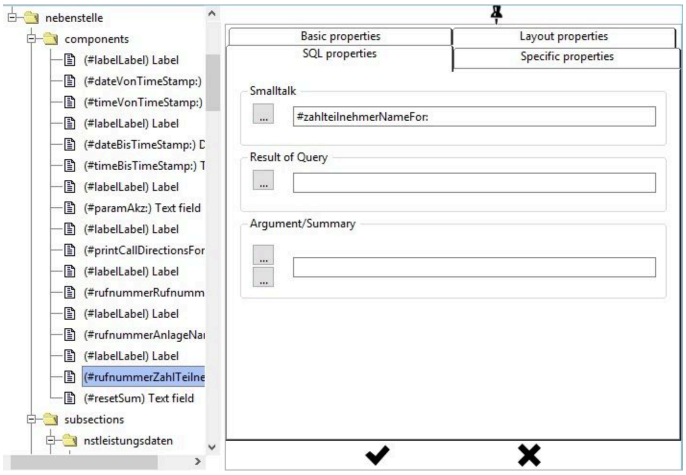
The size of the field is entered by specifying the upper left and bottom right coordinates of a box. The values also change when the field is either moved in the layout pane, or modified in its size.

Specific properties



The options for the alignment of contents and wordwrap can be set here.

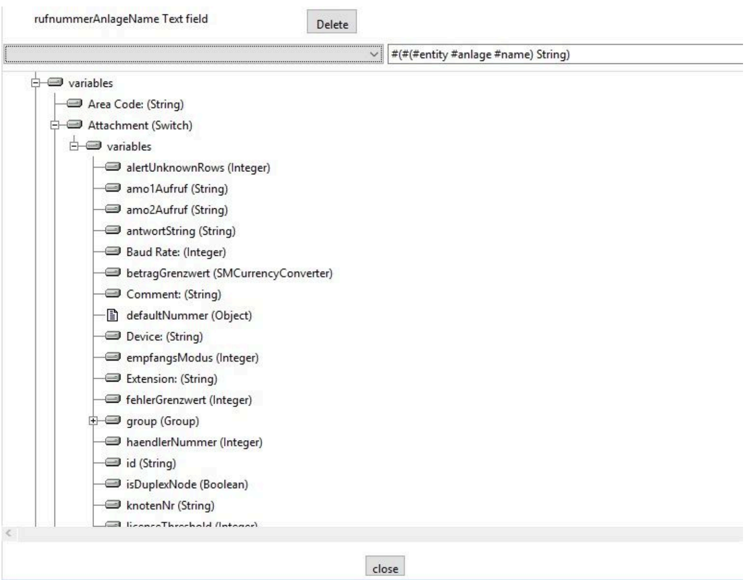
SQL properties



There are two options to define the contents of a field: queries using Smalltalk code or selection from the object model. The *Argument/Summary* options are currently not used. The following predefined methods are available for queries using Smalltalk:

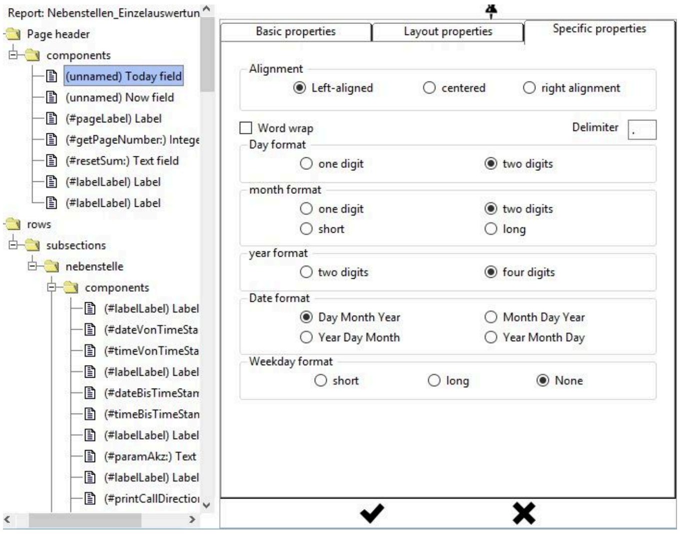
getPageNumber:	Output of the current page number
getReportName:	Output of the report name
leitungsLaenge:	Calculation and output of the line length
parameterHeadFullname:	(From network management): Output of parent object
parameterTitel:	Output of a header set by the program (report name and parent element)
reporterLogo:	Standard bitmap

The contents of the data and object model can be selected by means of the result query.



The "variables" (=data fields of the database) and "methods" (=predefined object method) areas are offered for selection as subelements of a class. Entries marked with a "+" indicate a reference to further classes.

Specific properties



The specific values in the individual tabs may deviate for some field types. For example, the date representation in a date field can be selectively changed with the above settings.

1.3.2 Reload Reports

Reload Reports

On the menu **Report writer** click on the entry **Reload Reports**. The reports are loaded from the database so that they are available in the Report Editor.

1.3.3 Manage Reports

Reporte

On the menu **Report writer** click on the entry **Manage Report Layouts**.

NOTICE: An overview of the available reports can be found in the appendix under Report Overview.

1.3.4 Load reports

Load reports

Click on the menu **Report writer** and then you'll get to the entry **Load reports from file**.

The dialog opens for loading reports. Select the report file from the directory. You can choose to import **Default reports**, **Own reports**, and / or **Export layouts**.

NOTICE: If the standard reports are to be imported, all reports (Default, Own and Export) are compulsorily deleted from the system. User-specific reports must then be restored from a previously created backup.

1.3.5 Save reports

Save reports to file

Click on the menu **Report writer** and then you'll get to the entry **Save reports to file**.

The dialog opens for saving reports. Select the driectory and put in the report file name. You can choose to export **Default reports**, **Own reports**, and / or **Export layouts**.

1.3.6 Export Editor

Export Editor

The export editor resembles to the report editor in the appearance and usage. The differences as well as the interaction with the call exports will be discussed in the following section.

The export editor combines exports with reports so that the results can be shown in any layout as PDF. Therefore, there is a special field of the type **Export Field** available in the export editor. In its properties it can be defined which column of the latter export should be displayed. Additionaly, fixed texts (**Labels**) can be placed within the layout.

An export layout consists of a main section named `rows` which is executed for each row of the export. Thus, its layout will be repeated for each row. Additionaly, a title and header as well as footer and summary section can be defined. The difference between a title and header respectively footer and summary is that the title and summary will be shown only once whereas header and footer will be repeated on every page. It is also possible to define a global header and footer section.

For the main section, it can be defined wheather a page break should be made after each row or if all rows should be printed below each other.

After having saved the export layout, it can be assigned to the groups and is available within the export definition.

1.4 Administration

On the **Administration** tab you will find the administration settings that affect the application as such, as well as special batch functions which should only be performed by experienced users.

1.4.1 User Administration

Overview

The User Administration enables you to conveniently manage all users of the application. Every user can be assigned to a specific group and thus be granted all the definable access rights of that group. The relevant groups must be created in advance.

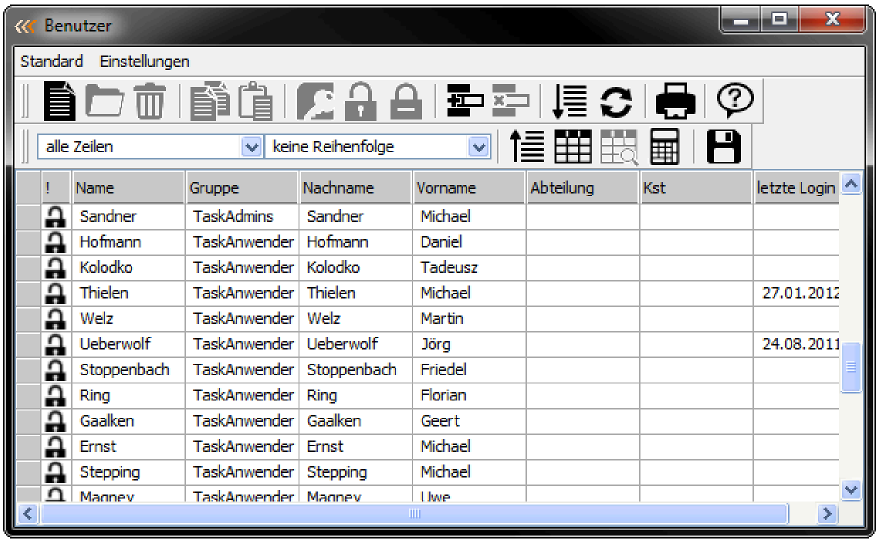
NOTICE: More details can be found in chapter on Groups.

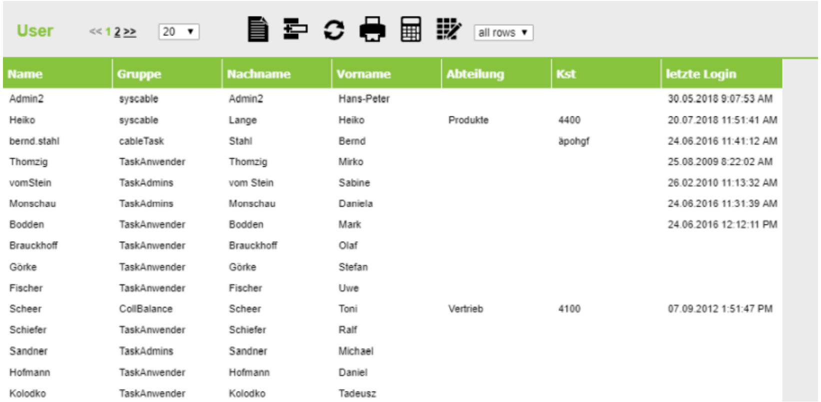
Every newly created user is automatically assigned the own user name as a password.

As soon as a user has been assigned to a group and thus receives the user-specific access rights, the user should change the initial password. To do so, the user must select "Change of password" on the "Log-in/Log-off" tab of the main selection menu. The user is then asked to enter the old password (i.e. the user name), the new (secret) password and again the new (secret) password for confirmation. Clicking the "Modify" button activates the own, new (secret) password, and the user can subsequently only log in with that password. You can force a user to change the generic password by enabling the corresponding option in the group of that user.

1.4.1.1 Activating User Management

 Click on the **Administration** tab of the main selection. Then click the **User** icon. You are taken to the program for managing OpenScape Accounting users and their access rights. A table is displayed listing the already existing users.





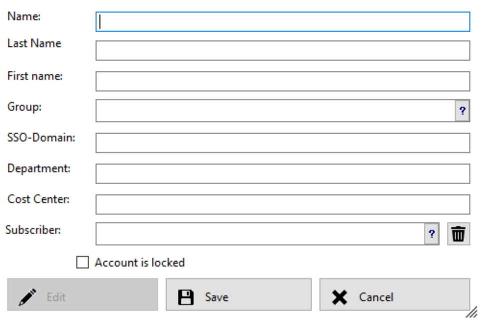
Name	Gruppe	Nachname	Vorname	Abteilung	Kst	letzte Login
Admin2	syscable	Admin2	Hans-Peter			30.05.2018 9:07:53 AM
Heiko	syscable	Lange	Heiko	Produkte	4400	20.07.2018 11:51:41 AM
bernd.stahl	cableTask	Stahl	Bernd		äpohgf	24.06.2016 11:41:12 AM
Thomzig	TaskAnwender	Thomzig	Mirko			25.08.2009 8:22:02 AM
vomStein	TaskAdmins	vom Stein	Sabine			26.02.2010 11:13:32 AM
Monschau	TaskAdmins	Monschau	Daniela			24.06.2016 11:31:39 AM
Bodden	TaskAnwender	Bodden	Mark			24.06.2016 12:12:11 PM
Brauckhoff	TaskAnwender	Brauckhoff	Olaf			
Görke	TaskAnwender	Görke	Stefan			
Fischer	TaskAnwender	Fischer	Uwe			
Scheer	CollBalance	Scheer	Toni	Vertrieb	4100	07.09.2012 1:51:47 PM
Schiefer	TaskAnwender	Schiefer	Ralf			
Sandner	TaskAdmins	Sandner	Michael			
Hofmann	TaskAnwender	Hofmann	Daniel			
Kolodko	TaskAnwender	Kolodko	Tadeusz			

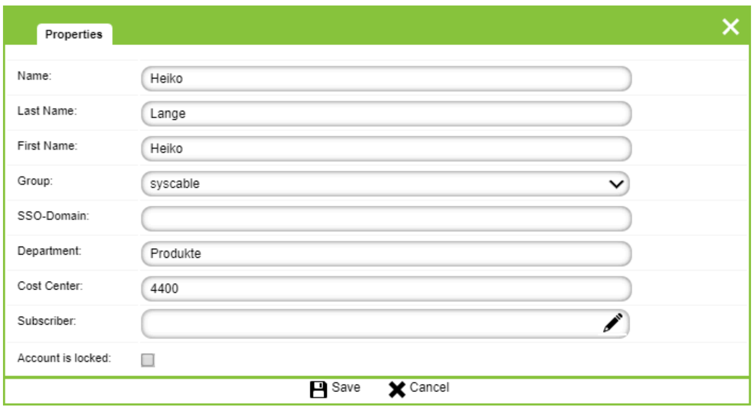
1.4.1.2 Adding a New User

Every user can be assigned to a group in which the individual access rights of the user are defined. The groups to which the users are to be assigned should thus have already been created in advance. This saves you from having to re-enter the same access rights for several users.

NOTICE: See also chapter Groups.

 Clicking on the New icon activates the **User screen:**".





Name	Enter the name of the user here. This name can then be used by the user to log into OpenScape Accounting . To save typing, you should only enter the last name or a unique code which is understood by the user. The entry in this field is checked for uniqueness.
Last Name	Last Name of the user. The field must not be empty
First Name	The user's first name
Group	Click on the "Group" field. You will be presented a selection of all existing groups. Select the group to which the user is to be assigned.
SSO-Domain	You can enter the domain of the user for the Single-Sign-On (SSO) procedure here if it is different from the value of the group.
Department	You can enter a department for the user.
Cost Center	You can enter a cost center for the user. This input is for information purposes only.
Subscribers	This field is active if you own an OpenScape Accounting licence. You can select a station that is assigned to the user here. This is used for determining "own telephone charge data", for example.

Click on "Save" after you have completed all inputs.

1.4.1.3 Editing Created Users

To reset a forgotten password to the user name, select the appropriate entry and click on the **Reset password** icon. For security reasons, you are required to confirm this process.

If a user enters the wrong login credentials more times than allowed in succession or times out, the respective user is locked. This **Unlock User** function can be used to delete the lock on that user entry.

1.4.1.4 Deleting Created Users

Every created user can be deleted if required. Select the user to be deleted in the control window and start the deletion.

Clicking the Delete icon starts the deletion process. To prevent you from unintentional deleting, a window with a note on the deletion process is displayed. If you confirm the deletion, the selected user is deleted.

NOTICE: The user `syscable` is required for the system and cannot be deleted.

1.4.2 Groups

Overview

Group management enables the convenient management of authorization groups. You can assign access rights to every group by restricting a group with respect to program modules, tables or individual fields. Only the administrator can set or assign restrictions and permissions.

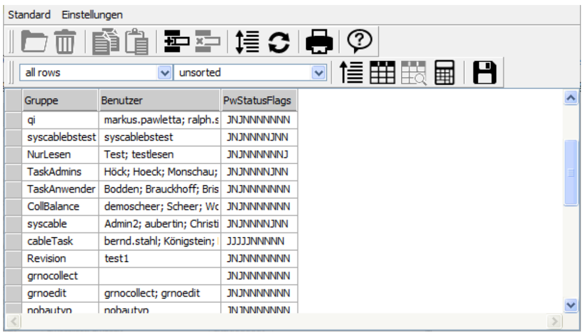
Since every user of the application is assigned to a group, access rights of multiple users can be managed simultaneously.

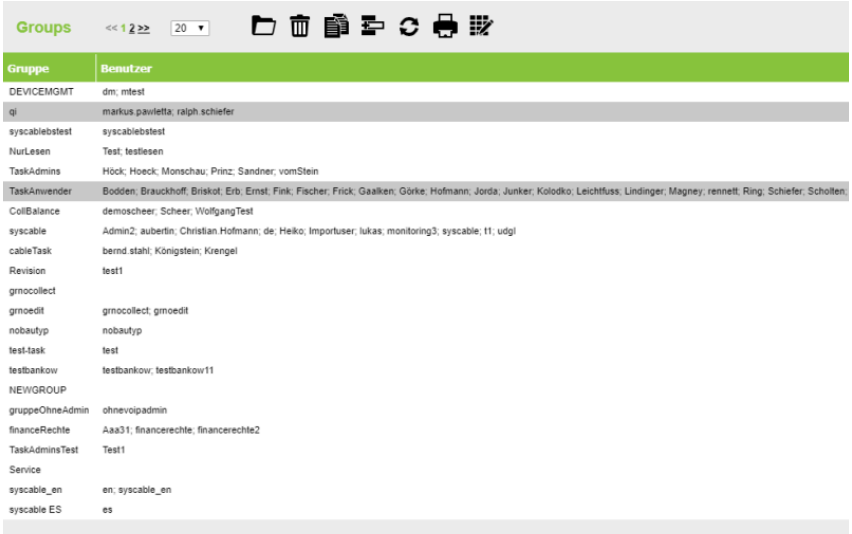
NOTICE: More details can be found in the chapter on Users.

NOTICE: Some functions of the Group management are available in the native client only (e.g. the definition of table layouts and permissions)

1.4.2.1 Opening the Group Administration

From within the main window, select the tab **Administration**. By clicking the icon **Groups**, the mask for managing groups will open. A table shows all available groups and one may create new groups or edit existing ones.



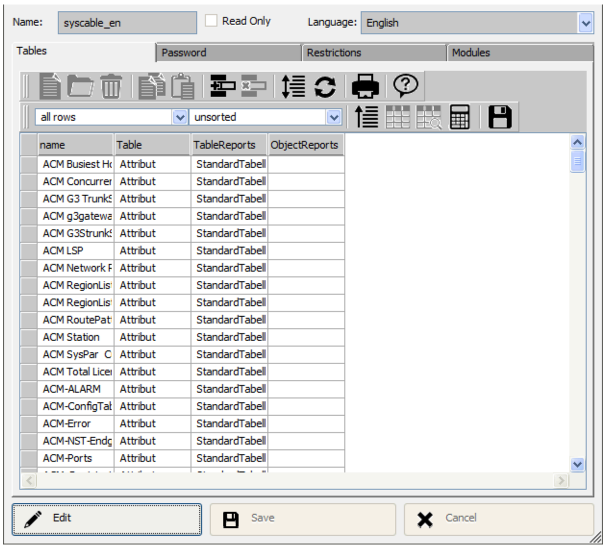


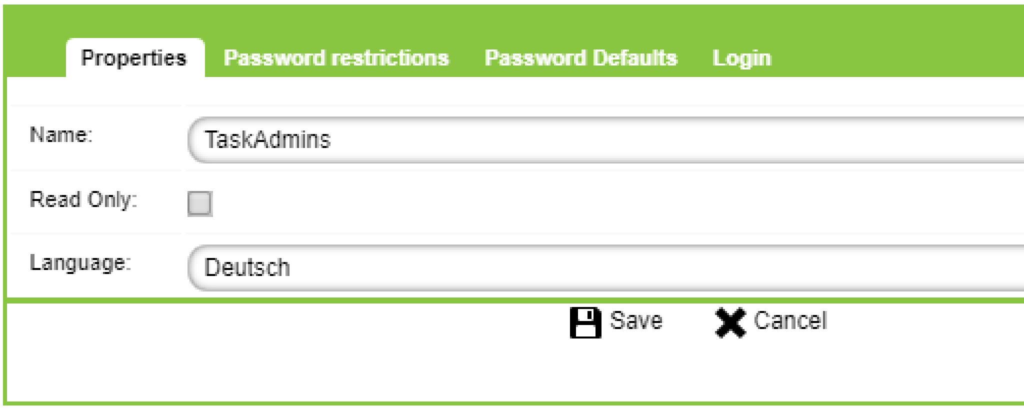
1.4.2.2 Creating a New Group

NOTICE: Create all the groups to which you want to assign users later. This allows you to re-enter the same access rights for different users.

NOTICE:

To create groups, you have to copy and paste existing groups. After inserting the group, you should only change and save the group name to create the new group. All properties of the new group can be edited or deleted as required by using the **Modify** option.





A newly created group with e.g.restricted administration rights can also serve as a template for a new group with further restrictions.Advantage: The restrictions of the template are transferred to the new group and therefore do not have to be assigned again.

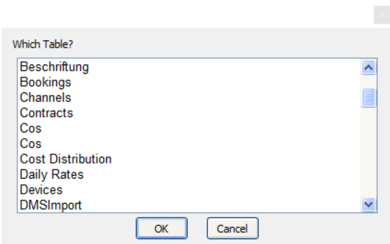
1.4.2.3 Assigning Tables

Each user group can be assigned different table views. A table view consists of the provided data columns, filter settings, assignment of reports, exports, and logbook options.

NOTICE: When creating table views, make sure that you follow with the data protection rules in your organization.

NOTICE: The assignment of tables is possible only on the native client.

On the **Tables** tab, click on the *New* or *Edit* icon to create or edit a table view, respectively. When creating a view, a list of the still unassociated tables appears, from which you can select an entry.



1.4.2.4 Editing Table Views

The dialog window for table views will be shown when mark a table and clicking

Edit icon.

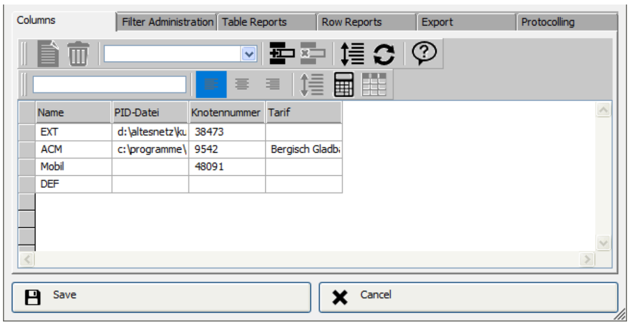
The Tabs are:

Tab	Use
Columns	The columns available for the user group are entered on this tab.
Filter	Here, filter settings can be managed for all users in this group.
Table Reports	Assignment of reports that apply to all filtered entries of the table view.
Row Reports	Assignment of reports that apply to a selected row in the table view
Exports	DDE exports to Excel or Word based on a template, each valid for one selected row in the table view.
Logging	Log events of this table view

1.4.2.4.1 Editing Columns

The table is opened. Click on a column header to mark it. The data fields in the column are highlighted yellow.

The **Add** icon can be used to insert a new column to the right of the selected column.



In the first selection box at the right of the *Add* and *Delete* icon, the data column (of the database) itself can be selected. The following column markers have to be observed:

Marker	Description
Red dot	Data field in the table with filter
Blue dot	Calculated field without filter
Green dot	Calculated field with filter
Folder icon	Reference to another table. You will also see a further selection column with the fields of the referenced table.

The second selection box is used to enter or change the column headers name (only in the application view).

Other possible settings are the alignment (*left*, *center*, *right*), release filter options for the users in the group, release calculator functions for this column and release editing options within the table (only for fields with a red dot).

Insert a column

To insert a new column click a column header of the table, and then click the **Add** icon. A new column is added to the table to the right of the selected column.The new column points to the same database field as the selected column.The original name of the database field is displayed.To display a different database field, use the first selection box above.

When you click on the first selection box, a hierarchical selection window appears.It is used to select hierarchically structured, complex database connections. The selection list for the entry in the input field usually goes through several hierarchy steps. You can scroll through the hierarchy and, if necessary, select a database field on a specific hierarchy level. A hierarchical selection window consists of several selection windows arranged side by side.

Database fields with red dots are selectable fields, database fields with a small card index still have subordinate database fields. Entries with blue dots are calculated columns, with yellow dots, calculated columns with filters.
If a database field with a card index is clicked in a selection list, then the subordinate database fields appear in the next window.

Now select the database field whose values should be displayed in the new column of the table. Your desired and selected database field now has a green dot and the complete hierarchy path of the database field appears at the top of the window. Click the input field to rename the column name and save it .

You can configure the new column as follows:

Column heading	If you have selected a database field, the name of the field is automatically entered in a text field. If the name is not apt or not meaningful, you can change it here. The entered name appears as a heading in the table.
Alignment	You can set the column entries either left-aligned, centered, or right-aligned. left center right Click the appropriate icon and the result is displayed directly in the table.
Column width	Position the mouse pointer over the dividing lines between the column headers, press the left mouse button, and you can specify the column width by dragging the dividing line.
Column filter allowed	Mark a column of the table, then click the **Filter** icon.The Icon change to means that the filter option on the column is activated.

Column calculation allowed	Mark a column of the table, then click the icon **Compute**. The Icon change to , means that you can use this calculation during the processing of the table,B. Determination of maximum and minimum values, totals, etc.
Column editing allowed	Mark a column of the table, then click the icon **Edit**. The Icon change to , this means that you can edit this column directly during editing of the table. **NOTICE:** There is no validation of the data when editing the data using this described editing function.Therefore, the editing function should only be assigned if the group has full transparency about the content of the data.

Change column properties

Click the column you want to edit in the table.It displays the current setting in the toolbar that can be changed.

Remove a column

If you want to delete a table column, select the column to be deleted in the table and click on the **Delete** symbol. Inadvertently deleted columns can be added at any time by re-adding.

Position the columns

All headers of the table columns are in the order in which they appear in the table.To change the positions of the table columns within the table, simply click on the heading of a column and move that column to the desired position.The activation of the shift function is indicated by a modified cursor.

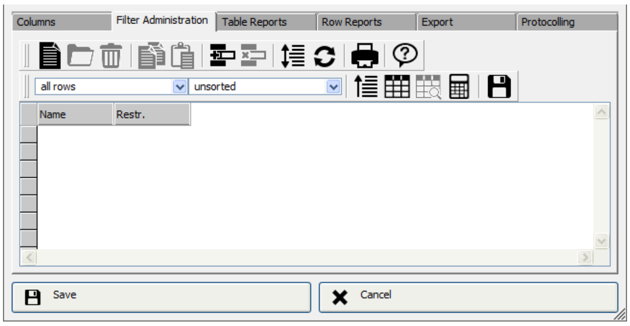
1.4.2.4.2 Setting Table Filters

This settings can be used to enter, edit and delete frequently used filters all users of this group. The setting of the filter is described in the section on Filters. Please note that the option **Reduced view** may only be enabled for a maximum of one filter. It causes all the views to have only the data for which the filter setting applies.

NOTICE:

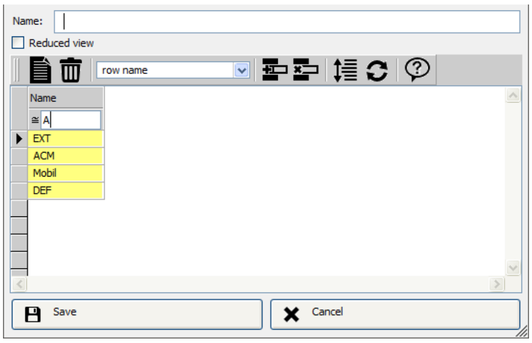
In the tables **Organization**, **Subscriber**, **Extension**, **Connections**, **Subscriber connections**, **Extension connections**, **Cost center connections**, **Fixed charges**, **Subscriber fixed charges**, **Extension fixed charges**, **Cost center fixed charges**, **Cost center**, **Print job**, **Call-Export** and **Tariff category** the filter's `own data` is already pre-assigned.It is recommended that you do not change this default filter as a restriction.

Users who are assigned to a subscriber can thus only see their own connection or master data for which they are responsible. This means for the evaluation that only own extensions, PIN and subscriber can evaluate. For reporting of organizations or cost centers, the same applies if the same subscriber has also been established as person responsible for the organization or cost center.



Setup a new filter

Select the table to be modified, activate the Edit button and click on the edit icon in the toolbar. The table is opened for processing. Click on the **Add** icon in the **Filter administration** and the dialog box *Filter* is opened.



Each filter detected here is stored under its own freely selectable name, e.g. `Telephone`.

You can use the check box **Reduced view** to control whether this filter always limits the data output in the table (**Reduced view *is activated***), or whether you offer this filter as an additional entry in the filter line of the table.

In the combo box, select a column which you wantto set the filter. Depending on the complexity of the table, the selection list can go through several hierarchy levels. You can scroll through the hierarchy and, if necessary, select a database field on a specific hierarchy level.

See also Chapter Filtering Data

By clicking the **Add** icon, the column is inserted into the table and displayed with the current content.

Add filter criteria

You can set the filter criteria for the individual columns in the same way as you are used to filtering within the tables. Click on the icon **Filter+** and it appears above the column, a character. Click on this character with the left mouse button and a list of criteria is displayed. After selecting a criterion, you can enter values that determine the filter more closely. Use the button **Save** to save the entry.

Remove filter criteria

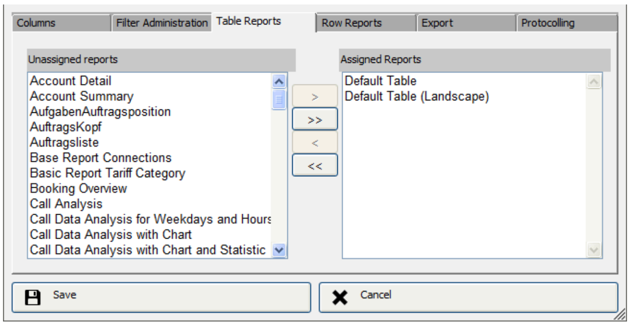
In *Filter administration* select the column to be deleted within the table and click on the **Delete** icon. the selected column will be deleted.

1.4.2.4.3 Assigning Table Reports

A list of all report layouts present in the database appears on the left, and the layouts already assigned are shown on the right. Reports can be assigned or removed by using the buttons between the two lists. The Charge Analysis shows only report layouts that are assigned to the current user's group.

> **NOTICE:** The left part offers all report layouts, regardless of whether or not they are valid for this table. Incorrect assignments can cause the program to abort when running the report.

Specific Table Reports were used for table printouts. The Reports were defining the Content and the Structure of the Printout. Click on the **Table Reports** to assign the reports.



On the left side , all available Table Reports were shown. On the right side, all Table Reports which should be available for usage for the selected Group were shown.

The Buttons in the middle of the Window have the following meaning:

	The selected Table Reports will be assigned to the Group
	All Table Reports will be assigned to the Group
	The selected Table Reports will be removed from the Group.

	All Table Reports will be removed from the Group.

Click on **Save** when all Settings were made.

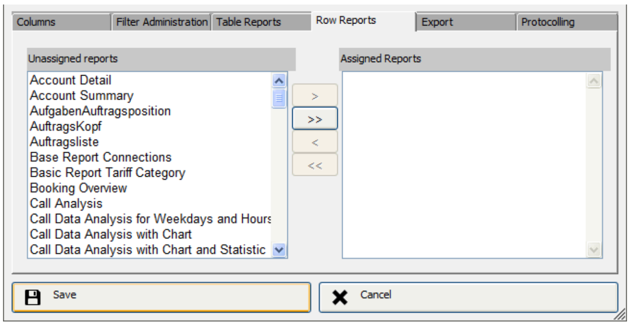
1.4.2.4.4 Assigning Row Reports

Row reports can be edited like *Table reports*. A list of all report layouts present in the database appears on the left, and the layouts already assigned are shown on the right. Reports can be assigned or removed by using the buttons between the two lists.

> **NOTICE:** The left part offers all report layouts, regardless of whether or not they are valid for this table. Incorrect assignments can cause the program to abort when running the report.

Click on **Row Reports** to assign the reports.

Row Reports were similar to Table Reports. The Reports were defining the Content and the Structure of the Printout. Only selected rows from the Table will be printed.



On the left side , all available Row Reports were shown. On the right side, all Row Reports which should be available for usage in the selected Group were shown.

The icons in the middle of the window the following settings can be used:

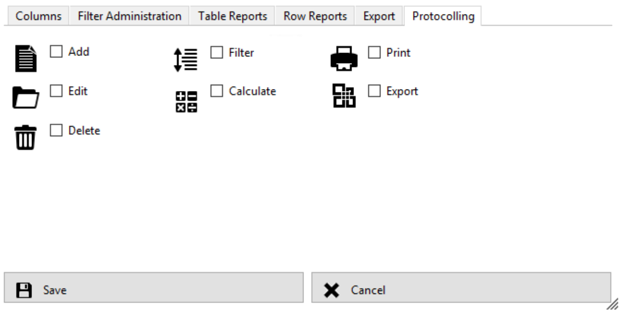
	The selected Table Reports will be assigned to the Group
	All Table Reports will be assigned to the Group
	The selected Table Reports will be removed from the Group.
	All Table Reports will be removed from the Group.

Click on **Save** when all Settings were made.

1.4.2.4.5 Defining Log Events

For certain actions of the users of this group, the log events can be activated. Whenever a user of this group uses one of the enabled options, a corresponding log entry is created.

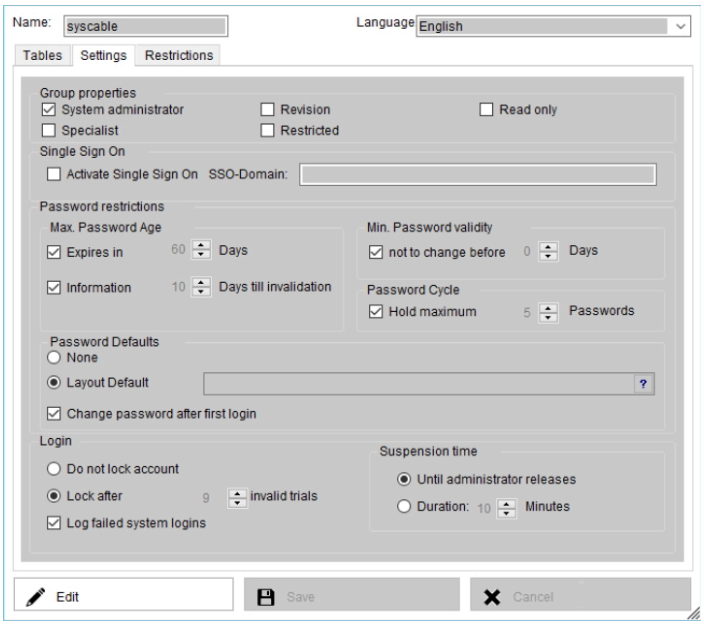
Options that can be activated are: **Add**, **Edit**, **Delete**, **Filter**, **Calculate**, **Print** and **Export**.



After you finished the settings click on the button **Save**

1.4.2.5 Setting up the Settings

Select the **Settings** tab from the dialog. You can set up the password conditions for the group here. All entries/properties are applied to all users of this group.



The following entries can be setup here:

Name	Enter the name of the user group.
Specialist	All users of the group are subject administrators.
Revision	All users of the group are auditors, whose application then requires a second user of the group to log in. (Corresponds to the previous group "Revision")
Restricted	Restricted views of certain tables apply to this group (Filter: My Data)

Read Only	Selecting this check box to disables the functions to create, edit and delete data for all users in this group.
System administrator	All users of the group are system administrators.The property can not be changed for the syscable and syscable_en groups.
Single Sign On	The **Enable Single-Sign-On** check box can be selected to offer this option to all users in the group. For all users of this group, the domain name can be entered as the default value.
Expires in x days	Enter the number of days after which the password becomes invalid and the user must enter a new password. If the check box is not selected, the password never expires.
Information x Days till invalidation	Enter the number of days before the user is to be notified of the imminent expiry of the password. An entry of 10 means that the user is informed 10 days before the invalidation of the password.
not to change before x Days	Specify the number of days after which an existing password can be changed at the earliest. If the check box is not selected, the password can be changed at any time.
Hold maximum x passwords	Enter the number of passwords the system is to retain. These passwords cannot be used again. If the check box is not selected, the same password can be used again later.
Password Defaults	**None:** If this radio button is selected, a password can have any appearance **Layout Default:** If this radio button is selected, you can define exactly a rule on password settings. **New users must change the password**If this radio button is selected, newly entered users of this group must change their passwords when logging in for the first time.

Login	**Do not lock account:**With this setting, a user can try to enter a wrong password any number of times. **Lock after x invalid attempts:**With this radio button selected, no password is accepted following x attempts: The lock must then removed by the administrator in the User Administration. **Log failed system logins:** If this check box is selected, every attempt to log in with a wrong password is logged. This can be viewed in Log Management.
Suspension time	**Until administrator releases:** If this radio button is selected, only the administrator can release a lock placed on the password. **Duration x Minutes:** The password lock is automatically released after x minutes. The user can then try to enter a password again.

1.4.2.5.1 Password Defaults - Password Layout

If you want to specify the password layout using regular expressions,

simply click on the combo box. The **Regular expressions** screen is shown.

Definitions on the optical appearance of passwords are managed here. Select a definition and confirm with **Accept**.

Click on the New icon if you want to add new regular expressions.

First enter the name of the expression. In **Regular expressions** you can enter regular expressions in accordance with UNIX conventions. These specify and restrict password entries. Enter information on the expression in the **Remarks** field. **Info** is intended for informative text that will be displayed to the user later when entering a new password. Test different passwords in the **Input Test** field. You can check whether these function in the way you want them to. The *light* is green for valid and red for invalid input.

1.4.2.5.2 Change password after first login

A new user is always automatically assigned the user name as the password. Selecting this check box forces new users to immediately change their passwords.

1.4.2.6 Specifying Group Permissions

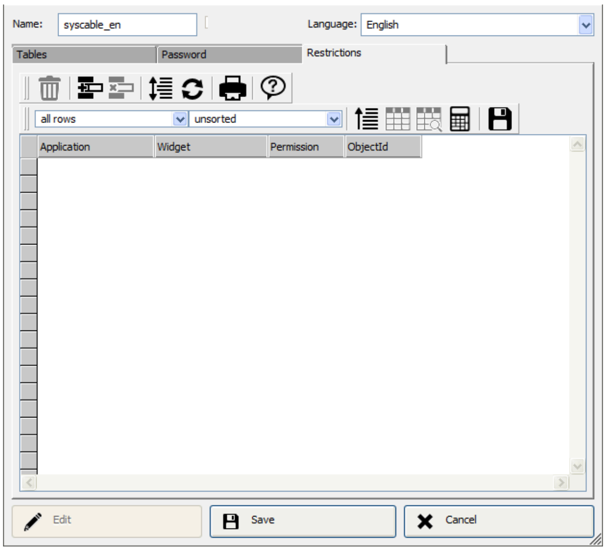
NOTICE: Group permissions can be viewed and created only in the native client.

Existing permission settings can be viewed and deleted in the Group Management. Group permissions can only be created by administrators. Administrators are offered the option of pressing the <Alt>+<F1> shortcut at any position in the application. This changes the shape of the cursor. Whenever an icon or a data field is now clicked in an editing window, a list of all groups (except the administrator group) with the currently set permission is displayed. Clicking on the group name changes its permission setting from the symbol **X** (*authorized*) to **-** (*not authorized*), and vice versa. For data fields, the permission changes in a loop from **W** (*write permission*) through **R** (*read permission*) to **-** (*invisible*), and then back to **W**.

The permission is stored with the name of the application window and the selected symbol or data field as a numeric value. The number **3** corresponds to *disabling a symbol*; the value **4** to the *Read only* setting, and the value **1** to the *suppression* of a data field.

1.4.2.6.1 Reviewing the Group Permissions

In addition to being able to define table views for a group, the group administration allows to review the restrictions for the group which were set by pressing `<Alt> + <F1>` or set via the Permission View. These restrictions are listed in the **Permissions** tab.



The restriction view consists of multiple columns. The application and widget columns identifiy the permission object whereas the permission column defines the widget's permission. The numeric value may be one of the following:

`1` - No permission, widget not visible/accessible

`2` - No read permission, widget not writable

`3` - No execute permission, widget/button not clickable

1.4.2.6.2 Auditing Group

Users of the **Audit** group are subject to special handling when logging in. Before being allowed to use the functions, a different user of this group must confirm the login with his or her own login credentials. For this feature to be used meaningfully, it is naturally essential that normal users enable the "Own data" restriction, while this group does not.

1.4.3 Constants

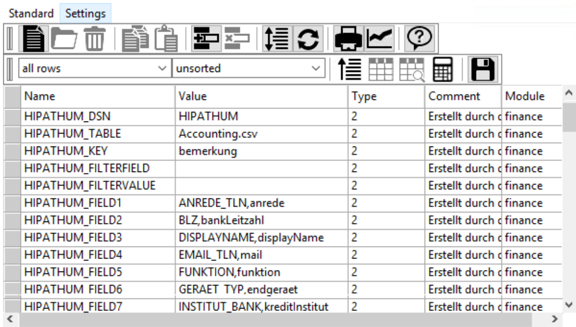
Overview

Under Constants Management, you can specify environmental parameters for OpenScape Accounting , e.g., internal database parameters or DDE transmission paths, etc.

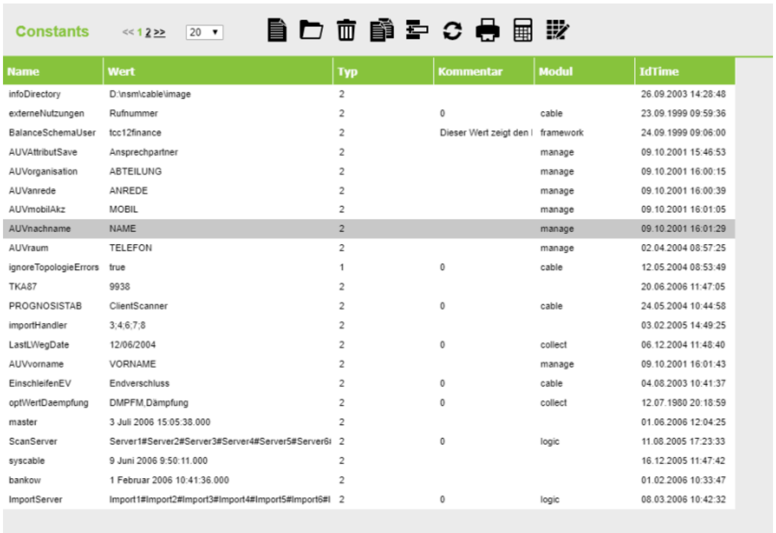
NOTICE: You should be very familiar with the meaning of these parameters within OpenScape Accounting before changing values or entering new values.

1.4.3.1 Activating Constants Management

Select the **Administration** tab in the main selection and then click on the **Constants** icon. The control window for the management of constants is displayed. The table lists the OpenScape Accounting parameters as well as their respective values.



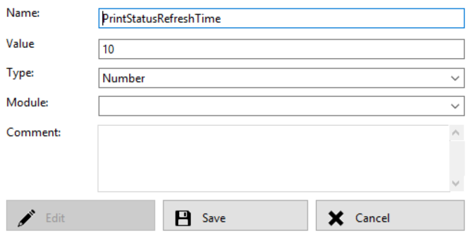
Name	Value	Type	Comment	Module
HIPATHUM_DSN	HIPATHUM	2	Erstellt durch c	finance
HIPATHUM_TABLE	Accounting.csv	2	Erstellt durch c	finance
HIPATHUM_KEY	bemerkung	2	Erstellt durch c	finance
HIPATHUM_FILTERFIELD		2	Erstellt durch c	finance
HIPATHUM_FILTERVALUE		2	Erstellt durch c	finance
HIPATHUM_FIELD1	ANREDE_TLN,anrede	2	Erstellt durch c	finance
HIPATHUM_FIELD2	BLZ,bankLeitzahl	2	Erstellt durch c	finance
HIPATHUM_FIELD3	DISPLAYNAME,displayName	2	Erstellt durch c	finance
HIPATHUM_FIELD4	EMAIL_TLN,mail	2	Erstellt durch c	finance
HIPATHUM_FIELD5	FUNKTION,funktion	2	Erstellt durch c	finance
HIPATHUM_FIELD6	GERAET_TYP,endgeraet	2	Erstellt durch c	finance
HIPATHUM_FIELD7	INSTITUT_BANK,kreditInstitut	2	Erstellt durch c	finance



Name	Wert	Typ	Kommentar	Modul	IdTime
infoDirectory	D:\nsm\cable\image	2			26.09.2003 14:28:48
externeNutzungen	Rufnummer	2	0	cable	23.09.1999 09:59:36
BalanceSchemaUser	tcc12finance	2	Dieser Wert zeigt den I	framework	24.09.1999 09:06:00
AUVAttributSave	Ansprechpartner	2		manage	09.10.2001 15:46:53
AUVorganisation	ABTEILUNG	2		manage	09.10.2001 16:00:15
AUVanrede	ANREDE	2		manage	09.10.2001 16:00:39
AUVmobilAkz	MOBIL	2		manage	09.10.2001 16:01:05
AUVnachname	NAME	2		manage	09.10.2001 16:01:29
AUVraum	TELEFON	2		manage	02.04.2004 08:57:25
ignoreTopologieErrors	true	1	0	cable	12.05.2004 08:53:49
TKA87	9938	2			20.06.2006 11:47:05
PROGNOSISTAB	ClientScanner	2	0	cable	24.05.2004 10:44:58
importHandler	3;4;6;7;8	2			03.02.2005 14:49:25
LastLWegDate	12/06/2004	2	0	collect	06.12.2004 11:48:40
AUVvorname	VORNAME	2		manage	09.10.2001 16:01:43
EinschleifenEV	Endverschluss	2	0	cable	04.08.2003 10:41:37
optWertDaempfung	DMPFM,Dämpfung	2	0	collect	12.07.1980 20:18:59
master	3 Juli 2006 15:05:38.000	2			01.06.2006 12:04:25
ScanServer	Server1#Server2#Server3#Server4#Server5#Server6#	2	0	logic	11.08.2005 17:23:33
syscable	9 Juni 2006 9:50:11.000	2			16.12.2005 11:47:42
bankow	1 Februar 2006 10:41:36.000	2			01.02.2006 10:33:47
ImportServer	Import1#Import2#Import3#Import4#Import5#Import6#I	2	0	logic	08.03.2006 10:42:32

1.4.3.2 Adding New Constants

Clicking the New icon opens the screen for adding constants.



NOTICE:

Before changing values or entering new values, you should be familiar with the parameters within OpenScape Accounting .

Name	Enter the constant's name.
Value	Enter the value the constant should have.
Type	Select the constant's type. If the value consists of digits only, select `Number`, if there are characters select `String`. `Boolean` is selected if the constant just represents the values `true` or `false` which then have to be entered.
Module	Select the module the constant belongs to.

Note	You may enter an optional note describing the constant and its value.

NOTICE: The application does not verify whether the type of constant matches the entered value.

After the relevant data has been entered, you can add the new constant to the Constant tab by clicking on **Save**.

NOTICE: An overview over the used constants can be found in the appendix.

1.4.4 Import Definitions

Import Definitions should only be used when having a deatailed Knowledge about the internal Structure of the Databases used for OpenScape Accounting. You should also have Knowledge about the Format of the File which should be imported. Misuse can end with the lost of Data.

Data from external Programs (like Excel) can be imported into OpenScape Accounting while using Import Definitions. Select a matching previously created Definition which also can be used for other external Data having the same Structure again and again.

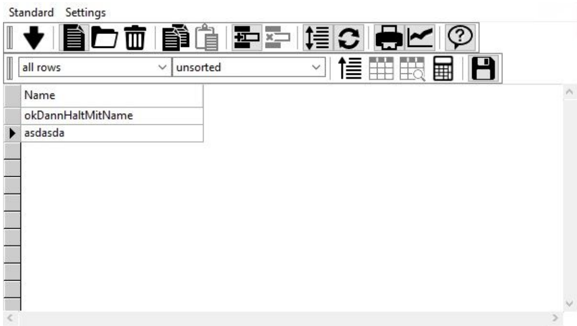
NOTICE:

In the File which should be imported, only one Record per Line can be used. The following Format are the most common Formats for importing Data from a Excel File:

- CSV (delimiter seperated) (*.csv)
- Text (delimiter seperated) (*.txt)

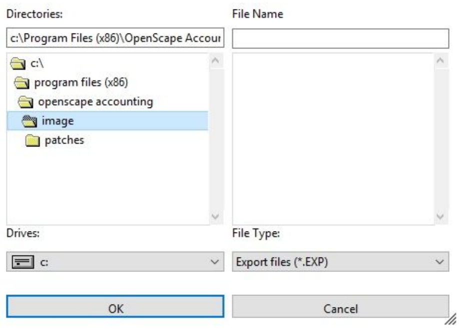
1.4.4.1 Activating Import Definitions

Go to **Administration** in the OpenScape Accounting Main Menu and click on **Import definitions** Symbol. The Import Definitions Window will open, showing all available Import definitions.



1.4.4.2 Importing Files using Import Definitions

For importing the Data, select the Import Definition you want to use from the Contol Window. Now click on the Symbol **Import**. A new Window opens where you can select the File which should be imported.



Confirm the Transaction while clicking on the **OK** Symbol. The import is now started. When the import is finished, a Window opens which onl has to be confirmed.

1.4.5 Protocols

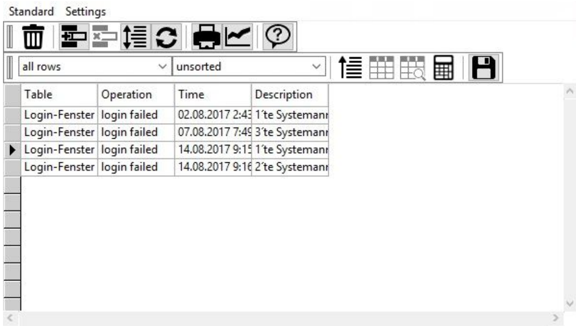
Overview

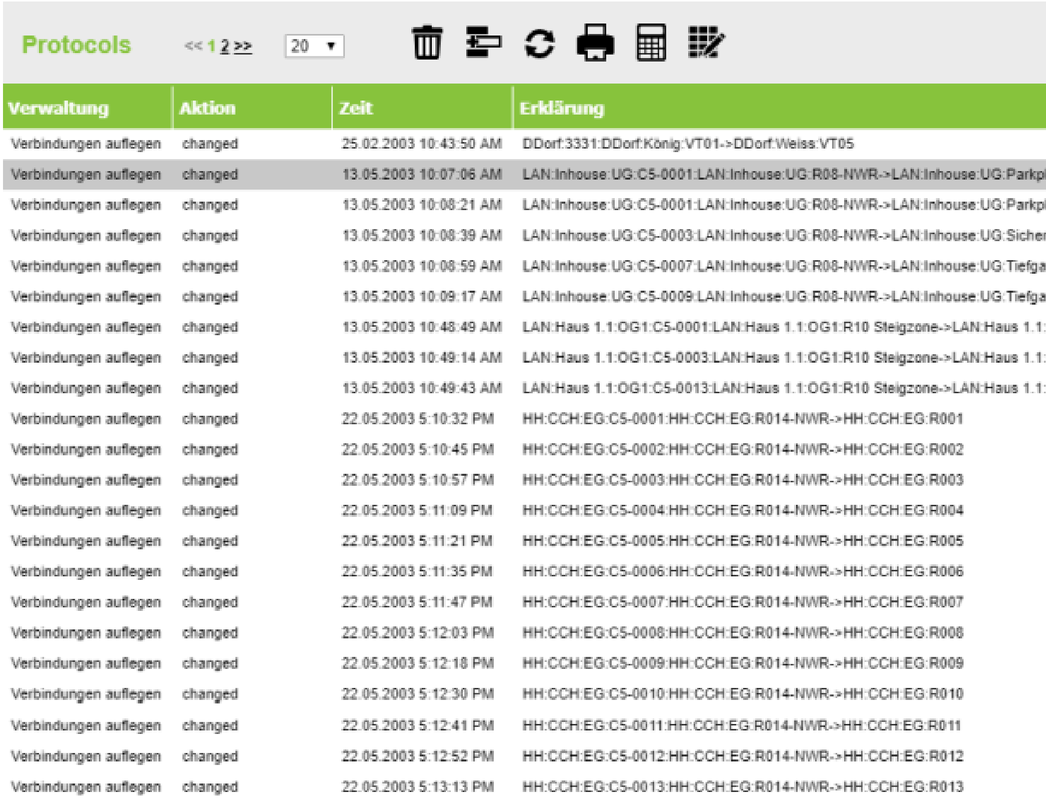
All accesses of a user to certain parts of the application can be logged. You can specify the exact settings about whether and when logs are to be created in the Group Administration. Log Maintenance informs you about all logged actions.

For more information, see the section on Groups chapter.

1.4.5.1 Activating Logging

Select the **Administration** tab in the main selection and then click on the **Logging** icon. The screen displays the log management control window. The table lists all the information on the recorded logs.





Maintenance	This is the name of the table that was accessed.
User	This user accessed the table.
Event time	This is the exact time the table was accessed.

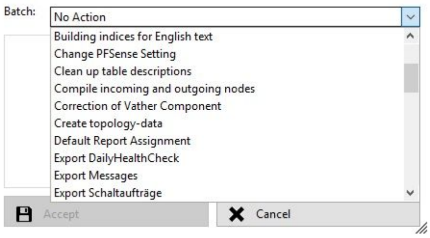
The log maintenance table contains all the log entries. You can use the filtering and printing functions to individually evaluate the log at any time and to print it as a list.

It is only possible to delete log entries if a filter was defined. Deletion means that all entries which meet the filter condition, e.g., event time < Oct. 1, 1998 are deleted.

1.4.6 Batch Processes

OpenScape Accounting offers multiple administrative batch functions. These can be used (depending on their functionality) by administrative users only

On tab **Administration** you will find the icon **Batch Processes**. Click on the icon and a list of all available *batch processes* will be shown.



Select a batch process and click on the button **Accept** to start the process. Depending on the function, another window opens or it is executed immediately without further interaction.

By granting appropriate Permissions, individual groups may be permitted or denied to access each batch function.

NOTICE: A lsit of all available processes are shown on Administrative Batch Functions.

1.4.7 Permission View

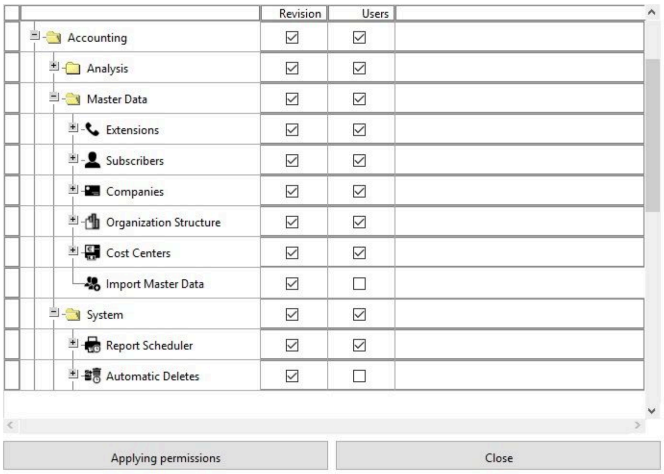
NOTICE: In order to use this function from within the web application, the Permission View must be opened once from the Windows client on the web server.

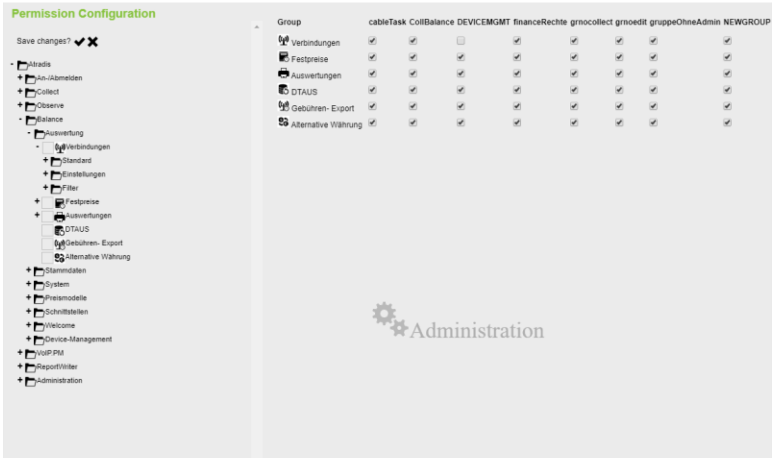
OpenScape Accounting offers a very fine-grained permission model based on groups. Specially when having many groups and permissions, it is not always easy to keep track of.

The permission view is a powerfull tool and should be accessible to administrative users only.

1.4.7.1 Start permission view

You can access the **Administration** menu by clicking the **Permission View** rights icon.Click the icon and the authorization overview appears.





1.4.7.2 Displaying Permissions

For this, OpenScape Accounting offers a permission view. In a tree structure, the menu items of the application as well as nearly all toolbar commands are shown. For each group can be defined if the item is accessible or inaccessible. The groups `syscable` and `syscable_en` will not be shown as they are administrative groups.

The tree structure is the same as in the application. A branch represents a menu item, leafs represent the commands within the views.

1.4.7.3 Changing Permissions

A permission can be changed by adding or removing the checkmark within a cell. If the checkmark is removed on a module branch, the whole module will be hidden. If a checkmark is removed for a table branch, the menu item will be removed. If a checkmark is removed for a leaf, the command within the table is removed.

After having adjusted all permissions, the button **Applying permissions** must be clicked. All permissions will now be removed or added.

1.5 My-Menu

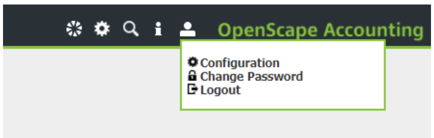
Overview

The **My menu** allows users to compile the application so that you can quickly access frequently used functions. Up to four menus with up to ten points per user can be created .

INFO: The **My menu** is only available in the Web application.

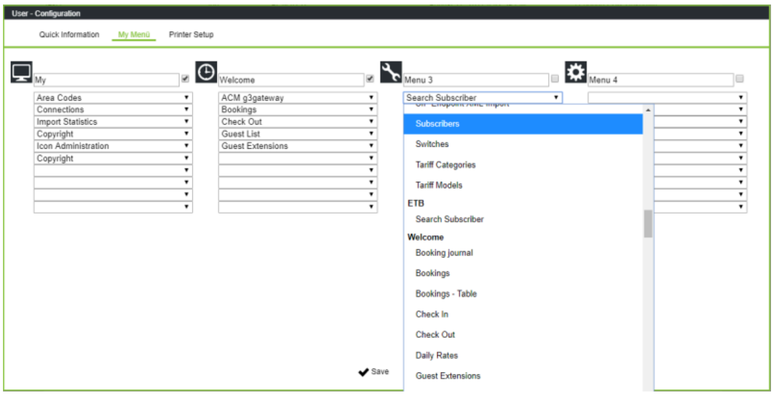
Configuration

My Menu allows the user to have an own specific menu configuration. The menu item **My** is only visible after previous configuration. After login click on the icon **User** and selecting the **Configuration** menu item. A separate menu view can now be created under the tab **My menu**.

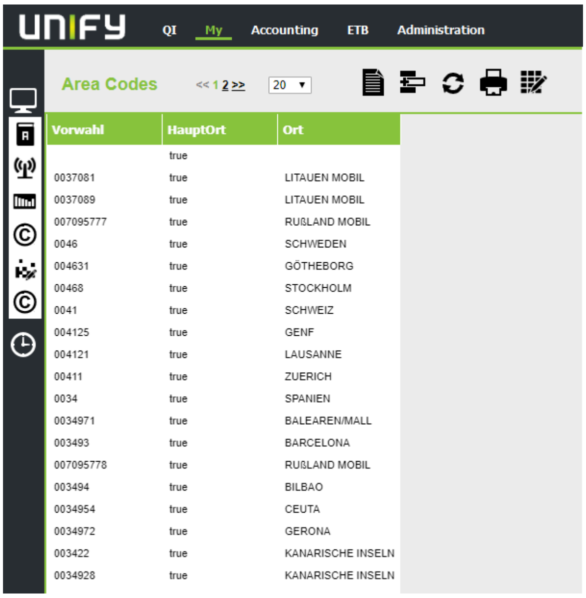


In the **My Configuration** dialog box, you can create up to four menu items. Each menu item must be assigned its own name, which then appears in its own menu view with the assigned name and icon. Each of the four individual menu items can be activated or deactivated. Only activated menu items as well as their entries are displayed under the setting **My**. If none of the four menu items is activated, the **My** setting is not displayed in the application.

The menu point selection refers to activated modules only. Each menu item can contain up to ten sub-items. A function can be assigned to each sub-item. Each user can create their own **My** - Menu view.



After saving, a new tab with the name **My** appears in the application. If you click on **My**, the previously configured menu items will appear.



1.6 Web parameters

Vorwort

It is possible to start Atradis as a web application with parameters. Depending on the parameters, the selected table view is opened directly after the login.

Example: *https://atradis.example.org/?view=checkin* or *https://atradis.example.org/?view=components*.

INFO: This functionality is only available in the web application.

Table 8:

Module	Components key
Welcome	guestlist
Welcome	checkin
Welcome	checkout
Welcome	editguest
Welcome	addbooking
Welcome	guests
Welcome	gastgruppen
Welcome	guestextensions
Welcome	bookings
Welcome	journal
Welcome	dailyrates
Welcome	switchcommands
Allgemein	About

Module	Components key
Allgemein	Copyrigh
Allgemein	AboutTCC
Allgemein	Lizenz
Balance	alert
Balance	Reporting
Balance	cleanup
Balance	Cleaningstatistics
Balance	Printjob
Balance	Printstatistics
Balance	Devices
Balance	ServiceCatalog
Balance	TypeofService
Balance	Company
Balance	Fraud-Definitionen
Balance	Fraud-Protokolle
Balance	Gateway
Balance	Call-Export
Balance	ImportStatistik
Balance	CostCenter
Balance	Extensions
Balance	OrganizationStructure
Balance	ReportHistory
Balance	SIM
Balance	ImportGateways
Balance	TariffModels
Balance	Tariffcategory
Balance	Subscriber
Balance	Switch
Balance	Connection
Balance	Contracts
Balance	Currency
ETB	etb
Administration	user
Administration	Gruppe
Administration	Constant
Administration	Protokoll

Module	Components key
Administration	Permission
QI	qi

2 OpenScape Accounting

Accurate billing for clear conditions

OpenScape Accounting calculates all TK procedures and components in your company quickly and easily. The collected data is managed and stored. The result: a clear handling and clear allocation of all costs.

Your applied value in the company

- Management and billing of contracts for network and / or line rental
- Comprehensive reporting and asset allocation
- Traffic-Measurement

2.1 Analysis

The **Analysis** menu item contains all functions required to create periodically recurring or one-time tasks.

All data can be viewed or analyzed, including export data, Sepa XML, etc.

2.1.1 Reporting

Reporting

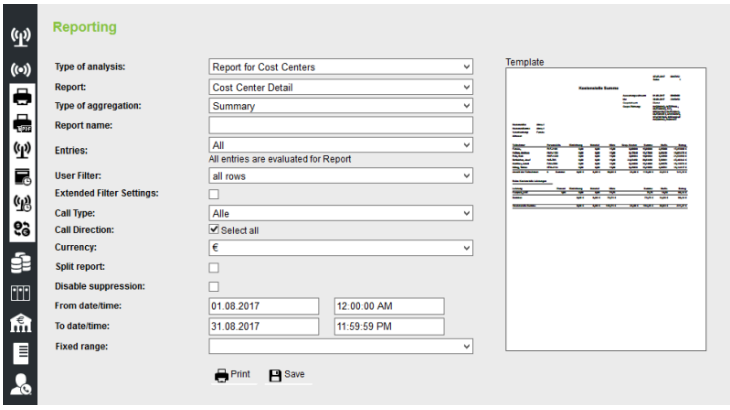
Reporting allows you to pick one report from a pool of custom reports and apply various filters to limit the required data set.

> **NOTICE:** It is, of course, also still possible to create individual ad-hoc reports from the connection costs or the extensions or subscriber table, for example.

In the **Analysis** menu, click on the **Reporting** item. The page for defining your report is displayed. You can specify the required lists by selecting certain analysis criteria there. The screen content is adapted to the selection made in the **Type of analysis** field.

2.1.1.1 Using Reporting

Click the point **Charge Analysis** in **Reporting** menu.The page for defining your evaluations is displayed.There you can define the required lists by selecting certain evaluation criteria. The contents of the window are adapted to the selection in the **Type of analysis** field.



2.1.1.2 Creating a Standard List for Calculating Charges

To create a standard list, fill in the following fields:

Type of analysis:	Here you can select various lists. The following templates are provided in the system: • Report for Extensions • Report for Cost Centers • Report for Cost Centers (Total) • Report for Organisational Units • Report for Organisational Units/ Extensions • Report for PINs • Report for Subscribers • Report for Tariff Categories • Report for Gateways
Report:	Specific report for the selected type of analysis.
Type of aggregation:	Here you select whether you want individual call details or only totals in your report.
Report name:	A name for the report can be specified.
Entries:	The following options are possible: • All • Table filter • Report entries • Random evaluation
Entries: All	No filter is used! All entries are evaluated according to the report template (extensions, participants, pin, organization or cost centers).

Entries: Table filter	If the entry *Tables - Filter* is selected, then another selection box is available below the entry. You can select existing filters or create new filters there. If the option *Create a new filter is used*, the corresponding table views (extensions, subscribers, pin, organization or cost centers) are opened, depending on the report template. Enter the filter condition and save the filter with an appropriate name. Use the icon to return to the evaluation dialog. In the selection box you can now select the newly created filter with the saved name. When creating the evaluation, only the filtered entries are now listed.
Entries: Report entries	If the entry *Report entries* is selected, then another selection box is available below the entry. Click on the icon and, depending on the report template, the corresponding table views (extensions, subscribers, pin, organization or cost centers) will be opened. It is now possible to use the filter line or mark an area in which you mark the first line of the area with the mouse pointer and then move the mouse pointer to the last line of the area. Hold down the left mouse button. Use the STRG or CTRL key to highlight several separate ranges. If all lines that want to use are marked, then you can now accept these entries by clicking on the icon . Use the icon to return to the evaluation dialog. The selection box now lists the filtered entries. When creating the evaluation, only the filtered entries are listed.

Entries: Random evaluation	If the entry *Random evaluation* is selected, then another selection box is available below the entry. The required percentage can be selected there. If a percentage is selected, when the report is generated, it automatically randomly lists X (= selected percentage) percent of all entries, depending on the report template of the corresponding table views (extensions, subscribers, pin, organization, or cost centers).
Filter: *(in the native application)*	A table filter can be selected to restrict the available objects. Filters can be created in table views (search as extensions or subscribers) and stored with a name. These can then be selected as an additional option for the respective evaluation type. To use this option, the filters must be created before the evaluation.
User filter	Depending on which report template has been selected, table views (for example, extensions or subscribers), filters can be created and saved. These can then be selected as an additional option for the respective evaluation type.
Extended Filter Settings	This option allows only the entries to appear in the evaluation. The cost, duration *and / or* units greater than or *equal to*, *less than or equal to*, *equal to* or *different than the set value's*. In addition, it can be determined that more than one option has been enabled in the summation, whether all (*and* enabled) options or only one (*or* enabled) option should be considered at the same time.

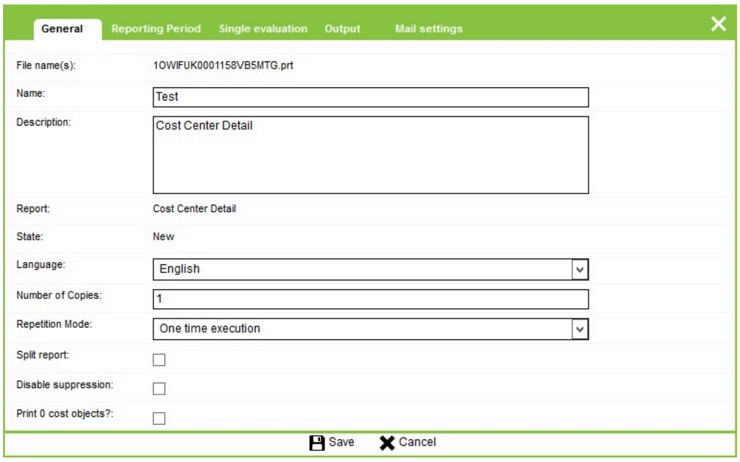
Call types:	Select the conversation type for the report. Available are: **All** — All conversation types are considered **In service** — Only service calls are considered **Private** — Only private calls are taken into account **Patient** — Only calls marked with the AKZ patient will be considered **External** — Only calls that are marked with the third party are considered
Call Direction:	Here, the call directions (e.g. INCOMING or OUTGOING) can be selected that should be regarded within the report
Currency:	Select the currency for the report.
Split report:	Via this option, the selected objects can be stored in more than one report. An own print job is started for every object. This option is particularly helpful when scheduling reports, since only one print job must be created for all analyses. Afterwards, own reports are created automatically and saved as PDF files, for example.
Do not suppress digits:	Normally, the all dialed phone numbers are output to the reports with the suppressing parameters applied. If you select this option, the numbers appear in full. Please note that this option should be disabled by the appropriate permissions if required. The release of the suppression is only for the current print job.
Billing period: From date / time	Period of call data relevant for the evaluation. The starting date is preassigned with the first day of the previous calendar month. The default is always the first day of the last month at 00:00:00.

Billing period: Until date / time	Endzeitpunkt, bis der in der Auswertung berücksichtigt werden soll. Als Standard wird immer der letzte Tag des letzten Monats bis 23:59:59 Uhr vorgegeben. Period of call data relevant for the evaluation. The starting date is preassigned with the last day of the previous calendar month. By default, the last day of the last month is always set to 23:59:59.
Fixed range	Fixed period to be considered in the evaluation.The following options are possible: • today • yesterday • this week • last week • this month • last month • this quarter • last quarter • this year • last year
Save filter	By default, the selected objects (i.e. those in the lower right section) are getting stored and reported when the report is printed. If this option is enabled, the selected table filter is stored instread. Therefore, the filter is getting analyzed at execution time and those objects, that are matching the filter at execution time are reported. If the filter is adjusted afterwards, these changed will not be regarded automatically (security reasons).
Buttons in the selection section:	Use these buttons to accept list entries of any entries (left) to be added to the analysis list (right) or vice versa. With the analysis list being empty, all data is analyzed (following a security prompt).
Random value	You can enter a numeric value from 0 to 80. A respective percentage of randomly selected objects is added to the analysis.

Clicking on the **Print** button initiates the generation of the report. You are shown a message indicating that the processing is in progress. You can continue working with the application during this time. When you subsequently return, you can have the report displayed. All reports are issued in PDF format, so you will need an appropriate program to display them.

2.1.1.3 Saving the Setting as a Print Job

By clicking on the **Save Print job** icon you can save all selections and entries made in the charge information window as a print job in the database. The print server handles the print job.



Name:	Enter a meaningful name for the print job here.
Description:	Here you can optionally enter a description for the print job.
Repetition type:	The repetition type defines wheather a job should be executed once, repeatingly, or manually. Depending on this setting, additional tabs will be shown or hidden.
Language:	Choose the language in which the report is to be issued..
Number of copies:	Specifies the number of copies to be created when printing.
Split report:	Splits of the report on the selected objects; see connection analysis
Do not suppress digits:	Deactivates the suppression parameters; see connection analysis
Print 0 cost objects?	This option defines wheather 0 cost objects should be printed. These are subscribers/extensions/etc that do not have made any costs within the selected period and single calls that were charged with 0.

Dynamic Range	If this option is active, the reporting period will not be defined by a fixed date. Instead, the first and the last day of the last month/quarter/etc will be used automatically.
Fixed Range	If this option is active, the start and end date will be set explicitely. In case of reocurring analysises, the dates will be shifted according to the number of month preserving the currently selected days in month.
Reoccuring analysis (if active)	The interval as well as the interval step can be defined (e.g. every three months). Additionally, the next execution time can be specified.
One time execution (if active)	It can be specified if the print job should be executed immediately or at a defined point in time.
Output:	Specify if the report should be saved as PDF, printed on a printer available to the print service, or if it should be executed as a CSV file. Therefore, the OpenScape Accounting Print Server must be installed and running prior to having printers within the selection box. When having selected the CSV export, a delimiter for for the fields can be selected as well as a delimiter for fields with text based contents.

Filename Rule	Specify a filename for the generated document. Besides static parts, the following variables may be used within the name: ***$PDFDIR$*** PDF Output directory ***$JOBNAME$*** Name of the Print Job ***$YYYY$*** Ceation Date, Year, four digits ***YY*** Ceation Date, Year, two digits ***MO*** Ceation Date, Month, two digits ***DD*** Ceation Date, Day, two digits ***HH*** Creation Time, Hour, two digits in 24 hour format ***MI*** Creation Time, Minutes, two digits ***SS*** Creation Time, Seconds, two digits ***$CREATOR$*** Creator of the print job **INFO:** The variables may also be selected using the context menu. In case of splitted reports, properties of the analyzed object may also be accessed. The syntax is *$S:property1.property2$*. When analyzing an extension for instance, the term *$S:zahlTeilnehmer.organisation.name $* would print the organizational unit's name of the paying subscriber of the extension.
Send report via e-mail:	Sends the report via e-mail; see connection analysis

Configure Mailing	If the option **Mail Report** is active, it can be specified to which receivers the report should be sent. The option **Object address only** lets the report be mailed to the object owner only. The option **Additional addresses only** sends the report only to the receivers specified in the lower text input field (multiple email addresses must be separated by a comma). The option **Object and additional addresses** combines thetwo options above.
Subject:	This subject will be used in mails for the mailed reports.
Message:	This message will be used in mails for the mailed reports.

Click on **Save** to store a print job on the server. This print job is then started directly or at the given time, depending on the setting. Print jobs can be monitored via the print manager.

Saved print jobs can be viewed in the Report Scheduler.

2.1.1.4 Load stored job

Click on the **Load stored job** icon to load a saved print job. The *stored job* are entered in the charge analysis window, so you only need to adjust the evaluation period practical.

2.1.1.5 Starting the Report Preview

By clicking the button **Preview**, a preview of the report is shown. You may navigate through the report pages using the arrow buttons. You may also print the report or save it to a PDF file.

NOTICE: The preview is available in the native application only.

2.1.1.6 Viewing the Report History

By clicking on the **Report History** menu item, you can again retrieve all previous reports as PDF files. By selecting the respective check box at the end of the column and clicking on the **Delete** button at the end of the table, you can also delete old reports.

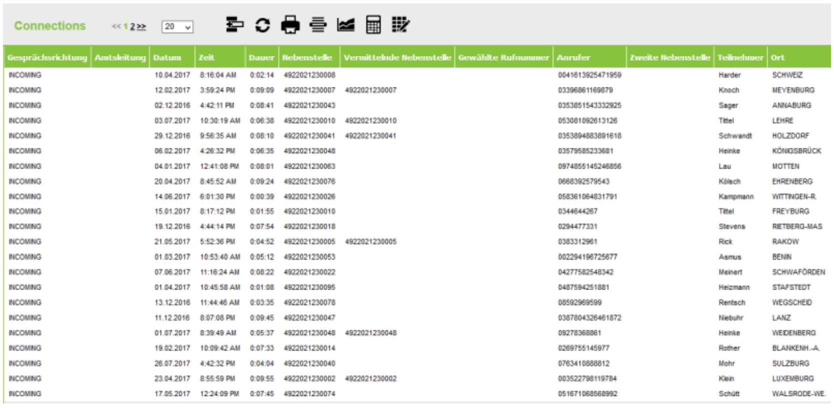
NOTICE: The report history is available only in the web application.

2.1.2 Connections

The telephone charges submitted by your telecommunication system can be accessed via connections. The call charge data records are linked to all the necessary organizational data and can thus be viewed and analyzed according to different criteria. It is not possible to rework the charge data records later. These records are the basis for the periodical charge analysis.

2.1.2.1 Activating Connection Cost Management

Select the **Analysis**menu item. Then click on the **Connections** icon there. The connections overview is displayed. All your call charge data is listed here in a table.


Connections << 1 2 >> 20

Gesprächsrichtung	Amtsleitung	Datum	Zeit	Dauer	Nebenstelle	Vermittelnde Nebenstelle	Gewählte Rufnummer	Anrufer	Zweite Nebenstelle	Teilnehmer	Ort
INCOMING		10.04.2017	8:16:04 AM	0:02:14	4922021230008			0041613925471959		Harder	SCHWEIZ
INCOMING		12.02.2017	3:59:24 PM	0:09:09	4922021230007	4922021230007		03396861169879		Knoch	MEYENBURG
INCOMING		02.12.2016	4:42:11 PM	0:08:41	4922021230043			0353851543332925		Sager	ANNABURG
INCOMING		03.07.2017	10:30:19 AM	0:06:38	4922021230010	4922021230010		053081092613126		Tittel	LEHRE
INCOMING		29.12.2016	9:56:35 AM	0:08:10	4922021230041	4922021230041		0353894883891618		Schwandt	HOLZDORF
INCOMING		06.02.2017	4:26:32 PM	0:06:35	4922021230048			03579585233681		Heinke	KÖNIGSBRÜCK
INCOMING		04.01.2017	12:41:08 PM	0:08:01	4922021230063			0974855145246856		Lau	MOTTEN
INCOMING		20.04.2017	8:45:52 AM	0:09:24	4922021230076			0668392579543		Kölsch	EHRENBERG
INCOMING		14.06.2017	6:01:30 PM	0:00:39	4922021230026			058361064831791		Kampmann	WITTINGEN-R.
INCOMING		15.01.2017	8:17:12 PM	0:01:55	4922021230010			0344644267		Tittel	FREYBURG
INCOMING		19.12.2016	4:44:14 PM	0:07:54	4922021230018			0294477331		Stevens	RIETBERG-MAS
INCOMING		21.05.2017	5:52:36 PM	0:04:52	4922021230005	4922021230005		0383312961		Rick	RAKOW
INCOMING		01.03.2017	10:53:40 AM	0:05:12	4922021230053			002294196725677		Asmus	BENIN
INCOMING		07.06.2017	11:16:24 AM	0:08:22	4922021230022			04277582548342		Meinert	SCHWAFÖRDEN
INCOMING		01.04.2017	10:45:58 AM	0:01:08	4922021230095			0487594251881		Heizmann	STAFSTEDT
INCOMING		13.12.2016	11:44:46 AM	0:03:35	4922021230078			08592969599		Rentsch	WEGSCHEID
INCOMING		11.12.2016	8:07:08 PM	0:09:45	4922021230047			0387804326461872		Niebuhr	LANZ
INCOMING		01.07.2017	8:39:49 AM	0:05:37	4922021230048	4922021230048		09278368861		Heinke	WEIDENBERG
INCOMING		19.02.2017	10:09:42 AM	0:07:33	4922021230014			0269755145977		Rother	BLANKENH.-A.
INCOMING		26.07.2017	4:42:32 PM	0:04:04	4922021230040			0763410888812		Mohr	SULZBURG
INCOMING		23.04.2017	8:55:59 PM	0:09:55	4922021230002	4922021230002		003522798119784		Klein	LUXEMBURG
INCOMING		17.05.2017	12:24:09 PM	0:07:45	4922021230074			051671068568992		Schütt	WALSRODE-WE.

2.1.2.2 Managing Extension Information

After selecting a charge data record, you can go to the respective control window by clicking on the **Extension administration** icon. This provides you with quick access to the complete information on the extension causing the costs.

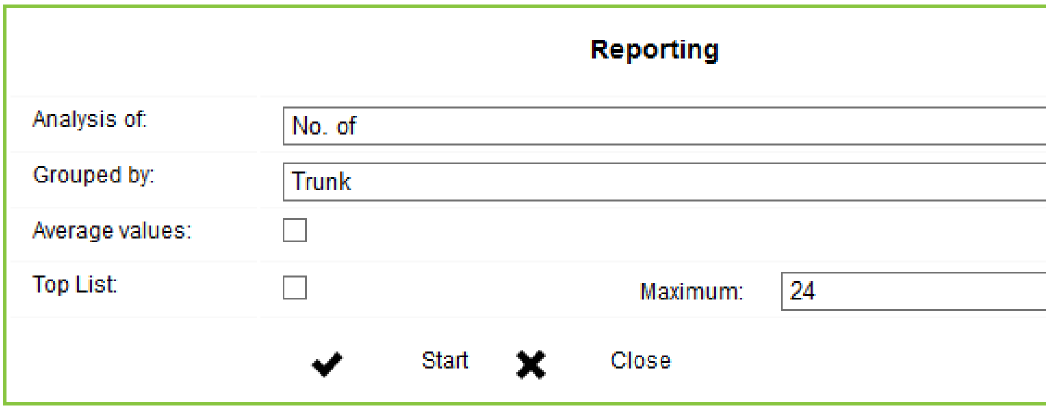
2.1.2.3 Coloring the Table

On clicking this icon, the rows are colored depending on the type of call (incoming, outgoing, ...). A second click on the icon removes the coloring again.

2.1.2.4 Special Excel evaluations

Using this symbol, special evaluations are started via Excel.

NOTICE: The basis for the evaluation is always the currently filtered data volume.



The following data fields can be selected as the basis for an evaluation:

- Number of calls
- Duration of call
- Unit
- Sum of call
- Ring time
- Queuetime
- Pick up statistic
- The grouping can be made according to the following values:
- Trunk
- Caller
- Call type (Incoming, Outgoing, ...)
- Access code type (Business, Private, ...)
- Dialed Number
- Extension
- Hour
- Weekday
- Weekday and hour

The *Average Values* option uses the average value of the selected evaluation base per call (therefore not selectable when *Number of calls* is selected).

The *Top list* option determines the number with the highest results set in the *Maximum* field.

2.1.3 Service Costs

Service cost management allows for the separate billing of basic and usage fees as well as the costs for other services. Management is done via *fixed price* data records containing all the relevant information. *Fixed price* data records can be assigned to individual extensions and thus a billing-relevant subscriber, a complete system or a cost center.

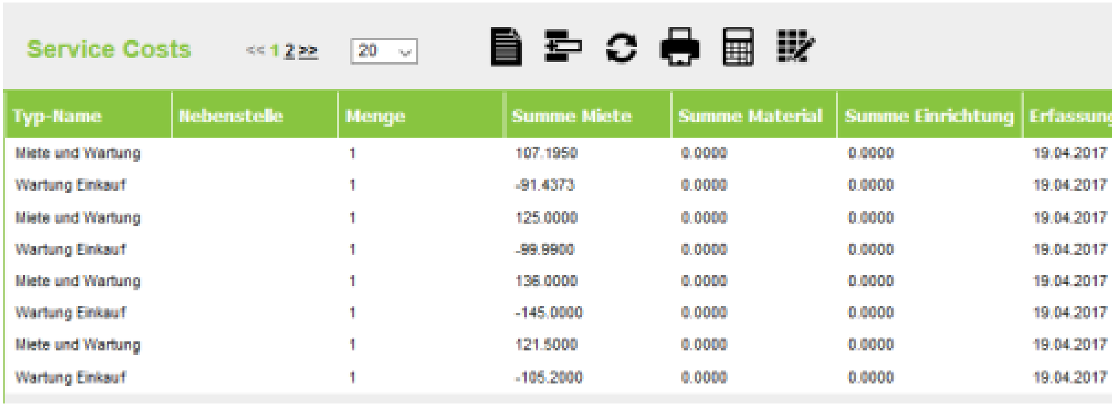
A *fixed price* data record is assigned to a unique type of fixed price. The fixed price types are created as the **service catalog** and serve as a convenient selection instrument for data input. Based on these *fixed price* types, single charges as well as ongoing rents for any type of equipment or usage can be specified.

NOTICE: See also the chapter on **Service Catalog**

The charges are calculated commercially, i.e., a month always has 30 days. The *fixed price* records, in addition to the charge data records, are the basis for periodic billing.

2.1.3.1 Using Service Cost

In the **Analysis** menu, click on the **Service Cost** item. The Service Cost screen is shown. The table shows all existing fixed prices.

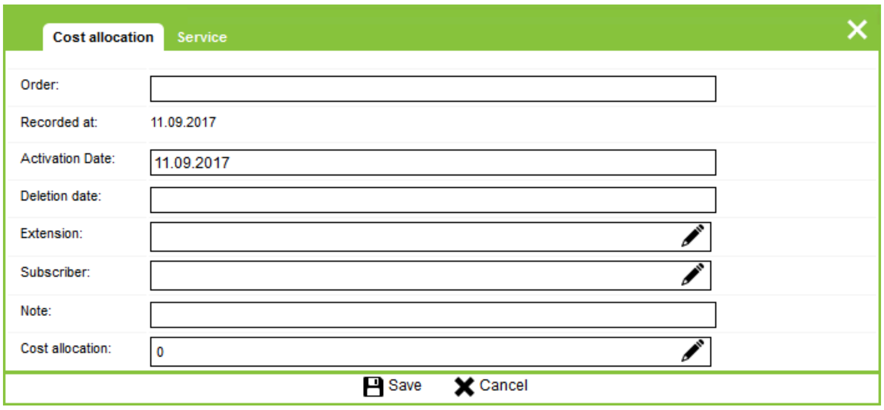

Service Costs << 1 2 >> 20

Typ-Name	Nebenstelle	Menge	Summe Miete	Summe Material	Summe Einrichtung	Erfassung
Miete und Wartung		1	107.1950	0.0000	0.0000	19.04.2017
Wartung Einkauf		1	-91.4373	0.0000	0.0000	19.04.2017
Miete und Wartung		1	125.0000	0.0000	0.0000	19.04.2017
Wartung Einkauf		1	-99.9900	0.0000	0.0000	19.04.2017
Miete und Wartung		1	136.0000	0.0000	0.0000	19.04.2017
Wartung Einkauf		1	-145.0000	0.0000	0.0000	19.04.2017
Miete und Wartung		1	121.5000	0.0000	0.0000	19.04.2017
Wartung Einkauf		1	-105.2000	0.0000	0.0000	19.04.2017

2.1.3.2 Entering New Service Cost

Cost Allocation

Clicking on the **New** icon opens the window for entering *Service Cost*.



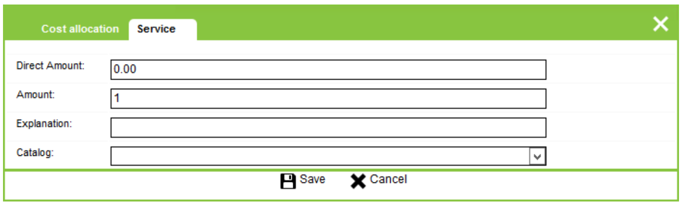
The data of a Service Cost record is divided into two tabs:

- Service Cost
- Cost allocation

To create a Service Cost, fill in the following fields here:

Table 9: Service Cost Record - Cost Allocation

Order:	Order number, which was either set internally or taken over from an external order management.
Recorded at:	Date the fixed price was recorded. The current date is entered automatically.
Activation date:	This date shows the starting date of the service. The service charge is calculated starting from this date. This date must not be later than the current date.
Deletion date:	This date shows the ending date of the service. The service charge is calculated up to this date. This indicates the time as of which the service is no longer used. The deletion date is often entered automatically.
Extension:	Enter the extension if you want to have billing done according to the extension. The field "System" must contain a valid system name.
Remark:	Here you can enter an explanation of the fixed price.
Charge assignment	Here you can assign cost objects for the fixed price. The costs can be distributed proportionally on a percentage basis among different carriers. Click on the New icon to add a cost center. You can select an entry from the cost center list and accept it for the table. You can add several cost centers. Cost allocation is done via the table field "Share (%)". 100% differences are settled via the last entry in the cost center table.



Service

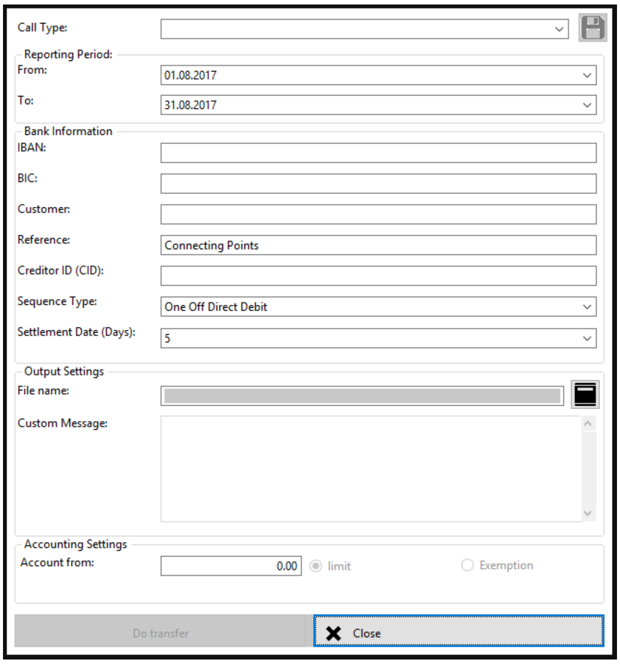
Fill in the following fields on the **Service** tab:

Table 10: Fixed Price Record - Service

Direct Amount:	Enter a value that flows directly into the accounting only once, e.g. a credit, additional charge, correction amount or cost entry, if no fixed price type can be selected from a fixed price catalog.
Amount:	Enter the quantity of fixed type here if it is needed several times. The fixed price type is then multiplied with this value in the calculation.
Explanation:	Enter a short explanation for the direct amount.
Type of service:	Select a type of service from the **service catalog** . All data on the catalog is automatically displayed.

2.1.4 Sepa XML

Call charges are often not only presented in the form of reports but are also withdrawn directly from the bank account of the respective subscriber. The data medium exchange format Sepa is available is for this purpose. It allows the production of the corresponding files, which can be processed by banks.



In order to produce Sepa files, the subscriber's bank details (account number and bank code) must be maintained. Without this data, the call charges for subscribers are not output.

The Sepa export is started via the **Sepa XML** item on the **Analysis** tab. In the mask, you must first specify the type of call as well as the reporting period.

Only the calls which have not yet been charged, which fall within the specified time period and which have the selected call types are exported.

NOTICE: The administrative batch run **Finance: Reset Sepa state** can be used to remove the flag indicating that a call has already been charged. The batch run may only be executed by the users **syscable** and **syscable_en**.

The next step is to configure the output file. This is the file that must subsequently be forwarded to the bank. In addition, the recipient information (bank code, account number, name and use) must be specified.

If a limit for the call type has been defined via the General Administration functions, you will then need to select whether this amount is a limit or an allowance (see also the General Administration Functions section in the Service Manual). This information is taken into account when creating the Sepa file.

The settings can be by stored with the **Save** button so that they are preset as default values when the mask is opened again. Consequently, only the time period would need to be adapted for monthly reports, for example.

Clicking on the **Do transfer** button starts the export. In addition to the specified Sepa file, a log is created in the log directory, which also lists the each charged amounts.

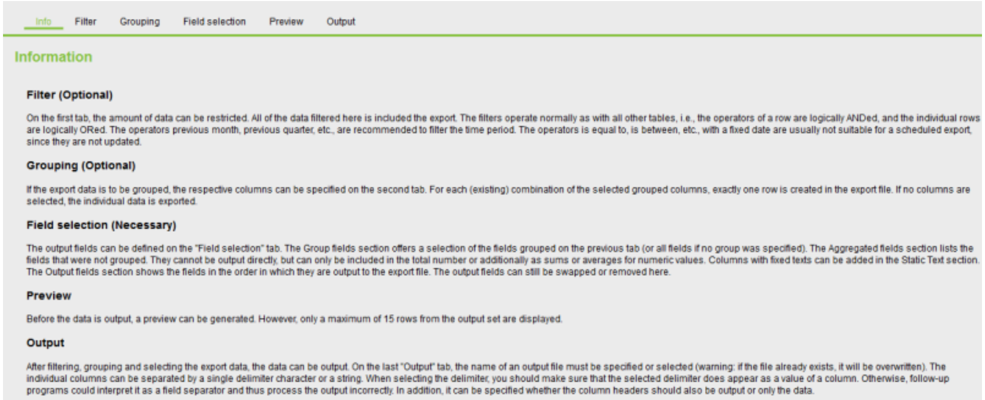
NOTICE: This special function is available in the native client only.

2.1.5 Call-Export

Besides creating reports as PDF files (or sending the output to a printer), it is also possible to generate the output of call charge data individually or as a summary (grouped). Like the reports, these outputs can be stored and created automatically on a scheduled basis. It is thus possible to export quarterly summary data per extension and call type to a CSV file.

2.1.5.1 Calling the Export Function

On the **Analysis** tab, you will find the **Call-Export** button. Clicking on the icon opens the Export window. It is divided into five tabs, which reflects the recommended approach for compiling the export.



The displayed data is determined by the **Call-Export** table. Like all tables, this table can also be freely configured and extended or reduced by adding or removing columns. All columns displayed in this table are (in principle) available for the export.

2.1.5.2 Filtering the Data Set

On the first tab, the amount of data can be restricted. All of the data filtered here is included the export. The filters operate normally as with all other tables, i.e., the operators of a row are logically ANDed, and the individual rows are logically ORed.

The operators **previous month**, **previous quarter**, etc., are recommended to filter the time period. The operators **is equal to**, **is between**, etc., with a fixed date are usually not suitable for a scheduled export, since they are not updated.

The Call Data Export internally joins its tables via an EQUI join. Due to this, when exporting an optional field like subscriber/salutation, data for a subscriber without a salutation will not be exported.

2.1.5.3 Specifying Groups

If the export data is to be grouped, the respective columns can be specified on the second tab. For each (existing) combination of the selected grouped columns, exactly one row is created in the export file.

If no columns are selected, the individual data is exported.

2.1.5.4 Field Selection

The output fields can be defined on the **Field selection** tab. The **Group fields** section offers a selection of the fields grouped on the previous tab (or all fields if no group was specified). The **Aggregated fields** section lists the fields that were not grouped. They cannot be output directly, but can only be included in the total number or additionally as sums or averages for numeric values. Columns with fixed texts can be added in the **Static Text** section.

For each field, a formatting can be defined. It will be only applied if the **Field width** is greater than `0`; the value `0` specifies, that no formatting should be done. If the field width is greater than `0`, the result will be extended or shrunken to this value using a freely definable **Fill character**. Based on the **Alignment** setting, the result will only be extended/shrunken at the left (`right aligned`), only be extended/shrunken at the right (`left aligned`), or alternately left and right extended/shrunken (`centered`).

The **Output fields** section shows the fields in the order in which they are output to the export file. The output fields can still be swapped or removed here.

The grouping of fields is independent of their output. This means that it is possible to group by extension as well as call direction, but to restrict the output to only the extension. This may, of course, result in multiple rows with the same extension.

2.1.5.5 Preview

Before the data is output, a preview can be generated. However, only a maximum of 15 rows from the output set are displayed.

2.1.5.6 Output of the Compilation

After filtering, grouping and selecting the export data, the data can be output. On the last "Output" tab, the name of an output file must be specified or selected (warning: if the file already exists, it will be overwritten).

The individual columns can be separated by a single delimiter character or a string. When selecting the delimiter, you should make sure that the selected delimiter does appear as a value of a column. Otherwise, follow-up programs could interpret it as a field separator and thus process the output incorrectly.

In addition, it can be specified whether the column headers should also be output or only the data.

The filename may include different place holders that are replaced with the real values during the export. These place holders are:

$PDFDIR$	PDF Output directory
$YYYY$	Ceation Date, Year, four digits
YY	Ceation Date, Year, two digits
MO	Ceation Date, Month, two digits
DD	Ceation Date, Day, two digits
HH	Creation Time, Hour, two digits in 24 hour format
MI	Creation Time, Minutes, two digits
SS	Creation Time, Seconds, two digits
$CREATOR$	Creator of the print job

2.1.5.7 Scheduling Export Jobs

Exports can be performed on a scheduled basis. Clicking on the **Schedule** button on the Output tab opens the mask with the schedule settings.

For each job, a name as well as the schedule must be specified, and a comment may be optionally added. However, in contrast to print jobs, the time period cannot be specified here, since this was already done on the **Filter** tab.

Within the scheduling settings, mail addresses may be specified. To these addresses, the export will be mailedIn when being executed by the Scheduler Service.

After you save the settings, the job is transferred to the scheduler. Saved export jobs are stored under the **Report Scheduler** item on the System tab. As with print jobs, exports are also performed by the **OpenScape Accounting Print Server** service in accordance with the schedule.

NOTICE: The Export function does not take any table restrictions defined for the **Call-Export** table into account and always shows costs in the database currency.

2.1.5.8 Assigning Layouts to the Export

As well as for exports that are executed only once, a report layout can be assigned to scheduled exports. These layouts must be created previously using the Export Layout Editor. All export layouts that are assigned to the current user's group may be used.

As each layout refers to the n-th column of an export, the same layout may be used for multiple exports.

2.1.6 Alternative Currency

Specifying the Currency in the Display

The **Select alternative currency** item on the **Analysis** tab can be used to select a different currency than the database currency. All screens are then adapted accordingly and display amounts in only the selected currency.

NOTICE: The configuration of currencies is done in the Currency Model.

After the selection, you can be specify whether this currency is to be used as the default display currency in the future or whether the previous currency is to be retained.

2.2 Master Data

Master data management allows you to view, supplement, edit or delete all data stored in the system over an extended period of time. Please note, however, that a lot of the master data is automatically imported from other systems, depending on the type of installation. Note as well that the configuration wizard can do an extensive data import during the initial installation. See the "OpenScape Accounting Service Manual" for details.

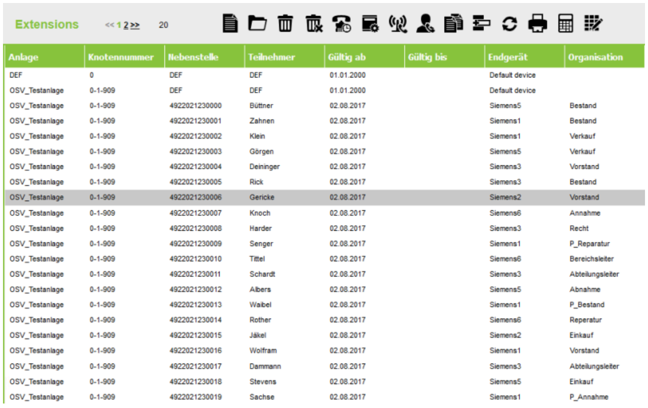
2.2.1 Extensions

An extension forms one of the main criteria to which connection data of a phone system can be assigned, since this information is generally contained in the system's data record.

NOTICE: Please note that the extension master data is generally imported into OS Accounting from the telecommunication system or its administration system. Data fields which are taken over from the telecommunication system should therefore be changed there and not in OS Accounting.

2.2.1.1 Activating Extension Management

Select the **Extensions** item from the Master Data menu. The extension management control window appears on the screen. The table lists all extensions already entered. The toolbars allow you to activate the desired functions and display modes.


Extensions << 1 2 >> 20

Anlage	Knotennummer	Nebenstelle	Teilnehmer	Gültig ab	Gültig bis	Endgerät	Organisation
DEF	0	DEF	DEF	01.01.2000		Default device	
OSV_Testanlage	0-1-909	DEF	DEF	01.01.2000		Default device	
OSV_Testanlage	0-1-909	4922021230000	Büttner	02.08.2017		Siemens5	Bestand
OSV_Testanlage	0-1-909	4922021230001	Zahnen	02.08.2017		Siemens1	Bestand
OSV_Testanlage	0-1-909	4922021230002	Klein	02.08.2017		Siemens1	Verkauf
OSV_Testanlage	0-1-909	4922021230003	Görgen	02.08.2017		Siemens5	Verkauf
OSV_Testanlage	0-1-909	4922021230004	Deininger	02.08.2017		Siemens3	Vorstand
OSV_Testanlage	0-1-909	4922021230005	Rick	02.08.2017		Siemens3	Bestand
OSV_Testanlage	0-1-909	4922021230006	Gericke	02.08.2017		Siemens2	Vorstand
OSV_Testanlage	0-1-909	4922021230007	Knoch	02.08.2017		Siemens6	Annahme
OSV_Testanlage	0-1-909	4922021230008	Harder	02.08.2017		Siemens3	Recht
OSV_Testanlage	0-1-909	4922021230009	Senger	02.08.2017		Siemens1	P_Reparatur
OSV_Testanlage	0-1-909	4922021230010	Tittel	02.08.2017		Siemens6	Bereichsleiter
OSV_Testanlage	0-1-909	4922021230011	Schardt	02.08.2017		Siemens3	Abteilungsleiter
OSV_Testanlage	0-1-909	4922021230012	Albers	02.08.2017		Siemens5	Abnahme
OSV_Testanlage	0-1-909	4922021230013	Waibel	02.08.2017		Siemens1	P_Bestand
OSV_Testanlage	0-1-909	4922021230014	Rother	02.08.2017		Siemens6	Reperatur
OSV_Testanlage	0-1-909	4922021230015	Jäkel	02.08.2017		Siemens2	Einkauf
OSV_Testanlage	0-1-909	4922021230016	Wolfram	02.08.2017		Siemens1	Vorstand
OSV_Testanlage	0-1-909	4922021230017	Dammann	02.08.2017		Siemens3	Abteilungsleiter
OSV_Testanlage	0-1-909	4922021230018	Stevens	02.08.2017		Siemens5	Einkauf
OSV_Testanlage	0-1-909	4922021230019	Sachse	02.08.2017		Siemens1	P_Annahme

NOTICE: Extensions already entered can be altered or deleted at any time. Refer to the sections on "Editing input objects" and "Deleting input objects" in the "Control Window" chapter.

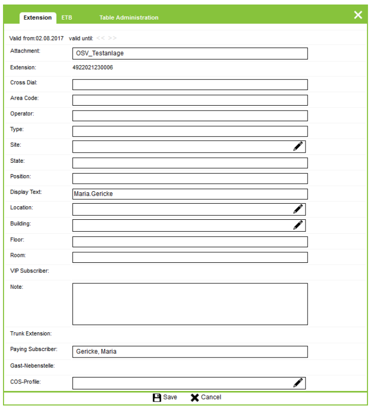
NOTICE: If you selected "Enable history objects", deleting does not result in an immediate deletion, but only in the entry of a deletion date. An extension is deleted permanently only by a data cleanup.

2.2.1.2 Configuring Extensions

Assign Extension blocks

Before you can enter any new extensions, the telecommunication systems (i.e., the switches) should have already been defined (see the Configuration Data area in the chapter on "Extensions").

 Clicking on the New icon takes you to the input screen for adding extensions.



If `Enable history objects` has been activated, the validity of the phone number is specified above the tabs. You can define the start of validity for every newly created extension. The end of validity may be open.

If a history entry is created for the extension in due course, the end of validity for the original data record is set to the date of the respective change, and the start of the new data record to the following day (a change made on the screen will, of course, take effect on the day the change was made).

History records cannot be subsequently edited. A maximum of one history record per day is created.

The following fields must be filled in when editing an extension:

Table 11: Fields for Processing Extensions

Switch	Selection of the telecommunication system. One system must be entered. **NOTICE:** The `DEF` system contains global default values for all systems. Consequently, generally applicable suppression parameters can be entered for the `DEF` extension for this system. **NOTICE:** The `DEF` extensions's number cannot be changed.

Extension	Enter the extension number. **NOTICE:** The `DEF` extension number contains default values for the extensions of a system. They are taken over at automatic creation, e.g., when importing the connection data for a new extension. The suppression parameters of the `DEF` extension apply to the entire telecommunication system, if not manually altered for a certain extension. **NOTICE:** The `DEF` extensions's switch cannot be changed.
Cross Dial	Cross dial (if deviating from the system).
Area Code	Area code (if deviating from the system).
Operator	Operator (if deviating from the system).
Type	Type of telephone number, e.g., SUB for subscriber, FAX for fax devices, etc.
State	State of telephone number, e.g., active, impaired, planned, etc.
Terminal	Select the equipment the telephone number is assigned to.
Position	Enter the position (port) this number is created at.
Display text	Enter the text which is to be displayed when calling the respective number.
Location	Select the location for the telephone number here. You can assign new location names in the selection list as well.

Building	Select the building for the telephone number here. You can assign new building names in the selection list as well.
Floor	Enter the floor for the telephone number.
Room	Enter the room number for the telephone number.
Special subscriber	You can assign the extension as a "Special subscriber". In specific reports, special subscribers can be dealt with differently.
ASD	This option is only enabled if there is the extension is an associated device. This Display cannot be changed manually, it is only used for this purpose Advertisement.

You can assign new subscribers to an extension. The data of assigned subscribers can be viewed. You can also unassign subscribers from extensions.

NOTICE: Exactly one subscriber can be specified as the payer. This payer (and his or her cost center and organization unit) is charged for the costs allocated to this extension.

Parts of a dialed telephone number and the associated call data can be suppressed in the output. This enables compliance with data security laws. Each extension can be assigned multiple suppressions. Settings applicable to all extensions are entered at the *DEF* extension of the *DEF* system. Settings applicable to all extensions of a system are entered at the *DEF* extension of that system.

Extension blocks are (easy to remember) extension to a subscriber for different device types, that can be determined with each extension of a set calculation (for example, extension 4711 => Fax 94711). The definition of extension blocks is done from within the Configuration Assistant. It is possible to create different set types (e.g. for different locations or switches).

By clicking on the **Extension block** icon, you will be taken to the extension block administration window.

The extension block view has the following fields

Table 12: Fields of the extension set view

Block	Selection of the extension block. the field to the right shows the definition for the current selection.
Deletion valid until	If the history function is enabled, extensions that were deleted before this daste will be marked green and those that were deleted after the specified date will be marked red.

Double Arrow buttons	The arrows allow skipping pagewise through the table
Start Value	An extension base number at which the result table should start. The number must belong to the selected extension set type. Pressing enter or tab updates the table.
Note	Note for the current extension set (marked yellow in the table)
State X (X = first letter of the extension rule name)	For each extension in the currently selected set (yellow) an additional state may defined. The coloring of the field depends on the state's value.
Table	The table shows 100 extension sets. The base number of the selected entry will be marked yellow. For each extension in the set, the state will be shown in a separate column along with a coloring. By clicking the right mouse button, new sets may be defined or existing ones may be editid or deleted.

NOTICE: The state values are defined from within the constant administration. The constant is named `rufnummerStatusWerte`, available values are separated by a pound key (`#`). The first value cannot be selected. it is a place holder for the value "not available". The state values should have distinct first letters in order to be distingushable from within the extension set view.

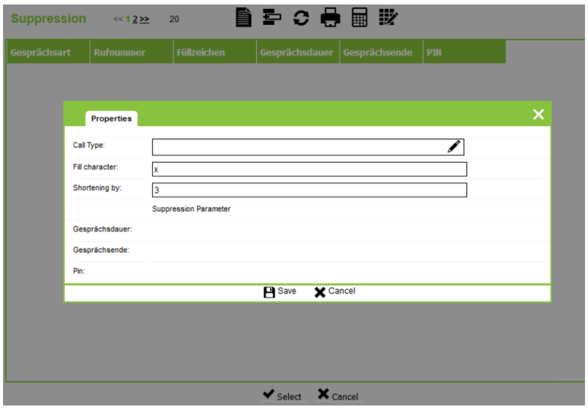
NOTICE:

The coloring of the extensions in the setting takes place according to the following scheme:

Color	Description
white	no extension available
lime	extension available but no other status
dark green	Extension with delete date before the set limit date, no other status entered
red	Extension with delete date available from the set limit date, no other status entered
pink	First special status value

gelb	Second special status value
blue	Third special status value
orange	Fourth special status value
Light blue	Fifth special status value
light gray	Sixth special status value
dark gray	Seventh specific status value
dark brown	Eighth special status value
light brown	All other status values

2.2.1.3 Configuring Suppression Entries



Call type:	Here you specify to which call type the suppression applies. You can enter, edit and delete further call types here.
Fillers	Enter which character is to replace the suppressed digits of the dialed number.
Dialed number shortening	This parameter enables you to specify how many digits of the dialed number are to be suppressed, starting with the first digit on the right.

In addition, by selecting the respective check box, you can determine whether one of the following parameters is to be suppressed as well:

- Call duration
- End of call
- Pin

2.2.1.4 Viewing Service Cost and Connection Costs

The fixed prices associated with an extension and the connection charges for calls conducted via that extension can be viewed on the **Connections** and **Service cost** tabs.

2.2.1.5 Assigning Fixed Costs to Extensions

By clicking the button **Assign Fixed Costs**, the fixed cost assignment mask opens. Within that window, fixed costs can be easily assigned to the previously selected extensions.

In the upper pane of the window, a list with all defined fixed costs is shown. In that list, one or multiple fixed costs can be selected; selected items are indicated by a checkmark in front of the name.

The middle pane shows a date selection. To this date, the assignment will be performed. If an extension is not valid at that point in time, no fixed cost can be assigned to this extension. Additionaly, it must be defined how to proceed with existing fixed costs. The following options are available:

Ignore existing fixed costs	If this option is selected, a new fix cost will be assigned to the extension, regardless of existing fixed costs of the same type.
Delete fixed cocts of same type	If this option is selected, existing fixed costs of the same type will be removed prior to assigning the new fixed costs. Deletion means setting the removal date to the day before the assignment date. Fixed costs of other types remain untouched.
Delete existing fixed costs (all)	If this option is selected, all exists fixed costs will be removed prior to assigning the new fixed costs. Deletion means setting the removal date to the day before the assignment date.

By clicking the **Assign** button, the assignment process is getting started. Within the log window above, log messages for each assignment will be shown.

For each assigbment, the fitting fixed costs will be determined for the extension, i.e. the most fitting fixed cost within the area catalogue. If there is no entry available in the area catalogue, no assignment can be performed.

2.2.1.6 Attachments Schedule commands for extensions

NOTICE: This option is only available when the **Welcome module** is licensed.

A change of the display name or the COS profile of an extension is not automatically transferred back to the system. This is done by clicking the

Schedule Switch Commands icon. The *Switch commands* can be scheduled either for the selected extension or for all filtered extensions. Only those extensions are observed, which are referred to as *guest extension*, and which are valid at execution time.

In the dialog box, the extensions for which changes are executed are shown again. This also selects both **execution time** and the **Switch commands** (check box Update display and reset COS profile).

NOTICE: The update does not check whether the respective extension is currently occupied by a guest. The display name or the COS profile of the extension is always updated.

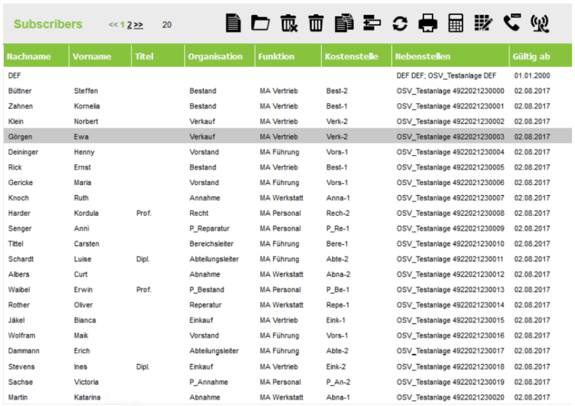
2.2.2 Subscribers

Subscribers are the users of services made available via dial-up terminals. You can conveniently handle the maintenance of all subscriber-relevant data via the subscriber management.

A subscriber owns an address within an institution and is placed on a certain level in the organizational hierarchy. On this level, the subscriber is assigned to a cost center. Furthermore, a subscriber may have a PIN and several extensions. This makes it possible to separately list and charge for private and business calls of a subscriber. Certain subscribers are marked as payers, i.e., are billed for services used.

2.2.2.1 Activating Subscriber Management

In the **Master data** menu, click on the **Subscribers** item. The screen displays the subscriber management control window. The table shows all existing subscribers.


Subscribers << 1 2 >> 20

Nachname	Vorname	Titel	Organisation	Funktion	Kostenstelle	Nebenstellen	Gültig ab
DEF						DEF DEF; OSV_Testanlage DEF	01.01.2000
Büttner	Steffen		Bestand	MA Vertrieb	Best-2	OSV_Testanlage 4922021230000	02.08.2017
Zahnen	Kornelia		Bestand	MA Vertrieb	Best-1	OSV_Testanlage 4922021230001	02.08.2017
Klein	Norbert		Verkauf	MA Vertrieb	Verk-2	OSV_Testanlage 4922021230002	02.08.2017
Görgen	Ewa		Verkauf	MA Vertrieb	Verk-2	OSV_Testanlage 4922021230003	02.08.2017
Deininger	Henny		Vorstand	MA Führung	Vors-1	OSV_Testanlage 4922021230004	02.08.2017
Rick	Ernst		Bestand	MA Vertrieb	Best-1	OSV_Testanlage 4922021230005	02.08.2017
Gericke	Maria		Vorstand	MA Führung	Vors-1	OSV_Testanlage 4922021230006	02.08.2017
Knoch	Ruth		Annahme	MA Werkstatt	Anna-1	OSV_Testanlage 4922021230007	02.08.2017
Harder	Kordula	Prof.	Recht	MA Personal	Rech-2	OSV_Testanlage 4922021230008	02.08.2017
Senger	Anni		P_Reparatur	MA Personal	P_Re-1	OSV_Testanlage 4922021230009	02.08.2017
Tittel	Carsten		Bereichsleiter	MA Führung	Bere-1	OSV_Testanlage 4922021230010	02.08.2017
Schardt	Luise	Dipl.	Abteilungsleiter	MA Führung	Abte-2	OSV_Testanlage 4922021230011	02.08.2017
Albers	Curt		Abnahme	MA Werkstatt	Abna-2	OSV_Testanlage 4922021230012	02.08.2017
Waibel	Erwin	Prof.	P_Bestand	MA Personal	P_Be-1	OSV_Testanlage 4922021230013	02.08.2017
Rother	Oliver		Reperatur	MA Werkstatt	Repe-1	OSV_Testanlage 4922021230014	02.08.2017
Jäkel	Bianca		Einkauf	MA Vertrieb	Eink-1	OSV_Testanlage 4922021230015	02.08.2017
Wolfram	Maik		Vorstand	MA Führung	Vors-1	OSV_Testanlage 4922021230016	02.08.2017
Dammann	Erich		Abteilungsleiter	MA Führung	Abte-2	OSV_Testanlage 4922021230017	02.08.2017
Stevens	Ines	Dipl.	Einkauf	MA Vertrieb	Eink-2	OSV_Testanlage 4922021230018	02.08.2017
Sachse	Victoria		P_Annahme	MA Personal	P_An-2	OSV_Testanlage 4922021230019	02.08.2017
Martin	Katarina		Abnahme	MA Werkstatt	Abna-1	OSV_Testanlage 4922021230020	02.08.2017

2.2.2.2 Configuring Subscriber Data

Before adding subscribers, you should make sure that all data required from other master data management systems has been created, e.g. cost center, organization structure, company, etc. You can also create the required data when adding subscribers, however, this would complicate the input process.

This window consists of five tabs.

- Name
- Master data
- Extension
- Bank
- PIN

Above the tabs, the validity for the extension is preset. The editing and operation is the same as for the extension.

Name

First Name	Fill in the first name in the first field and the last name of the subscriber in the second field. **NOTICE:** The `DEF` user's last name cannot be changed.
Salutation	Pick a salutation form from the selection list. You can also create new entries or edit and delete existing entries.
Title	Choose the title from the selection list. You can also create new entries or edit and delete existing entries.

Master Data

Personnel number	Enter the personnel number of the subscriber.
Function	Select the function designation of the subscriber from the selection list. You can also create new entries or edit and delete existing entries.

Organization	Use the list box to specify the assignment to an organizational unit.
Cost Center	The list box can be used to assign the subscriber to a specific cost center entry.
Special Address	If the subscriber has a different address that of the organization, you can assign it here.
Address	The subscriber's address is displayed. If no special address was entered, the address of the organization unit is shown.
E-mail:	Enter the e-mail address of the subscriber.
CC No. (external):	Enter the external cost center identification not included in OS Accounting here.
Remark	You can any text for the subscriber here.
Different startup digit	Enter a differing startup digit type here. Calls of this subscriber are then always listed using this type.

Since the structure and level descriptions of the organization structure are individual in companies, the depth and designation of the levels can be adapted via the constant administration:

Extension

BereichMaxLevel	Enter the maximum number of organizational levels as a number
ORGLabel<n>	Enter the name for the organizational level <n>, eg: ORGLabel1 Business area:

Extension	You can specify the extensions to which the subscriber is to be assigned here.
Fax	Enter the fax number of the subscriber. Alternatively, you may accept an already existing fax number from the selection list.
Private:	Enter the private telephone number of the subscriber

Bank

Bank	Enter the subscriber's bank.
Bank code	Enter the subscriber's bank code.

Account	Enter the subscriber's account number here.

Pin

Manual	Enter the subscriber's PIN, which the subscriber must enter on the phone for identification.
BuCode	Enter the PIN for the COS (class of service) switchover code of the subscriber here.
IDCard	Enter the PIN for the IDCard (card for card payphone) of the subscriber.

The **Connection costs** and **Service costs** tabs are not relevant for the data input. They are required to view the respective cost entries of the subscriber (see below).

Logins can be created automatically for the subscribers. This allows these subscribers to log on to the application. The following entries are required in the constants table or in the `OS Accounting` section of the `atradis.ini` file for this purpose:

createNewUser	true: New subscribers receive a login; false: No logins are created
newUserPassword	The initial password for the created login
newUserGroup	The name of the group to which the user is to be assigned.
newUserLogin	Template for the user name to be assigned.

If the creation of new logins is enabled, a login is created for every user that is entered in subscriber management or created via the master data import. If a login with the same name to be created already exists, no login is created.

In a subscriber is updated in the administration or via the master data import, the first and last names are adapted in subscriber management as well. The login name remains unchanged.

It is recommended that the "Own data" restriction filter be set for the group and that a change of password at the first login be required.

The syntax of the login is as follows: the individual components of the name are separated by `|`. If starting with # this part is classified as a subscriber property and is thus replaced. Other sections are interpreted as fixed character strings.

The entry `#firstname|.|#lastname` would create `John.Doe` if the subscriber's first name is John and last name is Doe. Please note that spaces and special characters as well as case sensitivity are relevant.

2.2.2.3 Deleting Entered Subscribers

Every entered subscriber can be deleted if required. To do this, select the entry to be deleted in your control window and then click on the Delete icon.

NOTICE: Subscriber entries which are still being used in other contexts cannot be deleted.

NOTICE: If you selected "Enable history objects", deleting does not result in an immediate deletion, but only in the entry of a deletion date. A subscriber is deleted permanently only by a data cleanup.

2.2.2.4 Viewing Fixed Prices and Connection Costs

The connection charges of a subscriber can be viewed (via both the PIN and paying extensions) on the **Connections** and **Fixed Prices** tabs. In addition, the fixed prices associated with the subscriber are also displayed. Fixed prices are posted centrally via the **Fixed Price Management**.

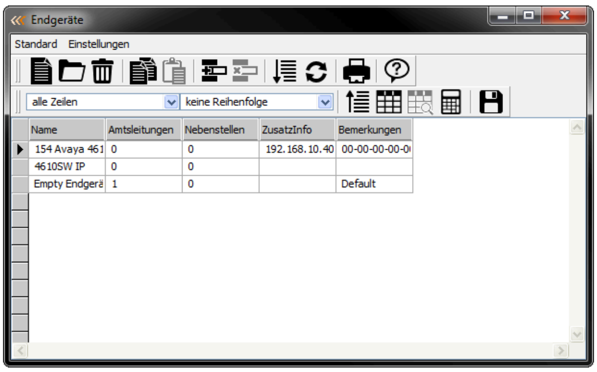
2.2.3 Terminal Devices

You can maintain all existing and usable devices via equipment management. The respective types of all existing devices are administered here. Equipment can be assigned to extensions and types of services.

See also the section on "Extensions" and "Terminal devices".

2.2.3.1 Activating Equipment Management

Select the "Terminal devices" item from the "Master data" menu. The equipment management control window appears on the screen. The table shows all existing devices.



2.2.3.2 Entering and Editing Equipment

The information on a terminal is divided into two tabs:

- Mark
- Remarks

System Technology	Information on the system technology of the device
Equipment technology	Information on the equipment technology of the device
Trunks	Number of existing/possible trunks for the device type
Extensions	Number of existing/possible extensions for the device type
Additional info	Detailed description of the type of device.
Name	Name of the device type. The name must be unique.

2.2.4 Companies

Addresses

You can conveniently maintain all address data relevant for charging via the *Addresses* module. Every subscriber of a communication network belongs to a location, department or institution, depending on the organization of the company. From the perspective of those responsible for cost accounting, these are the customers for services of the network operation.

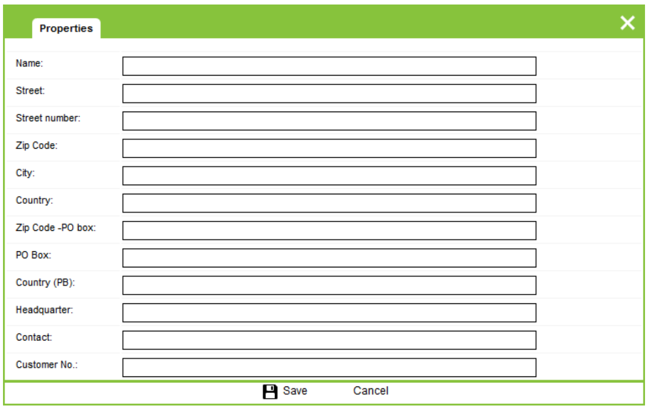
You can assign every company an address and a central telephone number. The entered company data can be assigned to individual organizational units or subscribers. The address of an organization unit applies to all subunits included in it as well as all assigned subscribers of this structure tree, unless a particular subunit or subscriber is assigned a different address. This saves a lot of effort when entering master data.

See see the sections on "Organization Structure" and "Subscribers"

2.2.4.1 Activating Address Management

In the **Master Data** menu, click on the **Addresses** item. The screen displays the address management control window. The table shows all existing addresses.

2.2.4.2 Entering and Editing Addresses



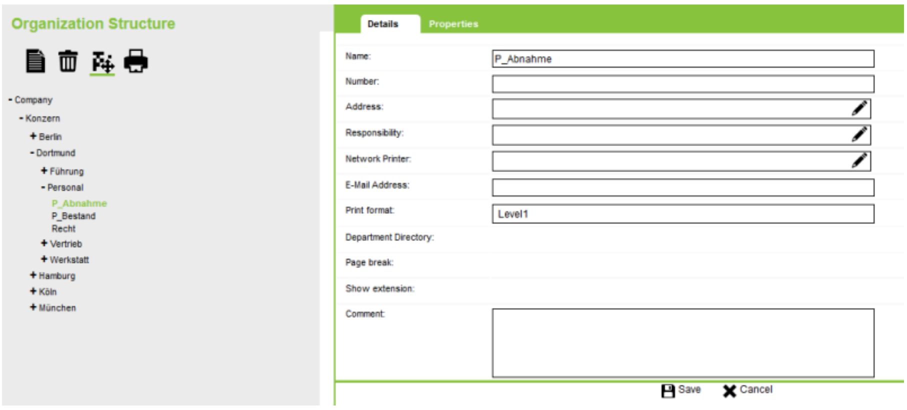
Name	Enter a meaningful designation for the address. The designation must be unique and facilitate searching for the address.
Street / House number	Enter the street name as well as the house number, if applicable.
Zip Code / City	Enter the Zip code (and the city).
Zip Code / PO Box	Enter the Zip code for the PO box as well as the PO box itself.
Main Office	Enter the phone number of the main office here.

2.2.5 Organization Structure

This module enables you to document and maintain your complex company structure. You can enter areas with equal rights on one level of your organization and then subdivide these according to your needs. This company structure is then available for you at any time for entering and maintaining data. This enables you to assign subscribers to a certain organizational area, for example, or you define area-specific service catalogs.

2.2.5.1 Activating Organization Structure Management

In the "Master data" menu, click on the "Organizational structure" item. The screen displays the management control window. A tree structure on the left of this screen displays the already entered organization units. Details on a marked tree entry are shown on the left of the "Details" tab. The "Properties" tab lists those subscriber entries assigned to the marked organization unit.



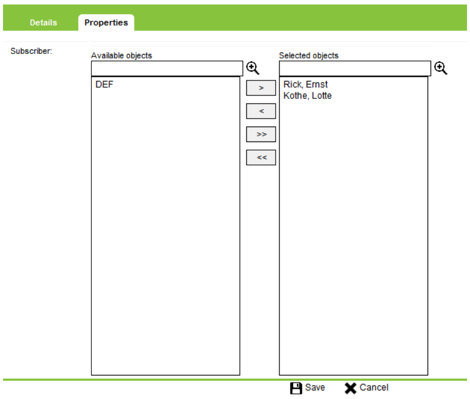
2.2.5.2 Entering New Organization Units

Before clicking on the "New" icon, mark the tree entry for which you want to add a new **subelement**. On clicking the "New" icon, a new subelement named "New" is created and released for editing in the detailed view on the right.

2.2.5.3 The Details Tab

Name	Enter a meaningful designation for the organization unit. This name must be unique within the parent organization unit.
Number	Enter the organization unit number, if applicable.
Address	Select the organization unit address. If you leave the address field empty, the address of the parent organization unit applies.
Responsibility	Enter the name of the person in charge of this organization unit.
Network printer	Select the printer responsible for this area. You can create new entries in the selection list or modify or delete existing ones.
E-mail Address:	Enter an e-mail address to which the reports for the organization unit are to be sent.
Comment	This field can be used to enter comments for this area.

2.2.5.4 The Properties Tab



The right pane displays the subscribers assigned to the organization unit, while the left pane contains all subscribers who are not yet assigned. Individual or multiple entries can be marked and shifted by using the buttons.

2.2.5.5 Deleting Organization Units

You can use the "Delete" icon to delete the currently selected organization unit in the tree structure.

If an organization unit should be deleted including all its subunits, the "force delete" methode can be used. Therefore, the **CTRL** button must be pressed while clicking the delete button. Subscribers, that are assigned to any of the units to delete will be unassiged. No histority check will be performed by this action as the organisation unit should be purged from the system.

2.2.5.6 Moving Organizational Units

The **Move** icon allows to move the selected organizational unit. When clicking the symbol, a new tree view will open. The organizational unit will be moved to the unit which is selected in this new window including all subunits.

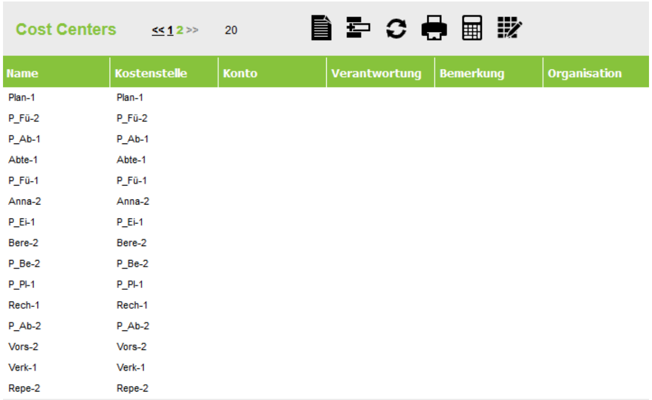
The root unit cannot be moved. It is also not possible to move a unit into one of its subunits. A unit may also not be moved to a unit which already includes a subunit with the same name.

2.2.6 Cost Centers

In order to selectively bill for connection and service costs, internal cost objects for the company are required. The costs accrued can then be assigned to these cost objects. The data required to define a cost center is entered and maintained in the cost center management. The cost center file can be periodically updated and expanded by importing internal corporate data.

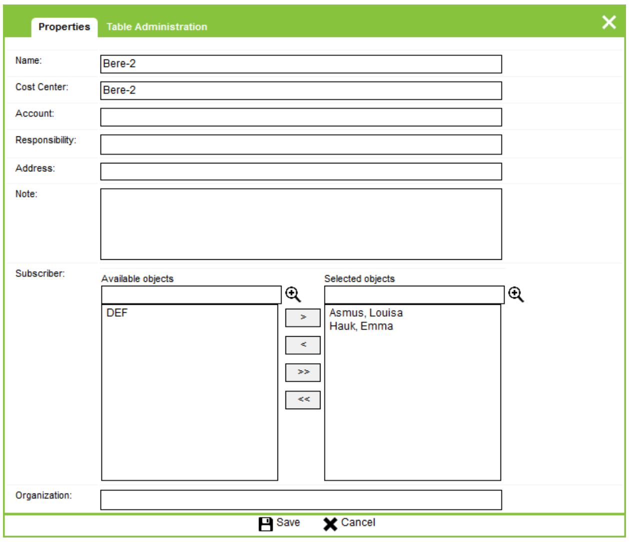
2.2.6.1 Activating Cost Center Management

In the **Master data** menu, click on the **Cost centers** item. The control window for cost center management control is displayed. The table shows all existing cost objects.



2.2.6.2 Entering and Editing a Cost Object

The cost center editing window has multiple tabs. The tab **Details** shows the cost center definition. The tab **Subscriber** shows all subscribers that are assigned to the cost center. The **Connection** tab and the **Fixed Costs** tab show the call data and fixed costs that are assigned to the cost center and its subscribers.



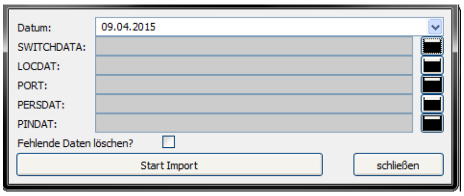
Name	Enter a meaningful designation for the cost object. The designation must be unique.
Cost center	Name of the cost center to be used for settlement. The cost object and cost center provide a unique association with the cost center master record.

Account	Account number cost object, which is used for settlement.
Responsibility	Name of the person responsible for the cost object
Address	Specific address of the cost object
Organization	Assign the organization unit here.
Remark	You can save further information on the cost object here.

The right pane displays the subscribers assigned to the cost object, while the left pane contains all subscribers who are not yet assigned. Individual or multiple entries can be marked and shifted by using the buttons.

2.2.7 OpenScape-Manager Master Data Import

OpenScape Accounting is able to import master date from an OpenScape Manager or OpenScape Manager System. Therefore, special request files are provided that query the required information in a defined format. This import may be executed manually within OpenScape Accounting . Additionally, it is possible to schedule a daily synchronization via the OpenScape Accounting Configuration Wizard. More information regarding the working process can be seen in the Service Manual.



NOTICE: This special function is available in the native client only.

2.2.7.1 Defining the Import Date

The OpenScape Manager Import is executed for a special date. New extensions and subscribers will be created for this date, no longer existing onces will be deleted for this date. The predefined value is the current date.

IMPORTANT: The import date must be always greater or equal to the last deletion date of the extension or subscriber. Otherwise, unpredictable effects may occur. Therefore, this function should not be used if a daily synchronization is activated.

2.2.7.2 Defining the Import Files

The import files can be prvided one after the other. The specified format has to be regarded. PIN-data may only be imported together with subscriber data.

2.2.7.3 Defining the Deletion Behavior

If the checkbox **Delete Missing Data** is checked, extension and subscriber data will be marked as deleted if they are no longer in the import files. This option should be only used if subscriber and extension data are imported at once.

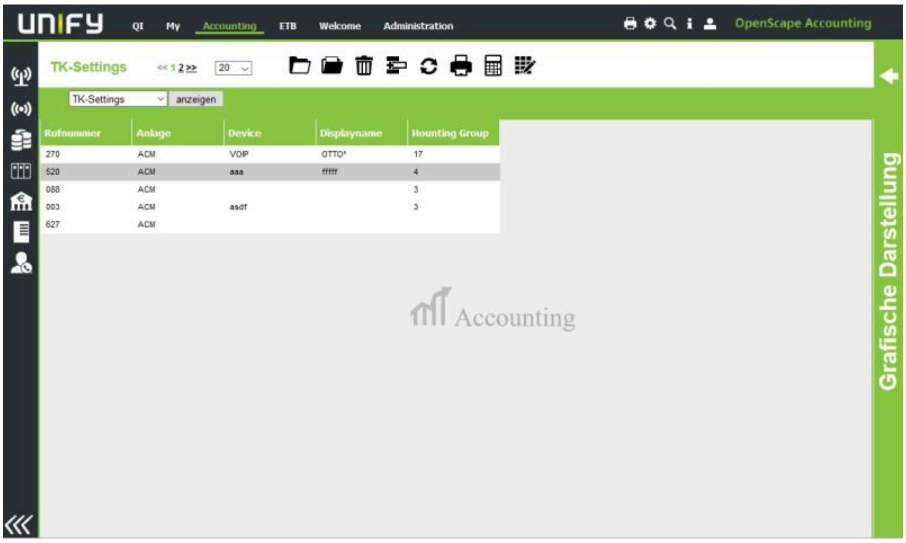
2.2.7.4 Performing the Import

By clicking **Start Import** the import routine will be started. All specified files are read and processed.

2.2.8 Attributes

Attributes are a way to assign customer specific information to objects. Each attribute defines its layout and information by its definition. Each attribute is assigned to a single subscriber or extensions; each subscriber and extension may have multiple attributes of the same and/or different types.

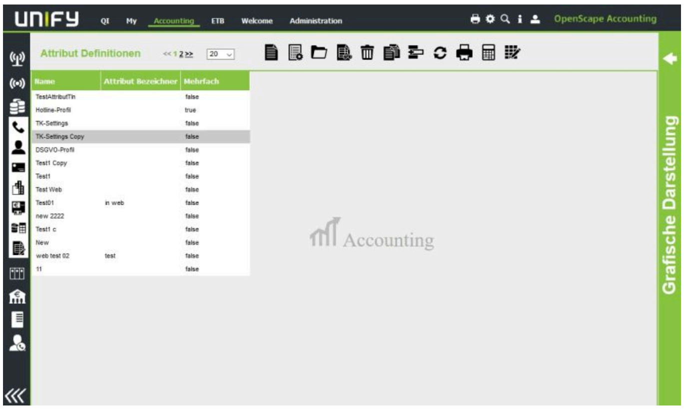
When clicking in the master data tab the symbol for Attributes, a dialog will be shown in order to select the attribute definition, for which the attributes should be shown.



After having selected a definition, a table will open showing all attributes of this kind. The layout of the table can be modified using the group administration; it is named by the definition's name. By that, it is also possible to define restrictions, filters, etc for these attribute tables.

2.2.9 Attribute Definitions

Additional information can be assigned to subscribers an extensions. Therefore, so called attributes can be used. The attribute definitions describe the layout and the fields for each attribute. Each attribute definition is designed by a form, constisting of one or more value fields which can be simple text inputs, radio button groups, drop down menus, and others.



2.2.9.1 Creation and Modification of Attribute Definitions

When creating a new or opening an existing definition, a new window openes. The window consists of three tabs, **Head**, **Form**, and **Default Columns**.

Head tab

Within the tab **Head**, general information are defined. The **Name** uniquely identifies each attribute definition. It can be defined, towards which objects attributes of this kind can be added, i.e. if subscribers and/or extensions should be equipped with these information.

The settings define additional behavior of the definition:

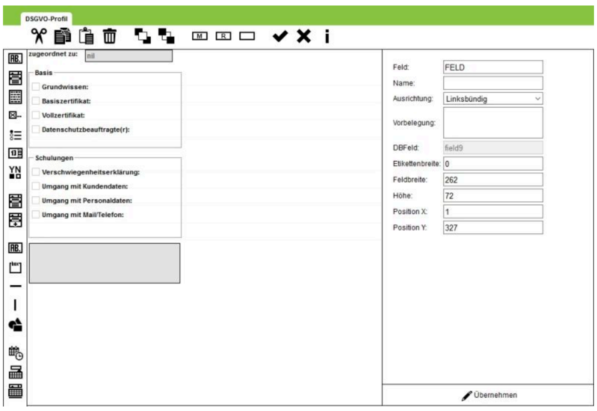
Multiple Assignment	If checked, multiple attributes of this kind can be assigned to the same subscriber/extension. This is helpful in case of notes or similar.
Copy with element	If checked, the attributes of this definition will be copied as well when copying the associated subscriber/ extension.
With History	If checked, the attributes of this definition will be copied to the new object (for objects created by the history function) instead of moving them there.
Mandatory Attribute	If checked, at least one attribute of this definition must be assigned to a new subscriber/extension. It will be added automatically.
Unique	If checked, the first five fields (i.e. those which are mapped to the database fields `field1` to `field5`) must be unique.

Default Columns tab

In the tab **Default Columns**, the default columns which will be shown by default when opening the table view for this attribute at the first time should be shown. By default, the assigned object's name will be shown. Additional columns based on the definition's formular's fields can be added. For each column, the caption as well as the data field can be defined.

2.2.9.2 Formular

Click on the **Formular** icon  to create or modify an individual formular on an easy way.



At the left side of the window all tools are placed to create new elements in the formular. The white area in the middle of the window represents the formular. The icons in the top area may be used to copy and paste or adjust elements. At the right side of the window details of a selected elements can be modified. The information in this area depends on the type of the selected element.

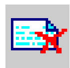
To place a new element on the formular, first select a creation tool from the left and keep the mouse button pressed. Then move the mouse pointer to the position where the new element should be placed and release the mouse button. Depending on the selected element type a frame appears in the formular with a predefined content.

The frame has one or more blue points. Click on a blue point and keep the mouse button presses to resize the element or the distance between label and input area. To move an element click on it and keep the mouse button pressed. Then move the element to its new position and release the mouse button. To select multiple elements click inside the formular outside of any element, keep the mouse button pressed and draw a rectangle around the elements you want to select.

The tools are divided in input-, SQL-, decoration and special types. Input types are used for data entry and data selection. SQL types allow a specific selection by defining a SQL select statement. Decorating types are used to obtain clearly laid out formular. The special tools provide a calender for date entry, selection of table entry (e.g. user) or buttons to start a report or export assigned to the attribut table (part of the group administration).

List of the tools:

<table>
<tr>
<td>
Inputfield</td>
<td>An input field provides entry of any data, e.g. name or extension number. The parameters of an input fields are:
<table>
<tr><td>variable name</td><td>Enter the name of the field for internal use. Only uppercase characters, numerics and underline may be used</td></tr>
<tr><td>label</td><td>Enter the label of the field in the formular.</td></tr>
<tr><td>format</td><td>Choose the format of the field: Alphanumeric, integer or fixed point (1 to 3)</td></tr>
<tr><td>justification</td><td>Choose the justification: left, centerd, right</td></tr>
<tr><td>length</td><td>Enter the maximum lenght for the data input (the maximum length is 2000)</td></tr>
<tr><td>default value</td><td>Enter the default value which should appear in new attributes.</td></tr>
<tr><td>DB field(1/2)</td><td>Shows the field number in the database (1 or none: the entered value, 2: the referenced object id)</td></tr>
<tr><td>button right of DB field(1/2)</td><td>Use this button to change the number of the DB field.</td></tr>
</table>
To save the parameters settings click on the Accept button .</td>
</tr>
</table>

<table>
<tr>
<td>
combo box</td>
<td>The combo box provides a field with a drop down button to select an element out of a pre-defined list. In addition to an input field the following parameters were shown:
<table>
<tr><td>allow manual entry</td><td>If this control is activated user may enter individual data. Otherwise only elements of the selection list may be selected.</td></tr>
<tr><td>labels</td><td>Here you may enter the data shown in the seletction list.
Click on  Neu to create a new entry in the list.  Del deletes teh selected list entry.
The icon  Def. declares teh selected list entry as default value and is marked with a check mark. To modify a list entry select the entry and enter the text of the entry in the input area under the list.
Click on the Accept button to save the parameters.</td></tr>
</table>
INFO: In the Web application enter the list entries comma separated (entry1,entry2,entry3).</td>
</tr>
</table>

Check box	The check box is used for a simple yes/no or true/false value. Parameters see above at input field.
Text box	The text box is an alphanumeric input field with a bigger input area. Parameters see above at input field.
radio button	Radio buttons are used to selected one entry of a pre-defined list. Parameters see above at input field or combo box.
Spinbox	You may use a spin box for a faster data entry. A pre-defined number may be changed by arrow buttons right the number. In addition to an input field the following parameters are shown: **increase value** This value is used to increase or decrease the acutal value in the formular.
	This type provides to check boxes (first = yes/true, second = no/false). One of the two boxes can be marked. Please notice that no top label is included in this type. You may use a label field instead. Only the parameters **field name**, **label** and **distance** between the check boxes exist and you may declare the yes- or no-box as default.

SQL- combo box	SQL is the abreviation of Standard Query Language. To use this tool you should be firm with the SQL syntax and with names and structure of the tables reference in the statement. A SQL box works like a combo box, but uses the result values of the SQL statement instead of a pre-definend list. In addition to an input field the following parameter is shown: **SQL** — Enter here the select statement that will be executed when the attribut formular is opened. The result values of the statement are shown after pressing the pull down button of the field.
extensible SQL-combo box	This element types lists the distinct values of this field contained in the existing data entries of this attribute. User may select one entry or enter a new one. Tip: often used for city or street names. No knowledge of SQL syntax needed. Parameters see above at input field.
Smalltalk-Field	This field type should only used by users familar with the smalltalk development language. It is only available in Atradis<Collect attribute definitions. For use of this field see user manual for smalltalk fields. In addition to an input field the parameter Smalltalk may be edieted: **Smalltalk** — Enter here the smalltalk program code **INFO:** Only available in native application

<table>
<tr><td>Label</td><td>This element type allows to place additional labels on the formular, may be a field label text is to long or as header label for Yes/No-Fields.</td></tr>
<tr><td>Group box</td><td>For a better clarity draw a group box around a group of fields which handle a common theme. Set the theme name in the frames top.</td></tr>
<tr><td></td><td>Horizontal and vertical lines help to design a formular more clearly and attractiv. .</td></tr>
<tr><td>Region</td><td>Regions are rectangles, circles or ovals which may have a special background color as advice to important informations in the formular. Make sure that regions allways are placed in the background of input fields. The following parameters are available:
<table>
<tr><td>Appearance</td><td>Choose between rectangle and oval</td></tr>
<tr><td>Line width</td><td>Enter the line width (in pixel)</td></tr>
<tr><td>Line color</td><td>Click into the field and select one of the colored fields.</td></tr>
<tr><td>Background color</td><td>Click into the field and select one of the colored fields.

Save the parameters with click on the button Accept.</td></tr>
</table></td></tr>
<tr><td>Calendar</td><td>This element type is used for date fields. A click on the pull down botton opens a calender view to select a day.</td></tr>
</table>

<table>
<tr>
<td>Object select</td>
<td>This element type is used to select a table entry. In addition to an input field the following parameters are shown:
<table>
<tr><td>Object</td><td>Select the table which objects should be shown in the drop down list. You may select the tables attribut, component, usage, user, connection. The balance licences adds service cost catalogue and subscriber.</td></tr>
<tr><td>Restrictions</td><td>This field takes restrictions which data should be shown in the selection list.
If the object = attribute it is sufficient to enter the name of the attribute definition.</td></tr>
</table>
</td>
</tr>
<tr>
<td>Tree selection</td>
<td>This element type is used to select an entry from a tree view. In addition to an input field the following parameter can be filled:
<table>
<tr><td>Tree</td><td>Presently only the component tree can be selected.</td></tr>
</table>
</td>
</tr>
</table>

Reporting	This element type creates a button view to execute a report or an export. The provided report or export layouts have first assign to this attribut definition for group syscable in the table description administration. In addition to an input field the following parameters are required: **Action** Select report or dde export. **Object** Select the report layout name or the export name. **Foreground** Select the foreground color of the button (labelling color) **Background** Select the background color of the button (button color)

INFO: Only in the Web application all elements have x and y coordinates. Allmost objects have width and height parameters.

To edit or adjust single elements on the formular the tools in the top of the window can be used:

	To copy an element click on it and afterwards on this icon. The copy of the element is now in the copy buffer.
	To cut an element click on it and afterwards on this icon. The copy of the element is now in the copy buffer.
	To paste an element from the copy buffer be sure that no element is selected. Then click on this icon. The element is inserted at its former position.
	To delete an element click on it and afterwards on this icon.
	To move an element to foreground click on it and afterwards on this icon.
	To move an element to background click on it and afterwards on this icon.

	To adjust some elements at left click first on the element with the desired left position. Then mark the other elements while keeping the <Shift-Key> pressed. Then click on this icon. **INFO:** Only in native application available
	To adjust some elements at right click first on the element with the desired right position. Then mark the other elements while keeping the <Shift-Key> pressed. Then click on this icon. **INFO:** Only in native application available
	To adjust some text boxes to the same height click the first text box with the desired heigth. Then mark the other text boxes while keeping the <Shift-Key> pressed. Then click on this icon. **INFO:** Only in native application available
	To adjust some input field boxes to the same width click the first input field with the desired width. Then mark the other input fields while keeping the <Shift-Key> pressed. Then click on this icon. **INFO:** Only in native application available
	Mandatory fields administration: Move all mandatory fields to right list using the arrow buttons. A formular can only be stored if all mandatory fields are edited.
	Read only fields administration: Move all read only fields to right list using the arrow buttons. Read only field may not be edited even by administrator.

	Hidden fields administration: Move all hidden fields to right list using the arrow buttons. Hidden fields are never shown.
	Use the test button to proove the layout and function of the formular. Fields with database function (SQL) or smalltalk code have no function in the test modus. **INFO:** Only in native application available

2.2.10 GDRP Tool

In an OpenScape Accounting system, several personally identifiable information are processed. Besides master an connection data of users within the own company, data of persons outside are also affected. Specially the phone numbers may identify external people.

According to GDRP, these people may request information about the data that is stored about them. The GDRP tool assists to identify these data within the system and to report as well as to anonymizte it.

NOTICE: The GDRP tool is available in the web application only.

2.2.10.1 Issue a Query

To issue a new search request, a new object will be added to the GDRP Request table. The following fields must be providedd:

Table 13: Fields of the GDRP Request Editor

Name *	Specify a unique name for the query. It is used to identify the request.
Search Term *	Specify the search term. The term will be exactly as provided.
Note	Specify an optional note for the query with additional information.

After having created the query, it must be scheduled for execution. Therefore, the **Send Request** button must be clicked.

As soon as the request was sent to execution, it cannot be modified anymore. The background service searches for the requested term in the fields `dialedNumber`, `phoneNumber`, `caller_id`, and `chargeNumber` as well as in all general fields of each call record.

2.2.10.2 Review Results

While the data is getting collected, the request cannot be modified anymore. In the result view, the request's basic data is shown. After the request has been finished, additional options become available.

After having gathered all data, a report and a CSV export file will be created automatically listing all matches. They can be downloaded within a password protected archive file. The random password can be shown via a click at the **Show Password** button.

There are several additional options how to proceed with the request:

Keep data, End request	The search request will be terminated and cannot be reviewed afterwards.
Delete data	Before ending the request, all matched data will be deleted from the database. **NOTICE:** Attention: This makes these records unavailable for any future analysis, for sure.
Anonymize data	Before ending the request, all matches will be replaced by a default text (`GDRP-Masked`). Only the matching fields will be masked, all other data like timestamp or cost information are kept. Due to the replacement, one is not able to re-identify the replaced data anymore.

2.3 System

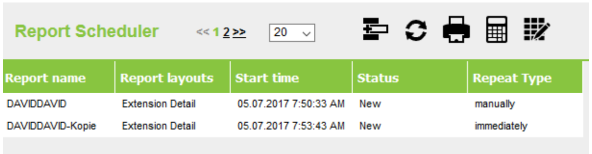
The **System** tab provides different views to monitor system operations. You thus have a central overview of past call data imports, print logs or alerts triggered when importing data, for example.

2.3.1 Report Scheduler

The Report Scheduler enables you to maintain your existing print and export jobs. The Report Scheduler cannot be used to create any new jobs. You can only edit the existing print jobs here.

2.3.1.1 Activating the Report Scheduler

Click on the **Report Scheduler** item in the **System** menu. The control window of the Report Scheduler is displayed. The table lists all existing print and export jobs.



2.3.1.2 Editing a Print Job

When editing a print job, the same options can be specified as when savng a job from within the Print Analysis.

2.3.1.3 Loading a Print Job

Click in the toolbar on the **Load Settings** icon. This opens the Reporting window with all the settings shown in the selection fields.

2.3.1.4 Loading an Export Job

Click in the toolbar on the **Load Setting** icon. The Call Export opens and the settings will be taken over.

If any filters and/or groupings cannot be restored as the corresponding column is no longer in the configured table layout, it is getting removed and a message is getting displayed.

2.3.1.5 Executing a Print- or Export-Job directly

When clicking the symbol **Execute Print Job Immediately**, a copy of the job is getting scheduled for one time execution. It is executed shortly by the print service.

2.3.2 Log of Printed Files

The table **Log of printed files** lists all reports that were printed using the print screduler. If report was splitted, all resulting files will be listed.

2.3.2.1 Starting the Log of Printed Files

In the menu, click on the **Log of Printed Files** icon. All files printed by the print service are listed. It is shown who initiated the print job as well as which subscriber is responsible for the data (if can be correlated).

If a file does not come from a splitted report, it may opened via the icon . Splitted files can be reviews using the icon.

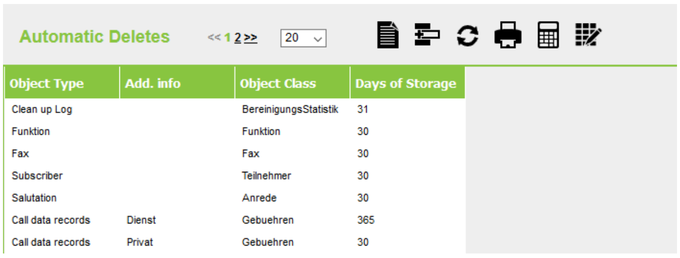
NOTICE: Reviewing files is only available in the web application.

2.3.3 Automatic Deletes

Here you can specify for how long certain data repositories are to be stored in the system. The cleanup itself is performed on the server in accordance with this setting. The executed cleanups can be seen in the cleanup statistics.

2.3.3.1 Activating Cleanup Management

Click on the **Cleanup Log** item if the **System** menu. A new control window shows all the cleanups already defined.



Object Type	Add. info	Object Class	Days of Storage
Clean up Log		BereinigungsStatistik	31
Funktion		Funktion	30
Fax		Fax	30
Subscriber		Teilnehmer	30
Salutation		Anrede	30
Call data records	Dienst	Gebuehren	365
Call data records	Privat	Gebuehren	30

2.3.3.2 Creating a New Cleanup

Click on the **Create a new object** icon. In the new window, select an object type for which no cleanup has been defined as yet. Also specify after how many days you want the entries of that type to be deleted from the database.

Depending on the object type, an **additional information** can be selected. In case of call data, a call type can be selected. By that it is possible to configure differend cleanup intervals based on the call's call type.

NOTICE: For example, if you want an extension to be deleted from the database after a certain time, then all its call data must also have been deleted beforehand.

2.3.4 Fraud Detection Definitions

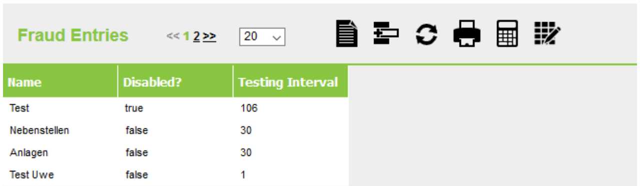
Introduction

The fraud detection module is able to detect and to report unusual call behavior within the system. This can be verly long call or a huge number of calls, for instance. These behaviors can be detected by a periodically schedule or after each call data import. Afterwards, a summary mail can be sent to a given list of receivers.

Checks for single calls will be performed only once per call. Anyway, the calls will be included in summary checks during the whole interval.

2.3.4.1 Starting the Fraud Detection Definition

In the tab **System**, click the button **Fraud Detection Entries**. The Fraud Detection Definitions will be opened.



2.3.4.2 Creating new/Editing existing Fraud Detection Entries

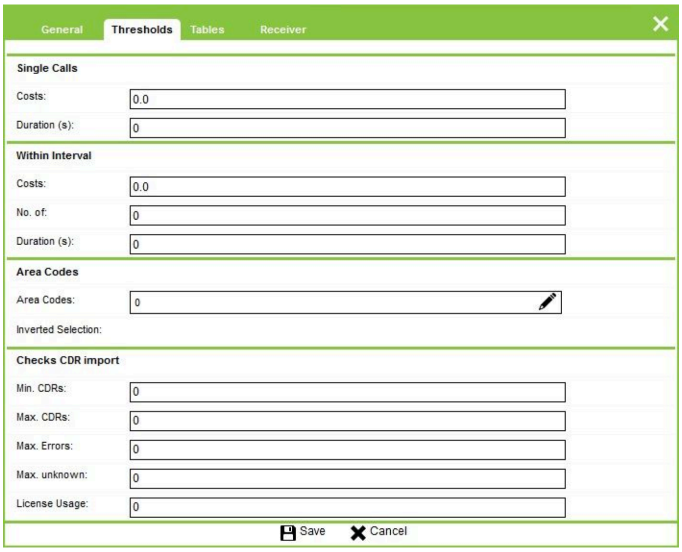
By clicking the **new** or **open**, the mask for creating and editing fraud detection entries will be opened. Within the different tabs, common settings, different states, the objects to analysze, and summary receivers can be successively specified. The tabs will be described in the following section.

In the tab **Common Settings**, common settings are made. The field **Name** specifies the unique name of the fraud detection entry. The value of the **Interval (days)** defines the number of days that should be tested in case of summary checks. All calls that were made after "today - <value> days" will be checked. The field **description** can be used to provide a longer description of the entry. The checkbox **Disable Check** indicates wheather the check should be executed in a check run or if it should be skipped.

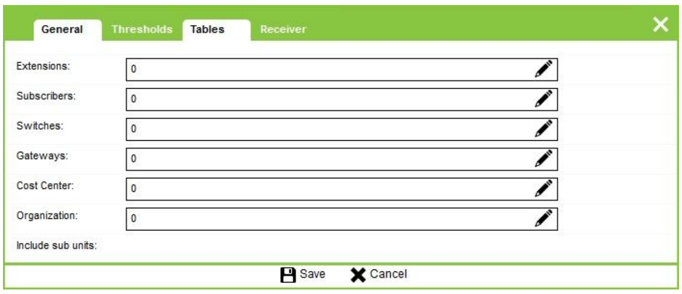
The tab **Thresholds** is for the definion of states, for which a protocol entry should be created. In the upper pane the threshold values for single calls are made. A value for the minimum cost (field **costs**) that is required to raise an alert can be specified as well as a minimum call duration (field **Duration (s)**). Below, the settings for the summary checks for the interval are made. Again, the total charge within the interval can be specified (field **costs**), the number of calls (field **Count**), and the duration (field **Duration (s)**).

In the **Avon list** prefixes can be managed using the buttons **add** and **remove**. If a call is detected that was made to one of these destinations, a protocol entry will be added. If the checkbox **Inverted Selection** is active, all calls that were made to a destination not listed will be reported instead.

Finally, checks referring to the call data import can be made. The value **Min. CDRs** defines the number of records that must be at least imported, the value **Max. CDRs** the maximum number. If the number of calls is outside of this range, a protocol entry will be created. Additionaly, a number for the maximum allowed errors and unknown records during an import can be specified (**Max. Errors** and **Max. unknown** respectively). It is also possible to define a license threshold (in percent; **License warning**). If the current license usage is above this threshold, a warning will be added.



In the tab **Extensions and Subscribers** extensions and subscribers can be added to a list. For these, the check will be performed. The buttons **Add** and **Removed** can be used to do this.

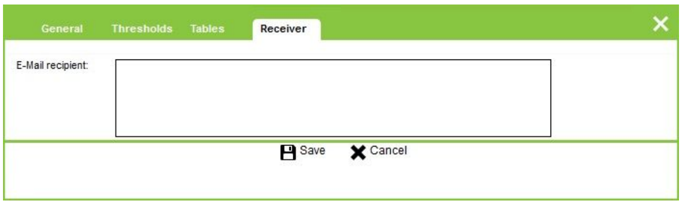


In the tab **Costcenters and Organizational Units** costscenters and organizational units can be added to list. For these, the check will be performed. The buttons **Add** and **Removed** can be used to do this.

If the checkbox **Include Subunits** is active, call of subscribers located in one of the subunits of the selected organizational units will be regarded either.

In the tab **Switches and Gateways** switches and gateways can be added to a list. For these, the check will be performed. The buttons **Add** and **Removed** can be used to do this.

In the tab **Receiver** mail addresses can be provided. To these addresses, the fraud check summary mail wil be send in the end of each check.



NOTICE: If the value of a field is `0` or if the field is `empty`, the corresponding test will not be performed.

2.3.4.3 Execute Fraud Detection Check

By clicking the menu item **Perform Fraud Check**, the fraud check will be performed for the selected entries as long as they are not deactivated.

In the tab **Administration**, there is also an administrative function named **Balance: Fraud Check**. This check executes all active fraud detection entries.

NOTICE: This special function is available in the native client only.

IMPORTANT: When configuring the call data retrieval from within the Configuration Wizard, the execution of the fraud check afterwards may be enabled.

2.3.4.4 Output the FraudCheck log entries into a CSV file

Configuration

For a succesful configuration, the file `atradis.ini` must be edited. It is located in the `image` subfolder of the installation directory.

A typical configuration section might be for example like this:

```
[Fraudcheck]
Logfile="C:\Fraud\FraudCheck_YYYYMMDDHHMISS.csv"
enabled="true"
writeHeader="true"
delimiter="|"
```

After a modification of the configuration file, OpenScape Accounting must be restarted in order to apply the changes.

Table 14: Atradis.ini - Section FraudCheck - structure

Entry	Description
Logfile	Path and filename (enclose in quotation marks)
enabled	*true* or *false* (enabled or disabled)
writeHeader	with header = *true*, without header = *false*
delimiter	Field delimiter (*;* or *,* or | or -)

Record structure of the CSV file

The file always contains 16 fields separated by delomiter. Each record is completed with carriage return and line feed. The file will be created after each check. This is automatically initiated after every hourly import.

File name structure

Per default the file name is **FraudCheck_YYYYMMDDHHMISS.csv**

Table 15: Possible structure of filename

Filename format	Description
YYYY	year (4 digits)
MM	month (2 digits)
DD	day (2 digits)
HH	hour (2 digits)
MI	minutes (2 digits)
SS	seconds (2 digits)

Record structure of the CSV file

Table 16: Description

Column	Description
FraudCheck_Name (Column A)	Name of FraudCheck in database will be shown on each record in the log file.
FraudCheck_ID (Column B)	ID of FraudCheck in database will be shown on each record in the log file.
Notification_type (Column C)	Type of notification in database will be shown on each record in the log file.

Table 17: Possible values for Column C - Notification_type

Notification_type section	Notification_type value ewhich is shown in Column C	Notification_type description	Info
	0	unknown value	
On Import records	1	less records imported than expected	The column PABX contains the name of the affected PABX (for Example “*o2”* or “*system”*).
	2	more records imported than expected	
	3	more erroneous records imported than allowed	
	4	too much unknown records than allowed	
License Check	11	port license used at x%	Shows the utilization of the license used in the application.
Single Call Checks	21	the cost of the call of the extension have exceeded the limit	The column name_subscriber PABX contains the name of the affected subscriber. Fields like extension, gateway, costcenter, organization and PABX are empty.
	22	the duration of the call of the extension have exceeded the limit	
	23	the extension has called an unauthorized area code	
	31	the cost of the call of the extension have exceeded the limit	The column extension contains the name of the PABX, the number of the extension for the affected extension. Fields like name_subscriber, gateway, costcenter, organization and PABX are empty.
	32	the duration of the call of the extension have exceeded the limit	
	33	the extension has called an unauthorized area code	

Notification_type section	Notification_type value ewhich is shown in Column C	Notification_type description	Info
	41	the cost of the call of the gateway have exceeded the limit	The column gateway contains the name of the affected gateway. Fields like extension, name_subscriber, costcenter, organization and PABX are empty.
	42	the duration of the call of the gateway have exceeded the limit	
	43	the gateway has called an unauthorized area code	
Interval Checks (on summaries)	51	the cost of calls of the subscriber have exceeded the limit in the interval	The column gateway contains the name of the affected gateway. Fields like extension, name_subscriber, costcenter, organization and PABX are empty.
	52	the duration of calls of the subscriber have exceeded the limit in the interval	
	53	the subscriber has more calls in the interval than set as limit	
	61	the cost of calls of the extension have exceeded the limit in the interval	The column extension contains the name of the PABX , the number of the extension for the affected extension. Fields like name_subscriber, gateway, costcenter, organization and PABX are empty.
	62	the duration of calls of the extension have exceeded the limit in the interval	
	63	the extension has more calls in the interval than set as limit	

Notification_type section	Notification_type value ewhich is shown in Column C	Notification_type description	Info
	71	the cost of calls of the cost center have exceeded the limit in the interval	The column costcenter contains the name of the affected costcenter. Fields like extension, name_subscriber, gateway, organization and PABX are empty
	72	the duration of calls of the cost center have exceeded the limit in the interval	
	73	the cost center has more calls in the interval than set as limit	
	81	the cost of calls of the PABX have exceeded the limit in the interval	The column PABX contains the name of the affected PABX (for example"*o2"* or "*system"*).
	82	the duration of calls of the PABX have exceeded the limit in the interval	
	83	the PABX has more calls in the interval than set as limit	
	91	the cost of calls of the gateway have exceeded the limit in the interval	The column gateway contains the name of the affected gateway. Fields like extension, name_subscriber, costcenter, organization and PABX are empty.
	92	the duration of calls of the gateway have exceeded the limit in the interval	
	93	the gateway has more calls in the interval than set as limit	

Notification_type section	Notification_type value ewhich is shown in Column C	Notification_type description	Info
	101	= the cost of calls of the organization unit have exceeded the limit in the interval	The column organization contains the name of the affected organization. Fields like extension, name_subscriber, costcenter, gateway and PABX are empty.
	102	the duration of calls of the organization unit have exceeded the limit in the interval	
	103	the organization unit has more calls in the interval than set as limit as limit	

Table 18: Description

Column	Description
FraudCheck_text (Column D)	**Text message of FraudCheck will be**shown on each record in the log file.
Record_ID (Column E)	ID of imported record (only if FraudCheck_Type = SINGLE) Default is empty
FraudCheck_type (Column F)	Type of FraudCheck in database will be shown on each record in the log file.

Possible values for Column F – FraudCheck typ

Value	Description
SINGLE	Check on each single call record
INTERVAL	Check on call record in the time range
LICENSE	Check on license
IMPORT	Check on import statistic

Description

Column	Description
Name_subscriber (Column G)	Name of subscriber when checked
Extension (Column H)	Number of extension when checked

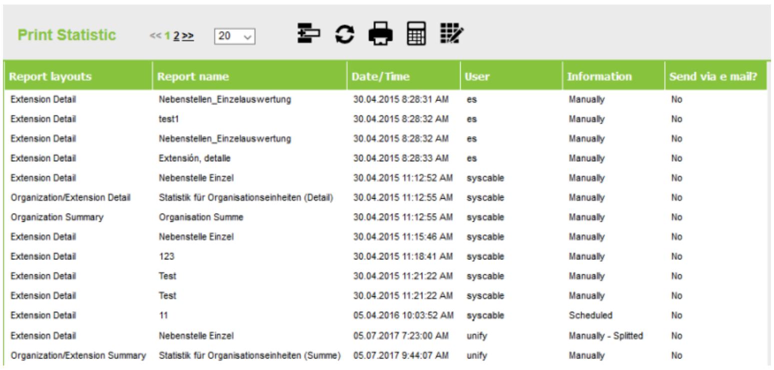
Column	Description
Gateway (Column I)	Name of gateway when checked
Costcenter (Column J)	Name/no. of cost center when checked
PABX (Column K)	Name of PABX when checked
Organization (Column L)	Name of organization when checked
Actual_value (Column M)	Actual value when checked will be shown on each record in the log file.
Allowed_value (Column N)	allowed value which was set up will be shown on each record in the log file.
Date (Column O)	Date when limit has reached will be shown on each record in the log file.
Time (Column P)	Number of extension when checked (only if FraudCheck_Type = SINGLE) Default is 00:00:00

2.3.5 Print Statistics

The print statistics shows which reports were printed by the print manager.

2.3.5.1 Activating the Print Statistics

Click on the **Print statistics** item in the **System** menu. The existing print statistics entries are shown in a new window.



Print Statistic << 1 2 >> 20

Report layouts	Report name	Date/Time	User	Information	Send via e mail?
Extension Detail	Nebenstellen_Einzelauswertung	30.04.2015 8:28:31 AM	es	Manually	No
Extension Detail	test1	30.04.2015 8:28:32 AM	es	Manually	No
Extension Detail	Nebenstellen_Einzelauswertung	30.04.2015 8:28:32 AM	es	Manually	No
Extension Detail	Extensión, detalle	30.04.2015 8:28:33 AM	es	Manually	No
Extension Detail	Nebenstelle Einzel	30.04.2015 11:12:52 AM	syscable	Manually	No
Organization/Extension Detail	Statistik für Organisationseinheiten (Detail)	30.04.2015 11:12:55 AM	syscable	Manually	No
Organization Summary	Organisation Summe	30.04.2015 11:12:55 AM	syscable	Manually	No
Extension Detail	Nebenstelle Einzel	30.04.2015 11:15:46 AM	syscable	Manually	No
Extension Detail	123	30.04.2015 11:18:41 AM	syscable	Manually	No
Extension Detail	Test	30.04.2015 11:21:22 AM	syscable	Manually	No
Extension Detail	Test	30.04.2015 11:21:22 AM	syscable	Manually	No
Extension Detail	11	05.04.2016 10:03:52 AM	syscable	Scheduled	No
Extension Detail	Nebenstelle Einzel	05.07.2017 7:23:00 AM	unify	Manually - Splitted	No
Organization/Extension Summary	Statistik für Organisationseinheiten (Summe)	05.07.2017 9:44:07 AM	unify	Manually	No

2.3.5.2 Print Result Files

In the menu, click on the **Print Results** icon. All files printed by the print service are listed. It is shown who initiated the print job as well as which subscriber is responsible for the data (if can be correlated).

If a file does not come from a splitted report, it may opened via the icon .

Splitted files can be reviews using the icon.

NOTICE: Reviewing files is only available in the web application.

2.3.6 Clean-up Log

All clean-ups performed are listed in the clean-up log. Here you can see how many objects of which type (e.g., call charge data or subscribers) were deleted in each pass.

2.3.6.1 Starting the Clean-up Log

Click in the **System** menu on the **Cleanup Log** item. All clean-ups performed are displayed in the new control window.

Table	Start	End	Duration	Rows	User
Import statistic	24.12.2010 12:29:33 AM	24.12.2010 12:29:33 AM	0:00:00	1	syscable
Import statistic	27.12.2010 12:31:10 AM	27.12.2010 12:31:10 AM	0:00:00	1	syscable
Import statistic	05.01.2011 12:21:12 AM	05.01.2011 12:21:12 AM	0:00:00	1	syscable
Import statistic	15.12.2010 12:30:24 AM	15.12.2010 12:30:24 AM	0:00:00	1	syscable
Import statistic	07.01.2011 12:20:12 AM	07.01.2011 12:20:12 AM	0:00:00	1	syscable
Import statistic	16.12.2010 12:30:58 AM	16.12.2010 12:30:59 AM	0:00:01	1	syscable
Import statistic	22.12.2010 12:28:31 AM	22.12.2010 12:28:31 AM	0:00:00	1	syscable
Import statistic	26.12.2010 12:30:36 AM	26.12.2010 12:30:36 AM	0:00:00	1	syscable
Import statistic	31.12.2010 12:33:09 AM	31.12.2010 12:33:09 AM	0:00:00	1	syscable
Import statistic	02.01.2011 12:19:42 AM	02.01.2011 12:19:42 AM	0:00:00	1	syscable
Import statistic	23.12.2010 12:29:02 AM	23.12.2010 12:29:03 AM	0:00:01	1	syscable
Import statistic	01.01.2011 12:33:38 AM	01.01.2011 12:33:38 AM	0:00:00	1	syscable
Import statistic	03.01.2011 12:20:15 AM	03.01.2011 12:20:16 AM	0:00:01	1	syscable
Import statistic	28.12.2010 12:31:37 AM	28.12.2010 12:31:37 AM	0:00:00	1	syscable
Import statistic	29.12.2010 12:32:08 AM	29.12.2010 12:32:08 AM	0:00:00	1	syscable
Import statistic	04.01.2011 12:20:45 AM	04.01.2011 12:20:45 AM	0:00:00	1	syscable
Import statistic	06.01.2011 12:19:45 AM	06.01.2011 12:19:45 AM	0:00:00	1	syscable
Import statistic	14.12.2010 3:29:45 AM	14.12.2010 3:29:56 AM	0:00:11	263	syscable

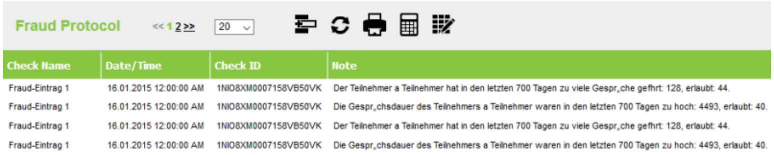
2.3.7 Fraud Protocol

Introduction

The fraud protocol lists all notifications that occured during a fraud check. All entries that were created during the same check do have the same check id. Therefore, it can be eaily seen which other notifications occured during the same run. If the notification refers to a single call check, the call data's id will also be shown.

2.3.7.1 Opening the Fraud Protocol

Within the tab **System**, click on the symbol **Fraud Protocol**. The fraud protocol window will be opened and all fraud protocol notification will be shown.



Fraud Protocol << 1 2 >> 20

Check Name	Date/Time	Check ID	Note
Fraud-Eintrag 1	16.01.2015 12:00:00 AM	1NIO8XM0007158VB50VK	Der Teilnehmer a Teilnehmer hat in den letzten 700 Tagen zu viele Gespr„che gefhrt: 128, erlaubt: 44.
Fraud-Eintrag 1	16.01.2015 12:00:00 AM	1NIO8XM0007158VB50VK	Die Gespr„chsdauer des Teilnehmers a Teilnehmer waren in den letzten 700 Tagen zu hoch: 4493, erlaubt: 40.
Fraud-Eintrag 1	16.01.2015 12:00:00 AM	1NIO8XM0007158VB50VK	Der Teilnehmer a Teilnehmer hat in den letzten 700 Tagen zu viele Gespr„che gefhrt: 128, erlaubt: 44.
Fraud-Eintrag 1	16.01.2015 12:00:00 AM	1NIO8XM0007158VB50VK	Die Gespr„chsdauer des Teilnehmers a Teilnehmer waren in den letzten 700 Tagen zu hoch: 4493, erlaubt: 40.

2.3.7.2 Opening a Fraud Procotol Entry

When having selected a fraud protocol notification and clicking the **Edit** symbol, a new dialog window appears showing all details for the selected entry.

Properties

Description:	Too many calls in interval (Subscriber)
Check Name:	Fraud-Eintrag 1
Check ID:	1NIO8XM0007158VB50VK
Scan Time:	16.01.2015 12:00:00 AM
Description:	Der Teilnehmer a Teilnehmer hat in den letzten 700 Tagen zu viele Gespr„che gefhrt: 128, erlaubt: 44.

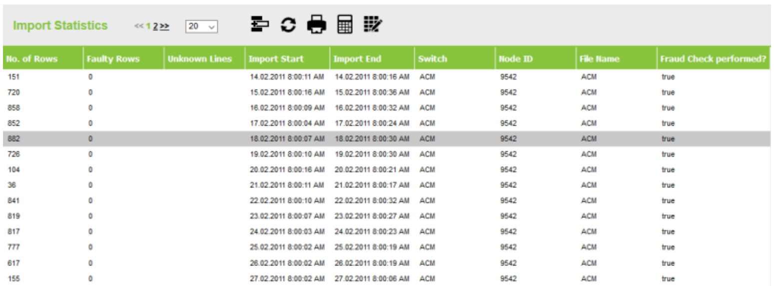
Edit Close

2.3.8 Import Statistics

The import statistics serve as a tool for documenting the data imports performed. An import log is created for every download of data from a telecommunication system and stored in the import statistics table. The statistics provide information on the number of records imported into the database, the number of invalid records, as well as the starting and ending times of the import.

2.3.8.1 Activating the Import Statistics

Click on the **Import Statistics** item in the **System** menu. All existing import statistics data is listed in a control window.



Import Statistics << 1 2 >> 20

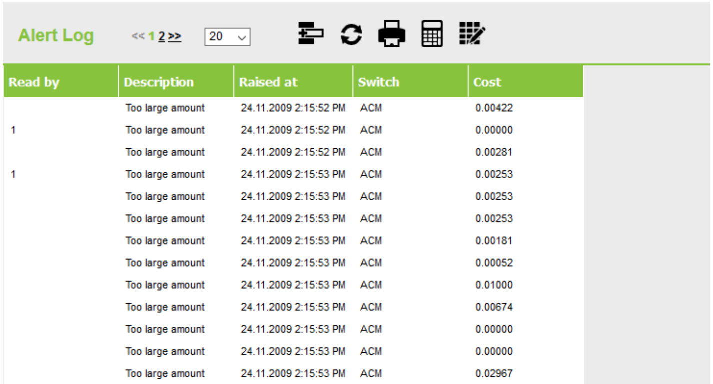
No. of Rows	Faulty Rows	Unknown Lines	Import Start	Import End	Switch	Node ID	File Name	Fraud Check performed?
151	0		14.02.2011 8:00:11 AM	14.02.2011 8:00:16 AM	ACM	9542	ACM	true
720	0		15.02.2011 8:00:16 AM	15.02.2011 8:00:36 AM	ACM	9542	ACM	true
858	0		16.02.2011 8:00:09 AM	16.02.2011 8:00:32 AM	ACM	9542	ACM	true
852	0		17.02.2011 8:00:04 AM	17.02.2011 8:00:24 AM	ACM	9542	ACM	true
882	0		18.02.2011 8:00:07 AM	18.02.2011 8:00:30 AM	ACM	9542	ACM	true
726	0		19.02.2011 8:00:10 AM	19.02.2011 8:00:30 AM	ACM	9542	ACM	true
104	0		20.02.2011 8:00:16 AM	20.02.2011 8:00:21 AM	ACM	9542	ACM	true
36	0		21.02.2011 8:00:11 AM	21.02.2011 8:00:17 AM	ACM	9542	ACM	true
841	0		22.02.2011 8:00:10 AM	22.02.2011 8:00:32 AM	ACM	9542	ACM	true
819	0		23.02.2011 8:00:07 AM	23.02.2011 8:00:27 AM	ACM	9542	ACM	true
817	0		24.02.2011 8:00:03 AM	24.02.2011 8:00:23 AM	ACM	9542	ACM	true
777	0		25.02.2011 8:00:02 AM	25.02.2011 8:00:19 AM	ACM	9542	ACM	true
617	0		26.02.2011 8:00:02 AM	26.02.2011 8:00:19 AM	ACM	9542	ACM	true
155	0		27.02.2011 8:00:02 AM	27.02.2011 8:00:06 AM	ACM	9542	ACM	true

2.3.9 Alert Log

The Alert Monitor shows all existing alerts. Alerts are exceptions that occur when importing call charge data import and are defined in the system administration (see Annexes).

2.3.9.1 Starting the Alert Monitor

Click on **Alerts** in the **System** menu. The alert monitor is opened, listing all existing alerts.



Read by	Description	Raised at	Switch	Cost
	Too large amount	24.11.2009 2:15:52 PM	ACM	0.00422
1	Too large amount	24.11.2009 2:15:52 PM	ACM	0.00000
	Too large amount	24.11.2009 2:15:52 PM	ACM	0.00281
1	Too large amount	24.11.2009 2:15:53 PM	ACM	0.00253
	Too large amount	24.11.2009 2:15:53 PM	ACM	0.00253
	Too large amount	24.11.2009 2:15:53 PM	ACM	0.00253
	Too large amount	24.11.2009 2:15:53 PM	ACM	0.00181
	Too large amount	24.11.2009 2:15:53 PM	ACM	0.00052
	Too large amount	24.11.2009 2:15:53 PM	ACM	0.01000
	Too large amount	24.11.2009 2:15:53 PM	ACM	0.00674
	Too large amount	24.11.2009 2:15:53 PM	ACM	0.00000
	Too large amount	24.11.2009 2:15:53 PM	ACM	0.00000
	Too large amount	24.11.2009 2:15:53 PM	ACM	0.02967

2.4 Cost Modelling

All cost settings are maintained in the **Cost Modelling tab**.Thus the tariff model defines the call costs or organizes the catalog.

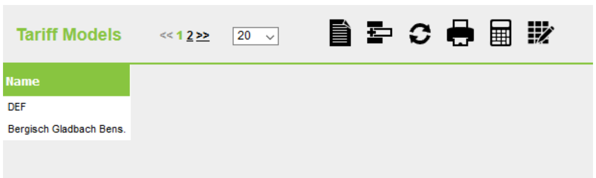
The representation of the price models is carried out in several steps because of its high complexity.

NOTICE: If the tariff data is to be generally revised, it is recommended to do this via the tariff import (via the configuration wizard or via the native client).

2.4.1 Tariff Models

Tariffs can be loaded into the system via the tariff import (via the configuration wizard or via the native client).The contents of the existing tariffs can be displayed via this menu item. It is also possible to change tariff contents or to record new tariffs.

Under the *Cost Modeling* tab, click the **Tariff Areas** icon.The table now shows all tariff areas contained in the system.



Name
DEF
Bergisch Gladbach Bens.

In general, the following values are used for the classification:

Table 19: Definitions

Name	Description of the tariff area - is imported automatically from the `Import.ini` file - entry `CityName`. **NOTICE:** The `DEF` tariff areas's name cannot be changed.

NOTICE: Manual changes to tariff areas are only available in the native application.

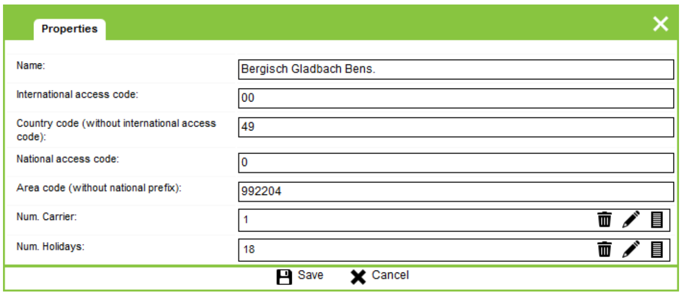
2.4.1.1 Dialog box tariff

Select an entry and click the Change icon to edit further details of the tariff area. The **Tariff:** *Name of the Tariff* dialog box is displayed with the existing settings and **carriers**.

- International access code
- National access code
- Country code (without International access code)
- Area code (without national prefix)

Table 20: Definition - Table Carrier

Carrier	Name of the carrier used
Vaild from	The date from which the calculation is valid for this carrier
Pulse Tariff	How to calculate a call: False = The call costs are calculated on the basis of the call duration True = The call costs are calculated on the basis of the transmitted pulses / charge units.



Select an entry and click the Change icon to edit further details of the tariff area. The **Carrier:** *Carrier Name* dialog box is displayed with the existing settings.

NOTICE: Settings for public holidays (see chapter Holydays)

2.4.1.2 Carrier

The dialog box displays settings, the associated tariff zones (prices) and the associated AVON (Locations). Individual adjustments can be made here. If the tariff data is to be generally revised, it is recommended to do this via the tariff import (via the configuration wizard or via the native client). For this purpose, a new VLIST (file with the tariff data) must be created or requested.

In general, the following values are adjusted for the classification:

- Name of the carrier
- Valid from
- Pulse tariff

NOTICE: Manual changes to the tariff zone are only available in the native application.

2.4.1.2.1 Tariff Zones

All existing tariff zones are displayed in the table.

Table 21: Definition - Table Tariff Zones

Name	Description of the tariff zone.Under each tariff zone, a price per call type is stored
Valid from	Specifies the date from which the tariff zone will be used

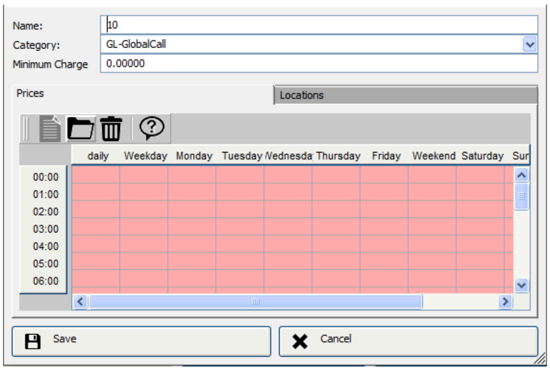
To edit a tariff zone, select the tariff zone to be processed and click on the *Change* icon.

NOTICE: Edit the AVON entries (see chapter Area Codes on page 146)

2.4.1.2.2 Prices

The calculation depends on the calculation type. The calculation can be performed according to *pulses/units* or by *duration*. At the same time, different prices can be given for each type of call (Business, Private, All, ...).
Definiton - Dialog box Prices

Minimum Charge	If the calculated call price is below the entered minimum amount, the minimum amount is accepted as a call price.



Select an entry in the calendar, e.g.**daily 00:00** and click on *Change*.

The tariff rates table is opened and contains the price per call type (Business, Private, ...), which is applied daily for the period from 00:00 - 01:00. The price per call type can, of course, be different.

A different price can be used for each period (00:00 - 23:00) in conjunction with the days (single weekday or daily, business day, weekend, holiday).

NOTICE:

If the same prices are used throughout the entire period in the tariff zone, the color coding is uniform. That means: All entries are displayed with the same color. If the prices are different, the entries are displayed in different colors.

Thus it is possible to see at a glance whether different prices are used in the tariff zone!

Table 22: Definition Table Tariff price

Time frame	Length of time frame in seconds, e.g. **1**, if Calculation per second **60**, if Calculation per minute **This entry is only used if *Pulse Tariff* is set to false.**
Valid from Second	From which second is the calculation to start, e.g.10 means that the first 10 seconds of the calls are not to be calculated. **This entry is only used if *Pulse Tariff* is set to false.**
PBX access type	Call type (Business, Private, ...)
Price	The price that is used

Tariff per pulse - Explanation

When recording a *tariff per pulse*, a price per pulse can be entered for each PBX access code (corresponds to call type Business, Private, ...).

The type ***All*** indicates the price for all types that have not been configured differently. If, for example, prices for the call types *All* and *Business* are stored in the table, the price of ***All*** is used for private calls also, but for the business calls the price on ***Business***.

Tariff per duration - Explanation

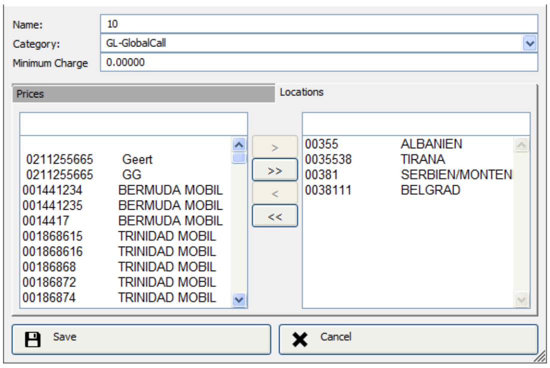
The creation of a *tariff per duration* is more complex, since the exact time windows have to be defined depending on the weekday.

The type ***All*** indicates the price for all types that have not been configured differently. If, for example, prices for the call types *All* and *Business* are stored in the table, the price of ***All*** is used for private calls also, but for the business calls the price on ***Business***.

2.4.1.2.3 Locations

Assigning locations to the tariff zone

Use tab **Locations** on tariff zone to move all all detected prefixes/locations from the left to right window. All prefixes/locations on the left window are valid for this tariff zone. The *prefixes/locations* are recorded under the **AVON** menu item and made available for a possible assignment. As a rule, there are no entries on the left-hand side, since all *prefixes/ locations* should be assigned to the respective tariff zones by *tariff import*.



Definition - Dialog box Locations

Name	Name of the tariff zone
Minimum Charge	If the calculated call price is below the entered minimum amount, the minimum amount is accepted as a call price.

2.4.1.2.4 Area Codes

In the table AVON (General index of the local area codes of the Telekom) all prefixes, location, tariff zones, prices and categories are taken from the VLIST. The VLIST can be imported into the OS Accounting application at any time. Based on this assignment, it is possible to have the destinations displayed in the clear text during the evaluation or billing of connection data.

Table 23: Definition - Table Avon

Prefix	area code
Location	Location, which is used for the area code

Tariff zone	Tariff zone (price group), which is used for the area code.This entry is only available in the table view. Changes must be made via the tab **Tarifzone**.
Categorie	Category (e.g., D1, International, ...) associated with the area code. New categories or the renaming of a category are made via the menu item **Tariff categories**.

To make adjustments to or expand the prefix, location, or categories, select the entry, and then click **Change** or **New**. In the dialog box, the inputs can now be made.

2.4.1.3 Legal Holidays in a tariff area

Legal Holidays

Special tariffs often apply to holidays.In order to take account of the costs incurred during these days, it is possible to record holidays to a tariff area. Select the **Legal Holidays** tab to edit the entries or create a new entry. Click on the **New** or **Change** icon to open the editing window where the following entries can be made:

Table 24: Definition - Table Legal Holydays

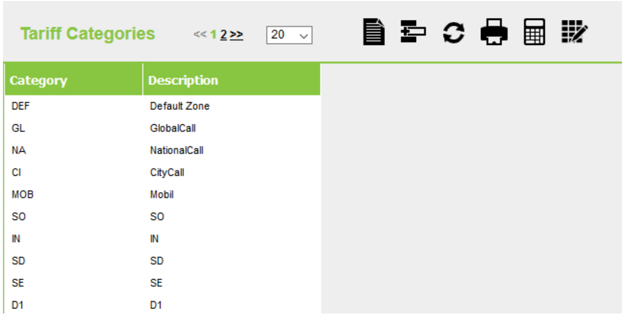
Name	Name of the holiday
Date	Date of holiday.The date must be unique for the tariff area

2.4.2 Tariff Categories

Tariff categories enable the grouping of individual tariff zones. For example, there can be different prices (and thus different tariff zones) for different regions of the country, but all of them could have the category **National** assigned to them. Consequently, the sum totals could be recorded via the tariff category.

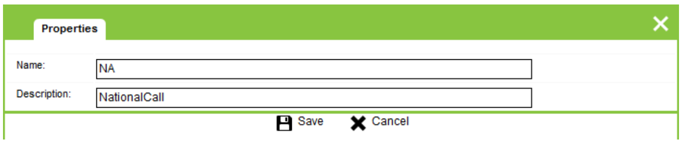
2.4.2.1 Activating Tariff Category Management

Tariff Category Management can be accessed via the **Tariff Categories** item on the **Cost Modeling** tab. The table lists all tariff categories already entered. The toolbars can be used to activate the desired functions and display modes.



2.4.2.2 Entering and Editing Tariff Categories

Clicking on the **Create a new object** icon opens the editing window for tariff categories. Both the name and the description text can be entered and edited here. The name must be unique throughout the system.



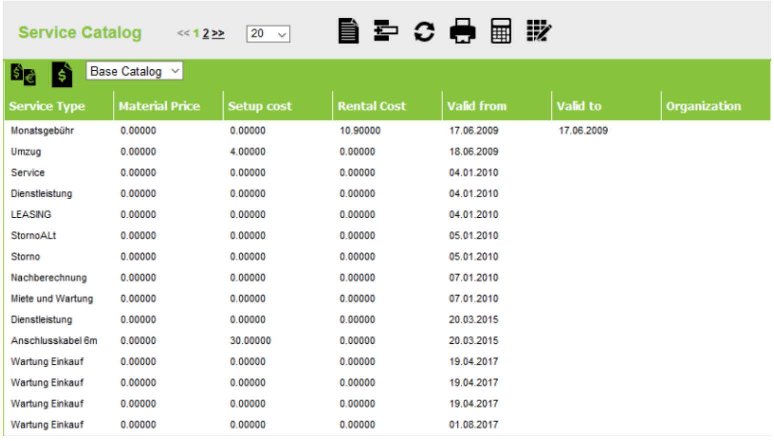
2.4.3 Service Catalog

The entire service range you provide your staff or customers with is managed in fixed price catalogs. A model fixed price catalog is available as a basis. A specific catalog can then be derived for every company area. Every catalog is composed of a series of services types, which contain a detailed description of the respective service.

The fixed price type management allows you to conveniently create and edit these catalogs and to define unique fixed-price types for every type of device or usage. You specify one-time fees and ongoing monthly rents in these fixed-price types. You can make use of these fixed-price types repeatedly for later billing, since this saves a lot of effort when entering service charges.

2.4.3.1 Activating the Service Catalog

Click in the **Settings** menu under the **Fixed-price catalog** item on the **Fixed-price catalogs** icon. The fixed-price catalog control window is displayed. A table lists all kinds of services available. You can distinguish between `Entire catalog`, `Master catalog` and `Area catalog` via a combo box and thus restrict the number of fixed price types. If you want to view or edit the area catalogs, you must select the desired organization area via the adjacent list box. If you selected `Entire catalog`, you are presented an overview of all kinds of services available in the master catalog as well as all area catalogs. However, you are not allowed to create new entries with this selection.



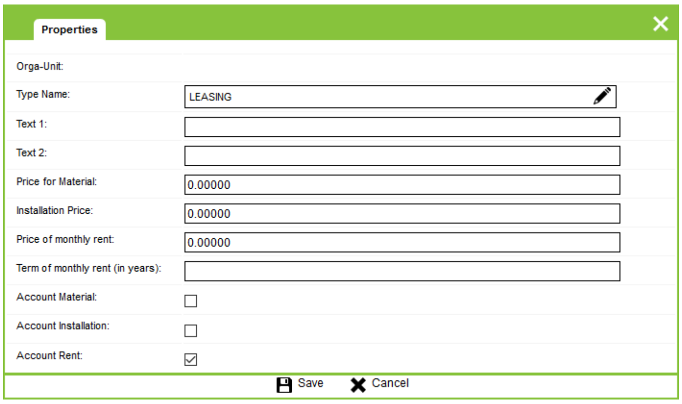
Service Type	Material Price	Setup cost	Rental Cost	Valid from	Valid to	Organization
Monatsgebühr	0.00000	0.00000	10.90000	17.06.2009	17.06.2009	
Umzug	0.00000	4.00000	0.00000	18.06.2009		
Service	0.00000	0.00000	0.00000	04.01.2010		
Dienstleistung	0.00000	0.00000	0.00000	04.01.2010		
LEASING	0.00000	0.00000	0.00000	04.01.2010		
StornoALt	0.00000	0.00000	0.00000	05.01.2010		
Storno	0.00000	0.00000	0.00000	05.01.2010		
Nachberechnung	0.00000	0.00000	0.00000	07.01.2010		
Miete und Wartung	0.00000	0.00000	0.00000	07.01.2010		
Dienstleistung	0.00000	0.00000	0.00000	20.03.2015		
Anschlusskabel 6m	0.00000	30.00000	0.00000	20.03.2015		
Wartung Einkauf	0.00000	0.00000	0.00000	19.04.2017		
Wartung Einkauf	0.00000	0.00000	0.00000	19.04.2017		
Wartung Einkauf	0.00000	0.00000	0.00000	19.04.2017		
Wartung Einkauf	0.00000	0.00000	0.00000	01.08.2017		

This control window contains the service bar as an additional toolbar. It includes the following non-standard functions for editing the fixed-price catalogs.

Table 25: Gruppenverwaltung: Leistungsart

	Copy service types from the master catalog into the current area catalog.
	Price changes for the area catalogs
	Price changes for fixed price types

2.4.3.2 Entering and Editing a Service Catalog Type



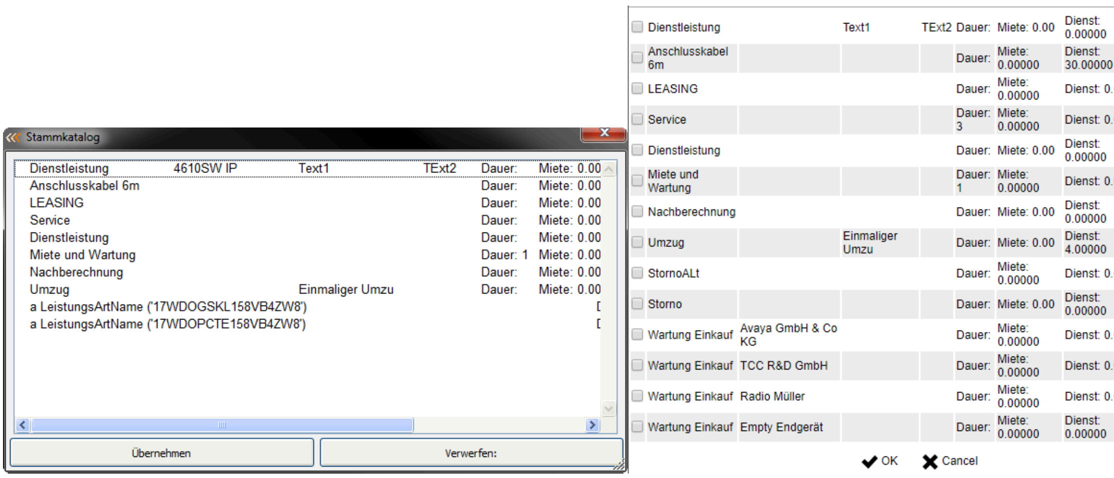
To create a fixed price type, fill in the following fields:

Orga Unit	This field is always disabled. For area catalogs, it contains the name of the selected organization unit.
Type name	Select a designation for the fixed price type from the selection list. You can create new entries in this list or modify or delete existing ones. The type name must be unique within a catalog.

Text1	Descriptive text on the kind of service.
Text2	Descriptive text on the kind of service.
Equipment	Select a device from a list if the entry is dependent on equipment.
Price for materials	Enter non-recurrent material costs for the fixed price type.
Account material	If this check box is selected, the value entered under "Price for materials" is included in the accounting.
Installation price	Enter the one-time installation costs for the fixed-price type here.
Account installation	If this check box is selected, the value entered under "Installation price" is included in the accounting.
Monthly price for rent	Enter the rent price here, which is due every month.
Term	Enter the term of the monthly rent in years.
Account rent	If this check box is selected, the value entered under "Monthly price for rent" is included in the accounting.

2.4.3.3 Copying Service Catalog Types from the Master Catalog

The master fixed price catalog can either be transferred completely or on an item basis into an area catalog. Select an area catalog from the fixed price type management and click on the **Master catalog** icon. A window with all fixed price types in the master catalog is displayed.



Select the check box before the entry to mark the fixed price types to be copied from this list.

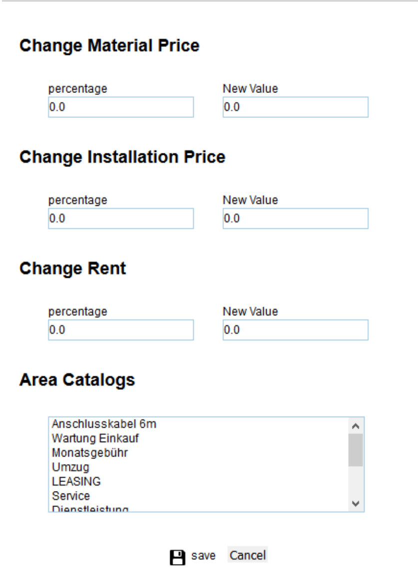
On clicking **OK**, the selected fixed price types are transferred to the area catalog. By pressing **Cancel**, you can exit the window without transferring data.

2.4.3.4 Implementing Price Changes

OS Accounting offers two options for changing prices. You can change prices for a set of area catalogs and for a set of fixed price types.

Select either the **Price change per area catalog** or the **Price change per service type** icon in the fixed price type management. A window in which you can enter the information on the desired price change is displayed.

You can change the price for materials, the installation price and the rent for a selected set of area catalogs or fixed price types.



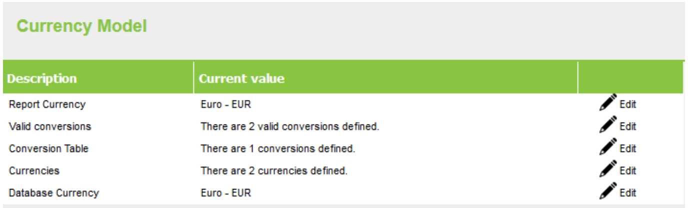
In the list, select the service catalogs or service types you want to change. You can click on individual entries, which causes a check mark to appear on the left beside the name. You can also select multiple entries by simultaneously pressing the `<Ctrl>` key. If you want to select all entries or several entries in succession, click on the first entry, point the mouse on the last entry and simultaneously press the `<Shift>` key. All marked entries will then be selected with a check mark.

The price change is specified in percent (+/-). There are fields which automatically increase or decrease the percentage value in increments of one percent when you click on the up or down arrows. The right side displays the new value in Euro.

Clicking on **OK** confirms the price change. Price adaption is done through commercial rounding. Press the **Cancel** button to discard your entries and exit the price change screen.

2.4.4 Currency Model

OS Accounting can differentiate amounts in several currencies. One currency is always defined as the base currency. Data storage always occurs in this base currency. If required, a (foreign) currency can be converted into the base currency, and vice versa. The user is responsible for managing the exchange rates.



2.4.4.1 Starting the Currency Conversion

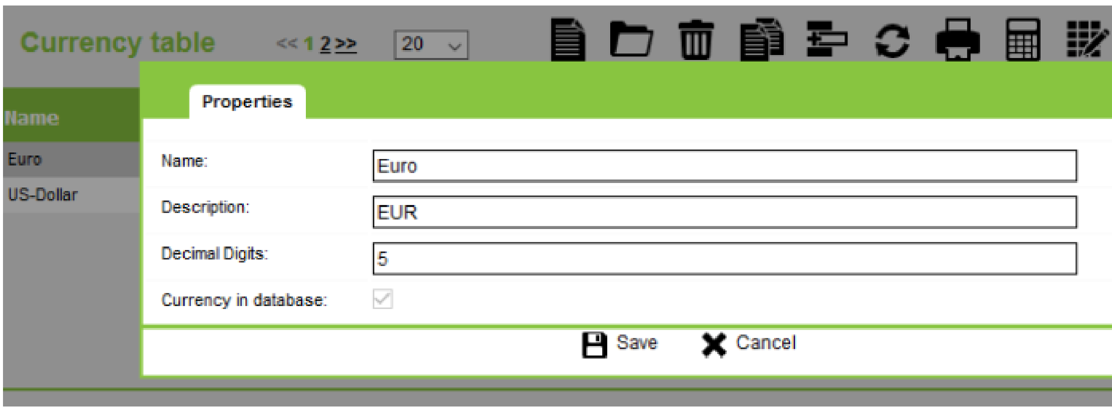
In the **Settings** menu, click on the "Currencies" item. The currency conversion window is opened.

This screen includes five options:

- Report currency
- Permitted conversions
- Conversion table
- Currencies
- Database currency

2.4.4.2 Entering a New Currency

Click on **Edit** in the "Currencies" row. A screen containing all defined currencies is opened. Click on the **Create a new object** icon. The following values can then be entered in the editing window:

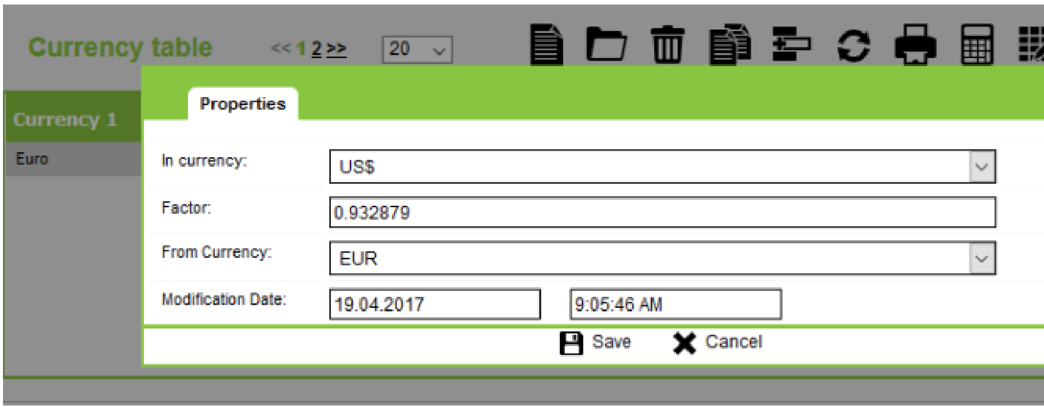


Currency symbol	Enter the currency symbol as abbreviation for the currency here.
Description	Enter the complete designation of the currency here.
Subunit	Here you can define with how many decimal places prices are to be shown in this currency.

NOTICE: The number of decimal places affects all prices within the system. In case of existing values, the surplus decimal places will be cut of. This is especially relevant if the price model has more decimal places than defined in the currency.

Entering a New Conversion Factor

Click on the Edit button in the **Conversion table** row. A new screen pops up. Click on the **Create a new object** icon. The editing window appears:

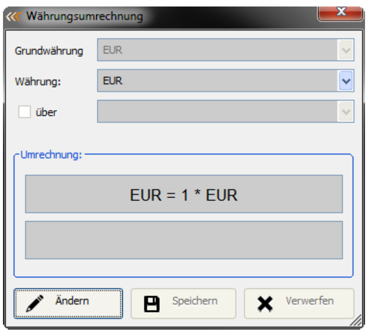


The fields mean the following:

To currency	Selection of the first currency (currency1).
Factor	Conversion factor from currency2 to currency1.
From currency	Selection of the second currency (currency2).
Modification date	Date as of which the conversion factor applies.

Entering a New Currency Conversion

Click on the **Edit** button in the **Valid conversions** row. A new screen pops up. Click on the **Create a new object** icon. The editing window appears:



Specifying the Database Currency

Click on the **Edit** button in the **Database currency** row. In the window that appears, you can specify the currency to be used as the database currency. All amounts in the database will then be saved in this currency. This currency must be used as the basis for defining conversions to allow different currencies to be displayed in reports.

2.4.5 Anonymous Numbers

Anonymous Numbers

Anonymous Numbers can be used to maintain a list on numbers that should be masked immediately and irreversible. This may be used for numbers to counseling services according to §99 paragraph 2 TKG which may not appear on an itemized bill.

If a call with such a number in the field **CHARGENUMBER** is detected, the dialed number as well as the AVON will be masked in after calculating the fee. By that, the costs are still visible but one may only see that such an anonymous number was called but not which one.

Opening the Table of Anonymous Numbers

When clicking **Anonymous Numbers** in the tab **Cost Modelling**, the window with the table of Anonmyous Numbers appers. All defined numbers will be listed.

Adding and Modifying Anonmyous Numbers

By clicking the **Add** button, new numbers can be added. The button **Change** allows to edit exitsing ones.

For each anonymous number, the **digits** must be defined. The number will be checked exactly against the given number, i.e. no replacement of 0049 by 0 will be done.

An anonymous number's **name** is only used for the organization, it will not be shown in an itemized bill. Optionally, a **comment** may be specified as well.

Importing Anonmyous Numbers

Anonmyous numbers may be imported from a file. The numbers must be in an CSV file with the format

```
"+49123456789";"Name 1"
030123456
0089123546;"Name 3"
```

The number must be present, the name is optional. If a number is already present in the system, its name will be updated. The numbers must be presented in the same format as shown up in the call records.

2.5 Interfaces

The Interfaces tab provides an overview of the switches maintained in the system as well as the associated gateways. It is also possible to import SIP Endpoint XML files from OpenScape Voice or OpenScape 4000 systems here.

2.5.1 Switches

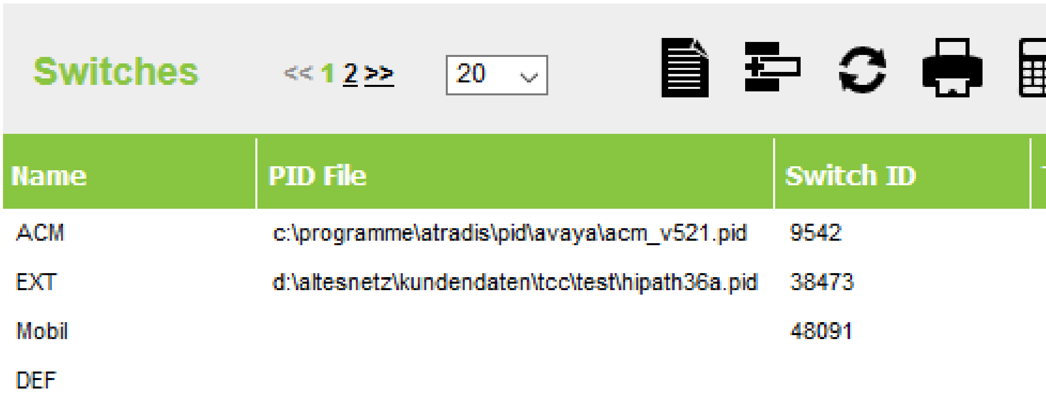
This module is used to describe the various telecommunications systems in more detail. This is required in order to set and document the system environment, since this is the only way a dialog between the computer system and telecommunication system can take place. This is how a system is assigned tariffs, which are required for calculating when importing the charges.

Here the systems are assigned tariffs which are required for calculation when importing the charges. The proper management of charges can only be ensured if the configuration parameters have been correctly set. A number of different aspects are differentiated here. The individual systems are uniquely identified by the node name and node numbers.

The options for entering system parameters listed in this section are all very user-friendly. Nevertheless, you should always keep in mind that system management is a very sensitive data area. All background processes required for the collection of charges are controlled here. Consequently, invalid entries can lead to an extensive loss in functionality. Changes or new entries should only be made by experienced system administrators here.

2.5.1.1 Activating Switch Administration

Click on the **Systems** item in the **Settings** menu. The system tab is shown in a control window.



Name	PID File	Switch ID
ACM	c:\programme\atradis\pid\avaya\acm_v521.pid	9542
EXT	d:\altesnetz\kundendaten\tcc\test\hipath36a.pid	38473
Mobil		48091
DEF		

2.5.1.2 Creating a New Switch

Introduction

On clicking the **New** icon, the window for entering and editing switch configuration data is opened.

NOTICE:

A distinction is made in system management between mandatory and optional fields. Mandatory fields must be filled with information and are checked by the program accordingly.

Before entering a system, all relevant tariffs should have already been configured within the system.

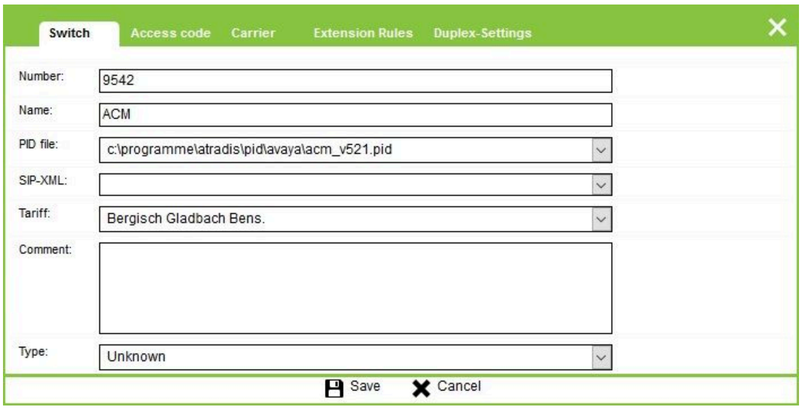
You can also use the configuration wizard to set up a system.

The description of a system occurs on the following tabs:

- System -> Base data of the system
- Carrier -> Carrier assignment

- Startup digit -> Definition of call types (business, private, ...)
- Extension Rules (automatic import or denial of calls)
- Rules for priorizing the carrier detection (routing)

Setting up the TC Switch



The following data fields must be filled:

Number	System number (system ID in the call data record).
Name	Name of system (system ID in the administration system). **NOTICE:** The `DEF` switche's name cannot be changed.
PID file	Assignment of the system-specific file with the description of the CDR format (PID= PBX Interface Description). See the installation directory for a catalog of PID files. If you do not find your system in the catalog, please contact our service.
XML file	Defines the SIP Endpoint XML file that was used during import.
Tariff	Assign the tariff zone applicable to your system here.
Is Duplex-Node?	If the switch is a duplex system, this option must be enabled. A new tab named Duplex-Options appears. At that tab, the two source nodes can be named. These nodes can be used for the CDR data retrieval to collect data from both nodes. The master data will be associated with the logical node only (the current switch).
Comment	Free text field for your comments

Type	Defines the switch type. This type is used in the Welcome addon and defines the configuration options.

PBX access codes

In addition to the basic configuration of the switch, the startup digit table with PBX access codes (AKZ) must be configured.

The startup digit table is used to assign specific codes in the call data record to call types. If the distinction is not made in the form of codes, the different call types must be nonetheless created using (program-internal) default values for business (07) and private calls (09). When creating a new system, these two startup digits are automatically created.

If the imported data record has a startup digit field, this value is taken. Otherwise, to distinguish between business and private calls, the data record is checked to see if it contains a *BUSINESS* or *PRIVATE* field. Depending on which of these fields is present and its value, a choice between the call types is made.

Carrier assignment

Different tariffs may be applied to each call type.

The **Carrier** and the trunks assigned to a system can be defined on the **Carrier** tab.

When clicking the **Edit** icon, a dialog window opens in which the following settings can be made:

Table 26: Carrier Settings

Carrier	Select a carrier. You can also enter new carriers in the selection window.
Second Carrier	An alternative carrier, for which the call charges should be calculated. By that, a comparison between two different tariffs can be made.
Number	Carrier number, which is supplied in the call data record.
Gateway	A gateway which is connected to the switch. In this scenarios, the tariff will be depicted from the gateway instead of the switch and carrier definition.
Trunks	Trunks permanently assigned to the carrier. The Trunk numbers must be unique in the whole system.
Is PSTN Trunk	If this checkbox is selected, the trunk will be marked as PSTN trunk. This is required for distinguishing ONNET and OFFNET calls.
Organization	Organizational unit that defines the carrier. It can be defined if the subunits are valid as well. The carrier is used if the subscriber's organizational unit or the extension's paying subscriber's organizational unit matches the definition.
General Field	A general field from the data record as well as a match value can be defined. If the value matches the field from the record, the carrier will be used.
Note	A note can be defined for the configured carrier definition.

Call Data Import

Normally, the Call Data Import is configured by the Configuration Wizard and started by the Scheduler Service. If an existing call data file should be imported manually, this can be done within the switch administration either.

After having selected the switch for which the import should be performed, the button **Import** must be clicked. The data import window openes. In there, the data file can be selected. If it is an error file from a previous data import, the option **Error file?** must be activated. By that, the error messages from the previous import (i.e. the first 100 characters) are getting skipped.

Extension Rules

The automated creation of extensions and pin numbers during the call data import can be defined in the section **Extension Rules**. Thereby, only extensions and pin numbers which match to the rules will be created automatically during the call data import. After clicking the **New** icon, a dialog window opens where the following data can be entered:

Table: Extension Rules

Name	Name for the rule
Type	Select, if it is a rule for `extensions` or for `PIN`. It can also be specified if the rule should allow the creation of an extension or pin or if it should deny its import.
Rule	The rule will be inserted here using the Regex11 Syntax
Input Test	To verify the rules, an extension or PIN can be entered which is immediately checked against the existing rules, showing the also the status. (Red=no match, Green=OK).

A rule may either permit the import of matching extensions and pins or deny their processing. In case of such denying rules, the data is not getting imported or regarded by the system.

Priorizing the Carrier Detection

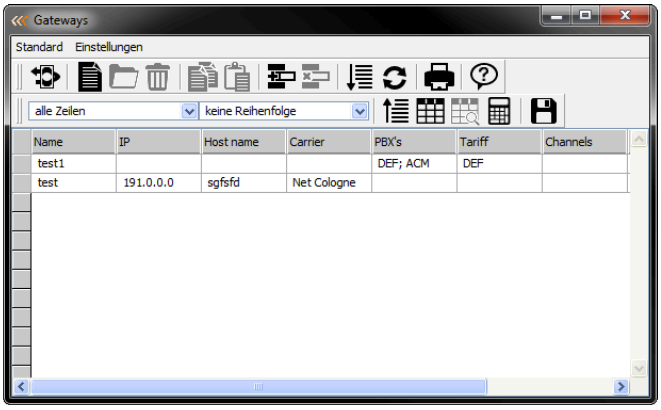
The priorization of the detection of the carrier can be defined. Therefore, within the tab **Routing** it can be defined, which routing mechanisums should be used and in which order they should be tested. The first carrier that matches its criterion will be used.

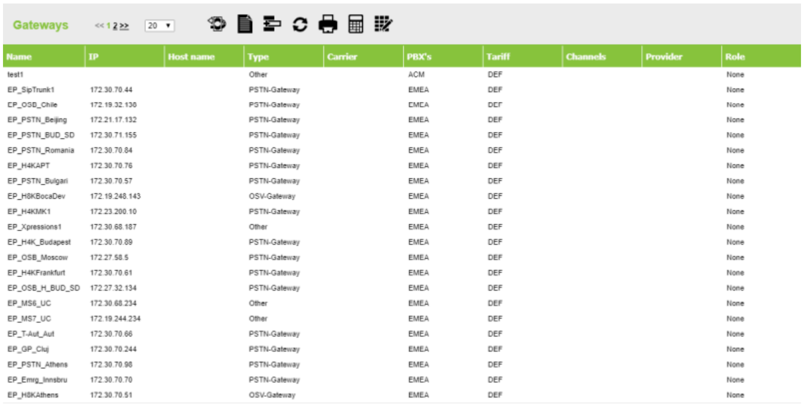
2.5.2 Gateways

Modern Voice over IP communication systems are often networked with one another over LAN and WAN routes. Using routing rules, a call that was initiated in the Hamburg branch, for example, can be routed to Munich over a WAN connection and only passed on the PSTN there. Such transfer points are (usually) represented by gateways. In such cases, the Munich tariff must obviously be used for the calculations. Each respective call data record must thus include the specific IP address of the gateway so that it can be identified.

2.5.2.1 Activating Gateway Management

Gateway Management can be accessed via the **Gateways** item on the **Interfaces** tab. The table lists all gateways already entered. The usual functions can be called from the toolbar.

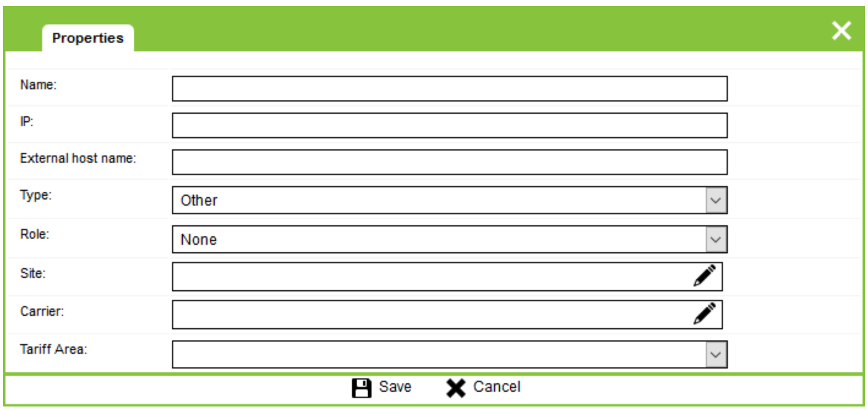




2.5.2.2 Adding New Gateways

NOTICE: Besides the manual entry process described here, gateway information for certain types of switches (such as the Unify OpenScape Voice or Unify OpenScape 4000 V6) can be imported from defined XML files.

Clicking on the **Create new object** icon opens the input mask for adding and editing gateways. A gateway must have at least a unique name. If the IP address or hostname were specified, these values must also be unique.



The following settings can be made in the process:

Name	Unique name of the gateway
IP	Unique IP address of the gateway. This identifies the gateway for the call charge data processing.
Hostname	Unique FQDN of the gateway
Type (PSTN, OSV, Other, HiPath 4000)	Gateway type, which is also used to identify the call type. Only calls conducted via a gateway of type PSTN are marked as **OUTGOING** and thus charged for on the basis of the tariff.
Role (none, central, local, standby)	Optional role of gateway in the overall architecture of the telephone network.
Site	Name of the site. A tariff area with this name is searched for the automatic assignment of carriers.
Tariff Area	The tariff area valid at the gateway.
Carrier	The valid carrier for the gateway. Only carriers that are defined in the selected tariff area can be selected.
Second Carrier	
Switch	The switches to which this gateway is assigned can be selected here.
Channels	The channels assigned to the gateway are shown here. These can be edited by clicking on `Edit`.

2.5.2.3 Entering Channels for a Gateway

Clicking on `Edit` icon during gateway processing opens a new control window with the channels assigned to the gateway. The appropriate buttons can then be used to edit existing channels or add new channels. The channels are assigned to only the selected gateway. They are used to calculate usage statistics (stress reports).

The following values can be specified for each channel:

Type	Type of channel. The possible types are: T1, T2, T3, E1, E2, E3, ISDN PRI, ISDN BRI, ISDN-B, ISDN-D, ISDN-H and SIP
Count	Number of channels of this type
Bandwidth	Bandwidth of a channel (in Kbytes/ sec)

2.5.2.4 Special Features of Gateway Management

Gateway Management includes the additional menu items **Associate service provider** and **Import SIP endpoint file**.

2.5.2.5 Assigning Service Providers

NOTICE: This function should only be used if the gateways were imported via an XML file that included this information on the service provider.

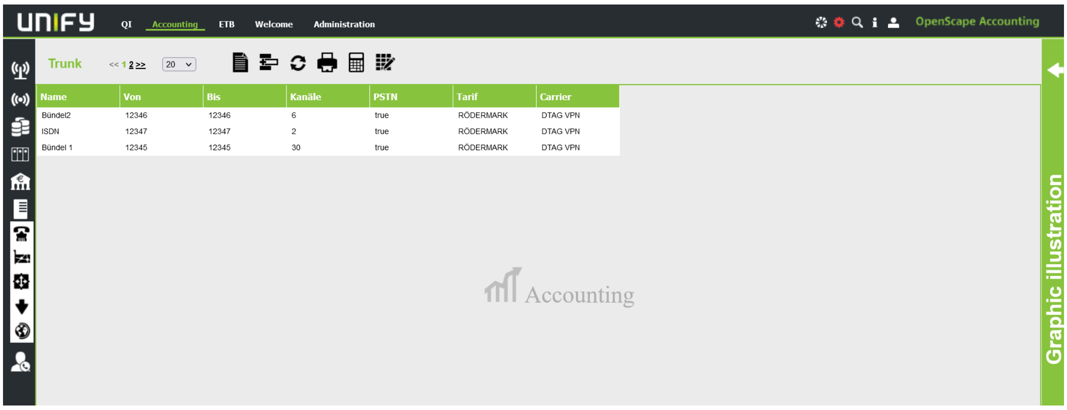
This function creates a carrier entry for all gateways on the associated switches. The tariff area and the carrier are identified based on the selected site of the gateway and the service provider, respectively. The carrier entry for each respective gateway is then created/changed in the switch accordingly, and the carrier is set to the one determined earlier.

2.5.3 Trunks

The term trunk describes the connection in a telephone network between the customer's telephone system and the public exchange of the telephone network operator (provider). Trunks can be assigned to different providers in the telephone system. In the application, the trunks can be assigned different tariffs. Therefore, the respective trunk must be present in the respective call data record so that it can be identified and calculated with the correct tariff or evaluated in the utilization statistics.

2.5.3.1 Starting the Trunk Management

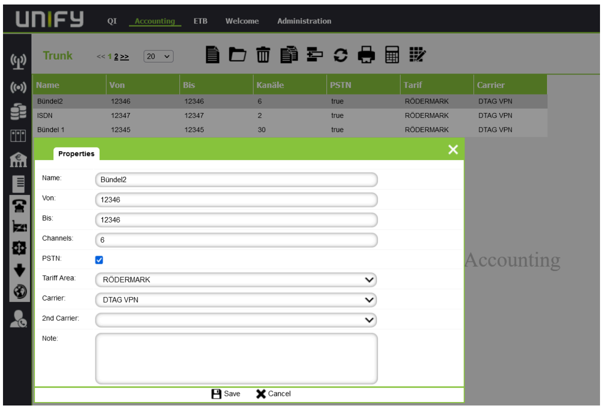
The trunk management can be reached in the tab **Interfaces** via the icon **Trunk** lines. The table lists all trunks that have already been recorded. The usual functions can be called up via the toolbar.



2.5.3.2 Creating New Trunks

> **NOTICE:** In addition to the manual creation described here, trunks for certain system types (for example Unify OpenScape 4000 from V6) can be imported from defined XML files

Clicking on the **Create a new object** icon opens the mask for creating and editing trunks. A trunk must have a unique name and number.



The following settings can be made during processing:

Name	Unique name of trunk
From	from trunk number
To	To trunk number
Channels	Amount of channel for the trunk
PSTN	Is the trunk a line to the public network (PSTN activated) or a cross line (PSTN not activated).
Tariff Area	Tariff Area which is used for the trunk
Carrier	Carrier which is used for the trunk. You can only select carriers that are defined in the selected tariff area.
2nd Carrier	An alternative carrier can optionally be selected here in order to additionally rate a call data record. Call costs can thus be compared when using different carriers.
Note	Your notification

2.5.4 SIP Endpoint XML Import

Gateways for both OpenScape Voice and OpenScape 4000 systems can be imported via the defined SIP Endpoint file. The **Gateway Import** item is available on the **Interfaces** for this purpose.

After selecting an XML file, the import tries to detect wether the selected file was an OpenScape 4000 or OpenScape Voice XML file. Depending on the result, the import process starts and creates the gateways or trunks. If the respective telephone system does not yet exist, this will be generated as well. In addition, a carrier assignment to the system and the gateway/trunk is created automatically.

The import function can also be used to update information. Gateways and trunks that have not yet been recorded are created automatically, and existing gateways and trunks are updated with the new data. However, gateways that have been removed from the XML file are not removed from the database.

The information from the location and service provider elements of the XML file are used to determine the tariff area and carrier, respectively, provided these details have been maintained.

NOTICE: This special function is available in the native client only.

2.5.5 COS Profiles

Using COS profiles, permissions may be specified for extensions. These will be used by the Welcome Add on in order to manage the permission of guests and guest extensions.

Each COS profile has a unique identifying **Namen**.

The values for **Cos1**, **Cos2**, **LCosS1**, **LCosS2**, **LCosD1**, and **LCosD2** represent the permissions.

2.6 Device Management

Device management is the central inventory of devices, SIM cards and associated contracts. Devices may be mobile (e.g., smartphones, tablets, notebooks) and stationary (e.g., deskphone). Since this is a function enhancement of OS Accounting the Device Management - Module is included in the standard scope of OS Accountingand does not have to be licensed separately. Any number of devices, SIM cards and contracts can be managed. In addition to company-owned devices, the management of external devices is also possible (BYOD - "Bring your own device"). In order to document possible changes of ownership, all devices and SIM's are historized.

2.6.1 Contracts

The contract management allows you to view, add, change or delete all data stored in the system. Contracts are one of the main criteria that can be assigned to device management. Various contracts can be created and managed. In addition to sales contracts, maintenance contracts and mobile phone or landline contracts can also be managed.

2.6.1.1 Contract management

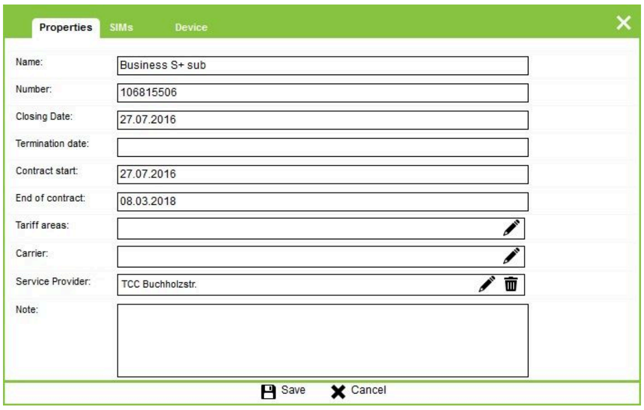
Activate the tab Device Management and click on the icon **Contracts**. The dialog box Contracts is opened. The table lists all contracts already entered. You can use the toolbar to activate the desired functions and display modes.

NOTICE: Already registered contracts can be changed or deleted at any time. More information in chapter „Creating new/ Editing existing contracts“ and „ Delete contracts“.

2.6.1.2 Creating new/Editing existing contracts

By clicking the icon **New** you enter the dialog box contracts.

If a record is selected in the contract table and the icon **Edit** is clicked on then the selected contract is opened in the dialog box for editing .



In the processing of the contracts, you will find the following fields (* are required fields):

Table 27: Fields in table contracts

Name *	Enter a name for the contract
Number	Here you can enter a contract number
Completion date	Date of the contract / Contract completion date
Termination date	Last date for termination
Start of contract	Startdate of contract
End of contract	Enddate of contract
tariff areas	A tariff area can be assigned.
Carrier	Selection of the carrier for the contract.

Service Provider	The business partner can be deposited here, e.g. provider for maintenance contracts.
Bemerkung	Free text field for more information about the contract.

Use the tab **SIMs** and **Device** to view all SIM cards and devices which are already assigned to the contract. However, the recording and allocation of these properties are carried out elsewhere.

2.6.1.3 Delete contracts

Any recorded contract can be canceled if necessary. Mark the contract to be deleted in the table and click on the delete icon.

NOTICE: Contracts which are still used can not be deleted.

2.6.2 SIM-Cards

SIM card management allows you to view, add, change, or delete all data stored in the system. The SIM card can be assigned a contract, a phone number, a device and an owner / subscriber.Further required information can also be deposited.Different SIM types can be created and managed.

2.6.2.1 SIM-Cards Management

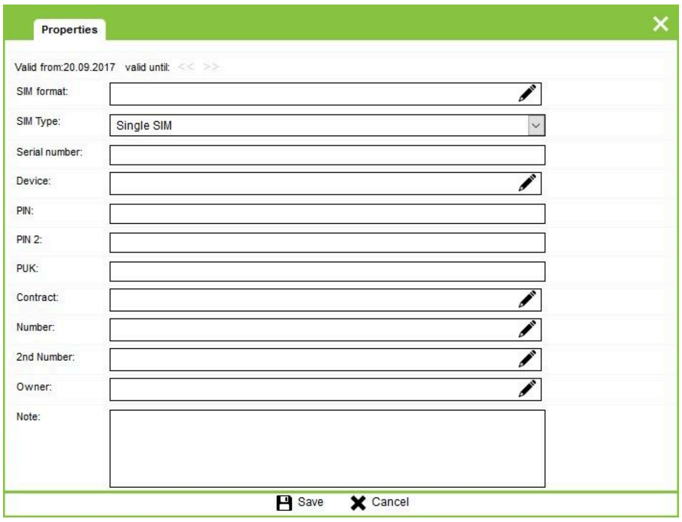
Activate the tab Device Management and click on the icon **SIM Cards** . The dialog box SIM Cards is opened. The table lists all SIM Cards already entered. You can use the toolbar to activate the desired functions and display modes.

NOTICE: Already registered SIM Cards can be changed or deleted at any time. Further information in chapter „Creating new/Editing existing SIM Cards“ and „ Delete SIM Cards“.

2.6.2.2 Creating new/Editing existing SIM-Cards

By clicking on the **New** icon, you enter the dialog box for new SIM cards.

If a record is selected in the SIM Cards table and the icon **Edit** is clicked on then the selected SIM cards is opened in the dialog box for editing.



Above the tabs, the validity for the SIM card is specified. If a new SIM card is created, you can set its validity date. The validity is automatically set when the SIM card is deleted.

If a historical entry is made to the SIM card over time, the validity record is set to the date of the change, the start of the new record to the next day (a manual change in th UI will be valid on the change date).

Historical records can not be edited afterwards. Additionally, only one history record is generated per day.

In the processing of the SIM cards, you will find the following fields (* are required fields):

Table 28: Fields in table SIM Cards

SIM Format	Select the format from the box by using the "Select" button.
SIM Type	SIM Type can be assigned
Serial number *	Input box of serial number
Device	Select the device in which the SIM card is inserted.
PIN	PIN of SIM Card
PIN2	PIN2 of SIM Card
PUK	PUK of SIM Card
Contract	Select the contract that is assigned
Number	Select the mobile number which is assigned
2nd Number	If SIM type is "Dual" assign the second mobile number
Owner	Select the the owner/subscriber that is assigned
Note	Free text field for more information about the SIM Card.

NOTICE:

In order to fill the **Device**, **Contract**, **Number**, **2nd Number** und **Owner** these must have been recorded in advance at the appropriate location (Device, Contracts, Number/2nd Number - Extension Owner -Subscriber).

Use the tab Call Charges to view the allocated calls of the SIM card.

2.6.2.3 Delete SIM-Cards

Any detected SIM card can be erased if necessary.You select the SIM card entry to be deleted in the table and click on the Delete icon.

NOTICE: SIM cards that are still used in another context can not be deleted.

2.6.3 Device

The device management allows you to review, enhance, modify, or to delete all devices, that are stored within the system. SIM cards are one of the main parts that can be documented by the Device Management.

Stationary as well as mobilde devices can be managed and associated with subscribers.

2.6.3.1 Device Management

Activate the tab Device Management and click on the icon **Device** . The dialog box Device is opened. The table lists all Devices already entered. You can use the toolbar to activate the desired functions and display modes.

NOTICE: Already registered Devices can be changed or deleted at any time. Further information in chapter „Creating new/Editing existing devices“ and „ Delete device“.

2.6.3.2 Creating new/Editing existing devices

By clicking on the **New** icon, you enter the dialog box for new devices. Before you have to decide if the new device should be a "Terminal device" or a "mobile device".

If a record is selected in the device table and the icon **Edit** is clicked on then the selected device is opened in the dialog box for editing.

Above the tabs, the validity for the device is specified. If a new device is created, you can set its validity date. The validity is automatically set when the device is deleted.

If a historical entry is made to the device over time, the validity record is set to the date of the change, the start of the new record to the next day (a manual change in th UI will be valid on the change date).

Historical records can not be edited afterwards. Additionally, only one history record is generated per day.

In the processing of the device you will find the following fields (* are required fields):

Table 29: Device - fields on tab "Properties"

Name *	A name for the device can be assigned here
Type	The terminal type can be indicated (e.g. Smartphone, tablet)
Owner	A subscruber can be assigend
Owner's device?	If the device belongs to the subscriber (it is his own device), this can be indicated by activating the checkbox
Note	Free text field for more information about the device

NOTICE: In order to be able to select the owner, the user must have been registered as a subscriber under master data.

Table 30: Device - fields on tab "Device"

Manufactur	The manufactur of the device can be assigned
Model	The title of the model can be assigned
Operartion system	Indication of the installed operating system
Colour	Colour of the device
Serial number	Serial number of the device
MAC	MAC address of the device

Table 31: Device - fields on tab "Mobile Device"

IMEI	The IMEI number of the device can be assigned
Memory	Specification of storage capacity
Memory is expandable?	If the memory of the device is expandable (e.g. by an SD card), this can be indicated by activating the checkbox

NOTICE: The tab **Mobile Device** is only visible on mobile devices.

Table 32: Device - fields on tab "Terminal Device"

Extension	The extension of the device can be assigned

NOTICE: The tab **Terminal Device** is only visible on terminal devices.

Table 33: Device - fields on tab "SIM cards"

SIM Cards	The SIM cards assigned to the device are displayed here. Alternatively, a new SIM card can be created in the system, which is directly assigned to the device.

NOTICE: The tab **Mobile Device** is only visible on mobile devices.

Table 34: Device - fields on tab "Contract Data"

Contract	Contract which belongs to the device
Date of purchase	Indication of the purchase date
Warranty number	If available, a guarantee number can be entered for the device.
Warranty expiration	Datumsangabe des Ablaufs der Garantie.

NOTICE: In order to be able to select the **Contract**, the Contract must have been registered before.

2.6.3.3 Delete device

Any detected Device can be erased if necessary. You select the device entry to be deleted in the table and click on the delete icon.

NOTICE: Devices that are still used in another context can not be deleted.

2.7 Welcome

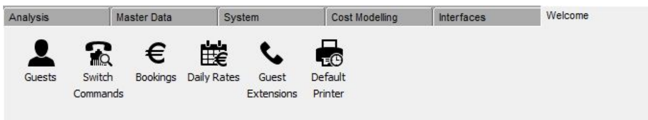
Telephony functions for guests in hotels or hospitals can be managed by using the Welcome module. Besides the native client for the Welcome applicartion, an easy to use Web Interface is also available for the daily work. The basic settings of this module will be set up using the Configuration Wizard.

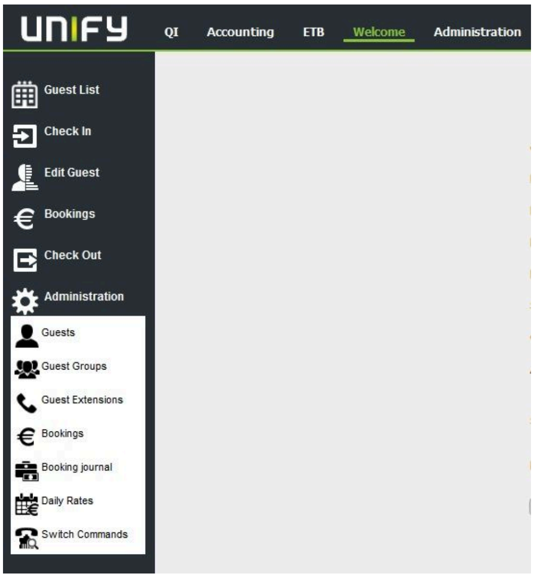
As switch commands cannot be created manually, this view is only used for verifying if a command was created and its execution result. The following commands are be available:

- Check In
- Check Out
- Lock User
- Unlock User
- Update Display
- Set PIN

2.7.1 Overview

In the tab **Welcome**, all functions for administrating and managing guests are included. In the following, these functions will be described in detail. Due to the slightly different handling of the native and the Web client, both clients will be considered seperately.





IMPORTANT: The **Welcome** tab is only visible if a valid Welcome license is present.

2.7.2 Web Client

The Welcome module is a additional menu item in the OpenScape Accounting applikation when using a valid license.To access the module, an internet browser is used.

2.7.2.1 Guest-List

While clicking the Button **Welcome** in the application's main menu, the submenu's first item, the Guest List, opens. All information regarding guests which were checked in or locked will be shown here. The information includes the guest's name, the room, the extension, the check in date and time, the current account balance and also the guest's state. For searching a specific guest or data record, the text field above the list can be used. The fields that will be searched for the entered value are firstname, lastname, and room. The search starts immediately after typing the first character.It is possile to print a Guest List using the printer symbol. The report will be printed on the logged in user's configured printer.


Guest List

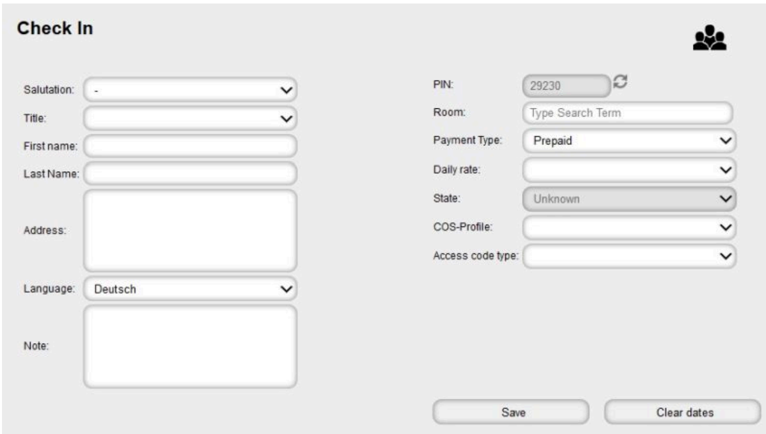
Name	Room	Extension	Check In	Credit Balance	Status
John Doe	Room 30	OpenScape Business 30	August 22, 2017 9:56:48 AM	10.00000 €	Checked In
Jane Smith	Room 34	OpenScape Business 34	August 21, 2017 8:34:22 AM	0.00000 €	Checked In

While clicking on a Guest, a new mask opens, offering the following actions:

Bookings	Openes the booking view. Payments and deposits can be made for the selected guest.
Edit Guest	Opens the editing mask for the guest.
Check Out	The Check Out mask for the selected guest will be opened.
Back	Back to the guest list without performing any action with the selected guest.

2.7.2.2 Check In

Using the Check In view, it is possible to create a new guest. When clicking on the **Check In** symbol in the Welcome menu, the corresponding view opens.



In the left column of the view, the personal information like **Salutation**, **Title**, **First name**, **Last name**, and **Address** will be inserted.

The selected **Language** determines which language is used in the reports for the guest.

Additional informations about the guest can be added in the **Note** section.

In the right column the telephone information for the Guest will be defined.

The assigned PIN is shown in the Field **PIN**. The PIN is generated automatically when clicking **Check In**. When using the regenerate button behind the field, a new random PIN can be generated.

The guest room number will be insetred into the field **Room**.

As **Payment Type** for a guest `Prepaid` or `Postpaid` can be choosed. Guest with the payment type `Prepaid` can do unrestricted phone calls (based on the COS Settings). Guest with the payment type `Postpaid` will be locked if they have no money on their account. In order to be unlocked again, these guests must deposit money on their guest account. The permission level of the locked and unlocked state can be defied from within the Configuration Wizard.

A **Daily Rate** can be assigned to each guest. It will be charged to the guest's account automatically during the stay starting with the arrival date. For having daily rates available for the Check In, the rates must be created once manually in **Daily Rates**. If the daily rate is changed for a guest, all future bookings will be done using this new rate. Already performed bookings will not be modified.

A **COS-Profile** can be assigned for each guest.The profile is set when the Guest is set to unlocked state, i.e. it is used during the check in and for unlocking. So an individual authorization for each guest independent of the default profile is possible.

For each Guest, an **Access code type** can be assigned. Calls made by this guests will be charged using this type. By this, it is possible to use individual prices for different guests.

The **State** of the guest shows if the account is active, locked, force locked, or checked out. Normally, only active guests have a COS class assigned allowing them to make outgoing calls. After the check in, all guests with payment type `Postpaid` get the Status `active`, guests with the payment type `Prepaid` will get the status `locked`. The Field **State** can't be modified by the User.

The view can be cleared without saving the data by using the button **Clear dates**.The **Save** button saved the guest in the system.

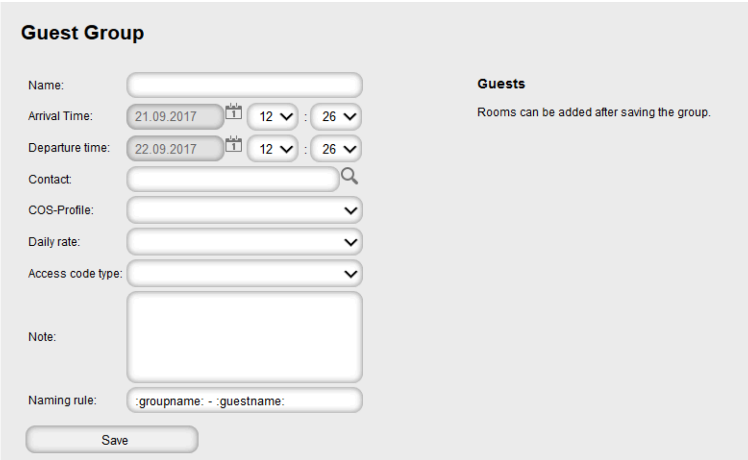
After a guest is successfully saved, the Check In document is sent to the default printer of the user in doubled execution. Depending on the settings of the OpenScape Accounting Print Service, a copy of the Check In document is saved in the specified PDF folder.

After the check in, OpenScape Accounting executes the check in command at the Switch. Hereby, the extension will be activated, the new PIN will be assigned, and the name of the guest is set as subscriber's display name.

When having payment type `Prepaid` an additional command is directly send to the switch which set the extension to the `locked` state again.

2.7.2.3 Guest-Group

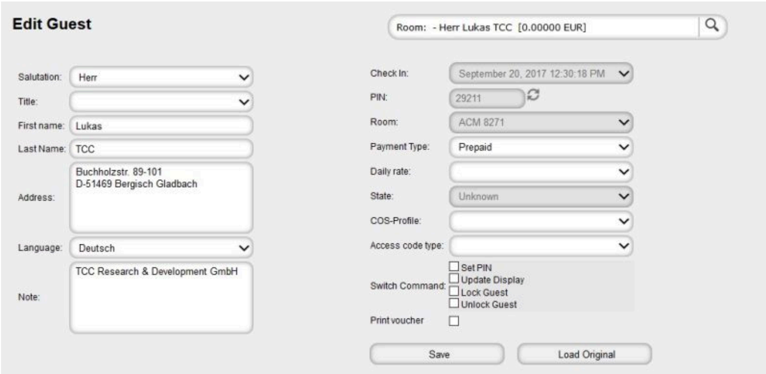
When clicking the guest group symbol in the top of the check in view, the guest group view will be opened.



Additional information about guest groups can be found in the section Guest Groups.

2.7.2.4 Edit Guest

Using the button **Edit Guest**, it is possible to edit guests which are checked in. Guests which are `checked out` cannot be editetd anymore. For this, another specific option is available described in Administration → Guests.



All **address data** can be edited and a **new PIN** can be assigned. The **payment type**, the **COS Profile**, the **access code type**, and the **Daily Rate** can be also changed.

Addinally, **switch commands** can be created using the corresponding check box in the bottom of the page:

Set PIN	if the PIN was changed, the checkbox **Set PIN** must be checked in order to sent the new PIN to the switch.
Update Display	If the guest's name is getting updates, this checkbox schedules an update to the switch.
Lock Guest	When checked, the guest will be set to **forced lock** state. In this state, the COS profile will be lowered as if his account balance is negative, i.e. normally he will not be able to initiate any phone calls anymore.
Unlock Guest	Unlockes a previously locked guest.

When checking **Print voucher**, the guest's Check In document can be printed again.

When clicking **Save**, all updates will be saved. Depending on the checked options, switch commands will be scheduled and executed or documents will be printed. Clicking **Load Original** discards any changes and reverts the guest's original state.

2.7.2.5 Bookings

The booking form can be activated using the left submenu's item **Bookings** or via the **Booking** item from within the guest list. When being opened via the menu, a guest must be selected for which a new booking should be accounted.

The view shows all account information for the selected guest. Besides an overview of all past bookings, new payments or deposits can be made.

In the upper section the selected guest and its current credit balance is shown. In the middle section, new payments or disposits can be made. Therefore, the **Amount** must be given in the corresponding field. A **Note** may be added to the booking. When clicking **Add**, the booking will be persisted and the new credit balance set. A negative amount means a deposit whereas a positive one represents a payment. For each booking, a receipt will be printed or saved as PDF, depending on the coniguration.

As the guest's current credit balance is periodically checked, previously locked guests (e.g. due the payment type `prepaid`) may be unlocked again if their balance is positive again, otherwise they remain locked. In the same manner currently unlocked guests will be locked if their account balance is negative and they have the payment type `prepaid`.

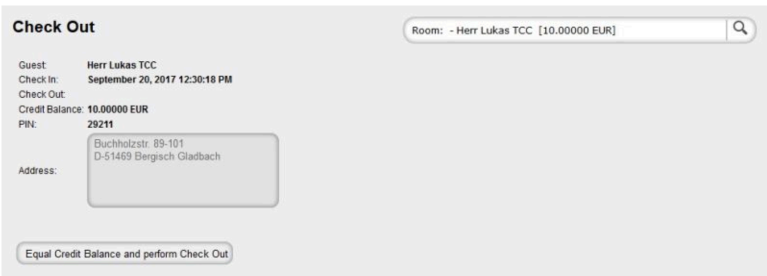
In the bottom part of the view, a table with all bookings of the guest is shown. The bookings appear in chronological order starting the the most current one. Using the date fields above the table, the shown bookins may be limited to a certain period.

Using the printer symbol, a booking overview can be printed for the selected guest.

In order to select another guest, the search field in the upper part of the view can be used. After typing the first letter, the search will be executed automatically. Alternatively, the guest list can be opened by clicking the magnifying glass symbol and selecting another guest.

2.7.2.6 Check Out

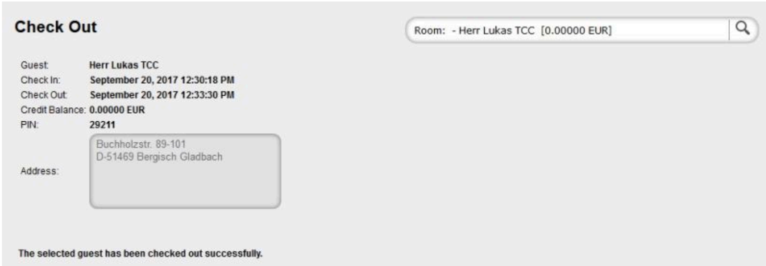
The **Check Out** allows to remove a guest from the system. It can be activated using the left menu or by clicking the **Check Out** item from a guest's menu. When being opened via the menu, a guest must be selected for which the check out should be performed.



In the header section, the selected guest, its check in date, the current credit balance, the PIN, and the given address is shown. By clicking the button **Equal**

Credit Balance and perform Check Out the guest will be disabled at the current date and time. If the current credit balance was positive, a final deposit of this amount will be perfomed. If the balance was negative, a final payment will be added.

After the check out, the button will be hidden and a notification displayed instead.



Beside the booking receipt, a check out document is printed as well (it is getting printed twice, one for the guest and one for the cashier).

After that, switch commands will be scheduled to lock the extension, to update the display name to `UNKNOWN`, and to reset the PIN to the default name.

> **IMPORTANT:** Checked out guests will not appear in the guest list anymore. They are still available via the menu item **Guests** from within the **Administration** menu. This item is only available for useres with administrative permissions.

2.7.2.7 Administration

The menu item **Administration** in the left menu is available only to users with administrative permissions. It has the following subitems:

- **Guests**
- **Bookings**
- **Booking journal**
- **Daily Rates**
- **Guest Extensions**
- **Switch Commands**
- **Report Histor**

2.7.2.7.1 Guests

The guest view shows all guests in a table and allows the modification using the default functiona from OpenScape Accounting. The guest view is getting activated using the menu item **Guests**.

Besides the filtering, Creating a new Guest or the editing of existing Guests can be done. A guest list can be printed in combination with user defined filters.

From within this view, also checked out guests can be reviewed.

2.7.2.7.2 Bookings

The Bookings view lists all bookins within the system in a table. They can be reviews and searched as knwon from all tables within OpenScape Accounting. New bookings can be added as well; when clicking the **New** button, the Booking view will be opened. The amount of existing bookings cannot be modified in order to prevent tampering of the data.

The printer symbol allows to print the table report `Booking Overview` listing all previously filtered bookings.

2.7.2.7.3 Booking Journal

The Booking Journal is a comfort way to print an overview of all bookings. Besides a filtering for the data, no additional filters are possible.

2.7.2.7.4 Daily Rates

The menu item **Daily Rates** allows the creation and modification of the avilable daily rates. They must be created once and can be assigned during the check in afterwards.

Daily Rates will be assigned automatically to guests via a system background service. For each assignment, a corresponding booking will be created as well.

Each daily rate has an unique **Name**, an **Amount**, a **Type**, and an optional **Note**.
The type defines in which interval the daily rate will be accounted. Possible values are `Daily Charge`, `Monthly Charge`, and `One Time Charge`.

Daily rates of the type `Daily Charge` will be accounted shortly after the check in and then every night to the guest's account.

Daily rates of the type `Monthly Charge` will be accounted shortly after the check in and then every first of each following month to the guest's account.

Daily rates of the type `One Time Charge` will be accounted only once after the check in.

2.7.2.7.5 Guest Extensions

The menu item **Guest Extensions** shows a table with all extensions that are marked as `guest extensions`. Extensions can be marked as guest extensions from within the extension table or the Configuration Wizard.

In the guest extension view, the menu items for new, edit, and delete have a different meaning than from within other tables. The **New** button allows the direct check in of a new guest for the selected extension. The **Edit** button opens the guest editing mask. The **Delete** buttons initiates the check out of the selected guest.

2.7.2.7.6 Switch Commands

The **Switch Command** view lists all commands which were created by several actions automatically. In addition to the command type, the extension, the execution time there is also the execution result and the number of attempts shown.

As switch commands cannot be created manually, this view is only for verification if a command was executed successfully.

The following command types are avialble:

- Check In
- Check Out
- Lock User
- Unlock User
- Update Display
- Set PIN

2.7.2.7.7 Report History

The report history lists all reports that were created from the application along with their information (i.e. name, timestamp, creation date, and state). The checkbox in the column **Delete** allows to delete the corresponding PDF file. This must be confirmed by the **Delete** button below the table. When clicking on the name of the report, the PDF file will be opened.

2.7.3 Native Client

The module **Welcome** is accessible via an additional tab from within the native application OpenScape Accounting. An additional license is necessary.

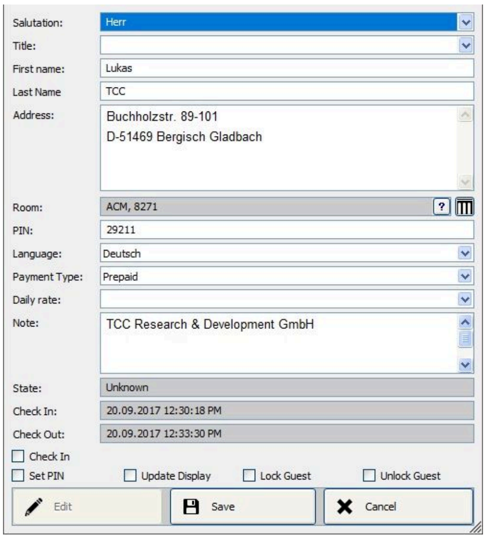
2.7.3.1 Guests

When clicking the **Welcome** button within the **Accounting** menu, the Welcome section openes.

The menu item **Guests** represents the central guest view within the native client. Guests can be checked in and checked out. Additionally, existing guests may be modified.

By clicking the **Guest** button, the guest table openes. All guests will be shown, independent if they are checked in or checked out. By default, information about the guest's first name and last name, their state, the room and extension, and their check in and check out timestamp will be shown along with their current credit balance. Using the common filter functions, the list may be arbitrarily restricted. The **printer symbol** allows to print a guest list or and data export besides the common default reports.

When clicking the **New** button, a new guest may be created or checked in respectively. The check in mask appears:



At first, personal information such as **Salutation**, **Title**, **First name**, **Last name**, and **Address** can be provided.

The field **Room** will be filled with the guest's room number.

The field **PIN** shows the guest's PIN. The PIN is preset with `0000`. The **Generate random PIN** button generates a random five digit PIN.

The **Language** defines the reports' language which will be created for the guest.

As **Payment Type** for a guest `Prepaid` or `Postpaid` can be choosed. Guest with the payment type `Prepaid` can do unrestricted phone calls (based on the COS Settings). Guest with the payment type `Postpaid` will be locked if they have no money on their account. In order to be unlocked again, these guests must deposit money on their guest account. The permission level of the locked and unlocked state can be defied from within the Configuration Wizard.

A **Daily Rate** can be assigned to each guest. It will be charged to the guest's account automatically during the stay starting with the arrival date. For having daily rates available for the Check In, the rates must be created once manually in **Daily Rates**. If the daily rate is changed for a guest, all future bookings will be done using this new rate. Already performed bookings will not be modified.

A **COS-Profile** can be assigned for each guest.The profile is set when the Guest is set to unlocked state, i.e. it is used during the check in and for unlocking. So an individual authorization for each guest independent of the default profile is possible.

For each Guest, an **Access code type** can be assigned. Calls made by this guests will be charged using this type. By this, it is possible to use individual prices for different guests.

Within the field **Note** additional information about the guest can be saved.

The **State** of the guest shows if the account is active, locked, force locked, or checked out. Normally, only active guests have a COS class assigned allowing them to make outgoing calls. After the check in, all guests with payment type `Postpaid` get the Status `active`, guests with the payment type `Prepaid` will get the status `locked`. The Field **State** can't be modified by the User.

The button **Cancel** discards all data and the window will be closed. The button **Save** creates the guest within the system and closes the window.

After a guest is successfully saved, the Check In document is sent to the default printer of the user in doubled execution. Depending on the settings of the OpenScape Accounting Print Service, a copy of the Check In document is saved in the specified PDF folder.

After the check in, OpenScape Accounting executes the check in command at the Switch. Hereby, the extension will be activated, the new PIN will be assigned, and the name of the guest is set as subscriber's display name.

When having payment type `Prepaid` an additional command is directly send to the switch which set the extension to the `locked` state again.

The button **Change** opens the guest as known from the check in mask. All address data may be modified and a new PIN can be set. The room number may be changed, the payment type and the daily rate may be adjustes as well. Additionally, special switch commands may be initiated. These can be scheduled by activating the corresponding check box in the bottom of the window:

Set PIN	if the PIN was changed, the checkbox **Set PIN** must be checked in order to sent the new PIN to the switch.

Update Display	If the guest's name is getting updates, this checkbox schedules an update to the switch.
Lock Guest	When checked, the guest will be set to **forced lock** state. In this state, the COS profile will be lowered as if his account balance is negative, i.e. normally he will not be able to initiate any phone calls anymore.
Unlock Guest	Unlockes a previously locked guest.

Clicking the **Save** button stores all data within the database and closes the window. The **Cancel** button discards all changes and closes the editing window.

By clicking the **Delete** button, the selected guest will be checked out and the account will be disabled for the current timestamp. If the account's balance was positive, a final disposit will be made; when being negative, a final payment is required.

In addition to the check out document, a booking receipt will be sent to the default printer and saved in the PDF directory.

Finally, the switch commands will be created setting the configured COS classes, updating the display name, and setting the device PIN to the default value.

2.7.3.2 Guest Groups

In the function **Guest Groups**, new guest groups can be added. Each guest group has a unique **Name** as well as a planned **Day of Arrival** and **Day of Departure**. Additionally, a **Contact** can be defined. This address may be used for the final guest group invoice.

Groups will be charged generally via final invoice. Prepaid is not possible. For each group, a **Daily Rate** can be defined which is assigned to all guests of this group. Additionally, a note could be added for each group.

For each group, a **COS Profile** and an **Access code type** can be defined. This profile and type will be used for all guests within the group. So it is easy to change both for the whole group at once. If a guest has an own COS profile or Access code type defined, that one will be used instead.

A **Naming Rule** can be defined for a group. This rule is used to create the display name for all guests within the group. If no naming rule was provided, the guest's last name will be used instead. The following placeholders can be inserted into the naming rule which will be replaced by the corresponding values:

:groupname:	The name of the guest group
:guestname:	The guest's last name
:extension:	The rxtension
:persi:	The PERSI entry for the extension

A possible naming rule could be `:groupname: - :guestname:`. This would create display names showing the group's name, followed by a dash, followed by the guest's last name.

In the tab **Guests**, rooms and extensions can be added or removed for the group. This is only possible as long as the guest group has not arrived yet. Only unassigned extensions and extensions not planned for future arrivals during the group's planned stay are avilable for assignment. For each assigned extension a guest object with the `planned` state is created.

The **Day of Arrival** and the **Day of Departure** cannot be modified for guest groups if there are already guests assigned.

A guest group will be automatically checked in if the planned Day of arrival was reached or by clicking the **Check In** button in the editing view. The group's guests will be checked in in the background (meaning the extensions will be unlocked, the display names and PINs updated) and also the state is set to **Checked In** in both cases.

The check out works similar: If the planned **Day of Departure** is reached or the button **Check out** is clicked, all guests within the group will be directly checked out. The accumulated expenses for each guest will be booked to the group so that the Guest account is equal after the check out.

A guest assigned to a guest group may be checked out before reaching the planned **Day of Departure** (i.e. early departure). This is done as if checking out a normal guest, i.e. selecting the guest from within the guest list and clicking the **Check Out** button. During this process, the chashier must decide if if guest has to pay for his charges or if they should be accounted to the guest group.

An already checked out guest will not be checked out again during the group check out. Also, the assigned extension is available for other use directly after the guest's departure and will not be blocked until the group's day of departure.

Billing reports can be created for guest groups. These reports are available as object reports within the guest group table. An overview abouit existing costs for each guest as well as an detailed itemisation for each booking and call are available.

Guest gropups can be copied. When inserting a copied group, a new **Day of arrival** and **Day of Departure** must be set. Afterwards, all existing guest extension from the copied group will be transfered to the new group if available. This is only possible for guest extensions which are not planned for the new period for another guest.

2.7.3.3 Switch Commands

The **Switch Command** view lists all commands which were created by several actions automatically. In addition to the command type, the extension, the execution time there is also the execution result and the number of attempts shown.

As switch commands cannot be created manually, this view is only for verification if a command was executed successfully.

The following command types are avialble:

- Check In
- Check Out
- Lock User

- Unlock User
- Update Display
- Set PIN

2.7.3.4 Bookings

By clicking the menu item **Bookings** €, the booking table will be opened. It shows all bookings and the corresponding account balances. Payments and deposits can be performed from within this view.

The default table view shows the guest's name, the bookings amount, the current credit balance after the booking, the booking timestamp, the cashier, and the optional note for the booking. Automated bookings are noted by the cashier `syscable`.

The **Neu** button initiates a new booking. Within the new window, the guest must be selected for whom the booking should be maked. Therefore, the ? symbol must be clicked and a guest selection opens.

The **Booking Typ** defines if a booking is a `Payment`, a `Deposit`, or a `Daily Rate`. The booking's **Amount** must be entered in the next field. Negative bookings are not possible; a deposit can be made by selecting the corresponding booking type. The **Note** field offers the posibility to note a free text describing the booking.

By clicking the **Save** button, the booking will be persisted in the database and the window will be closed. The new booking appears in the booking table.

After the booking was persisted, it is accounted to the guest's account. A booking receipt will be created automatically and will be printed or saved (as configured).

As the guest's current credit balance is periodically checked, previously locked guests (e.g. due the payment type `prepaid`) may be unlocked again if their balance is positive again, otherwise they remain locked. In the same manner currently unlocked guests will be locked if their account balance is negative and they have the payment type `prepaid`.

Using the printer symbol, a booking overview can be printed for the selected guest.

2.7.3.5 Daily Rates

The menu item **Daily Rates** allows the definition of new daily rates. They must be created once in order to be available for assignment to guests during the check in.

Daily Rates will be assigned automatically to guests via a system background service. For each assignment, a corresponding booking will be created as well.

Each daily rate has an unique **Name**, an **Amount**, a **Type**, and an optional **Note**.

The type defines in which interval the daily rate will be accounted. Possible values are `Daily Charge`, `Monthly Charge`, and `One Time Charge`.

Daily rates of the type `Daily Charge` will be accounted shortly after the check in and then every night to the guest's account.

Daily rates of the type `Monthly Charge` will be accounted shortly after the check in and then every first of each following month to the guest's account.

Daily rates of the type `One Time Charge` will be accounted only once after the check in.

2.7.3.6 Guest Extensions

The menu item **Guest Extensions** lists all extensions that are marked as `Guest Extension`. This property can be set either from within the Configuration Wizard or by checking the checkbox in the extension list.

In the guest extension view, a planning view for the selected extensions can be opened. This is a monthly overview showing which extension is used or planned during which days.

From within the guest extension list, new guests can be checked in directly for unplanned extensions. Checked in guests may also be modified or checked out directly without the need to open the Guest view.

2.7.4 Administrative Settings

Introduction

After the configuration of the telephony switch, optionally with the assistant of the OpenScape Accounting Configuration Wizard, all extensions are available within the application. Currently, only OpenScape Business V2 (using CSTA or WSI) and OpenScape 4000 are supported (other systems may be supported on request).

> **IMPORTANT:** When using an OpenScape Business V2, the CSTA interface must be available. For the WSI, an OpenScape Business V2R3 is required.

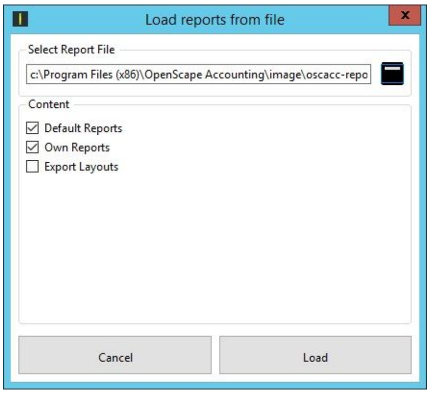
2.7.4.1 Welcome Reports

The module "Welcome" uses several special reports like the Check In Receipt or the Guest List. These reports cannot be issued using the Print Analysis mask. The reports must be assigned to the corresponding tables in order to be available to the users. Normally, this is done during the import of the report file.

IMPORTANT: After the first start of OpenScape Accounting, the default reports must be imported once.

IMPORTANT: The import is done via the native client's **Report Writer** tab. The default report file is located in the directory `<Installationspfad>\image` (filename: oscacc-reports.st).

After having selected the report file, the scope must be defined. **Default Reports** must be selected in order to enable the import of the default reports.



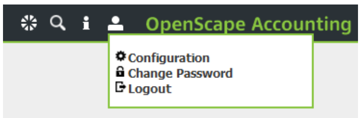
Clicking **Load** initiates the import of the reports.

After a fresh installation, when being asked if the default reports should be overridden, it must be confirmed by selecting `Yes`. The second question if the default report assignemnt should be restroed, should be also answered by clicking `Yes`.

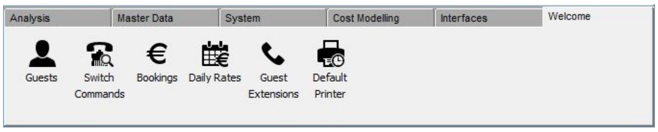
2.7.4.2 Default Printer

OpenScape Accounting allows to configure a user specific printer which is used by the Welcome module. After logging in and clicking the **Default Printer** icon, a mask shows up with all available printers. The printer must be a local printer at the machine where the print service is located (local may also be using a direct TCP connection. Mapped network printers are not supported).

In the web application, the default printer can be defined from within the user menu.



Within the native client, the icon is located in the Welcome tab.



2.7.4.3 Alarming

The Welcome-Module is able to raise alarms in case of non-running services or unsuccessfully executed switch commands. These alarms are shown during the login as well as periodically while being logged into the application. By that, potential difficulties may be seen early and can be elimited directly.

The activation of the alarming can be done via the Configuration Wizard.

NOTICE: All alarms are listed in the tab **Accounting** at **System** (cf. chapter Alert Log)

Constant	Description
WelcomeModuleCheckEnabled	Enables or disables the notifications
WelcomeRefreshTimePopup	Enables or disables an additional periodical full screen notification
WelcomeRefreshTime	Defines the check interval in seconds (default: 180)
WelcomeCheckTime	Defines the check interval for the services in seconds (default: 180)
WelcomeMaxError	Defines, how many switch commands must fail at least within the interval prior to raising an alarm. Below that value, just a notification will be shown.
WelcomePrintServer	Stores the timestamp of the last activity of the print service
WelcomeSwitchCommandService	Stores the timestamp of the last activity of the switch command execution service

WelcomeDailyAssign	Stores the timestamp of the last activity of the booking service

NOTICE: The constants are located in the tab **Administration** at **Constants** (cf. chapter Constants). There, they can be created or modified.

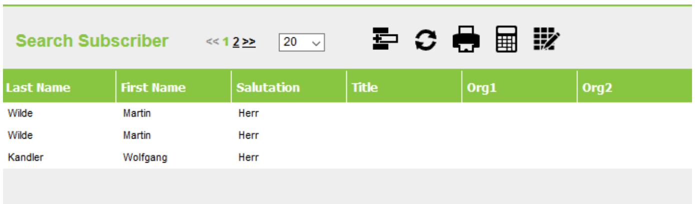
2.8 ETB

Directory Enquiries (electronic telephone book)

The directory enquiries function allows searching though all subscriber and extension data stored in the database. The base for all enquiries are the assignments between extensions and subscribers.

Activating Directory Enquiries

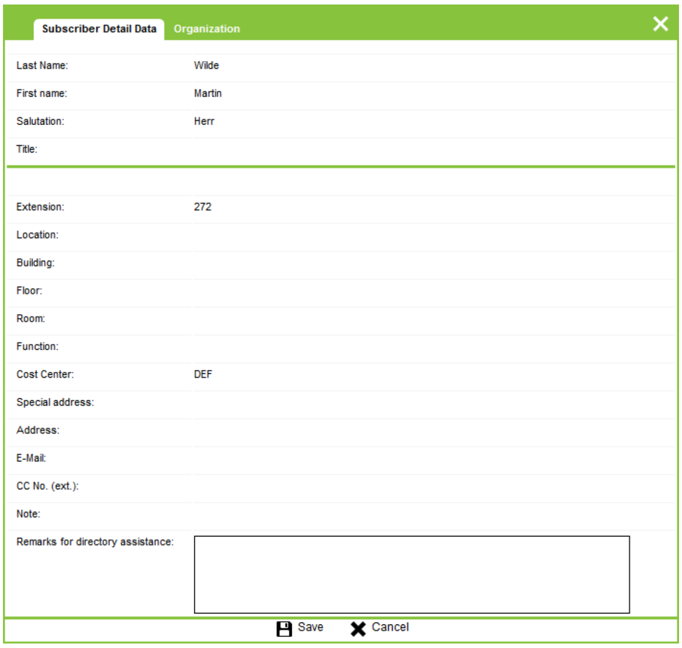
Select **Directory Enquiries** item from the **ETB** menu. The enquiry management control window appears on the screen. In the table are all combinations of extensions and subscribers listed which are still valid.



Searching the directory

In addition to the standard filtering possibilities the search criteria may be entered into a single input field and finished with the return key or a click on the loupe icon. Then all matching entries with the search criteria in the fields surname, first name, organization level 1 to 5, function, location and building.

A click on the folder icon opens a detail view of the marked entry / entries. If a single entry is marked in the control window, a maximum number of 50 entries before and after the selected entry can be scrolled with the arrow icons in the right upper corner. Otherwise all selected entries may be scrolled:



All field contents may be copied, but not modified. Only the contents of the field **remark directory assistance** may be modified by click on the icon right the field label.

3 Appendix

Introduction

In this chapter covers, additional information are presented. They cover general accounting topics and basic workings of OpenScape Accounting.

3.1 Call-Types

Introduction

OpenScape Accounting supports the reporting for different call types. For instance, a report may be configured to contain only outgoing calls. These call types will be explained in the following section.

Incoming	All incoming calls using PSTN
Internal	All internal calls within the PABX
Outgoing	All outgoing calls using PSTN
T2T (Trunk-to-Trunk)	All Trunk-to-Trunk calls using incoming and a outgoing PSTN
Breakout-Incoming	All internal (incoming) calls using PSTN because of problems while using the internal network
Breakout-Outgoing	All internal (outgoing) calls using PSTN because of problems while using the internal network
Out-On-Net	All outgoing calls between two or more PABXes using the internal network (without using a PSTN)
In-On-Net	All incoming calls between two or more PABXes using the internal network (without using a PSTN)

Depending on the used PABX system and the switch environment it might be that not all possible call types occur within the software. Additionally, the categorization of a call can be influenced by modifying the used PID file.

3.2 Utilization Statistics

Introduction

The utilization statistics provide two exports to Microsoft Excel, visualizing the utilization of a trunk or a gateway on an hourly or minutely basis. These values are displayed in absolute values as well as in relative values.

It is also possible to generate an alert if a gateway is utilized more than 80%.

IMPORTANT: Channels must be assigned to the gateways, otherwiese no utilization can be calculated.

IMPORTANT: Since the analysis is based on CDR data, the alarm cannot be triggered in real time. The alarm is raised as soon as the analysis is getting generated.

Configuration of the Trunk Statistic

The trunk statistics can be enabled for any user group within its group administration. For the table **Gebühren** in the tab **Exports**, a new entry must be added. The **Name** must be `TrunkStatistic`, `Excel` as **Application**. By clicking the new button, a new mapping for the export is getting inserted. In the field **Text**, any text max be entered, for instance `TrunkStatistic`. In the field **Add. Call:**, `<TrunkStatistik>` must be entered.

Usage of the Trunk Statistic

In the connection table, the function **print** -> **Export** must be selected and in the new window `TrunkStatistic`. After starting the export, the following windows appear:

Reporting Period	It can be choosen if a whole day (Reporting Period = `Hour`) or a single hour of a day (Reporting Period = `Minute`) should be analyzed.
Date	The date of the day that should be analyzed must be entered in this window.
Hour	When performing a day based analysis, an hour of the day must be entered. For instance, when entering `14`, the timespan between 14:00 and 15:00 (2pm and 3pm).
Trunk	Finally, the trunk number of the trunk to be analyzed must be given. Afterwards, the values are getting calculated and transferred to Microsoft Excel.

Configuration of the Gateway Statistic

The gateway statistics can be enabled for any user group within its group administration. For the table **Gateway** in the tab **Exports**, a new entry must be added. The **Name** must be `GatewayStatistic`, `Excel` as **Application**. By clicking the new button, a new mapping for the export is getting inserted. In the field **Text**, any text max be entered, for instance `GatewayStatistic`. In the field **Add. Call:**, `<GatewayStatistik>` must be entered.

Usage of the Gateway Statistic

In the gateway table, the function **print** -> **Export** must be selected and in the new window `TrunkStatistic`. After starting the export, the following windows appear:

Reporting Period	It can be choosen if a whole day (Reporting Period = `Hour`) or a single

	hour of a day (Reporting Period = `Minute`) should be analyzed.
Date	The date of the day that should be analyzed must be entered in this window.
Hour	When performing a day based analysis, an hour of the day must be entered. For instance, when entering `14`, the timespan between 14:00 and 15:00 (2pm and 3pm).

After these inputs, the values are getting calulated and transferred to Microsoft Excel.

Execution of the Server Process for the Gateway Statistics

The gateway statistc can also be performed on a regular basis using the OpenScape Accounting Scheduler Service. Therefore, a batch file (`gateway-analysis.cmd`) in the directory `image` of the installation must be created. Its contents must be:

```
C:
Cd "\Program Files\OpenScape Accounting \image"
"C:\Program Files\OpenScape Accounting \bin\visual.exe"
 -noherald "C:\Program Files\OpenScape Accounting \image
\cableserver.im" checkGateways dummy
```

INFO: The path `C:\Program Files\OpenScape Accounting` must be modified according the the environment.

This file is getting specified as external job in a new transport job (node: DummyNode, source file: any new and empty document).

The server process checks all call data of the prevoius day, in which a value in at least one of the fields GATEWAYIN or GATEWAYOUT is present. For each gateway and interval (hour), the call durations (in seconds) are getting summed up. This sum is compared to 80 percent of the maximum number of possible seconds per hour.

The maximum number of seconds is calculated as follows: (Sum of channels of the gateway) * 3600 * 80%

If a gateway does not have any channel specified or is the sum of the channels 0, the gateway is not getting analyzed.

If there is any interval, wherein the duration sum is greater than the limit of 80%, an alert entry will be inserted into the alarm table. If the SNMP agent is configured, a trap will be sent to the OpenScape Fault Management, too.

Site Analysis

The site analysis allows utilization over several gateways. If, for example, several gateways are present at one location, the sum of all available channels is considered during the analysis. Only if the total call duration for such a group of gateways in an interval section exceeds the definable threshold value, an alarm is generated. An overview of the values per site and gateway is also generated in order to allow a more detailed analysis.

Perform Site Analysis

The site analysis can be executed from the native client in the Administration tab in the Batch Processes menu item. In the dialog box Batch Processing the entry **Balance: Site-Utilization Analysis** must be selected.

In succession, the sites to be analyzed, the evaluation interval, the evaluation period, the alarm threshold, as well as whether alarms and / or a report are to be generated.

If all values are specified, the evaluation is started.Depending on the scope of analysis, execution may take a few minutes.

Site analysis by scheduler

The site analysis can also be executed in a scheduled manner. For this, the configuration must be done in the `headless-startup.st` file, which is located in the image directory of the installation directory. The following section is located in the file:

```
 "Syntax: visual.exe -noherald CableServer.im siteAnalysis
start "
 command = 'siteAnalysis' ifTrue: [
  Patch imageType: #financeServer.

  aBlock := [:app |
   | siteAnalysis sitesToAnalyze |
   SNI.CABLEP01 new session: app session.
   SNI.CABLEP01 billUser: (app constant:
'BalanceSchemaUser') value.
   Oracle7Transporter allInstances do: [:each | each
initForQueries].
   SNI.CABLEP01 new initializeCurrency.


   siteAnalysis := SiteAuslastung new initialize.
   Transcript show: 'Starting Site Analysis...'; cr.

   " To define the Sites that should be analyzed, create a
constant named
     SitesToAnalyze, type: String, module: #finance. Its
value must contain a
     semicolon separated list of site names.
     If it is not present, all sites will be analyzed.
   "

   " There are different possibilities to configure the
date/time values.
     Some examples:
   Date values
     - today
    date := Date today.
     - yesterday
    date := Date today subtractDays: 1.
     - first day of this month
    date := Date today subtractDays: (Date today
dayOfMonth - 1).
     - last day of this month
```

```
    date := Date today addDays: (Date today daysInMonth -
Date today dayOfMonth)
     - first day of last month (two lines)
    date := Date today subtractDays: Date today
dayOfMonth.
    date := date subtractDays: date daysInMonth - 1.
     - last day of last month
    date := Date today subtractDays: Date today
dayOfMonth.
     - first day of year
    date := Date newDay: 1 monthNumber: 1 year: Date today
year.

   Time values
     - now
    time := Time now.
     - abitrary time
    time := Time new hours: 15 minutes: 26 seconds: 37.

   All four values must be specified.
   "
   startDate := Date today subtractDays: 1.
   startTime := Time fromSeconds: 0.
   endDate := Date today.
   endTime := Time fromSeconds: 0.

   " The interval that should be used. When specifying
large time ranges and short intervals,
     the analysis will take long time. Most common values
are: 60, 60*60, and 60*69*24 for
     minutes, hours, and days. "
   siteAnalysis intervallInSeconds: 60*60.

   " The minimum threshold that is required to trigger an
alarm in percent. "
   siteAnalysis alertLevel: 80.

   " Generate alarms in the Alarm table? These will be
sent out as traps by the SNMP agent
     - true -> enabled
     - false -> disabled
   "
   siteAnalysis generateTraps: true.

   " Generate the SpreadSheet report?
     - true -> enabled
     - false -> disabled
   "
   siteAnalysis generateReport: true.

   " The absolute filename for the report. The location
must be accessible by the user (i.e. SYSTEM
     if the analysis is scheduled via Scheduler Service).
You may use replacement characters that are
     substituted by the current time values:
     :year: -> Replaced by the current year, e.g. 2017
```

```
    :month: -> Replaced by the current month, e.g. 05
    :day: -> Replaced by the current day, e.g. 01
    :hour: -> Replaced by the current hour, e.g. 06
    :second: -> Replaced by the current minute, e.g. 30
  "
  siteAnalysis reportFilename: 'C:\Reports\Sites
\analysis_:year::month::day:-:hour:.xml'.

  " DO NOT EDIT BELOW "

  siteAnalysis fromTime: (Timestamp fromDate: startDate
 andTime: startTime).
  siteAnalysis toTime: (Timestamp fromDate: endDate
 andTime: endTime).
  sitesToAnalyze := Constant existingObjectWithValue:
 'SitesToAnalyze' at: #name in: CABLEP01 new
 existingSession ifAbsent: [nil].
  sitesToAnalyze := sitesToAnalyze ifNil: [(Site
 objectsIn: CABLEP01 new existingSession) collect: #name]
 ifNotNil: [sitesToAnalyze value tokensBasedOn: $;].
  siteAnalysis sitesToAnalyze: sitesToAnalyze.

  siteAnalysis execute.
  Transcript show: 'all done'.
  ObjectMemory quit.
 ].
].
```

This section describes the configurations that are requested from the client during execution. These are in detail:

startDate / endDate	The Start or end date of the evaluation. Both fixed and/or variable values can be specified here. Examples of possible values:

startDate := '31.01.2017' asDate.	This specifies January 31, 2017 as a fixed start date.
startDate := Date today.	This indicates today's start date.
startDate := Date today subtractDays: 1.	This sets yesterday's date as the start date.
startDate := Date today subtractDays: (Date today dayOfMonth - 1).	This specifies the first day of the current month.
startDate := Date today addDays: (Date today daysInMonth	This specifies the last day of the current month.

	- Date today dayOfMonth).	
	startDate := Date today subtractDays: Date today dayOfMonth. startDate := startDate subtractDays: startDate daysInMonth - 1.	These two lines indicate the first day of the previous month.
	startDate := Date today subtractDays: Date today dayOfMonth.	This specifies the last day of the previous month.
	startDate := Date newDay: 1 monthNumber: 1 year: Date today year.	This specifies the first day of the year.
	The values described above can be used to specify the starting date `startDate` as well as the end date `endDate` .	
startTime / endTime	This value specifies the start time or end time on the previously defined days. Examples of possible values:	
	startTime := Time now.	This indicates the current time.
	startTime := Time new hours: 15 minutes: 26 seconds: 37.	This specifies the fixed time 15:26 and 37 seconds.
	startTime := Time now subtractSeconds: 60 * 60.	This specifies the current time minus 60 x 60 seconds.
	The values described above can be used to specify the starting time `startTime` as well as the ending time `endTime`.	
siteAnalysis intervalInSeconds: 60*60.	This sets the analysis interval to hourly (60x60 seconds).	
siteAnalysis alertLevel: 80.	This sets the alarm threshold to 80%.	
siteAnalysis generateTraps: true.	This activates the generation of alarms in the alarm table. If `false` is specified instead of `true` no alarms	

	are generated. The generated alarms are sent by the SNMP agent as a trap, if this is installed and active.
siteAnalysis generateReport: true.	This activates the generation of the overview report. If `false` is specified instead of `true` no report are generated.
siteAnalysis reportFilename: 'C:\Reports\Sites \analysis_:year::month::day:-:hour:.xml'	This specifies the output path for the report file. The path must be accessible for executing user, means that for example the user `SYSTEM` if the analysis will be started via scheduler service have to have the permission. In the path specification, placeholders can be used, which are replaced during execution. These are: **:year:** Is replaced during the execution by the current year, for example 2017. **:month:** Is replaced during the execution by the current month, for example 05. **:day:** Is replaced during the execution by the current tag during execution, for example 01. **:hour:** Replaced during execution by the current hour, for example 06. **:minute:** Replaced during execution by the current minute, for example 30.

Finally, a batch file with the following content is created:

```
C:
cd "\Program Files (x86)\OpenScape Accounting\image"
..\bin\visual.exe -noherald cableserver.im siteAnalysis
 start
```

The path `C:\Program Files (x86)\ OpenScape Accounting` has to be adapted according to the installation directory. This batch file can now be executed in a timed manner, for example through the OpenScape Accounting Scheduler Service.

3.3 Report Overview

Introduction

OpenScape Accounting offers a variety of reporting categories. The list gives an overview of the available categories and reports. For each report, the reporting period, the call type, the call direction can be defined as well as the objects to be reported. All reports are accessible and schedulable using the Reporting mask.

The reports are designed to display the number of decimal places as configured for the selected currency when printing the costs for single calls. If less or more decimal places should be displayed, it is recommended to define an alternative currency with the conversion factor 1:1 but with the altered number of decimal places.

Extension Reports

Extension Detail	Detail Report. The report shows an itemized bill for each extension including associated fixed costs.
Extension Summary	Total Report. For each extension, the responsible subscriber as well as the number of pulses, rental, service and call charges are shown.
Status Incoming Calls	Total Report. For each extension, the number of calls, the average ringtime, the call time and the number of calls which were answered within and after 15 seconds is shown. The number of unanswered calls (busy, lost, rereouted, others) is shown, too. This report is only usable with OpenScape Voice data.
Status Incoming Calls (Detail)	For each extension, the values based on the report `Status Incoming Calls` are shown, borken down on each hour. This report is only usable with OpenScape Voice data.
Status of Incoming Calls (Hourly Statistic)	For all selected extensions, the summed values based on the report `Status Incoming Calls` are shown, additionally broken down on each hour. This report is only usable with OpenScape Voice data.
Toplist Extension	Total Report. This report displays various top lists based on the calls of the selected extensions. By default, the top 10 values are shown; this value can be adjusted by the constant `ReportToplistNumberOfRows`. For internal extensions, for the dialed number, and for the tariff category, the

	sums of call duration, costs and each average values are shown.
Call Direction Statistic	Total Report. This reports shows for each selected extension the number of calls per call direction (Incoming, Outgoing, Internal, Inonnet, Outonnet, Others).

Cost Center Reports

Cost Center Detail	Detail Report. For each cost center the (partially) assigned fixed costs are listed, if present. Below, an overview over the cost center's subscribers and their itemized bills is given.
Cost Center Summary	Total Report. For each cost center the subscribers with their fixed costs and telephony costs are listed. Additionally, (partially) assigned fixed costs for the cost center are listed.

Cost Center Total Reports

Cost Center Total	For ech cost center, the sum of fixed costs and telephony costs are listed.
Monthly Comparision for Cost Centers	For each cost center, the telephony costs for the last month (max. 13) are listed. The reporting period defined the month to be taked care of. The change from the last month to the month before is shown as well as the total sum during the reporting period. Please take care of legal store and deletion periods.

Organization Reports

Organization Summary	Detail Report. For each organizational unit, the fixed costs and telephony costs are listed as well as the number of calls. The report is hierarchical, i.e. for each unit up to two lower subunits the sums are shown either.
Monthly Comparision Organizations	Total Report. For each organizational unit, the telephony costs for the last month (max. 13) are listed. The reporting period defined the month to be taked care of. The change from the last month to the month before is shown as well as the total sum during the reporting period. Please take care of legal store and deletion periods.

Organization Total	Total Report. For each organizational unit, the fixed costs and telephony costs are shown as well as the sum of pulses and duration.

Organization-Extension Reports

Organization/Extension Detail	Detail Report. For each oragnizational unit as well as for up to two subunits the associated extensions with their sums for fixed costs, telephony costs, and duration sums are shown. Additionally, an itemized bill is shown for each extension.
Organization/Extension Summary	Total Report. For each organizational unit as well as for up to two subunits, the associated extension are listed with their sums for fixed costs, telephony costs, and sums of duration.
Monatsvergleich Organisation/ Nebenstelle	Total Report. For each organizational unit the the telephony costs for each extension for the last month (max. 13) are listed. The reporting period defined the month to be taked care of. The change from the last month to the month before is shown as well as the total sum during the reporting period. Please take care of legal store and deletion periods.

PIN Reports

Account Detail	Detail Report. For each PIN, an itemized bill is created.
Account Summary	Total Report. For each PIN, the number of calls as well as the sum of telephony costs and duration is shown.

Subscriber Reports

Subscriber Detail	Detail Report. For each subscriber, an itemized bill is created.
Subscriber Detail with Exemption	Detail Report. For each subscriber, an itemized bill is created. Prior to showing the total sum, the configured exemption is regarded, i.e. the amount is subtracted from the calculated costs.
Subscriber Detail with Limit	Detail Report. For each subscriber, an itemized bill is created. Prior to showing the total sum, the configured limit is regarded, i.e. the amount is

	only getting shown if it is above the limit.
Subscriber Summary	Total Report. For each subscriber, the number of calls as well as the sum of duration and costs is shown.
Subscriber Summary with Exemption	Total Report. For each subscriber, the number of calls as well as the sum of duration and costs is shown. The total amount for each subscriber takes care of the exemption, i.e. it is getting subtracted from the calculated costs.
Subscriber Summary with Limit	Total Report. Total Report. For each subscriber, the number of calls as well as the sum of duration and costs is shown. The total amount for each subscriber takes care of the limit, i.e. it is getting shown if the amount is above the limit only.

Tarif Category Reports

Tariff Categorie Detail	Detail Report. For each tariff category, an itemized bill including the internal extension, the dialed number, and the sum of duration and costs is created.
Tariff Categorie Summary	Total Report. For each category, the number of calls, the sum of duration, and the sum of costs is shown.

Gateway Reports

Gateway Detail	Detail Report. For each gateway, an itemized bill including the call direction, the extension, date and time, dialed/incoming number, and the costs is shown. The report can only be used for OpenScape Voice data.
Gateway Summary	Total Report. For each gateway, the number of incoming and outgoing calls as well as the total duration and costs is shown. Additionally, the percentage distribution of incoming and outgoing calls for the gateway as well as its share to all calls is given. For all values, the total sums are displayed. The report can only be used for OpenScape Voice data.
Gateway Utilization	Total Report. For each gateway, the number of calls, the occupancy (call seconds), and the utilization (based on the configured channels) is shown, divided hourly and displayed for each

	day separately.The report can only be used for OpenScape Voice data.
Call Analysis	Total Report. The report performs the call analysis for all selected gateways in sum. Details for the report can be taken from the chapter Gateway Statistic Reports . The report can only be used for OpenScape Voice data.
Gateway Call Statistic	Total Report. This reports shows the same values as the report `Call Analysis` but seperated for each gateway. Additionally, the costs per tariff category are shown. The report can only be used for OpenScape Voice data.

NOTICE: Fixed cost information such as price for rent, material, and setup will be displayed in business reports only.

3.4 Gateway Statistic Reports

Introduction

The Gateway Statistic Reports are available at the Print Schedulers Mask when grouping by Gateway. Then can be used for any gateway defined in the system. The report **SummaryCallStatistics** shows a summary of the call data of all selected gateways whereas the report **GatewayCallStatistic** is displaying information for each indivisual gateway.

Quantity of calls

This section shows the relation of the calls for each Attempt Indicator values (absolute and relative). Only those Attempt Indicator values are shown that occured within the reporting period.

NOTICE: A list of all possible values including a shot explanation is available in the OpenScape Voice Interface Manual.

Duration of Calls

This section shows the average call durations of incoming and outgoing calls for the selected gateways and their relation. The values can be interpreted as follows:

Average Incoming with Gateway (s)	Average call duration of all incoming and internal incoming calls in seconds, for which no incoming PSTN gateway was used.
Average Incoming without Gateway (s)	Average call duration of all incoming calls for which an incoming PSTN gateway was used.

Avarage total	Average of those two values.
Average Outgoing with Gateway (s)	Average call duration of all outgoing and internal outgoing calls in seconds for which no outgoing PSTN gateway was used.
Average Outgoing without Gateway (s)	Average call duration of all outgoing calls for which an outgoing PSTN gateway was used.
Avarage total	Average of those two values.
Ratio outgoing / incoming	Relation of the average values of incoming and outgoing (outgoing/incoming=ratio).

3.5 Constant Table

Introduction

OpenScape Accounting uses different constants for configuration purposes. These constants can be viewed from within the Constant Management. Normally, a manual editing of these values is not required as they are defined by the Configuration Wizard. For verification purposes, the lookup in the table is often the faster way.

Name	Description	Default Value
AKZTypLanguageCheck	Indicates, that the Names of the Call-Types have been initialized according to the default language.	
AlarmOnRejectedCalls	This value indicates weather the alerting function on blocking times is enabled (true) or not (false).	false
BackupDirectory	This value defines the directory into which the automated backups should be placed. If the value is empty, the default directory will be used.	
BalanceSchemaUser	This value points to the name of the database schema user which contains the Balance database objects. Do not edit this value.	finance

Name	Description	Default Value
ConstantLanguageCheck	Indicates, that the comments of the constants have been initialized according to the default language.	
createNewUser	This value indicates weather the master data import should create new user logins (true) or not (false).	false
CreateUnknownExtensions	This value indicates weather new switches should get rules for creating unkown extensions and pins automatically (true) or not (false).	false
dbVersion	Database schema version. Do not edit this value.	
DELTransactionSize	This value indicates the transaction size for the Cleanup Service.	255
DisableCheckForAnonymousNumbers	Enables the check for anonymous numbers (false) or disables it (true).	false
DisableSingleReports	Defines weather reports on selected objects are enabled (true) or disabled (false). If disabled, only a random number of objects can be evaluated.	false
DMSLineSeparator	This value references the used line separator for the OpenScape Manager synchronization. It must fit to the used request files.	10
DMSTransactionSize	This value defines the transcation size to use during the OpenScape Manager import.	255
financeDbVersion	Database schema version. Do not edit this value.	

Name	Description	Default Value
GEBLineSeparator	This value references the used line separator for the CDR import. It must fit to the received cdr files.	10
GEBTransactionSize	This value defines the transcation size to use during the CDR import.	255
HistoryEnabled	Defines, wheather the history function is activated (true) or not (false). This affects the master data as well as the CDR import.	false
HomogeneousNumberingPlan	The value indicates weather the numbering plan within the application is homogenous (true) or not (false).	true
LogUnknownCDRs	Defines weather unknown CDR record should be logged to a separate file (true) or if logging of those is disabled (false).	false
maxLengthExtension	Defines the maximum size of an extension length.	22
newUserGroup	Defines the name of the group for newly created users by the master data import.	
newUserLogin	Defines the login name template for new created users.	
newUserPassword	Defines the initial password for new created users.	
OracleServer	Defines the Compatibility level of the Oracle Database. Set to 10 when using Oracle 10 or above.	10
PDFDirectory	Defines the directory where PDF reports should be saved to.	

Name	Description	Default Value
PinReportEnabled	This value indicates weather the reporting for PINs should be enabled (true) or disabled (false).	true
Rufnummer	This value defines in case of which property changes an extension history object should be created.	
StatisticIncomingPerOrgShowAll	For the reports "Status of Incomin Calls (Organization)", this value this value defines if only extensions of the selected organizational unit should be shown (false) or if extensions of subunits should be shown as well (true).	false
Teilnehmer	This value defines in case of which property changes a subscriber history object should be created.	
uniqueSwitch	Overrides the switch name when importing master data for the OpenScape Manager. Do not set this value for regular usage.	
VAT	Defines the VAT value.	19
WelcomeLockingThreshold	This values defines the credit balance, below which guest using the prepaid method should be locked. If the constant is not present, 0.0 will be assumed.	n/a
withThomas	Defines wheather the Atradis<THoMAS output is enabled (true) or not (false).	false
workingHours	Defines the working hours for a business day (for some reports). The format is fromHour/ toHour, e.g. 7/17.	7/18

3.6 Microsoft Excel Configuration

Introduction

OpenScape Accounting is able to transfer tables directly to Microsoft Excel using a DDE interface.Additionaly, some charge analyses are getting transferred to Microsoft Excel. The setup of the Excel connection is done by the installation routine by default. If Excel is getting installed after OpenScape Accounting, the settings must be edited manually.

> **NOTICE:** If simple table views with a large amount of rows should be transferred to Excel, the usage of the CSV or SpreadsheetML format is recommended. It is significantly faster that an DDE connection.

Configuration

For a succesful configuration, the file `atradis.ini` must be edited. It is located in the `image` subfolder of the installation directory.

Within the section **Constant**, there are entries `Excel` and `Excelversion` which must be adapted. `Excel` must point to the full path to the program `Excel.exe`. The setting of `Excelversion` depends on the version and language of Microsoft Excel. It is alwas `<version>#<language>` whereas `<version>` is one of the values `97`, `XP`, `2003`, `2007`, `2010`, `2013`, or `2016` and `<language>` of one `DE`, `EN`, or `ES`. If a German Excel 2010 version is used, the setting must be `2010#DE`, in case of an English Excel 2016 it must be `2016#ES`.

A typical configuration section might be likt this:

```
[Constant]
Excel="C:\Program Files\Microsoft Office 15\root
\office15\EXCEL.EXE"
Excelversion="03#en"
Winword="C:\Program Files\Microsoft Office 15\root
\office15\WINWORD.EXE"
Wordversion="97"
```

After a modification of the configuration file, OpenScape Accounting must be restarted in order to apply the changes.

3.7 Language Settings

Introduction

OpenScape Accounting is shipped with the languages German, English, and Spanish. The setup as well as the application (native client and web application) are able to show all languages. The shown language depends on multiple factors which will be discussed in the following.

Default Language

When starting setup, a language can be selected. In this language, the whole setup application will be shown (exception: some buttons in a small number of dialogs are shown in the operating system's language). The installation language is also used as default language for the application. The default language affects the following parts:

- The shortcuts in the Start Menu are shown in this language.
- The application will be shown in this language before a user is logged in.
- The Configuration Wizard is shown in this language.
- The syscable's group is set to this language.
- The backup configuration will be shown in this language.

Editing the Default Langugae

The default language can be adjusted in the file `atradis.ini` (entry `language`). This affects the Configuration Wizard, the backup configuration, and application before the login; the Shortcuts will not be modified.

The language of the native application is defined by the setting for the logged in user's group. It can be adjusted within the Group administration.

Language of the Web Application

The menus of the web application will be displayed in the preferred browser language. If no matching preferred language can be determined, English will be used.

Istructions how to edit the preferred language can be found in th help of the browser.

The language of the column headers of the tables within OpenScape Accounting are shown as defined within the table definition of the corresponding group.

Column Headers

The column headers in OpenScape Accounting can be defined freely with user defined captions. When opening a table for the first time (via group administration or via the menu item), a default table view will be created. The column headers are created in the language of the currently logged in user.

If the language of a group is getting changed, the column headers will not be updated automatically. If no customizations were performed to the table defintion, it can be simply deleted and recreated in the new language.

3.8 Administrative Batch Functions

Introduction

OpenScape Accounting offers multiple administrative batch functions. These can be used (depending on their functionality) by administrative users only (i.e. `syscable` or `syscable_en`) or by all users having access to the batch functions. The available batch functions will be explained in the following. By using Permissions, access to abitrary batch function can be limited to several user groups.

Load program patch

Import of a new patch file. The application must be restartet to apply the patch.

This batch may be used by all users.

This batch imports a patch file (*.hdr and *.ptc). After the import, the patch file will be given the extension .imported. To enable the patch file, the application and the services need to be restarted. Details for each patch can be depicted from the corresponding release notes.

Load program patches from directory

This batch loads all patch files located in the patch directory (constant patchDirectory: <directory> or <directory>) und renames the source files to *.imported. You have to restart the application to apply the patches.

This batch may be used by all users.

This batch imports all patch files (*.hdr and *.ptc) out of the configured patch directory. After the import, the patch file will be given the extension .imported. To enable the patch file, the application and the services need to be restarted. Details for each patch can be depicted from the corresponding release notes.

Default Report Assignment

Restore the default assignment of reports?

This batch may be used by the users `syscable` or `syscable_en` only.

This batch assignes all default reports to all table definitions. For instance, each table gets the reports `Default Table` and `Default Table (Landscape)` assigned. In addition, the reports for the analysis will be reassinged, so that all default reports are available again.

Balance: Reset Sepa XML state

This batch resets the information that a call was already exported via Sepa XML. You may specify a time period in between which the reset should be performed.

This batch may be used by the users `syscable` or `syscable_en` only.

Within each call data record it is marked wether it was exported within a Sepa XML export. By that, a record cannot be charged multiple times. This batch function removes the mark. A time period for within the calls get unmarked can be specified.

Import site definitions

Imports the association of sites and extensions from a csv file. Each line must be build like this: <site name>;<extension>

This batch may be used by all users.

This batch offers a way to assign extensions to sites. From within a CSV file, the assignments will be read. Each extension is listed in its own line, its structure is always `<Sitename>,<Extension>`. If the extension does not exist, it will be created automatically and assigned to the switch named `DEF`.

Balance: Re-apply suppression

The digit suppression of the dialed number will be re-applied. The time period for the re-application can be defined. If no start date is given, the application starts with the oldest call. If no end date is given, it ends with the newest call. It may also defined that the check for anyonmous numbers should be performed as well.

This batch may be used by the users `syscable` or `syscable_en` only.

The masking of the dialed number is getting applied during the call data import. Therefore, changes within the digit suppression configure do not affect the data which is already imported. This batch function re-applies the digit suppression according to the current definitions. If the option `check again for anonymous numbers` was selected, all calls will be checked if they were done to or from an anonymous number. In that case, they will be made indecipherable as during the call import. A time period for within the re-application gets performed can be specified.

Balance: Mixed Network Join

This batch accumulates CDR data based on their Global Call ID. If any part contains PIN information, these information will be transfered to all other parts with the same Global Call ID. The outgoing part will be recalculated afterwards. The interval can be defined by the constant "MixedNetworkInterval". The time period in days has to be specified.

This batch may be used by all users.

This batch joins multiple call data parts for a mixed network scenario and performs a recalculation afterwards. Details on the mixed network functionality can be found in the Service Manual.

Balance: Re-calculation

The costs for calls are calculated again according to the current tariff table. The interval can be defined. If no start date is specified, the calculation starts at the date of the first call. If no end date is specified, the calculation will be done up to the newest call.

This batch may be used by all users.

The pricing for the calls is performed during the import of the data. If the tariffs are getting changed, a re-calculation is neccessary which can be initiated by this batch function. A time period for within the calls get recalculated can be specified. It is also possible to recalculate the charges only for the main or the second carrier as well as for both at the same time.

Call to anonymous number cannot be recalculated as the dialed number is not known anymore.

Balance: delete calls

This batch deletes all calls within a given period. Thereby, all referencing LinkRecords will be deleted as well as the associated general fields.

This batch may be used by the users `syscable` or `syscable_en` only.

If malicious call data (e.g. due to a misconfiguration) was imported, this batch allows to delete the data within a given time period.

Call data record that are still assigned to bookings within the module Welcome will not be deleted in order not to invalidate the billings.

Balance: Site-Utilization Analysis

This batch run performs an utilization report (based on the call data) for sites, so groups of gateways can be analyzed. The sites, the time period, and the alarming threshold can be defined. For each run it can be chosen whether an alarm and/or a report shoudl be generated.

This batch may be used by all users.

This patch performs a call data based utilization analysis for sites. As a precondition, gateways have to be assigned to sites and channels to the gateways. After having started the batch, the sites to be analyzed can be selected. Afterwards, the analysis interval (minutes, hours, or days) can be specified as well as the corresponding time period. Finally, a threshold can be defined. If it is exceeded, an alarm can be raised. For each analysis, a report can be created if desired.

As the analysis is based on call data record, it supports in analysing bottlenecks that have occured. The current utilization cannot be detected as well as a complete failure of a gateway (OpenScape Accounting would recognize an utilization of 0% for that gateway at that time as no CDR data is available). During an analysis, a top down approach should be used, i.e. a larger interval in the beginning to detect peaks. For these peaks, a more detailed analysis should be performed.

During the calculation of the utilization values, for each interval step all calls having at least a part of their durartion within the interval, will be regarded. The corresponding partial call duration seconds will be calculated against the maximum available seconds (number of channels of the site multiplied with the number of seconds within the interval). That implies, that when having a larger interval, a very short utilization cannot be seen in every case. Anyway, larger periods should not be analyzed using a short interval as the calculation may take a lot of time.

The site utilization analysis can be scheduled. Therefore, a batch file with the following content must be triggered using the Scheduler Service or via the Task Scheduler service (the path to the OpenScape Accountinginstallation must be adapted accordingly):

```
C:
Cd "\Program Files (x86)\OpenScape Accounting\image"
..\bin\visual.exe -noherald cableserver.im siteAnalysis
 start
```

The configuration of the sites to be analyzed can be done within the file `headless-startup.st`. There is a blockHier Hier befindet sich ein Block with configuration examples for the different options:

```
  "Syntax: visual.exe -noherald CableServer.im siteAnalysis
 start "
  command = 'siteAnalysis' ifTrue: [
   Patch imageType: #financeServer.

   aBlock := [:app |
    | siteAnalysis sitesToAnalyze |
    SNI.CABLEP01 new session: app session.
    SNI.CABLEP01 billUser: (app constant:
 'BalanceSchemaUser') value.
    Oracle7Transporter allInstances do: [:each | each
 initForQueries].
    SNI.CABLEP01 new initializeCurrency.


    siteAnalysis := SiteAuslastung new initialize.
    Transcript show: 'Starting Site Analysis...'; cr.
```

```
   " To define the Sites that should be analyzed, create a
constant named
     SitesToAnalyze, type: String, module: #finance. Its
value must contain a
     semicolon separated list of site names.
     If it is not present, all sites will be analyzed.
   "

   " There are different possibilities to configure the
date/time values.
     Some examples:
   Date values
     - today
    date := Date today.
     - yesterday
    date := Date today subtractDays: 1.
     - first day of this month
    date := Date today subtractDays: (Date today
dayOfMonth - 1).
     - last day of this month
    date := Date today addDays: (Date today daysInMonth -
Date today dayOfMonth)
     - first day of last month (two lines)
    date := Date today subtractDays: Date today
dayOfMonth.
    date := date subtractDays: date daysInMonth - 1.
     - last day of last month
    date := Date today subtractDays: Date today
dayOfMonth.
     - first day of year
    date := Date newDay: 1 monthNumber: 1 year: Date today
year.

   Time values
     - now
    time := Time now.
     - abitrary time
    time := Time new hours: 15 minutes: 26 seconds: 37.

   All four values must be specified.
   "
   startDate := Date today subtractDays: 1.
   startTime := Time fromSeconds: 0.
   endDate := Date today.
   endTime := Time fromSeconds: 0.

   " The interval that should be used. When specifying
large time ranges and short intervals,
     the analysis will take long time. Most common values
are: 60, 60*60, and 60*69*24 for
     minutes, hours, and days. "
   siteAnalysis intervallInSeconds: 60*60.

   " The minimum threshold that is required to trigger an
alarm in percent. "
   siteAnalysis alertLevel: 80.
```

```
    " Generate alarms in the Alarm table? These will be
 sent out as traps by the SNMP agent
      - true -> enabled
      - false -> disabled
    "
    siteAnalysis generateTraps: true.

    " Generate the SpreadSheet report?
      - true -> enabled
      - false -> disabled
    "
    siteAnalysis generateReport: true.

    " The absolute filename for the report. The location
 must be accessible by the user (i.e. SYSTEM
      if the analysis is scheduled via Scheduler Service).
 You may use replacement characters that are
      substituted by the current time values:
      :year: -> Replaced by the current year, e.g. 2014
      :month: -> Replaced by the current month, e.g. 05
      :day: -> Replaced by the current day, e.g. 05
      :hour: -> Replaced by the current hour, e.g. 15
      :second: -> Replaced by the current minute, e.g. 05
    "
    siteAnalysis reportFilename: 'C:\Reports\Sites
\analysis_:year::month::day:-:hour:.xml'.

    " DO NOT EDIT BELOW "

    siteAnalysis fromTime: (Timestamp fromDate: startDate
 andTime: startTime).
    siteAnalysis toTime: (Timestamp fromDate: endDate
 andTime: endTime).
    sitesToAnalyze := Constant existingObjectWithValue:
 'SitesToAnalyze' at: #name in: CABLEP01 new
 existingSession ifAbsent: [nil].
    sitesToAnalyze := sitesToAnalyze ifNil: [(Site
 objectsIn: CABLEP01 new existingSession) collect: #name]
 ifNotNil: [sitesToAnalyze value tokensBasedOn: $;].
    siteAnalysis sitesToAnalyze: sitesToAnalyze.

    siteAnalysis execute.
    Transcript show: 'all done'.
    ObjectMemory quit.
   ].
  ].
```

Gateway Stress Check

All gateways are checked if 80% of their capacity is reached. On this case an alarm record will be created.

This batch may be used by all users.

The gateway stress check works basically the same way as the site utilization does; it just works based on gateways instead of sites. Therefore, the analysis is performed on a per gateway base.

Government Agency Function: Reassessment of Private Calls

This batch reassesses all private calls within the given month if their sum is below a specified number.

This batch may be used by the users `syscable` or `syscable_en` only.

If the government agency functions are properly configured by the Configuration Wizard, this batch function can be used to reassess private to business calls. During the reassessment, all private calls within the given period are summed up for a subscriber or an extension. If the sum is below the configured threshold, the calls will be reassed to business calls.

> **NOTICE:** The batch function should be executed only if ensured that all calls for the period are imported. It should not be executed multiple times for the same interval as already reassessed calls would not be taken into account.

> **NOTICE:** in this description, private and business calls are used as representatives for two arbitrary call types. They can be defined within the Configuration Wizard.

Balance: Fraud-Check

This batch performs the frauf check for all definied and active fraud entries.

This batch may be used by the users `syscable` or `syscable_en` only.

This batch executes a fraud detection run for all active fraud detection definitions. Details on the Fraud Detection Module can be found in the chapter Fraud-Detection-Entries.

Alter syscableini Password

This batch assists in altering the syscableini password. It should be used only by advanced system administrators.

This batch may be used by the users `syscable` or `syscable_en` only.

By default, the database user `syscableini` is used during the two step login procedure, to decrypt the password which is required for the data connection. In some installation environments it is required to modify the default password. This can be done using this batch function. After having entered the new password twice, it can be automatically altered within the database. Additionally, a database secret is shown. This secret must be placed within the configuration files `atradis.ini` and `webserver-X.cfg`. If additional clients were installed, the database secret must be placed there as well.

> **NOTICE:** Not providing the database secret or proving a wrong secret makes all logins impossible in the native as well as in the web client (exception: syscable is able to login into the native client).

Copy Table Descriptions

This batch allows to copy table descriptions from one group to another. Only those descriptions will be copied that are not yet present in the target group.

This batch may be used by all users.

Welcome: Reassign Daily Rates

This batch corrects false or not assigned daily rates. Therefore, an interval is specified for which the corrections will be performed. Afterwards, the corrections will be processed for all non-checked out guests. That is:

- All current bookings will be deleted.
- Day by day, all daily rates, bookings, and call charges will be reassigned.

While the corrections are running, the corresponding guest may not show the correct credit balance and may be locked/unlocked shortly.

This batch may be used by all users.

Welcome: Gast-Nebenstellen-Synchronisierung

This batch performs a synchronization of the guest extensions with the switch. Thereby, for all guest extensions the display name will be updated and the PIN and permission profile set.

The application is leading, i.e. the current switch settings will not be checked.

This batch may be used by all users.

3.9 Default Passwords

Introduction

OpenScape Accounting uses several default password. These passwords are also listed in the Security Checklist. They should be changed after the installation.

Default Passwords

The following default passwords are used within the application:

System login to the OracleXE database	User: `system`, Password: `oraclexe`
System login to the PostgreSQL database	User: `postgres`, Password: `postgres`
syscable user for the application or sqlplus	User: `syscable`, Password: `syscable`
syscableini user for the two-step login	User: `syscableini`, Password: `syscableini`
Password for the Configuration Wizard	For the Configuration Wizard, the password of the `syscable` user is used as well.
Password for the Scheduler Service	`CDR-C551` The password cannot be changed.

3.10 PID Files

Introduction

OpenScape Accounting uses PID files to extract the required information from a telephony switch's CDR record in order to process it. Dependin on the used switch and environment, the corresponding PID file must be specified.

In the directory `<Installation Directory>\pid-orginal\`, there are the most current files. They will be updated during a software update as well. In the directory `<Installation Directory>\pid\`, customer specific files can be stored, they will not be modified automatically during an updated.

Unify Telephony Switches

Switch	COL-Input Line	COL-Output Line	E164?	unique numbering scheme?	PID
OS 4000 V4	AMPM_UV4	H4000_HPAM_E164	yes	yes	H4K_E164Standalon
OS 4000 V4	AMPM_UV4	AM-WIN 2.0	no	yes	HP4000_Dupl_with_I
OS 4000 V4	AMPM_UV4	AM-WIN 2.0	no	no	HP4000_Dupl_withou Nodenr.pid
OS 4000 V4 Mixed Network	AMPM_UV4	H4000_HPAM_E164	yes	yes	H4K_MixedNetwork_ Nodenr.pid
OS 4000 V4	AMPM_UV4	H4000_HPAM_E164	yes	yes	H4K_E164Standalon
OS 4000 V5	AMPM_UV5	AM-WIN 2.0	no	yes	HP4000_Dupl_withou Nodenr.pid
OS 4000 V5	AMPM_UV5	AM-WIN 2.0	no	no	HP4000_Dupl_with_I
OS 4000 V5 Mixed Network	AMPM_UV5	H4000_HPAM_E164	yes	yes	H4K_MixedNetwork_ Nodenr.pid
OS 4000 V6	AMPM_UV6	H4000_HPAM_E164	yes	yes	H4K_E164Standalon
OS 4000 V6	AMPM_UV6	AM-WIN 2.0	no	yes	HP4000_Dupl_withou Nodenr.pid
OS 4000 V6	AMPM_UV6	AM-WIN 2.0	no	no	HP4000_Dupl_with_I
OS 4000 V6 Mixed Network	AMPM_UV6	H4000_HPAM_E164	yes	yes	H4K_MixedNetwork_ Nodenr.pid

Switch	COL-Input Line	COL-Output Line	E164?	unique numbering scheme?	PID
OS 4000 V7	AMPM_UV7	H4000_HPAM_E164	yes	yes	H4K_E164Standalone.pid
OS 4000 V7	AMPM_UV7	AM-WIN 2.0	no	yes	HP4000_Dupl_without Nodenr.pid
OS 4000 V7	AMPM_UV7	AM-WIN 2.0	no	no	HP4000_Dupl_with_Noder
OS 4000 V7 Mixed Network	AMPM_UV7	H4000_HPAM_E164	yes	yes	H4K_MixedNetwork_witho Nodenr.pid
OS 4000 V8	AMPM_UV8	H4000_HPAM_E164	yes	yes	H4K_E164Standalone.pid
OS 4000 V8	AMPM_UV8	AM-WIN 2.0	no	yes	HP4000_Dupl_without Nodenr.pid
OS 4000 V8	AMPM_UV8	AM-WIN 2.0	no	no	HP4000_Dupl_with_Noder
OS 4000 V8 Mixed Network	AMPM_UV8	H4000_HPAM_E164	yes	yes	H4K_MixedNetwork_witho Nodenr.pid
OS Branch			yes	yes	OB_BF_Survivabilty.pid
OS Business			no	yes	OSc_Business.pid
OS Voice V4			yes	yes	OSV_BF.pid
OS Voice V5			yes	yes	OSV_BF.pid
OS Voice V6			yes	yes	OSV_BF.pid
OS Voice V7			yes	yes	OSV_BF.pid
OS Voice V8			yes	yes	OSV_BF.pid
OS Voice V9			yes	yes	OSV_BF.pid
RG 8700			yes	yes	RG8700_BF.pid