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V⊕IPNOW ®

4PSA VoipNow ® 1.6.4

Queue Extension Guide

Queue Extension Guide

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For suggestions regarding this manual contact:

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Preface

Who Should Read This Guide

This Extension's Guide must be read by the 4PSA VoipNow extension owners.

Chapter 1
Edit Your Contact Information

In order to update your contact information click the ![icon] Edit extension icon available in the Home section, which can be accessed from the left panel Navigation area.

4PSA VoipNow allows you to update your account information:

- Update your contact information
- Change your login password

You can modify the following contact details:

- Company name
- Contact name
- Password – Use this textbox to change the password. The provided password should have at least six characters to be valid.
- Confirm Password
- Phone

- Fax

- Email – The email address where 4PSA VoipNow can send you notifications about events that occur in the system.

> ⚠ Caution
>
> The system can send automatic notifications when predefined events occur. In order to change your notification preferences, as well as the email templates used for sending these notifications, go to PBX -> **Email templates**.

- Address
- City
- State/Province
- Postal/ZIP code
- Country

For submitting the data, click the OK button. If you choose not to change the information, the Cancel button will return you to the previous page without any modification.

Chapter 2
Queue Account Overview

- **Extension type** – The type of the extension, in this case Queue
- **Public phone number(s)** – If one or more public phone numbers are assigned to the extension, they will be displayed here with their corresponding monthly costs (e.g. `49932040495 (10.1 USD)`). Otherwise, 4PSA VoipNow displays '-'.
- **Extension internal number** – The internal phone number of the extension in 4PSA VoipNow
- **Billing plan** – The billing plan assigned with the extension with its monthly fee
- **Calls cost** – The cost of the calls in current month
- **Outgoing time spent on** – The total duration of outgoing calls and the total number of calls in current month
- **Incoming time spent on** – The total duration of incoming calls and the total number of calls in current month
- **Total agents** – Total number of agents assigned to the queue
- **Registered agents** – How many agents are registered to the queue

- Queue supervisors – The number of supervisors for the queue
- Number of sound files – The total number of sound files and the disk space used by these

Chapter 3
Queue Extension Features

4PSA VoipNow displays the following options:

- Queue general preferences
  - Queue name – A name that easily identifies the queue
  - Call distribution algorithm – 4PSA VoipNow offers you several methods of assigning calls to queue operators:
    - Ring all – All free operator extensions ring at the same time and the call is transferred to the first operator that answers.
    - Distribute calls evenly – This method searches for available agents sequentially and uses the order of the agent list. Each time it tries to assign a call, it remembers the starting position `start`; the next time a waiting call arrives, the search begins with agent in position `start+1`.

      For example, let's assume you have a queue served by 3 agents. The first time a call arrives, 4PSA VoipNow searches for the first available operator using the order Agent1, Agent2, Agent3. When the second call arrives, 4PSA VoipNow starts the search with Agent2.

- **Least recently called** – The call is transferred to the operator with the longest waiting time interval from the previous call.

- **Fewest calls** – The call is transferred to the operator who has answered the fewest calls. This method does not take into account the actual agent workloads; it ignores the time the agents spent on each call.

  For example, if Agent1 has had 3 calls that lasted each for 10 minutes and Agent2 has had 5 calls each lasting 2 minutes, 4PSA VoipNow will assign a new call to Agent1.

- **Random** – The call is transferred to a randomly selected operator.

- **Round robin with memory** – This method is similar with the `Distribute call evenly` algorithm. The difference is that Random robin with memory remembers the position of the agent who answered the call `answered`; the next time a waiting call arrives, the search will begin with agent in position `answered+1`.

  For example, let's assume you have a queue served by 3 agents. The first time a call arrives, 4PSA VoipNow searches for the first available operator using the order Agent1, Agent 2, Agent 3. Let's suppose Agent2 is available and answers the call. When the second call arrives, 4PSA VoipNow starts the search with Agent3 and uses the order Agent3, Agent1, Agent2.

◦ **Wait for {x} seconds before retrying all agents again** – After ringing all operators according to the queue's call distribution algorithm, the application waits for {x} seconds before restarting the process. Values for this parameter range from 3 to 900 seconds. The default value is 20 seconds.

◦ **Service level agreement** – This is the maximum time interval that callers should be waiting in the queue. Values for this parameter range from 3 to 9999. This textbox is empty by default.

> **Note**
>
> 4PSA VoipNow 1.5.0 does not use the **Service level agreement** value. It will be used in future versions.

- **Local agent's behavior**

  ◦ **Ring an agent for a maximum of {x} seconds** – The value {x} is the maximum number of times that an operator extension rings. The default value is 20.

◦ Maintain a minimum of {x} seconds between calls – The value {x} specifies the minimum operator break between calls. The default value is 120.

◦ Contact agents involved in non-queue conversations - When this option is enabled, operators that are involved in non-queue conversations will be contacted.

◦ Delay for {x} seconds before connecting agent to caller – After an operator answers a call, the application will wait for {x} seconds before connecting the caller to the operator. Values for this delay range from 0 to 60 seconds. The default value is 0 seconds.

◦ Pickup announcement for agent – The sound that 4PSA VoipNow plays for queue agents before connecting them to a waiting call.

> **Note**
>
> This feature is useful for agents that are simultaneously logged to several queues at the same time. Distinctive sounds can be assigned for every queue.

◦ Report how long the user waited in the queue – When this option is enabled, 4PSA VoipNow reports the time the user spent in queue before being connected to an agent.

◦ Restart timer if agent does not answer – When this option is enabled, the timer `Maintain a minimum of {x} seconds between calls` is reset every time the agent does not answer.

• Queue agents

  ◦ Available extensions – This list contains the extension owners available to join the queue as operators. To add an extension to the queue, select it from the `Available extension` list and click the `>>>` Move button.

  ◦ Assigned extensions – This list contains the extension owners that will join the queue as operators. Technically they can join the queue from any phone terminal extension, based on their agent code and password. To remove an extension from the queue, select it from the `Assigned extension` list and click the `<<<` Remove button.

• Caller behavior

  ◦ Welcome sound – The sound played to the caller before connecting him to the queue

  ◦ Announce Position every {y} seconds – When this option is enabled, the callers will be informed about their position in the queue.

> **Note**
>
> The caller will be announced of his/her position in the queue using the `There are` sound and the `The current estimated hold time is` sound set in section Sound files setup.

- ◦ Announce expected time to connect – When this option is enabled, the callers will be informed about the estimated waiting time.

- ◦ Periodic announcements every {x} seconds – A periodic announcement is a message like "Thank you for holding, your call is important to us". The value {x} specifies the frequency of these announcements. The default value is 30.

- ◦ Exit to extension on key pressed - When this option is enabled, the caller can exit the queue by pressing "0" on his/her phone pad. The call will be transferred to another extension belonging to the same client account. Select the destination extension from the dropdown list.

- • Sound files setup

  - ◦ Music on hold – The sound played to the callers while they are waiting

  > **Note**
  >
  > The path will display the folder name and also its origin:
  >
  > //// placed before the name of a folder signals the admin's default folder
  >
  > /// placed before the name of a folder signals the reseller's default folder
  >
  > // placed before the name of a folder signals the client's default folder
  >
  > / placed before the name of a folder signals the extension's default folder

  - ◦ 'There are' sound – The sound played to announce the position in the queue

  - ◦ 'The current estimated hold time is' sound – The sound played to announce the estimated hold time in the queue

  - ◦ 'You are now first in line' sound – The sound played to the caller that is in the second position in the queue

  - ◦ 'Thank you for your patience' sound – The sound played to the caller that is first in the queue

  - ◦ 'Calls waiting' sound – The sound played to describe how many calls are waiting in the queue

- 'Less than' sound – The sound played to announce the number of seconds to agent connection
- 'Hold time' sound – The sound played to announce the 'Hold time'
- 'All reps busy / wait for next' sound – The sound played to announce that 'All reps busy / wait for next'
- 'Seconds' sound – The sound file that corresponds to the word 'seconds'
- 'Minutes' sound – The sound file that corresponds to the word 'minutes'

- Queue behavior

  - If a caller has been in queue for {x} seconds, transfer it to extension {extension} – Use this option to set a maximum waiting time and to specify an extension to transfer the call to in case it exceeds this time. When the checkbox is enabled you can fill in the two textboxes:

    - {x} the waiting interval. The default value is 600.

    - {extension} the extension where the call will be transferred.

  - If there are no agents logged in queue, transfer caller to extension {extension} – Use this option to specify an extension to transfer the call to in case there are no operators logged in the queue.

  - If all agents are unavailable, transfer new calls to extension {extension} – Use this option to specify an extension to transfer the new call to when all operators are busy.

  - Play sound {sound} to the caller when queue timeouts - Use this option to specify the sound that will be played to the caller on queue timeout.

> **Note**
>
> The previous options can be edited only if there is at least another phone terminal extension in the same client account.
>
> The extensions that are disabled are displayed in grey colour in the dropdown lists.

Chapter 4
View Your Billing Plan

4PSA VoipNow allows you to view detailed information about your account's current billing plan. To access this information, follow these steps:

1. Click the My billing icon available in the `Tools` area to view details about the prices charged for calls made by extensions on your account.

2. Depending on the billing plan type (prepaid or postpaid) and its settings, you can view one or more of the following sections:

- Billing plan description
    - Billing plan name – The name of the billing plan for your account
    - Billing plan type – The type of the billing plan for the extension account: prepaid or postpaid.
    - Allow incoming calls - Yes – 4PSA VoipNow displays this information only if the extensions on your account can receive calls from extensions that belong to the system as well as from extensions outside the system.

- Allow outgoing external calls - Yes — 4PSA VoipNow displays this information only if the extension can make calls to destinations outside the system.

- Allow outgoing local calls - Yes — 4PSA VoipNow displays this information only if the extension can call other extensions on the same client account.

- Allow outgoing extended local calls - Yes — 4PSA VoipNow displays this information only if the extension can call other extensions in the system (not on the same client account).

- Monthly charge — The monthly fee paid by the your account owner

> **Note**
>
> This information is available only for postpaid billing plans.

- Initial incoming credit — The credit that was granted for incoming calls when your account was created.

> **Note**
>
> This information is available only for prepaid billing plans.

- Initial outgoing credit — The credit that was granted for outgoing calls when your account was created.

> **Note**
>
> This information is available only for prepaid billing plans.

- Remaining incoming calls credit — The amount currently available for incoming calls.

> **Note**
>
> This information is available only for prepaid billing plans.

- Remaining outgoing calls credit — The amount currently available for outgoing calls.

> **Note**
>
> This information is available only for prepaid billing plans.

- Number of recharges

- Available outgoing minutes - Number of outgoing minutes available, per time interval. The number of outgoing minutes is displayed for each time interval included in the billing plan in the format:

  ◦ {m} available outgoing minutes in time interval {T} The number of remaining minutes in current month is also displayed in format:

  ◦ {m} remaining in {month}

- Outgoing calls charges – These are the charges applied to conversations after the user has exceeded the number of available minutes

  ◦ Local calls are charged {money unit} / second – The fee charged for calls between extensions on the same client account.

If the charges for external calls are computed using a fixed prices method, 4PSA VoipNow displays the costs for each time interval in the following format:

  ◦ Calls made in time interval {T} are charged with {money unit} / second – The price charged for external calls made in time interval {T}.

4PSA VoipNow displays the costs for the calls outside the time intervals specified above:

- Calls made outside these time intervals are charged {money unit} / second – The price charged for external calls made outside time interval {T}.

3. External incoming calls charges – These charges apply to calls received from outside the system.

> **Note**
>
> 4PSA VoipNow displays this information only if the extensions are allowed to receive external calls.

View Your Billing Limits

4PSA VoipNow 1.5 allows you to view your billing limits when you have a postpaid billing plan. Billing limits are a form of extra credit, a special offer made to a particular extension.

> **Note**
>
> If you have a prepaid plan, you can only view *billing credits*.

View Your Billing Limits History

To view detailed information about your billing limits click the Billing limits icon available in the `Tools` area.

The table with billing limits history contains the following columns:

- **Incoming money limit** – Displays the supplementary credit for external incoming calls.

- Outgoing money limit – Displays the supplementary credit for external outgoing calls.

- Overusage minutes – Displays the supplementary overusage minutes limit.

- Every month – Displays whether the limits are offered monthly or only for the current month.

- Order number – Displays the number of the request for allocating the new billing limits.

- Date added – Displays the date when the billing limits were enforced.

Chapter 6
View Your Billing Credits

4PSA VoipNow 1.5 allows you to see your billing credits when you have a prepaid billing plan.

> **Note**
>
> If the you have a postpaid plan, you can only see *billing limits*.

View Your Billing Credits History

To view detailed information about the history of recharges for your billing credit, click the Billing credits icon available in the `Tools` area.

The table with billing credits history contains the following columns:

- **Incoming calls credit** – Displays the supplementary credit for incoming calls.

- Outgoing calls credit – Displays the supplementary credit for outgoing calls.
- Order number – Displays the number of the request for allocating the new billing credits.
- Date added – Displays the date when the billing credits were enforced.

Chapter 7
Manage Time Intervals

4PSA VoipNow allows you to manage time intervals, helping you to define the incoming and outgoing call rules.

You can access this page by clicking the Time intervals icon, in the `Tools` area.

You can view a list of all available time intervals on your account. You can also perform several operations on these time intervals:

- Add a new time interval
- Search for a specific time interval
- Edit an existing time interval
- Delete time intervals

4PSA VoipNow displays the following information about each time interval:

- T – This icon specifies the method used to define the time interval:
  - Individual days method

- ○ ⏱ Interval method
- Name – The descriptive name of the time interval. Click this link to edit the time interval information.
- Hours – The hours used as limits for the time slot
- Weekdays – The days of the week used as limits for the time slot
- Month Days – The month period when the time interval applies
- Month – The month when the time interval applies
- Created – The date when the time interval was created

> **Note**
>
> 4PSA VoipNow displays the `Full month` interval, covering the entire month, as a default setting.

> **Note**
>
> 4PSA VoipNow also displays the time intervals belonging to your parent account. You cannot edit or delete these time intervals.

Search the Interval List

When the time intervals list is too long and you are searching for specific time intervals, you can use the following features:

- Search – Write the text you are looking for in the textbox. Then click the 🔍 button or the `Search` label to display only the time intervals whose name, hours, weekdays or dates contain the text.
- Show all – Click this 🗒 button or the `Show all` label to display the entire list.

Even if you navigate to other pages, the search criteria will be retained until a new search is performed.

You can change the number of records displayed on the page by clicking the `Number of entries per page` link. The number of entries per page is shown in the left side of the table along with the total number of time intervals.

Another way to simplify the listing is to sort the time interval list by clicking a table header link. The order criteria are marked by the highlight of the table

header and the arrow indicates the direction. The sort direction can be changed by another click on the respective header.

Add a New Time Interval

To add a new time interval, click the Time intervals icon available in the `Tools` area and follow these steps:

1. Click the Add time intervals icon. A new page opens allowing you to enter information on the new time interval.

   - Name – Use the textbox to fill in a descriptive name to identify the time interval.

   - Matching algorithm – A time interval can be described in two ways:
     - Individual days – This method allows 4PSA VoipNow to match the same time interval in different days. See the example below.
     - Interval – This method allows 4PSA VoipNow to match a continuous time interval that extends over several days. See the example below.

   - Start at hour and End at hour – Use the available textboxes to specify the hours that limit the time slot.

   - Start weekday and End weekday – Use these dropdown lists to select the days of the week that define the time slot.

   - Start date and End date – Use these dropdown lists to select the days of the month that define the time slot.

   - Month - Use this dropdown list to select the month that defines the time slot.

2. Use the ⊟ ⊞ buttons to add several time intervals at the same time.

   - ⊟ removes the corresponding `Time interval`

   - ⊞ adds another `Time interval`

3. Click OK to add the new time interval(s). Click Cancel to go back to the previous page without adding the interval(s).

   Example of a time interval defined in individual days

   In the time interval below, 4PSA VoipNow matches calls made or received between the hours 8:00 – 20:00 on Monday, Tuesday, Wednesday, Thursday, and Friday between 1 and 31 every month.

A time interval defined in individual days

Example of a continuous time interval

In the time interval below, 4PSA VoipNow matches calls made or received between Monday, 8:00 and Friday, 20:00, between 1 and 31 every month.

A continuous time interval

Edit a Time Interval

To access this page, click the ![clock icon] Time intervals icon available in the Tools area and follow these steps:

1. In the time interval list, click the name link of the time interval you want to change.

   > **Note**
   >
   > 4PSA VoipNow also displays the time intervals belonging to your parent account. You cannot edit these time intervals.

2. A new page opens where you can rename the time interval and modify its start/end hours, days, dates. You can also change the matching algorithm.

   > **Note**
   >
   > For more information on these fields, see the Add a New Time Interval section.

3. Click OK to save the changes to the time interval. Click Cancel to return to the previous page without saving the changes.

Delete Time Intervals

To delete a time interval click the ![clock icon] Time intervals icon available in the "Tools.

Choose the time intervals you want to delete by checking the corresponding checkbox in the time interval list. Then click the Remove selected link. You will be asked to confirm the removal.

> **Note**
>
> Time intervals can be removed only if they are not currently used.

> **Note**
>
> 4PSA VoipNow also displays the time intervals belonging to your parent account. You cannot delete these time intervals.

Chapter 8
Manage Incoming Call Rules

Incoming Call Rules Overview

4PSA VoipNow allows you to filter the incoming calls to an extension. As a result, when a caller is trying to reach the extension, 4PSA VoipNow can perform a set of predefined actions. For example, let's assume that from 9:00 to 17:00 the extension owner is working and he is waiting for an important call that will be made on another extension. All he has to do is to define a rule that transfers the calls from an extension to the other one.

In the Incoming Call Rules page, you can view the incoming call rules for your account. Multiple operations can be performed:

- Add new incoming call rules
- Change the priorities of the rules
- Delete existing incoming call rules

To view the incoming call rules for your account, click the Incoming call rules icon available in the `Tools` area.

4PSA VoipNow displays the following information about each existing call rule:

- No – The position of the rule inside the group

- S – The status of the rule, displayed using an icon: ☑ enabled or ☒ Disabled. Click the icon to change the status of the rule.

> **Note**
>
> After you add a new rule, 4PSA VoipNow automatically sets its status as enabled. To disable the rule, click the corresponding ☑ icon.

- P – Use the available ▲ up and ▼ down arrows to change the position of the rule in the group.

> **Note**
>
> Any change made is countered in the left side of the list table: {x} `pending changes`. The counter is increased for each rule with a different position than the initial one.

- Action – The action performed when the caller's number matches the rule. The four possible actions are:
  - Busy – 4PSA VoipNow plays a "busy signal" to let the caller know that the number he is trying to reach is engaged in another call.
  - Congestion – 4PSA VoipNow plays a "fast busy signal" (known in telephony as a "congestion tone") to let the caller know that the call was unsuccessful.
  - Hang up – 4PSA VoipNow hangs up the incoming call rule.
  - Set call priority – 4PSA VoipNow sets a certain priority for the incoming call in order to be answered faster by the operators in a queue. This action is available only for extensions of type `Queue`. The value of the priority parameter is also displayed here.
  - Transfer – 4PSA VoipNow transfers the call to another extension on the same client account; this option is available if the extension has `Multi-user aware` permission enabled and there are available phone terminal extensions on the client account.

- ◦ Transfer on event — If the extension user does not answer or the extension has not been registered in the system, 4PSA VoipNow transfers the call to another extension belonging to the same client account or an external phone number; this option is available if the extension has `Multi-user aware` permission enabled and there are available phone terminal extensions on the client account.

- ◦ Transfer to external — If the extension has assigned a billing plan that allows calls to external destinations, calls can be diverted to this destination. The called extension will be charged for these calls.

- ◦ Voicemail — If the extension is `Phone terminalcode>` type, calls can be directed to voicemail directly.

- • Number check — 4PSA VoipNow can apply the rule to the calls that match or do not match the phone number specified by the rule. The two possible values of this field are:

  - ◦ Matches — The incoming call matches the number

  - ◦ Does not match — The incoming call doesn't match the number

  - ◦ Is anonymous — The incoming call does not have Caller-ID information

- • Pattern — The caller's phone number for all actions except `Transfer on event` when the field displays the event. This field can also contain a regular expression that matches an entire set of numbers. The three possible values for the transfer event are:

  - ◦ No answer - The call is considered unanswered.

  - ◦ Not registered - The number that the caller is trying to reach is not registered.

  - ◦ Busy - The number that the caller is trying to reach is engaged in another call.

- • In time interval — The time interval when the rule will be executed

> **Note**
>
> 4PSA VoipNow displays the time intervals belonging to you and the ones belonging to your parent account. You can choose any of these time intervals to define routing rules.

- • To extension — In case the action is `Transfer`, this column displays an extension user name and number where the call will be redirected.

  In case the action is `Transfer to external`, this column displays an external phone number where the call will be redirected.

Add Incoming Call Rules

To add incoming call rules for your account, click the Incoming call rules icon available in the `Tools` area.

In the `Add call rules` section you can find buttons, textboxes, and dropdown lists allowing you to define one or more incoming rules. The following steps must be followed:

1. Use the first dropdown list to choose the action that will be performed, if the number is matched. The actions available are:

   - Busy – 4PSA VoipNow plays a "busy signal" to let the caller know that the number he is trying to reach is engaged in another call.

   - Congestion – 4PSA VoipNow plays a "fast busy signal" (known in telephony as a "congestion tone") to let the caller know that the call was unsuccessful.

   - Hang up – 4PSA VoipNow hangs up the incoming call.

   - Set call priority – 4PSA VoipNow sets a certain priority for the incoming call in order to be answered faster by the operators in a queue. This action is available only for extensions of type `Queue`.

   - Transfer – 4PSA VoipNow transfers the call to another extension on the same client account; this option is available if the extension has `Multi-user aware` permission enabled and there are available phone terminal extensions on the client account.

   - Transfer on event – If the extension user does not answer or the extension has not been registered in the system, 4PSA VoipNow transfers the call to another extension belonging to the same client account or an external phone number; this option is available if the extension has `Multi-user aware` permission enabled and there are available phone terminal extensions on the client account.

   - Transfer to external – If the extension has assigned a billing plan that allows calls to external destinations, calls can be diverted to this destination. The called extension will be charged for these calls.

   - Voicemail – If the extension is `Phone terminalcode>` type, calls can be directed to voicemail directly.

2. Use the second dropdown list to choose whether the action will be performed for incoming calls that match or do not match the expression you will specify later at Step 3.

   - Matches – The incoming call matches the number

- Does not match – The incoming call doesn't match the number

- Is anonymous – The incoming call does not have Caller-ID information

> ⚠ Caution
>
> Number matching is based on Caller-ID. If the remote party does not send a Caller-ID, no matching can be performed; however you can use the `Is anonymous` option to route anonymous calls.
>
> Pay attention to the `number` entry. You can specify the number as a combination of the digits 0-9 and the characters '+', 'X', 'Z', 'N', '[', ']', '.', '*' .
>
> The number entry supports the Asterisk number matching. You can enter an expression that matches multiple numbers. Remember that:
>
> X - matches any digit from 0-9
>
> Z - matches any digit form 1-9
>
> N - matches any digit from 2-9
>
> [] - matches any digit or letter in the brackets
>
> . - matches one or more characters
>
> * - matches 0, 1 or any number of the previous expression
>
> For example:
>
> - Number 0. will match any number starting with 0.
>
> - Number 1X[123]N will match any number starting with 1, followed by any digit between 0 and 9, followed by 1,2 or 3 and followed by any digit between 2 and 9.

3. Use the first textbox to specify the extension number or a regular expression that matches the incoming call.

4. Use the third dropdown list to choose the time interval when calls must be checked.

5. Use the `Add in position` textbox to specify the order of the rule in the list.
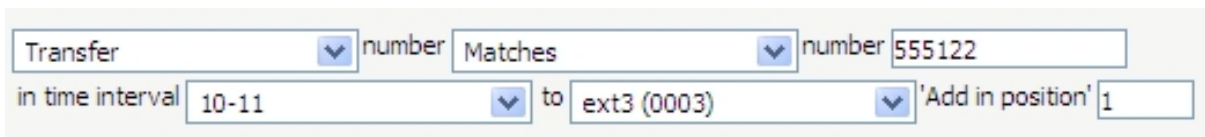
> ⚠ Caution
>
> The position of a rule in the group is very important because it defines the order in which 4PSA VoipNow verifies the call rules in case of an incoming call.
>
> The check is made in order and all rules are final (the program stops checking when the first rule is matched).

6. The actions `Set call priority`, `Transfer`, `Transfer to external` and `Transfer on event` have additional parameters.

- When you select the `Set call priority` action, 4PSA VoipNow displays an additional textbox. Use it to fill in the queue position where the call will be placed.

- When you select the `Transfer` action, 4PSA VoipNow displays an additional dropdown list. Use it to select the final extension destination of the call.

- When you select the `Transfer to external` action, 4PSA VoipNow displays an additional field. Use it to enter the number where you want the call diverted.

- When you select the `Transfer on event` action, 4PSA VoipNow displays several additional fields:

  ◦ Use the first dropdown list to select the event when the transfer will be performed.

  ◦ Use the second dropdown list to choose whether the call will be transferred to an internal or external number.

  ◦ Use the last control (dropdown list or textbox) to specify the final destination of the call.

The example below means that if a call from number 555122 arrives at 13:30, the call is transferred to extension 0006.

Transfer	⌄	number	Matches	⌄	number	555122
in time interval	10-11	⌄	to	ext3 (0003)	⌄	'Add in position' 1

Example of a valid incoming rule

7. Use the ⊖ ⊕ buttons to add several new call rules at the same time. Click the ⊕ button to add a new set of buttons, textboxes, and dropdown lists allowing you to create an additional rule. Click the ⊖ button to delete its corresponding rule.

8. Click OK to add the new rule(s) to the list. Click Cancel to go back to the previous page without changing the incoming rules.

Change the Order of the Call Rules

The position of a rule in the group is very important because it defines the order in which 4PSA VoipNow verifies the call rules in case of an incoming call.

The program verifies the conditions of the rules and stops checking when it finds the first rule whose conditions are true.

If you want to change the order of the incoming call rules, click the Incoming call rules icon in the `Tools` area and follow these steps:

1. In the call rule list, use the ▲ up and ▼ down buttons to change the position of a certain rule inside the group.

2. To move a certain rule to a higher position, click the ▲ up arrow. To move a certain rule to a lower position, click the ▼ down arrow.

> **Note**
>
> When you change the order of the call rules in the list, 4PSA VoipNow displays the number of changes you have performed to remind you to save them before navigating away from the page. In the top left corner of the call list 4PSA VoipNow displays {x} `pending changes`.

3. Click the Apply changes link to save the changes you have made on the list of call rules.

Delete Call Rules

To remove incoming call rules from your account, click the Incoming call rules icon. Choose the rules you want to delete by selecting their corresponding checkboxes. Then click the Remove selected link. You will be asked to confirm the removal.

> **Note**
>
> There is an implicit rule that accepts ALL calls from ALL destinations in ANY time interval that is not shown!

Manage Outgoing Call Rules

4PSA VoipNow allows extension users to block certain outgoing calls, based on the dialed number and the time interval when the call was placed. This feature is very useful when several people use the same phone but only one of them has access to the extension account in the 4PSA VoipNow interface.

View Extension's Outgoing Call Rules

To access extension's call rules, click the name of the extension in the

Extension Management page, and then click the Outgoing call rules icon available in the `Tools` area.

In the Outgoing Routing Rules Management page, you can view a list of the routing rule groups available in the extension account.

4PSA VoipNow displays the following information on each group:

- S – The status of the rule, displayed using an icon: ✅ Enabled or ❌ Disabled. Click this icon to change the status of the rule.

- Action – The action performed when 4PSA VoipNow matches the number dialed by the user.

- Number – The number chosen to match the number dialed by the extension user.

- In time interval – The time interval when the rule will be executed.

Add an Outgoing Call Rule

To add outgoing call rules to the system, click the name of the extension in the Extension Management page, and then click the ![icon] Outgoing call rules icon available in the `Tools` area.

In the Add new outgoing routing rules section you can find buttons, textboxes, and dropdown lists that allow you to define one or more routing rules for outgoing calls. Follow these steps:

1. Use the first dropdown list to choose the Block action.

   4PSA VoipNow blocks the call to that number if the number is matched.

2. Use the `number` textbox to match the number dialed by the extension user.

> ⚠ Caution
>
> Pay attention to the `number` entry. The number supports the Asterisk number matching system. You can enter an expression that matches multiple numbers. Remember that:
>
> X - matches any digit from 0-9
>
> Z - matches any digit form 1-9
>
> N - matches any digit from 2-9
>
> [] - matches any digit or letter in the brackets
>
> . - matches one or more characters
>
> * - matches 0, 1 or any number of the previous expression
>
> For example:
>
> - Number 0. will match any number starting with 0.

- Number 1X[123]N will match any number starting with 1, followed by any digit between 0 and 9, followed by 1,2 or 3 and followed by any digit between 2 and 9.

3. Use the third dropdown list labeled `if in time interval` to select the time interval when this rule applies.

> ⚠ Caution
>
> The `Block` rule is final. This means that when the rule is matched, other rules are no longer checked.

> 📝 Note
>
> 4PSA VoipNow displays the time intervals belonging to you and the ones belonging to your parent account. You can choose any of these time intervals to define routing rules.

4. Click OK to add the new routing group to the system. Click Cancel to go back to the previous page without adding the rule group.

Delete Outgoing Call Rule

To remove call rules from the system, click the Outgoing call rules icon in the Extension Management page, in the `Tools` area. Next, choose the rules you want to delete by selecting their corresponding checkboxes in Existing Rules section. Then click the Remove selected link. You will be asked to confirm the removal.

Manage Your Recorded Calls

In Recorded Messages page, you can view a list of the recorded calls. Multiple operations can be performed on these recorded calls.

- Search for specific calls
- Download recorded conversations on your computer
- Delete recorded conversations
- Activate/Deactivate the call recording feature

To access recorded calls on your account, click the ⦿ Recorded calls icon.

> **Note**
>
> The ⦿ **Recorded calls** icon is available only if the call recording feature is enabled.

4PSA VoipNow displays the following details for each recorded call:

- T – The type of the call, displayed using an icon: 🖕 Incoming or 🖊 Outgoing.

- File – The name of the file; it is automatically generated by 4PSA VoipNow using a format that is specific to the extension type:

  ◦ For phone terminals: `date_time-type.ext` (e.g. `20051230_182345-in.wav`). Click this link to download the recording file.

  ◦ For queues: `date_time-agentnumber.ext` (e.g. `20051230_182345-0001*0002.wav`). Click this link to download the recording file.

- Size – The size of the recording file

- Created – The date when the conversation recording started

Search the Call List

When the recorded conversation list is too long and you are searching for specific recordings, you can use the following features:

- Search – Insert the text you are looking for in the textbox. Then click the 🔍 button or the `Search` label to display only the recorded calls whose `File` field contain the text.

- Show all – Click this ▤ button or the `Show all` label to display the entire list.

The search criteria will be retained even if you navigate to other pages until a new search is performed.

You can change the number of records displayed on the page by clicking the `Number of entries per page` link. The number of entries per page is shown in the left side of the table along with the total number of conversations recorded.

Another way to simplify the listing is to sort the recorded conversations by clicking a table header link. The order criteria are marked by the highlight of the table header and the arrow indicates the direction. The sort direction can be changed by another click on the respective header.

Delete Recorded Calls

To remove recorded conversations from your account, click the 🔴 Recorded calls icon available in the `Tools` area.

Choose the recordings you want to delete by selecting their corresponding checkboxes. Then click the Remove selected link. You will be asked to confirm the removal.

Enable or Disable Call Recording

- **Activate Recording** – Use this icon to activate call recording.

- **Deactivate Recording** – Use this icon to deactivate call recording.

Chapter 11
Manage Queue Agents

To access the Queue Agents Management page, click the Queue Agents icon located in the Tools section of the respective queue extension's management page.

All the agents

S - The icon in this column shows the status of the agent: - agent is logged in; - agent is logged off.

V - The icon in this icon shows the type of the agent: - agent is a normal queue member; - agent is a queue supervisor.

Agent - The agent's phone terminal extension.

Last logged in - The date and time when the agent last logged in.

Last logged off - The date and time when the agent last logged out.

Average logged - The average duration of the agent's login sessions.

Penalty - The agent's penalty number. For more information, please read the Editing A Queue Agent section.

Calls - The number of calls accepted by the agent.

Connected to - The phone terminal extension where the agent is connected from.

Editing a queue agent

To edit a queue agent, click it's phone terminal extension in the Agent column, in the Queue Agents Management page.

The new page that opens allows you to configure the following parameters:

Supervisor - Use the available dropdown list to specify whether the agent is a supervisor or not.

Penalty - Use the available textbox to specify the penalty number of the respective agent. The Penalty can be used to differentiate agents on levels. The call distribution algorithm will be applied on the agents with the lowest penalty number. If the are no agents available with the lowest penalty number , the algorithm will be applied on the agents with the next higher penalty number.

For example, let's assume you have a queue served by 4 agents. Agent A and Agent B have 1 as penalty r; Agent C and agent D have 2 as penalty. When a call arrives, 4PSA VoipNow will apply selected the distribution algorithm on agents A and B, which have the lowest penalty number (1). If Agent A and Agent B are unavailable, 4PSA VoipNow will apply the call distribution algorithm on agents B and C, which have 2 as penalty.

In this page you can also see a quick report on the selected queue agent. The following details are displayed:

Last logged in - The date and time when the agent last logged in.

Last logged off - The date and time when the agent last logged out.

Average logged in time - The average duration of the agent's login sessions.

Number of completed calls - The number of completed calls.

Average call time - The average time interval (in seconds) an agent spent in a conversation.

Average hold time - The average time interval (in seconds) an agent spent on hold.

Connected to - The phone terminal extension where the agent is connected from.

Chapter 12

View Reports on the Queue Activity

The Queue Report page includes relevant metrics (displayed in tables and graphics), that can be used for reviewing the activity of the queue operators.

To access this page, in your home page click the Queue report icon available in the `Tools` area.

Queue Report Overview

To access this page, in the Queue Report toolbar click the Overview tab.

The information is structured in several sections:

- Queue overview – This section displays general statistic data on the selected queue.
  - Total answered calls – The total number of calls answered by queue's agents
  - Total unanswered calls

- Total number of calls
- Answered calls
  - Total calls ended by agent – The total number of answered calls that were ended normally by queue's agents
  - Total calls ended by caller – The total number of answered calls that were ended normally by the person who called the queue
  - Total number of transferred calls – The total number of calls that were transferred from the queue to an extension
- Unanswered calls
  - Calls dropped due to channel incompatibility – The total number of calls answered by an agent, but dropped because the communication channels were not compatible
  - Calls ended due to caller abandon – The total number of calls that entered the queue and callers hang-up before speaking to an agent
  - Calls that exit the queue due to timeout – The total number of calls that exited the queue when the caller was on hold too long and the timeout was reached
  - Calls ended due to no members - The total number of calls that were ended due to the fact that no member was available at that moment
  - Calls ended due to no members logged in - The total number of calls that were ended due to the fact that no members were logged in at that moment.
  - Calls ended due to all members unavailable - The total number of calls that were ended due to the fact that all the members were unavailable at that moment
  - Calls ended due to all members logged out - The total number of calls that were ended due to the fact that all the members were logged out at that moment
  - Calls ended due to queue full - The total number of calls that were ended due to the fact that the queue was full at that moment
- Call duration
  - Avg call length (completed calls) - The average call length for completed calls
  - Avg hold time (completed calls) - The average on hold time for completed calls
  - Avg hold time (abandoned calls) - The average time spent by the callers in the queue before abandoning the call

- >Call completion
  - Avg pos when callers abandon - The average position of the callers when they abandon the call
  - Avg pos advanced (abandoned calls) - The average number of positions that the callers advanced in the queue before they abandoned the call
  - Avg init pos for completed calls - The average initial position of the callers who completed the calls

Answered Calls Report

To access this page, in the Queue Report toolbar click the Answered Calls tab.

- Queue Overview – This section displays the following statistics about call duration and caller waiting intervals:
  - Total number of answered calls
  - Average call length
  - Minimum call length – 4PSA VoipNow also displays the date and time of the conversation as well as the agent responsible for it
  - Maximum call length – 4PSA VoipNow also displays the date and time of the conversation as well as the agent responsible for it
  - Total call length
  - Average call waiting time
  - Minimum call waiting time
  - Maximum call waiting time
  - Total waiting time
- Queue Agents – This section displays the following statistics about each operator in the queue:
  - Agent – The number of the operator's extension as well as his/her status in the queue (logged in or not logged in). Click this link to open the agent's Agent status and view statistics about his/her activity.
  - Calls – The numbered of answered calls registered by the operator
  - Percent – The operator's percentage of answered calls out of the total number of answered calls
  - Graphic – A graphic representation of the percentage value

- Service level agreement – This section displays statistics for the intervals that the callers spent waiting in queue.

  ◦ Answered – The waiting time interval

  ◦ Calls – The number of answered calls in `Answered` period

  ◦ Percent – The percentage of answered calls in `Answered` period from the total calls answered

  ◦ Graphic – A graphic representation of the percentage of answered calls

- Disconnection causes – This section displays statistics about how calls are terminated:

  ◦ Cause – There are 3 possible reasons for terminating a call: the agent hung up, the caller hung up or the call was transferred to an extension outside the queue

  ◦ Calls – The number of calls that were terminated that way

  ◦ Percent – The percentage represented by the disconnection cause out of the total number of calls

  ◦ Graphic – The graphic representation of the percent value

To filter the records displayed on this page you can use the following controls:

- Report starts on – Use the textbox to fill in a date in the following format `yyyy-mm-dd`. Use the 🗓 button to display a calendar and select the desired date.

- Report ends on – Use the textbox to fill in a date in the following format `yyyy-mm-dd`. Use the 🗓 button to display a calendar and select the desired date.

- Click the 🔍 button to display only the desired records.

> **Note**
>
> The dates are saved even if you navigate to other pages. All the other queue statistics pages available from the toolbar will display records from the same time interval.

- Click the Default link to reset the Report starts on and Report ends on values to their default values corresponding to the current month.

Unanswered Calls Report

To access this page, in the Queue Report toolbar click the Unanswered Calls tab.

- Queue Overview – This section displays the following statistics about call duration and caller waiting intervals:
  - Total number of unanswered calls
  - Average wait time before disconnection
  - Minimum wait time before disconnection
  - Maximum wait time before disconnection
  - Total wait time before disconnection
  - Average queue position at disconnection
  - Minimum queue position at disconnection
  - Maximum queue position at disconnection
- Service level agreement – This section displays statistics for the intervals that the callers spent waiting before the call was terminated.
  - Hangup – The waiting time interval
  - Calls – The number of unanswered calls in `Hangup` period
  - Percent – The percentage of unanswered calls in `Hangup` period from the total calls answered
  - Graphic – A graphic representation of the percentage of unanswered calls
- Disconnection causes – This section displays statistics about how calls are terminated:
  - Cause – There are several possible reasons for terminating a call:
    - Call abandoned by caller – This happens when the caller hangs up before being connected to an agent.
    - Call abandoned by agent – This happens when an agent hangs up during the pick-up announcement or the delay before connecting to the caller.
    - Call disconnected due to channel incompatibility – This happens when there are differences between the list of codecs used on the agent's channel and list of codecs used on the caller's channel.
    - Call transferred with key – This happens when the caller presses a key on his/her phone pad while waiting to be connected to an agent.

- Call timeout – This happens when the caller's waiting time exceeds the maximum waiting time set for the queue (i.e. the queue's timeout).
- Call disconnected due to no members – This occurs when a call arrives and there but no queue agents have logged in yet.
- Call disconnected due to no members logged in – This occurs when a call arrives on position number 1 but there are no agents available to take the call.
- Call disconnected due to event that all queue members disconnected – This occurs when a call arrives and but all queue agents have logged out.
- Call disconnected due to event that all queue members logged out – This occurs when a call arrives on position number 1 but while waiting, all agents have logged out.
- Call disconnected due to event queue full – This occurs when a call arrives and the maximum numbers of callers waiting in queue has already been reached.
  - Calls – The number of calls that were terminated that way
  - Percent – The percentage represented by the disconnection cause out of the total number of calls
  - Graphic – The graphic representation of the percent value

To filter the records displayed on this page you can use the following controls:

- Report starts on – Use the textbox to fill in a date in the following format yyyy-mm-dd. Use the 📅 button to display a calendar and select the desired date.
- Report ends on – Use the textbox to fill in a date in the following format yyyy-mm-dd. Use the 📅 button to display a calendar and select the desired date.
- Click the 🔍 button to display only the desired records.

> **Note**
>
> The dates are saved even if you navigate to other pages. All the other queue statistics pages available from the toolbar will display records from the same time interval.

- Click the Default link to reset the Report starts on and Report ends on values to their default values corresponding to the current month.

Calls Distribution Report

To access this page, in the Queue Report toolbar click the Calls Distribution tab.

This page displays a series of statistics computed for different time intervals (day, weekday, hour) and different types of objects (answered calls, call waiting, unanswered calls):

- Answered calls per day
  - Day
  - Calls
  - Percent
  - Average call duration
  - Minimum call duration
  - Maximum call duration
  - Graphic
- Call wait time per day
  - Day
  - Calls
  - Percent
  - Average call wait
  - Minimum call wait
  - Maximum call wait
  - Graphic
- Unanswered calls per day
  - Day
  - Calls
  - Percent
  - Average time to hangup
  - Minimum time to hangup
  - Maximum time to hangup
  - Graphic
- Answered calls per weekday

- Weekday
  - Calls
  - Percent
  - Average call duration
  - Minimum call duration
  - Maximum call duration
  - Graphic
- Call wait time per weekday
  - Weekday
  - Calls
  - Percent
  - Average call wait
  - Minimum call wait
  - Maximum call wait
  - Graphic
- Unanswered calls per weekday
  - Weekday
  - Calls
  - Percent
  - Average time to hangup
  - Minimum time to hangup
  - Maximum time to hangup
  - Graphic
- Answered calls per hour
  - Hour
  - Calls
  - Percent
  - Average call duration
  - Minimum call duration
  - Maximum call duration
  - Graphic

- Call wait time per hour
  - Hour
  - Calls
  - Percent
  - Average call wait
  - Minimum call wait
  - Maximum call wait
  - Graphic
- Unanswered calls per hour
  - Hour
  - Calls
  - Percent
  - Average time to hangup
  - Minimum time to hangup
  - Maximum time to hangup
  - Graphic

To filter the records displayed on this page you can use the following controls:

- Report starts on – Use the textbox to fill in a date in the following format `yyyy-mm-dd`. Use the ▦ button to display a calendar and select the desired date.

- Report ends on – Use the textbox to fill in a date in the following format `yyyy-mm-dd`. Use the ▦ button to display a calendar and select the desired date.

- Click the 🔍 button to display only the desired records.

> 📝 **Note**
>
> The dates are saved even if you navigate to other pages. All the other queue statistics pages available from the toolbar will display records from the same time interval.

- Click the Default link to reset the Report starts on and Report ends on values to their default values corresponding to the current month.

Agents Report

To access this page, in the Queue Report toolbar click the Agents Report tab.

- Queue overview
  - No of agents
  - Average logged in time
  - Minimum logged in time
  - Maximum logged in time
  - Total agents time
  - Average on pause time
  - Minimum on pause time
  - Maximum on pause time
  - Total agents pause time
- Agent Availability
  - Agent – Click this link to open the agent's Agent status page and view statistics about his/her activity.
  - Logged in time
  - On pause time
  - Effective time
- Agent Sessions
  - Agent – Click this link to open the agent's Agent status and view statistics about his/her activity.
  - Sessions – Click this link to open the agent's Agent session details page and view statistics about the sessions of the agent.
  - Average time per session
  - Pauses
  - Average time per pause
  - Pause %
  - Pauses per session
- Answered calls
  - Agent – Click this link to open the agent's Status page and view statistics about his/her activity.

- Calls – Click this link to open the agent's Agent calls page and view statistics about the calls assigned to the agent.
- Total call time
- Average call time
- Average wait time
- % of queue calls
- Graphic

To filter the records displayed on this page you can use the following controls:

- Report starts on – Use the textbox to fill in a date in the following format yyyy-mm-dd. Use the [calendar] button to display a calendar and select the desired date.

- Report ends on – Use the textbox to fill in a date in the following format yyyy-mm-dd. Use the [calendar] button to display a calendar and select the desired date.

- Click the [search] button to display only the desired records.

> **Note**
>
> The dates are saved even if you navigate to other pages. All the other queue statistics pages available from the toolbar will display records from the same time interval.

- Click the Default link to reset the Report starts on and Report ends on values to their default values corresponding to the current month.

Agent Status

This page can be accessed by clicking the agent extension number in one of the following statistics pages Answered Calls Report and Agents Report.

The page displays general statistics about the status of an agent and his/her sessions:

- Status
- Logged in – The number of times the agent has logged in the queue
- Average logged in – The average length of the agent's sessions

- Minimum logged in – The length of the agent's shortest session
- Maximum logged in – The length of the agent's longest session
- Paused – The number of times the agent used the pause feature (i.e. dialed *96EXTENSION_NUMBER on his/her phone)
- Average on pause time – The average length of the agent's pauses
- Minimum on pause time – The length of the agent's shortest pause
- Maximum on pause time – The length of the agent's longest pause
- Calls – The total number of calls assigned to the agent in the reported time period

Agent Session Details

This page can be accessed by clicking the number of sessions corresponding to an agent on the Agents Report page.

The page displays detailed statistics about the sessions of an agent:

- Login hour – The start time of the session
- Logout hour – The end time of the session
- Duration – The length of the session
- Logged in from – Agents can log in a queue from any phone connected to the 4PSA VoipNow system (the phone associated with the agent's extension or another phone associated with another extension). This column specifies the extended number of the extension associated with the phone used by the agent during the session.
- Pauses – The number of times the agent used the pause feature (i.e. dialed *96EXTENSION_NUMBER on his/her phone)
- Pause time – The total duration of the agent's pauses

Agent Calls

This page can be accessed by clicking the number of calls answered by an agent on the Agents Report page.

The page displays detailed statistics about the calls assigned to an agent:

- Caller-ID – The ID of the caller
- Caller-ID – A unique ID generated for each call.

- Start time
- End time
- Duration – The length of the conversation
- Call wait – The time the caller had to wait before being connected to the agent
- Call ended with – The reason the call was terminated

Chapter 13
View Reports about Queue Agents

For extensions of type queue, 4PSA VoipNow offers two types of reports about queue agent activity:

- A report with an overview of all queue agents

- Detailed reports for individual agents

Queue Agents Report

To access this page, in your home page, click the Queue agents icon available in the Tools section.

4PSA VoipNow displays the following information about each queue agent:

- S – The status of the queue agent, displayed using an icon: for a Logged in agent or for a Logged off agent.

> **Note**
>
> To login to the queues, the queue agent must dial *96 or *97 from his/her phone and enter the password followed by #. To log off, the agent must dial *98.

- V – The role of the agent in the queue: the ⬛ icon means that the agent is a supervisor and can listen to the conversations of other agents, the ⬛ icon means that the extension is a regular queue agent.

> **Note**
>
> To listen to active conversations, the supervisor must dial *999 followed by the number of the queue extension.
>
> 4PSA VoipNow will announce the extension number of the first active agent and start playing his/her conversation. To listen to the next available call, the supervisor must dial *.

- Agent – The name and the extension number of the phone terminal which is an agent in the queue. Click this link to view the parameters associated with the agent and a brief report on his/her activity.
- Last logged in – The date and time when the agent last logged in the queue
- Last logged off – The date and time when the agent last logged off the queue
- Average logged – The average interval the agent stays logged in the system
- Calls – The number of answered calls that were terminated normally
- Connected to – The phone terminal where the agent is logged in. If the status of the agent in `Logged off`, 4PSA VoipNow displays '-'.

Queue Member Report

To access this page, click the chosen agent name link in the Queue Agents page.

This page allows you to:

- Set up agent settings (agent role, agent penalty)
- View a quick report about the agent's activity

In the Setup member {name} parameters section you can:

Use the Supervisor dropdown list to select the role of the agent. If you select the 'Yes' option, the agent will become supervisor and will be allowed to listen to the active conversations of other agents. Otherwise the agent is considered as regular by 4PSA VoipNow.

- Use the Penalty textbox to determine the order in which 4PSA VoipNow assigns calls to agents. When a call is received, 4PSA VoipNow first applies the distribution algorithm to the set of agents with `Penalty = 1`. If no available agent is found, 4PSA VoipNow applies the algorithm to the agents with `Penalty = 2` and so on. Agent with high `Penalty` values will be assigned fewer calls normally. The values allowed range from 1 to 100. The default value is 1.

In the Quick report section, 4PSA VoipNow displays the following statistics about the agent's activity:

- Last logged in – The date and time when the agent last logged in the queue
- Last logged off – The date and time when the agent last logged off the queue
- Status – Logged in or Logged off
- Average logged in time – The average interval the agent stays logged in the system
- Number of completed calls – The number of conversations completed by the agent
- Average call time – The average time spent by the agent on completed calls
- Average hold time – The average time the agent's callers spent on hold
- Connected to – The phone terminal where the agent is logged in. If the status of the agent in `Logged off`, 4PSA VoipNow displays '-'.

Chapter 14
Manage Your Sounds

View the Sound List

There are two types of sounds: `music on hold` and `announcements` sounds.

Music on hold sound files are played when a caller is on hold waiting for someone to answer his/her call. These sound files are not language specific because they are usually melodies. Music on hold files can only be uploaded, not recorded over the phone.

An announcement sound is played when the user is notified on an event or when information is requested from the user. These sounds have different files for different languages, so that a user can listen to the sound version according to his/her language preferences. If the files in the requested language do not exist, the default files will be played. This type of sound can be either uploaded or recorded over the phone.

To access your sounds page, click the Sounds icon available in the `Tools` area.

> **Note**
>
> The **Sounds** section is available only if the permission "Sound Management" has been activated for your account. If this permission hasn't been activated for your account, you will not be able to see the **Sounds** icon in the `Tools` area.

In the Sound Management page, you can view a list of the sounds available in your account. You can also perform multiple operations:

- Add and delete sounds from your account.
- Search for specific sounds in your account.
- Organize sound files by using sound languages and sound folders.

  4PSA VoipNow displays the following information about each sound:

- S – The status of the sound, displayed using an icon: ✅ Enabled and ❌ Disabled. Click the icon to change the sound's status.
- M – This field describes the purpose of the file by using an icon:
  - 🅲 specifies an `Announcement` sound
  - 🅜 specifies a `Music on hold` sound
- Name – The name of the sound. Click this link to edit the sound.
- Folder – The folder where the sound is located in the system.
- Languages – The number of languages for which this sound is defined.

  > **Note**
  >
  > If the sound is used as `Music on hold`, the field displays '-'.

- Modified – The date when the sound was last modified

Search the Sound List

When the sound list is too long and you are searching for specific sound, you can use the following features:

- Search – Insert the text you are looking for in the textbox. Then click the 🔍 button or the `Search` label to display only the sounds whose names contain the text.
- Show all – Click this ▤ button or the `Show all` label to display the entire list.

The search criteria will be retained even if you navigate to other pages until a new search is performed.

You can change the number of records displayed on the page by clicking the `Number of entries per page` link. The number of entries per page is shown in the left side of the table along with the total number of sounds.

Another way to simplify the listing is to sort the sound list by clicking a table header link. The order criteria are marked by the highlight of the table header and the arrow indicates the direction. The sort direction can be changed by another click on the respective header.

Add a New Sound

To access this page, click the ![icon] Sounds icon available in the `Tools` area.

> **Note**
>
> The **Sounds** section is available only if the permission "Sound Management" has been activated for your account. If this permission hasn't been activated for your account, you will not be able to see the **Sounds** icon in the `Tools` area.

You can add a new sound associated to your account only if you have sound languages available. On extension creation, the default sound language is added

to the extension account. When there are no sound languages, click the ![icon] Sound languages icon and follow the instructions in the Add a New Language section to add new languages.

To add a new sound to the extension account, follow these steps:

1. Click the ![icon] Add sound icon available in the `Tools` area.

2. A new page opens allowing you to enter information on the new sound:

   - Sound form

     ◦ Name – The descriptive name for the sound.

     ◦ This is music on hold – Use this checkbox to specify the purpose of the sound. When this option is selected, the sound can be played to a caller that is on hold. Otherwise, the sound is used for announcement purposes only.

- Record sound over the phone – When this option is enabled, 4PSA VoipNow gives you the possibility to record the sound file over the phone rather than uploading it.

- Folder – Use this dropdown list to select the folder where the sound will be stored.

• Upload sound files

- Filename – Click the Browse button to locate the sound file on your computer and upload it.

> **Note**
>
> 4PSA VoipNow accepts the following extensions for sound files: `.mp3`, `.wav`, `.gsm` and `.raw`.

If you are creating an announcement sound (i.e. the checkbox `This is music on hold` is not enabled), the following options are visible:

- Default sound file – When this option is enabled, this file is set as default for the sound. The default file is played for the callers with a phone language that is unavailable for the sound.

  For example, let's assume you have created a sound that announces callers that the extension user is on holiday. You have added versions of the announcement in English, French, and Dutch and set the English file as default. The English sound version will be played to any caller that has other phone language set.

> **Note**
>
> Each sound object must have one default sound file associated. When uploading several sound files at the same time, make sure you select only one default file. Otherwise, 4PSA VoipNow displays an error message.

3. You can use the ⊟ ⊞ buttons to remove/add versions of the sound in different languages.

- ⊟ removes the `Upload sound` section

- ⊞ adds another `Upload sound files` section

4. Click OK to add the new sound. Click Cancel to go back to the previous page without adding the sound.

Edit Sound Options

To access this page and edit the information on an existing sound, click the Sounds icon available in the `Tools` area.

> **Note**
>
> The **Sounds** section is available only if the permission "Sound Management" has been activated for your account. If this permission hasn't been activated for your account, you will not be able to see the **Sounds** icon in the `Tools` area.

In the new opened page you can modify the properties of a sound. You can add and delete files containing versions of the sound for different languages.

To edit the properties of a sound from the extension account, follow these steps:

1. Click the name link of the sound you want to modify.

2. A new page opens allowing you to change the details of the sound. The content of this page depends on the purpose of the sound: `announcement` or `music on hold`.

If the sound is an announcement sound, the information is grouped in the following sections:

- Sound form

- Upload sound files – Use this section to upload files containing versions of the sound in different languages.

-
  Use the [−] [+] buttons to remove/add versions of the sound in different languages.

  ○ [−] removes the corresponding `Upload sound files` section

  ○ [+] adds another `Upload sound files` section

> **Note**
>
> When you upload a sound file associated with a language that already exists, 4PSA VoipNow replaces the old file with the new version. Before this operation is performed, 4PSA VoipNow asks you to confirm the replacement.

To manage the existing sound files associated with an announcement sound, follow the steps:

1. Click the name link of the sound you want to modify.

2. A new page opens allowing you to change the details of the sound.

   In the `Existing sounds` section, 4PSA VoipNow displays the following information on each file:

   - Filename – The name of the file. Click this link to download the file on your computer.

   - Sound file size – The size of the file in Kb

   - Folder – The folder where the file is located

   - Language – The language associated with the sound file

   > **Note**
   >
   > The default sound file of the sound object is displayed in **bold** format.

3. Click OK to save your changes. Click Cancel to go back to the previous page without changing the sound.

Search the File List

When the file list is too long and you are searching for specific sound files, you can use the following features:

- Search – Insert the text you are looking for in the textbox. Then click the 🔍 button or the `Search` label to display only the sound files whose names contain the text.

- Show all – Click this 📋 button or the `Show all` label to display the entire list.

The search criteria will be retained even if you navigate to other pages until a new search is performed.

You can change the number of records displayed on the page by clicking the `Number of entries per page` link. The number of entries per page is shown in the left side of the table along with the total number of sound files in the system.

Another way to simplify the listing is to sort the sound file list by clicking a table header link. The order criteria are marked by the highlight of the table header and the arrow indicates the direction. The sort direction can be changed by another click on the respective header.

Remove Files

Choose the files you want to delete by selecting their corresponding checkboxes. Then click the Remove selected link. You will be asked to confirm the removal.

> **Note**
>
> Default sound files cannot be deleted. You must replace a default sound file.

Manage Sound Folders

In the Sound Folder Management page, you can view a list of the sound folders available in the extension's account. Multiple operations can be performed:

- Add a new sound folder
- Delete sound folders and their content
- Search for specific folders

To access a sound folder page, click the Sounds icon available in the Tools area and the Folders icon.

> **Note**
>
> The **Sounds** section is available only if the permission "Sound Management" has been activated for your account. If this permission hasn't been activated for your account, you will not be able to see the **Sounds** icon in the Tools area.

4PSA VoipNow displays the following information on each folder:

- Folder name – The name of the sound folder
- Sound files – The number of sounds stored in the folder. Click this link to open a new page listing these sounds.
- Created – The date when the folder was added to the system

Search the Folder List

When the time folder list is too long and you are searching for specific sound folders, you can use the following features:

- Search – Insert the text you are looking for in the textbox. Then click the 🔍 button or the `Search` label to display only the folders whose names contain the text.

- Show all – Click this ▤ button or the `Show all` label to display the entire list.

The search criteria will be retained even if you navigate to other pages until a new search is performed.

You can change the number of records displayed on the page by clicking the `Number of entries per page` link. The number of entries per page is shown in the left side of the table along with the total number of sound folders in the system.

Another way to simplify the listing is to sort the sound folder list by clicking a table header link. The order criteria are marked by the highlight of the table header and the arrow indicates the direction. The sort direction can be changed by another click on the respective header.

Add a New Sound Folder

Each time you add new sound files in the system you must choose the folder name where you want them to be stored. If you want to store a sound in a specific folder, other than the ones already existent, you can add a new sound folder before adding sound files.

Follow the steps described below to add a new sound folder:

1. Click the 📣 Sounds icon in `Tools` area and the 📁 Folder icon.

> 📝 **Note**
>
> The **Sounds** section is available only if the permission "Sound Management" has been activated for your account. If this permission hasn't been activated for your account, you will not be able to see the **Sounds** icon in the `Tools` area.

2. In the Sound Folder Management page, click the 📁➕ Add folder icon.

3. A new page opens allowing you to enter the name of the new folder. Use the available textbox to name the new folder.

4. Use the ➖ ➕ buttons to add several folders at the same time.

- ➕ adds a new folder input textbox

- • ▬ removes the corresponding textbox

5. Click OK to add the new sound folder(s). Click Cancel to go back to the previous page without adding the folder(s).

Delete Sound Folders

To remove sound folders from your account along with the sound files inside, click the 📢 Sounds icon available in the Tools area and the 📁 Folder icon.

> 📝 **Note**
>
> The **Sounds** section is available only if the permission "Sound Management" has been activated for your account. If this permission hasn't been activated for your account, you will not be able to see the **Sounds** icon in the Tools area.

A new page opens displaying all the sound folders available on your account. To delete sound folders follow these steps:

1. Choose the folders you want to delete by selecting their corresponding checkboxes.

2. Click the Remove selected link. A new page opens displaying the list of folders and the sounds located in the folders that will be deleted.

> 📝 **Note**
>
> When you delete a folder, you also delete all the sounds located in the folder.

3. Review the list. If you want to proceed with the removal, select the Confirm the removal checkbox and click OK. Otherwise click Cancel to return to the previous page without any removal.

> 📝 **Note**
>
> If the sounds inside the folder are currently used, these sounds cannot be deleted. The folder that contains them cannot be deleted either.

Manage Sound Languages

View the Language List

A sound file can be recorded in several languages so that the extension can listen to the specified announcement in his/her chosen language if available in the system. When the extension's language does not exist, the announcement will be played in the default sound language.

In the Sound Languages Management page, you can view a list of the languages available on your account. Multiple operations can be performed:

- View a detailed list of the system languages
- Add a new sound language
- Search for specific languages
- View the sounds that have files in different languages
- Delete sound languages from the system

To access Sound Language Management page, click the Sounds icon available in the `Tools` area. In the new page that opens, click the Sound languages icon.

> **Note**
>
> The **Sounds** section is available only if the permission "Sound Management" has been activated for your account. If this permission hasn't been activated for your account, you will not be able to see the **Sounds** icon in the `Tools` area.

4PSA VoipNow displays the following information on each sound language:

- Language name – The name of the language
- Sound files – The number of sound files in this language. Click this link to view the list of sound files.
- Created – The date when the language was added to the system

Search the Language List

When the language list is too long and you are searching for specific languages, you can use the following features:

- Search – Insert the text you are looking for in the textbox. Then click the 🔍 button or the `Search` label to display only the languages whose names contain the text.

- Show all – Click this 📄 button or the `Show all` label to display the entire list.

The search criteria will be retained even if you navigate to other pages until a new search is performed.

You can change the number of records displayed on the page by clicking the `Number of entries per page` link. The number of entries per page is shown in the left side of the table along with the total number of sound languages in the system.

Another way to simplify the listing is to sort the sound language list by clicking a table header link. The order criteria are marked by the highlight of the table header and the arrow indicates the direction. The sort direction can be changed by another click on the respective header.

Add a New Language

To add a new sound language, click the 📢 Sounds icon available in the `Tools` area.

> **Note**
>
> The **Sounds** section is available only if the permission "Sound Management" has been activated for your account. If this permission hasn't been activated for your account, you will not be able to see the **Sounds** icon in the `Tools` area.

In the new page that opens, click the 🌐 Sound languages icon and follow these steps:

1. In the Sound Language Management page, click the 🌐 Add Sound Language icon.

2. A new page opens allowing you to enter the name of the new sound language. Use the dropdown list to add one of the available languages to your account.

3. Use the ➖ ➕ buttons to add several languages at the same time.

   - ➕ adds another dropdown list so you can create another language

- removes the corresponding dropdown list
4. Click OK to add the new sound language(s). Click Cancel to go back to the previous page without adding the language(s).

Edit Language Details

To change the details of a sound language, click the Sounds icon available in the `Tools` area.

> 📒 **Note**
>
> The **Sounds** section is available only if the permission "Sound Management" has been activated for your account. If this permission hasn't been activated for your account, you will not be able to see the **Sounds** icon in the `Tools` area.

In the new page that opens, click the Sound languages icon and follow these steps:

1. Click the name link of the language you want to modify.
2. A new page opens in which you can use the `Name` dropdown list to choose another name for the language.
3. Click OK to save your changes. Click Cancel to return to the previous page without renaming the language.

Delete Sound Languages

To remove sound languages from your account, click the Sounds icon available in the `Tools` area.

> 📒 **Note**
>
> The **Sounds** section is available only if the permission "Sound Management" has been activated for your account. If this permission hasn't been activated for your account, you will not be able to see the **Sounds** icon in the `Tools` area.

In the new page that opens click the Sound languages icon and follow the steps:

1. Choose the languages you want to delete by selecting their corresponding checkboxes.
2. Click the Remove selected link. A new page opens displaying the list of languages and their associated sounds that will be deleted.
3. Review the list. If you want to proceed with the removal, select the `Confirm the removal` checkbox and click OK. Otherwise click Cancel to return to the previous page without deleting anything.

Delete Sounds

To delete sounds on your account, click the Sound icon available in the `Tools` area.

> **Note**
>
> The **Sounds** section is available only if the permission "Sound Management" has been activated for your account. If this permission hasn't been activated for your account, you will not be able to see the **Sounds** icon in the `Tools` area.

Choose the sounds you want to delete from the available list by selecting their corresponding checkboxes. Then click the Remove selected link. You will be asked to confirm the removal.

You cannot remove sounds that are currently used.

You cannot remove a sound object of type `music on hold`, if the following conditions are met:

- The folder where the sound is located is used.
- The sound is the only one left in the folder.

Chapter 15
View Your Call Costs

View Extension's Call Costs

4PSA VoipNow offers an easy way to keep track of each extension's calls and their costs.

In Call Costs page, you can view a detailed list of calls for the current and previous months. Multiple operations can be performed:

- Search for specific calls.
- Export the call list to a Microsoft Excel file.
- Export the call list to a CSV file.

To view your call costs, click the Call costs icon available in the `Tools` area.

4PSA VoipNow displays a table containing the calls registered in the current month. To view the calls from a previous month, use the dropdown list available at the top of the table.

> **Note**
>
> The entries in the dropdown list also display the total cost of the costs registered for each month.

The table includes the following details about each call:

- F – The flow of the call displayed using an icon: incoming call, outgoing call.

- T – The type of the call displayed using an icon: local call, extended local call, external call.

- A – The call application type displayed using an icon: Dial, Queue, IVR, Voicemail, Conference, Park, Unpark, Callback, Calling Card.

- From – The short extension number (if the call is initiated from inside the system) of the person who made the call.

- To – The short extension number (if the call is to an inside extension) of the person who answered the call.

- Call started – The date and time when the call was started

- Call duration – The duration of the call

- CallID – The unique number that Asterisk generated to identify the call.

- Call cost – The cost of the call for the extension owner

Search the Call List

4PSA VoipNow automatically displays only the calls of the current month. If you want to view the call list of previous months or search for specific calls, perform the following steps:

1. Use the following options for an advanced search:

   - From number - Use this textbox to fill in the phone number of the person who made the call.

   - To number - Use this textbox to fill in the phone number of the person who answered the call.

   - CallID – Use this textbox to fill in the unique number that Asterisk generated to identify the call.

- Call duration – Use this section to specify the call duration limits by filling in the fields in rule:

  higher than { } seconds and/or lower than { } seconds

- Call cost – Use this section to specify call cost limits by filling in the fields in rule:

  higher than { } and/or lower than { } seconds

- Call ended with – Use the dropdown list to choose a certain ending for the call. Possible values are: answered, no answer, busy, failed, unknown.

- Start search on/ End search on - Use these textboxes or click the corresponding calendar icon to specify the period you want to search.

- Display - Use these radio buttons to filter the search results:

  ◦ All – Select this option to display all the types of calls in the list.

  ◦ Incoming calls – Select this option to display only the calls that were received.

  ◦ Outgoing calls – Select this option to display only the calls that were placed.

- Limit search by call context – Use these radio buttons to filter the search results:

  ◦ All – Select this option to display all calls.

  ◦ Local calls – Select this option to display only calls made to local numbers (between extensions belonging to the same client).

  ◦ Extended local calls – Select this option to display only calls made to extended local numbers (between extensions belonging to different clients).

  ◦ External calls – Select this option to display only calls received from outside the system or sent to external destinations.

- Limit search by application – Use these checkboxes to filter the search results by the application used by Asterisk to handle the call:

  ◦ Dial – Select this option to display calls between two phone terminals.

  Queue – Select this option to display calls targeted at queue extensions.

  Conference – Select this option to display conference calls.

  Voicemail – Select this option to display calls that ended in the voicemail mailbox.

Voicemail Center – Select this option to display calls to an extension of type voicemail center.

IVR – Select this option to display calls targeted at IVR extensions.

Park – Select this option to display calls that were parked.

Unpark – Select this option to display calls that were picked up form the parking lot.

Callback - Select this option to display calls that were made using an extension of type callback.

Calling Card - Select this option to display calls that were made using an extension of type calling card.

2. Click OK to display only the records that fit your search criteria.

3. Use the dropdown list in the top left side of the call costs list to search for calls made in a specific month. Choose the `'--'` option to display the entire call costs list.

Note

In the top left corner of the calls table, 4PSA VoipNow displays the total cost of the calls found as a result of the search operation.

Export to an Easy-to-edit Format

- Export to Excel – Click this button to export the call costs report to a Microsoft Excel file.

- Export to CSV – Click this button to export the call costs report to a CSV file.

You have the possibility to customize the exported call cost report by choosing the columns you want to include in your report. To select the relevant columns that will appear in the exported report, click the `Show export` button in the upper right corner of the screen. Enable the checkboxes corresponding to the column names you want to export. Disable the checkboxes corresponding to the column names you want to leave out.

This is the list of all possible columns you can export in your customized report:

- Call flow
- Call type

- Application

- To number

- From number

- Call started - The date and time when the call started ringing on the destination phone.

- Call answered - The date and time when the call was answered. If the call was not answered, 4PSA VoipNow records the value: `0000-00-00 00:00:00`

- Call duration

- Call disposition - The way the call was terminated: it was either answered, not answered, failed, etc

- Billing plan - The billing plan that generated the call cost.

- Call cost The cost of the call as charged by the reseller account owner.

- Money unit

- Call ID - The unique ID of the call generated by 4PSA VoipNow.

- Transfer source - If the call was transferred to another extension, this column will list the source extension.

- Transfer destination - If the call was transferred to another extension, this column will list the destination extension.

- Initially called extension - If the call was picked up from another extension, this column will display the extension that was originally called.

- Callback caller-ID - If the caller used a callback extension to route its call to a remote destination, this column displays the authorized Caller-ID (the number from which the user dialed the system).

- Calling card code - If the caller used a calling card to call a destination number, this column displays the code introduced to authenticate and charge the call.

Manage Your Interface Preferences

4PSA VoipNow allows you to customize the look and feel of the control panel in the Interface Preferences page. On this page, you can define the interface language, the skin of the application, and the number of rows in records list.

To access this page click the Interface preferences icon available in your account page. You can adjust the following preferences based on your needs:

- Rows in table – Use this textbox to set the number of rows that will be displayed in your control panel.
- Interface skin – Use this dropdown list to choose the skin used in your control panel.
- System language – Use this dropdown list to choose the language used in your control panel.

> ⚠️ Caution
>
> 4PSA VoipNow does not allow you to use language packs that were created for earlier versions of the interface. The following warning message is displayed:

Impossible to switch to preferred interface language `{outdated language}`, because an outdated language pack is installed on the system. Please contact your provider to correct this situation.

Only the system administrator can fix this problem.

Chapter 17
Manage Email Notifications

4PSA VoipNow can send you email notifications when standard events occur. The text of the notifications can be customized.

To access this page, click the **Email templates** icon available in your homepage.

You can set the notification preferences for a series of events displayed on the first column.

Notification emails can also be sent to an email address specified in the `E-mail address` column. This email address can be different for each selected event.

> **Note**
>
> To enable all the checkboxes in a column, click the column's header. For example, if you want to enable all the checkboxes in the `Extension` column, click the `Extension` header.

The events that can trigger an email notification are displayed in `Email templates` section:

- Extension expiration warning – Email notification triggered by this event is sent {days} days `in advance` as specified in `Send expiration notices` field.

- Extension expired

- Extension billing limit warning – Email notification triggered by this event is sent when the available number of minutes is below {minutes} minutes as specified in `Send billing limit warnings when the account is below` field.

- Extension billing limit exceeded

- Voicemail message notification – When the extension receives a voicemail message, the extension user and a custom email addressed can be notified of the event.

- Fax message notification – When the extension receives a fax message, the extension user and a custom email addressed can be notified of the event.

- Forgot password – For this event, 4PSA VoipNow will send to the user who forgot his/her password and requested a new one an email message containing a temporary password. This password is valid only the amount of time specified in Login Preferences page in the `Expiration time for new password` field.

Note

`Voicemail message notification` and `Fax message notification` are displayed for `Phone terminal` extensions only if the respective features are enabled.

In `Preferences` section the reseller can specify the conditions in which the warning emails will be sent:

- Send expiration notices {x} days in advance – Use this textbox to specify how many days before the account expiration a notifications is dispatched to the users.

- Send billing limit warnings when the account is below {x} minutes or {y} {money unit} – A billing limit warning is generated in one of the following cases:

  ◦ The minutes remaining in `Available external outgoing minutes` plus the minutes remaining in `External over usage` go below a certain limit.

Use the first textbox to specify this minutes limit.

- ◦ The credit remaining in `Limit for external outgoing calls` goes below a certain limit.

  Use the second textbox to specify this money limit.

- ◦ The credit remaining in `Limit for external incoming calls` goes below a certain limit.

  The money limit you introduced for external outgoing calls in the above textbox, includes the external incoming calls money limit.

To enable notifications for your account, follow the steps:

1. From the available checkboxes, select the ones corresponding to the events you want to receive notifications for.

2. Click OK to save your options. Click Cancel to return to the previous page without saving the changes you have made.

Customize Email Content

To customize the subject and content of an email notification, follow these steps:

1. Click the 📝 icon corresponding to the chosen event.

2. A new page opens allowing you to edit the email subject and email body. Modify the text, keeping in mind the following rules:

   - You may use only plain text when writing the email subject and content. The email is also sent in plain text format.

   - You can include tags that will be automatically replaced by the system with the appropriate content. Examples:

   - `[recipient_name]` is replaced with the name of the person receiving the notification.

3. Click OK to save the changes to the email. Click Cancel to return to the previous page without saving the changes.

Restore the Default Settings

To restore the default notification settings and email contents, click the Default button.

> **Note**
>
> When you click the **Default** button, 4PSA VoipNow will not overwrite the other email address destination.

Chapter 18
Global Account Management

The Single Sign On (SSO) mechanism was designed to provide a centralized point of login for a user in multiple applications. The user creates a special account (Global Account) that will be used later by other applications to make the connection between the interfaces.

To access the Global Account Setup page, click the Global Account link located on the left frame navigation area.

Connecting To A Global Account

You can connect to a global account with an existing user, or you can create a new global account.

Click the Connect to global account icon.

In the new page that opens, make sure that the Use existing global account checkbox is selected, specify the global account username and password and click OK to connect to the global account.

> **Note**
>
> If several local accounts are connected to a global account, when logging in to the VoipNow interface using the global account, the user will be asked to select from the local accounts connected to the same global account.

To create a new global account, select the Create new global account checkbox, set the username and password for the new account and click OK to create the new global account.

> **Note**
>
> When creating a new global account, the respective account will be created on the SSO server.

Changing the password for a global account

You can change the password for the connected global account by pressing the ![icon] Change password icon.

In the new page that opens, submit the existing password and set a new one.

Disconnecting from a global account

If you are connected to a global account and wish to disconnect, click the ![icon] Disconnect from global account icon. In the new page that opens, select the Confirm disconnection from global account checkbox and click OK.