



4PSA VoipNow® 2.0.3 Queue Extension Type Guide

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Queue Extension Type Guide

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Preface

Who Should Read This Guide

This Extension's Guide must be read by all the 4PSA VoipNow users that own a Queue Extension.

Chapter 1

Edit Your Contact Information



Caution

After the first install, you will be required to fill in your contact information from the Extension's Account Details page. You will not be able to access and manage the application until all the required details are set up in the system.

In order to update your contact information, click the Edit extension icon available in the 10 Home section, which can be accessed from the left navigation panel.

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 text box to change the password for the reseller account.

A Caution

Based on the chosen password strength set up by the system administrator, you are not allowed to fill in dictionary words or passwords containing only digits or sequences of more than three identical characters.

All security levels ask for a minimum five characters long password.

- 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, click the Figure Email templates icon located in the Tools area.



- Address
- City
- State/Province
- Postal/ZIP code
- Country
- Region The regions of a country are listed in alphabetical order. The one selected by default is the first one on the list.
- Timezone The time zone selected by default is one you have previously set up from Unified Communications >> Interface Preferences page.

Click the OK button to submit the data. When all the required information has been filled in and you choose not to change it, the Cancel button will return you to the previous page without any modification.

Chapter 2

Manage the Application

My Interface Settings

4PSA VoipNow allows you to customize the application's default look and settings in the My Interface Settings page. Here you can define the interface language, the application's skin, the number of rows in the records list for the logged in user (reseller in your case) and several other options.

To access this page, you can either click the My interface link from the right corner of the top frame, either on the My interface button located in the Unified Communications settings area of the Unified Communications page.

You can adjust the following preferences based on your needs:

 Rows in table – Use this text box to set the number of rows that will be displayed in your interface. It can be any number between 1 and 9999, the default value being 50.

- Expanded alerts Use this text box to set the number of alerts displayed in the user context. It can be any number between 1 and 10, the default value being 3.
- Interface skin Use this drop-down list to choose the skin used by the logged in user interface.
- System language Use this drop-down list to choose the language used by the logged in user interface.

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.

- Display tool tip Use this check box to enable/ disable application tool tips displayed on mouse over images/ icons.
- Display context help Use this check box to enable/ disable context help, displayed in the top area of the page, under the title.
- Program logo Choose the logo that will be displayed at the top of the user's interfaces. Fill in the text box with the location of the file on your Browse... computer or use the button to locate the file.



Caution

It is recommended to use an image file in a GIF, JPEG, or PNG format with a height of 50 pixels.

 Logo URL – The logo file has a hyperlink attached to it. Use this text box to fill in the destination of this hyperlink. It can be your business website for example.

Click OK to save your changes. Click Cancel to go back to the previous page without updating the preferences. The Default button overwrites your own account settings with the default settings.

Restore Dismissed Alerts

Alerts present on any page in the application can be hidden by pressing the <u>Dismiss alert</u> link. These settings are only available for the logged in user.

▲

s, click the 🏴 Restore dismissed

To restore all the dismissed alerts, click the alerts button available in the Tools area.

Set up an Access Policy

4PSA VoipNow allows you to set up an access policy for the extension account. To enter the Access policy page, click the Access icon available in the Unified Communications settings area of the Unified Communications page.

There are two types of access policies:

- Deny When this policy is configured, the extension is not allowed to log in to the 4PSA VoipNow interface if his computer's IP is listed on the deny list. All the other IPs that are not included in the deny list can access the interface with the extension account.
- Allow When this policy is configured, the extension can login to the 4PSA VoipNow interface only if his computer's IP address is listed in the allow list.
 All the other IPs that are not included in the allow list cannot access the interface with the extension account.



Note

You cannot set up both types of policies at the same time.

View the Networks List

In the Network Access Policy page you can see a list with all the allowed and denied networks available in the system. The following information is available:

- N The network's order number.
- A The network's permission:
 - ° 🌡 Allowed
 - ° 💄 Denied

- P Use these icons to change the position of a certain network inside the list:
 - ° 📥 Up
 - ° **T** Down



Note

When you change the order, 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 network list 4PSA VoipNow displays $\{x\}$ changes pending in the rules order.

Click the Apply changes link to save the changes you have performed in the network list.

- IP The network's IP address.
- Mask The network's subnet mask.

Searching the Network List

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

- Search Fill in the text you are looking for in the text box. Click the button or the Search label to display only the desired networks.
- 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 entries per page by clicking the <u>10</u>, <u>25</u> and <u>100</u> links available in the right side of the table. The total number of records is shown in the left side.

Add Allowed or Denied Network

In order to add allowed or denied networks, follow these steps:

- Click the Access icon. A new page where you can enter the subnet or IP addresses to which you want to allow/ deny access opens.
- Subnet or IP address Use the drop-down list to specify if you want to allow or to deny access for the subnet or IP address filled in the first text box. Use the second text box to specify the position of the address inside the networks list.
- Use the buttons to add several subnet or IP addresses at the same time.
- Click Ok to add the IP(s) to the allow/ deny list. Click Cancel to go back to the previous page.

Remove a Network

To remove a network, select its corresponding check box and then click the Remove selected link. You will be asked to confirm the removal.

Chapter 3

View Account Overview

You can view the details of your account in the Home section, which can be accessed from the left navigation panel. There, in the Account overview section, 4PSA VoipNow displays the following information:

- Extension type The extension type, 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 phone number assigned when the extension was added to the system.
- Calls cost for { month} The the calls' cost in the current month.
- Outgoing time spent on { month} The outgoing calls' total duration of the total number of calls in current month.
- Incoming time spent on {month} The incoming calls' total duration of the total number of calls in current month.

- Total agents The total number of agents assigned to the queue.
- Registered agents The total number of agents registered into the queue.
- Queue supervisors The total number of supervisors for the queue.
- Number of sound files The total number of sound files, the disk space used and the percent of available disk space.
- Number of music on hold files The total number of music on hold files, the disk space used and the percent of available disk space.
- Queue report Reports on the queue's activity in a selected time interval.

Chapter 4

Manage Unified Communications Features

From this page you can manage your sessions and your access policies or you can customize your interface.

To access this page, click the <u>unified Communications</u> link from the left navigation panel.

Manage Sessions

View the Sessions List

In order to view the sessions list, click the Lunified Communications link

available in the left navigation panel. Then click the Sessions button. This link will open the Manage Sessions page, where you can view a list of all the sessions. Multiple operations can be performed on the sessions:

- Search the existing sessions
- Delete sessions

4PSA VoipNow displays the following information about each session:

- T The type of the user that logged in the system displayed using an icon:
 - ° 🚨 Admin
 - ° 🏮 Reseller
 - ° 퉐 Client
 - °
 Extension
- Login The user name of the person who logged in to the system.
- IP The IP of the machine after which the user logged in the system.
 - Note

If the user logged in from the VoipNow4Plesk module, the IP of the respective Plesk server will be displayed here.

• Logon time - The time when the user logged in to the system.

Searching the Sessions List

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

- Search Use the text box to specify the words you are looking for. Click on the P button or the Search label to display only the sessions that match your search criteria.
- 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 entries per page by clicking the <u>10</u>, <u>25</u> and <u>100</u> links available in the right side of the table. The total number of records is shown in the left side.

The sessions list can be filtered by login name, IP and log in time. To do so, click on a table header link. The order criteria is marked by the highlighted

table header and the arrow indicates how the sessions list was sorted. The sort direction can be changed by another click on that header.

Remove a Session

To remove registered sessions, follow these steps:

- 1. Choose the sessions you want to remove by selecting their corresponding check boxes in the Manage Sessions page.
- ² Click the Kemove selected link.
- 3. You will be asked to confirm the removal. If you want to proceed, click OK. Otherwise, click Cancel.

Login History

You are able to see a detailed history of the login sessions by clicking

the Login history button located in the Tools section of the Session Management page.

The following information is available:

- T The user's level is shown using an icon:
 - ° 🏮 Admin
 - ° 🏮 Reseller
 - ° 퉐 Client
 - ° Extension
 - ° III Unknown level
- O The icon in this column shows if the respective user is logged in or not.
 The icon can be:
 - ° 🏮 User is online
 - [°] Juser is offline
- Username The user name of the persons who logged in to the system.
- Number of logins The number of login sessions establish by the respective user.

- First login The date and time when the user logged in for the first time.
- Last login The date and time when the user last logged in.

Searching the Login History List

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

- Search Use the text box to specify the words you are looking for. Then click the button or the Search label to display only the records that match your search criteria.
- Show all Click the 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 entries per page by clicking the <u>10</u>, <u>25</u> and <u>100</u> links available in the right side of the table. The total number of records is shown in the left side.

The login history list can be filtered by user name, number of logins, first login date and last login time. To do so, click on a table header link. The order criteria is marked by the highlighted table header and the arrow indicates how the login history list was sorted. The sort direction can be changed by another click on that header.

Clear Logs

You are able to clear logs according to two criteria:

- Clear logs starting from { date} to { date} You can choose to clear the logs from a distinct period of time. Click the Calendar icon to specify the start and end date of the time interval.
- Clear logs older than You can choose to clear logs older than a specified number of days / weeks / years. Select the time unit from the drop-down list and specify the number of time units in the text box.

Login History of a Specific Account

You are able to see the login history of a specific account by clicking the respective user name in the login history list. The page containing the login history of a specific account displays the following information:

- Login time The date and time when the user logged in.
- IP address The IP address the user logged in from.

0

Note

If the user logged in from the VoipNow4Plesk module, the IP of the respective Plesk server will be displayed here.

- Hostname The hostname where the user logged in from.
- L This column shows whether the user logged in from the interface or by using API:
 - ° Control panel log in
 - ° 🔀 CallAPI log in

Searching the Account's Login History List

When the account's login history list is too long and you are searching for a specific record in the list, you can use the following features:

- Search Use the text box to specify the words you are looking for. Then click the button or the Search label to display only the records that match your search criteria.
- Show all Click the 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 entries per page by clicking the <u>10</u>, <u>25</u> and <u>100</u> links available in the right side of the table. The total number of records is shown in the left side.

The account's login history list can be filtered by login time, IP address, host name and login type. To do so, click on a table header link. The order criteria is marked by the highlighted table header and the arrow indicates how the account's login history list was sorted. The sort direction can be changed by another click on that header.

Clear Logs for an Account

The procedure is identical to the one described in the <a>Clear Logs section.

Failed Logins

You can see a list of the failed login attempts by pressing the Failed logins button in the Tools section of the Sessions Management page.

The following information is available:

- L This column shows whether the user logged in from the interface or by using API.
- Login time The date and time of the login attempt.
- Username The user name used for the login attempt.
- Message The reason for which the login attempt failed.
- IP Address The IP address of the user who attempted to log in.



Note

If the user logged in from the VoipNow4Plesk module, the IP of the respective Plesk server will be displayed here.

Hostname - The hostname of the user who attempted to login.

Searching the Failed Login History List

When the failed login history list is too long and you are searching for specific records, you can use the following features:

- Search Use the text box to specify the words you are looking for. Then click the button or the Search label to display only the records that match your search criteria.
- Show all Click the 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 entries per page by clicking the <u>10</u>, <u>25</u> and <u>100</u> links available in the right side of the table. The total number of records is shown in the left side.

The failed login history list can be filtered by login time, user name, message, IP address and hostname. To do so, click on a table header link. The order criteria is marked by the highlighted table header and the arrow indicates how the failed login history list was sorted. The sort direction can be changed by another click on that header.

Clear Logs

The procedure is identical to the one described in the <u>Clear Logs</u> section.

Chapter 5 Queue Setup

This type of extension is used to implement call center functionality.

In order to edit your extension's settings, click the 50 Home link available

in the left navigation panel and than on the Queue setup icon located in the Tools area.

4PSA VoipNow displays the following options:

- Queue general preferences
 - Queue name Use this text box to provide a descriptive name for the queue
 - Queue size The maximum number of callers waiting to talk to an operator. If you do not want to limit the queue size, enable the Unlimited option. Otherwise, disable the Unlimited option and fill in a value in the available text box.
 - 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.
- 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 each lasting 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 searches for available agents sequentially and uses the order of the agent list. Each time it tries to assign a call, it remembers the agent that answered the call answered; the next time a waiting call arrives, the search begins 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.

• Ring members in the adding order - The call is transferred to the agents in the order they have been added to the queue.

For example, let's assume you have a queue managed by 3 agents. The first added to the queue is Agent1, the second is Agent2 and the third is Agent3. The first time a call arrives, 4PSA VoipNow searches for the first available operation using the order Agent1, Agent2, Agent3. If Agent1 is available, the call is transferred to him. If not, it will be transferred to Agent2. If he is not available as well, the call will be transferred to Agent3.

 Random with member penalty - The call is transferred to a randomly selected agent from those with the smallest penalty level. If none is available, a new agent is selected from the next penalty level.

For example, let's assume you have a queue managed by 4 agents. Agent1 and Agent3 have the smallest penalty level, while Agent2 and Agent4 have a bigger penalty level. The first time a call arrives, 4PSA VoipNow searches for the group with the smallest penalty level and

randomly assigns the call to one of the Agent1 and Agent3. If none is available, the call is transferred to one of the Agent2 and Agent4.

- 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 text box is empty by default.
- Record all queue conversations This option allows the recording of all the calls taken by the queue operators.
- Call recording storage space When the call recording option is enabled, you have the possibility to limit the storage space for the recordings. If you don't want to limit the space, select the Unlimited check box.

Local agent's behavior

- Ring an agent for a maximum of {x} seconds The {x} value is the maximum time interval that an operator extension will ring. The default value is 20.
- Maintain a minimum of {x} seconds between calls The {x} value specifies the minimum operator break between calls. The default value is 120.
- 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 had to wait 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.

Caller behavior

- Welcome sound Use the icon to select the sound played to the caller before connecting him to the queue. A pop-up window that displays a list of all the available sounds matching the name filled in the text box opens. The following information is available:
 - P Click the 🕒 icon to play or to download the sound.
 - Name The name of the sound file. Click the link in order to select this sound.
 - Folder This column displays the file's folder location.

If you are searching for a particular sound, you can use the available controls.

In order to display all the sounds available in the system for all the events, click the <u>Display all</u> link located under the search controls.

You can change the number of entries per page by clicking the $\underline{10}$, $\underline{25}$ and $\underline{100}$ links available in the right side of the table. The total number of records is shown in the left side.

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



Note

The caller will be announced of his position in the queue using the There are sound and The elapsed queue hold time sound set in the **Sound files setup** section.

- Announce hold time When this option is enabled, the callers are informed about the time they have been waiting in the current queue for their call to be answered by an agent. The sound played to the user when this option is enabled is the one entered in the 'The elapsed queue hold time' sound field.
- 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" key on his phone pad. The call will be transferred to another extension belonging to the same client account. Use the text box to specify the extension's number. Also, you can click the icon to see a list with all the extensions available for that client. A pop-up window will be displayed, allowing you to choose the extension number.

The Extensions list pop-up window displays the following details:

- T This icon displays the extension type:
 - C Phone terminal
 - 5 Queue
 - 📍 🧐 Interactive Voice Response (IVR)
 - Voicemail center
 - Conference
 - ५ Callback
 - 🊝 Calling card
 - Intercom/ Paging
- S This icon displays the extension's status:
 - **I** Fnabled
 - 🔟 Disabled
- Extension The name of the extension.

Click the link to select the extension.

Extension number - The extension number.

If the extensions list is too long, you can use the available controls to search for a specific one.

- 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.



Note

This is disabled if the **Announce Position every {y} seconds** is also disabled.

- 'The elapsed queue hold time' sound This is the sound played to the caller waiting in the queue for his/her call to be answered by an agent. It represents the amount of time for which the caller has been waiting in the current queue (the amount of time is not cumulative for callers that have been transferred from one queue to another).
- '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 gueue.
- 'Hold time' sound This sound is played to the agent answering a call from a user waiting in the queue. This sound represents the amount of time for which the user has been waiting in the current queue.
- 'All reps busy / wait for next' sound The sound played to announce the caller that, for the moment, all the agents are busy and that he has to wait a certain period until his call will be answered.
- 'Seconds' sound The sound file that corresponds to the word 'seconds'.
- 'Minutes' sound The sound file that corresponds to the word 'minutes'.



Note

When you click the icon, a pop-up window that shows a list of all the available sounds matching the text filled in the text box is displayed. The following information is available:

- P Click the licon to play or to download the sound.
- Name The name of the sound file. Click the link in order to select this sound.
- Folder This column displays the file's folder location.

If you are searching for a particular sound, you can use the available controls.

In order to display all the sounds available in the system for all the events, click the Display all link located under the search controls.

You can change the number of entries per page by clicking the <u>10</u>, <u>25</u> and <u>100</u> links available in the right side of the table. The total number of records is shown in the left side.

Oueue behavior



Note

The following options can be edited only if there is at least another phone terminal extension in the same client account.

- If a caller has been waiting in queue for {x} seconds, transfer call to extension { extension} – Select this check box if you want to set a maximum waiting time and to specify an extension to transfer the call to in case it exceeds this time. When the check box is selected, you can fill in the two text boxes:
 - {x} The waiting interval. The default value is 600.
 - { extension} The extension that the call will be transferred to.
- If there are no members logged in the queue, transfer the caller to extension { extension} – Select this check box if you want 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} – Select this check box if you want to specify an extension to transfer the new call to when all the operators are busy.

- Play sound {sound} on disconnect due to queue full Select this check box if you want to specify the sound that will be played to the caller on disconnection due to queue full. Clicking the icon will open a popup window that displays a list of all the available sounds matching the text filled in the text box. The following information is available:
 - P Click the local icon to play or to download the sound.
 - Name The name of the sound file. Click the link in order to select this sound.
 - Folder This column displays the file's folder location.

If you are searching for a particular sound, you can use the available controls.

In order to display all the sounds available in the system for all the events, click the <u>Display all</u> link located under the search controls.

You can change the number of entries per page by clicking the $\underline{10}$, $\underline{25}$ and $\underline{100}$ links available in the right side of the table. The total number of records is shown in the left side.



Note

Use the text boxes to specify the extension's number or click the ² icon to see a list with all the extensions available for that client. A pop-up window will be displayed, allowing you to choose the extension number.

The **Extensions list** pop-up window displays the following details:

- T This icon displays the extension type:
 - * Phone terminal
 - 👼 Queue
 - Interactive Voice Response (IVR)
- S This icon displays the extension's status:
 - Enabled
 - Disabled
- Extension The name of the extension.

Click the link to select the extension.

• Extension number - The extension number.

If the extensions list is too long, you can use the available controls to search for a specific one.

Chapter 6 **Queue Features**

Manage Queue Agents

To access the Queue Agents page, click the Queue agents icon located in the Tools section.



Select Queue Agents

You can assign or un assign agents to the queue by clicking on the Choose items button located on the right of the Queue agents list. A new pop up window will open, allowing you to select the desired agents.

When you are done, click the Update button. This will populate the queue agents list displayed at the bottom of the page with the assigned extensions.

View the Queue Agents List

In the Queue Agents page, all existing agents are displayed in a table. The following information is available:

- S This icon shows the status of the agent:
 - ° 5 The agent is logged in
- V This icon shows the type of the agent:
 - ° 5 The agent is a normal queue member
 - ° The 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 Edit a queue agent section below.
- Calls The number of calls accepted by the agent.
- Connected to The phone terminal extension where the agent is connected from.

Edit a Queue Agent

If you want to edit an agent who has been added to the queue, select him from the queue agents information list in the Queue Agents page and click his name.

The new opened page allows you to configure the following parameters:

- Supervisor Use the available drop-down list to specify whether the agent is a supervisor or not.
- Penalty Use the available text box to specify the penalty number of the respective agent. The Penalty can be used to differentiate agents by level. The call distribution algorithm will be applied on the agents with the lowest penalty number. If the are no agents with the lowest penalty number available, 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; 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.

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 information, follow these steps:

- 1. In the Extension Management page, click the queue extension's name.
- 2. In the new opened page, click the <a> Queue report icon available in the Tools area.

Queue Reports Overview

To access this page, click the Overview tab located in the Queue Report tool bar.

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 the queue's agents.
 - Total unanswered calls The total number of calls unanswered by the queue's agents.
 - Total number of calls The total number of both the answered and unanswered calls.
- Answered calls This section displays general statistic data on the answered calls.
 - Total calls ended by agent The total number of answered calls that were normally ended by the queue's agents.
 - Total calls ended by caller The total number of answered calls that were normally ended 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 This section displays general statistic data on the 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 that were ended by the callers before speaking to an agent.
 - Calls transferred with key The caller pressed 0 key before speaking to an agent and the call was transferred to another extension.
 - Calls that exit the queue due to timeout The total number of calls that exited the queue when the caller was on hold for too long and the timeout limit 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 This section displays general statistic data on the calls' duration.
 - Avg call length (completed calls) The average call length of the completed calls.
 - Avg hold time (completed calls) The average on hold time for the completed calls.
 - Avg hold time (abandoned calls) The average time spent by the callers in the queue before abandoning the call.
- Call completion This section displays general statistic data on the completed calls.
 - 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.

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

- Analyzing records between Use the text box to fill in a date in the following format yyyy-mm-dd. Use the button to display a calendar and select the desired date.
- and Use the text box to fill in a date in the following format yyyy-mm-dd.

 Use the button to display a calendar and select the desired date.
- Stats display Use the drop-down list to specify the display method for the report. Choose between:
 - Default
 - Hourly
 - Weekly
 - Daily

- Monthly
- ullet Click the ullet 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 tool bar will display records from the same time interval.

Answered Calls Report

To access this page, click the Answered calls tab located in the Queue Report tool bar.

The information is structured in several sections:

- Queue Overview This section displays the following statistics about call duration and caller waiting intervals:
 - Total number of answered calls The total number of calls answered by the queue's agents.
 - Average call length The average length of the incoming calls.
 - 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 The total length of all the incoming calls.
 - Average call waiting time The average waiting time for all the calls.
 - Minimum call waiting time The minimum waiting time for an incoming call.
 - Maximum call waiting time The maximum waiting time for an incoming call.
 - Total waiting time The total waiting time of all the incoming calls.
- Queue agents This section displays the following statistics about each operator from the queue:
 - Agent The number of the operator's extension as well as his status in the queue (logged in or not logged in). Click this link to open the Agent status page and view the statistics about his 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 the 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.
 - 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:

- Analyzing records between Use the text box to fill in a date in the following format yyyy-mm-dd. Use the button to display a calendar and select the desired date.
- and Use the text box to fill in a date in the following format yyyy-mm-dd.

 Use the button to display a calendar and select the desired date.
- Stats display Use the drop-down list to specify the display method for the report. Choose between:
 - Default
 - Hourly
 - Weekly
 - Daily

- Monthly
- $^{\bullet}$ Click the \nearrow 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 tool bar will display records from the same time interval.

Unanswered Calls Report

To access this page, click the Unanswered calls tab located in the Queue Report tool bar.

- Queue overview This section displays the following statistics about call duration and caller waiting intervals:
 - Total number of unanswered calls The total number of unanswered incoming calls.
 - Average wait time before disconnection The average time a user had to wait before his call was interrupted.
 - Minimum wait time before disconnection The minimum time a user had to wait before his call was interrupted.
 - Maximum wait time before disconnection The maximum time a user had to wait before his call was interrupted.
 - Total wait time before disconnection The total time waited by all the users before their calls were interrupted.
 - Average queue position at disconnection The average queue position of an user before the call was interrupted.
 - Minimum queue position at disconnection The minimum queue position of an user before the call was interrupted.
 - Maximum queue position at disconnection The maximum queue position of an user before the call was interrupted.
- 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 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 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:

- Analyzing records between Use the text box to fill in a date in the following format yyyy-mm-dd. Use the button to display a calendar and select the desired date.
- and Use the text box to fill in a date in the following format yyyy-mm-dd.

 Use the button to display a calendar and select the desired date.
- Stats display Use the drop-down list to specify the display method for the report. Choose between:
 - Default
 - Hourly
 - Weekly
 - Daily
 - Monthly
- Click the P 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 tool bar will display records from the same time interval.

Calls Distribution Report

To access this page, click the Calls distribution tab located in the Queue Report tool bar.

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:

- Analyzing records between Use the text box to fill in a date in the following format yyyy-mm-dd. Use the button to display a calendar and select the desired date.
- and Use the text box to fill in a date in the following format yyyy-mm-dd.

 Use the button to display a calendar and select the desired date.
- Stats display Use the drop-down list to specify the display method for the report. Choose between:
 - Default
 - Hourly
 - Weekly
 - Daily
 - Monthly
- Click the \nearrow 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 tool bar will display records from the same time interval.

Agents Report

To access this page, click the Agents report tab located in the Queue Report tool bar.

- Agents overview
 - Number of agents The total number of agents of that particular queue.

- Average logged in time The average time the agents were logged in to the queue.
- Minimum logged in time The minimum time the agents were logged in to the queue.
- Maximum logged in time The maximum time the agents were logged in to the queue.
- Total agents time The total time all the agents were logged
- Average on pause time The average length of the agent's pauses.
- Minimum on pause time The minimum length of the agent's pauses.
- Maximum on pause time The maximum length of the agent's pauses.
- Total agents pause time The total length of all the agents' pauses.

Agent Availability

- Agent Click this link to open the Agent status page and view the statistics about his activity.
- Logged in time The total time the agent was logged in to the queue.
- On pause time The total time the agent was on pause.
- Effective time The effective time (Logged in time On pause time).

Agent sessions

- Agent Click this link to open the Agent status page and view the statistics about his activity.
- Sessions Click this link to open the Agent status page and view statistics about the agent's sessions.
- Average time per session The average time spent by an agent logged in per session.
- Pauses The total time of the agent's pauses.
- Average time per pause The average time of an agent's pause.
- Pause % The percentage of the pauses time out of the total session time.
- Pauses per session The number agent's pauses per session.

Answered calls

- Agent Click this link to open the Agent status page and view the statistics about his 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 The total time of the calls answered by the agent.
- Average call time The average time of an answered call.
- Average wait time The average time the user had to wait until his call was answered by an agent.
- % of queue calls The percentage of the answered calls out of the total queue's calls.
- Graphic A graphic representation of the percentage value.

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

- Analyzing records between Use the text box to fill in a date in the following format yyyy-mm-dd. Use the button to display a calendar and select the desired date.
- and Use the text box to fill in a date in the following format yyyy-mm-dd.

 Use the button to display a calendar and select the desired date.
- Stats display Use the drop-down list to specify the display method for the report. Choose between:
 - Default
 - Hourly
 - Weekly
 - Daily
 - Monthly
- ullet Click the \nearrow 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 tool bar will display records from the same time interval.

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 sessions:

- Status The agent's 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 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 session's start time.
- Logout hour The session's end time.
- Duration The session's length.
- 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 phone).
- Pause time The agent's pauses total duration.

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:

- CallerI D The caller's identification number.
- Callerl D A unique identification number generated for each call.
- Start time The time the conversation started.
- End time The time the conversation ended.
- Duration The conversation's length.
- 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 7

Edit Your Extension's Permissions and Phone Numbers

To modify the permissions and phone numbers of your extension, follow these steps:

- Click the Extension permissions and phone numbers icon available in the Tools area.
- 2. A new page opens, allowing you to modify the following fields:
 - Permissions
 - Sound management This option allows the extension to manage sound files, folders, and languages.
 - Limits
 - Maximum disk space for sound files Use the available text box to specify the maximum storage space reserved for the sounds created

by the extension user. If you do not want to limit the disk space, select the Unlimited check box.

- Maximum disk space for music on hold files Use the available text box to specify the maximum storage space reserved for the music on hold files. If you do not want to limit the disk space, select the Unlimited check box.
- Maximum concurrent text to speech Use the available text box to limit the number of calls that are allowed to use the text to speech application at the same time. If you do not want to limit the extension, select the Unlimited check box.



Note

This line is available only if the **Allow text to speech** option was enabled from the Unified Communications >> **System Preferences** page.

In order to use the text to speech functions, you must make sure that:

- There is at least one Cepstral voice engine installed on your server.
- There is at least one voice support license and one concurrency port license installed on your server (licenses can be purchased from the 4PSA store).

More details about the Cepstral engine installation can be found in the 4PSA VoipNow release notes.

 Maximum number of queue members – Use the available text box to limit the number of agents that can be added to the queue.



Note

The Maximum number of queue membersoption is displayed for Queue extensions only.

- Account expiration date To specify the date when the extension account becomes invalid, deselect the Unlimited check box and provide a date using the text box or the available calendar button.
- 3. Click OK to save the changes to the account. Click Cancel to return to the previous page without saving the changes.

Chapter 8

View Your Personal Charging Plan

4PSA VoipNow allows you to view detailed information about your account's current charging plan. To access this information, click the Home link available

in the left navigation panel and than on the Charging plans icon situated in the Tools area.

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

- Charging plan description
 - Charging plan name The descriptive name of the charging plan.
 - Charging plan type The type of the charging plan: prepaid or postpaid.
 - Allow incoming calls Yes 4PSA VoipNow displays this information only if your extension 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 your extension can make calls to destinations outside the system.
- Allow outgoing local calls Yes 4PSA VoipNow displays this information only if your extension can call other extensions on the same client account.
- Allow outgoing extended local calls Yes 4PSA VoipNow displays this information only if your extension can call other extensions in the system (not on the same client account).
- Remaining incoming calls credit The amount currently available for incoming calls.



Note

This information is available only for prepaid charging plans.

 Remaining outgoing calls credit – The amount currently available for outgoing calls.



Note

This information is available only for prepaid charging plans.

Number of recharges



Note

This information is available only for prepaid charging plans.

 Incoming money limit – The supplementary credit for external incoming calls.



Note

This information is available only for postpaid charging plans.

 Outgoing money limit – The supplementary credit for external outgoing calls.



Note

This information is available only for postpaid charging plans.

- External outgoing limits Number of outgoing minutes available, per time interval. The number of outgoing minutes is displayed for each time interval included in the charging plan in the format:
 - {m} minutes limit in time interval {T}

The number of remaining minutes in current month is also displayed in format:

{m} minutes limit in over usage. {m} minutes and 0 seconds remaining in {m} remaining in {month}



Note

This information is available only for postpaid charging plans.

4PSA VoipNow displays this section only if the extensions on the client account can make calls to destinations outside the system.

- Outgoing calls charges These are the charges applied to conversations after the user has exceeded the number of available minutes.
 - Calls are charged indivisible for the first {T} seconds and then every {T} seconds - For the first {T} seconds the call is taxed as one minute; afterwards, taxing is done every {T} seconds.
 - Local calls are charged { money unit} / second The fee charged for calls between extensions on the same client account.



Note

4PSA VoipNow displays this information only if the extensions can call locally.

 Extended local calls are charged {money unit} / second – The fee charged for calls between extensions belonging to different client accounts from the system.



Note

4PSA VoipNow displays this information only if the extensions can call locally to extensions on different client accounts.

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}.
- 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.

Chapter 9

View Your Charging Limits History

4PSA VoipNow allows you to view detailed information about a extension's

charging limits. To access this information, click the Charging limits icor available in the Tools area.

The charging limits history table 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.
- Over usage minutes Displays the supplementary over usage minutes limit.
- Every month Displays the time frame for the charging limits: current month or monthly.
- Order number Displays the number of the request for allocating the new charging limits.

Data added Displays the data when the charging limits were enforced
 Date added – Displays the date when the charging limits were enforced.

Chapter 10

View Extension's Charging Credits History

4PSA VoipNow allows you to view detailed information about the history of recharges for the extension's charging credit. To access this information, click the



Charging credits icon available in the Tools area.

The charging credits history table 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 charging credits.
- Date added Displays the date when the charging credits were enforced.

Chapter 11 Manage Your Time Intervals

View Time Intervals

Time intervals are used to match calls to a certain period of time. This can be done for charging reasons or in order to filter incoming/ external calls. In the Time Interval Management page, you can view a list of all the available time intervals added to the system.

To access this page, click the 100 Home link in the left navigation panel.

Next, click the Time intervals icon available in the Tools area. Multiple operations can be performed:

- Add a new time interval
- Searching the time intervals list
- Edit an existing time interval
- Delete time intervals

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

- T The method used to define the time interval:
 - ° Individual days method
 - ° 🟮 Interval method
- Name The time interval's descriptive name. Click this link to edit the time interval's information.
- Intervals The number of different time intervals defined for the specific time interval block. Click the number displayed to see further information regarding the time intervals:
 - Hours The hours used as the time interval limits.
 - Week days The days used as the time interval limits.
 - Days of the month The month period to which the time interval applies.
 - Month The month to which the time interval applies.
- Created The date when the time interval was created.



Note

There is one default time interval for each user in the system named Full month that covers the entire month.

Searching the Intervals List

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

- Search Fill in the text you are looking for in the text box. Click the button or the Search label to display only the time intervals whose name contain that 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 entries per page by clicking the <u>10</u>, <u>25</u> and <u>100</u> links available in the right side of the table. The total number of records is shown in the left side.

The time intervals list can be filtered by name and creation date. To do so, click on a table header link. The order criteria is marked by the highlighted table header and the arrow indicates how the time intervals list was sorted. The sort direction can be changed by another click on that header.

Add a New Time Interval

Time intervals are used on call filtering, call routing, charging plans, etc. Whenever a new account is created, the extension must have a charging plan associated to this account. The extension can be charged differently based on the call time interval.

To add a new time interval, click the 10 Home link in the left navigation

panel. Next, click the Time intervals icon available in the Tools area and follow the next steps:

1.



In the Time Interval Management page, click the intervals icon.

- 2. A new page opens, allowing you to enter information about the new time interval:
 - The Time interval definition area has two fields which represent the generic description of the time interval block:
 - Name Use the text box to fill in a descriptive name which will help identifying the time interval.
 - Matching algorithm A time interval block 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.
 - Timezone Use the drop-down list to select the time zone in which your time interval is defined. The default value is server_default.



Note

This information is also displayed in the list of time intervals, next to the name of the time interval.

In the description of a charging plan, this information is listed in the Outgoing calls charges area.

- The Matching intervals area allows you to enter multiple time intervals in order to have a more complex and comprehensive overview of the calls. Here you can enter the following parameters:
 - Start at hour and End at hour Use the available text boxes to specify the limits of the time slot.
 - Start weekday and End weekday Use these drop-down lists to select the days of the week that define the time slot.
 - Start day of month and End day of month Use these drop-down lists to select the days of the month that define the time slot.
 - Month Use this drop-down list to select the month that defines the time slot.
- ³. Use the buttons to add several time intervals at the same time:
 - removes the corresponding Time interval.
 - dads another Time interval.
- 4. Click OK to add the new time interval(s). Click Cancel to go back to the previous page without adding the interval(s).

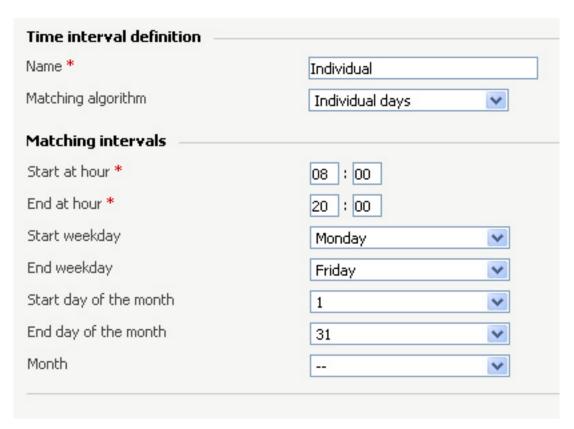


Note

You can enter up to **ten** different time intervals to a single time interval block.

Example of a time interval defined in individual days

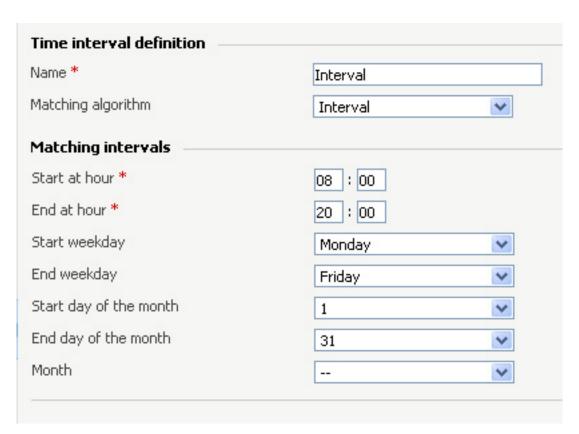
In the below time interval, 4PSA VoipNow matches the calls made or received between 8:00-20:00 hours, on Monday, Tuesday, Wednesday, Thursday and Friday between 1 and 31 of every month.



A time interval defined in individual days

Example of a contiguous time interval

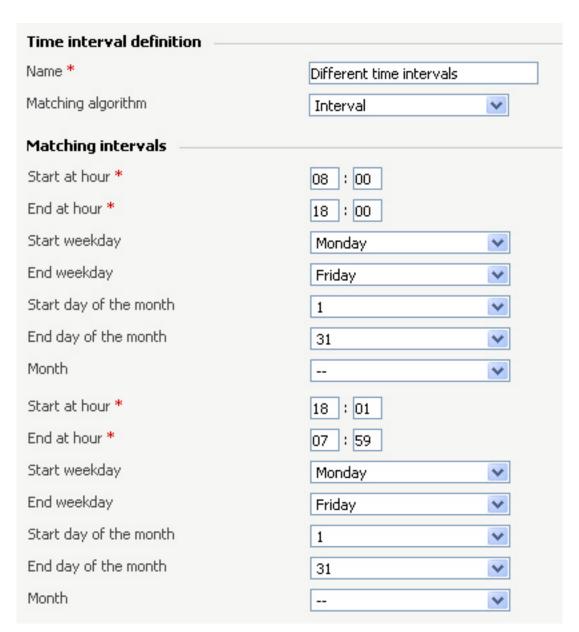
In the below time interval, 4PSA VoipNow matches the calls made or received between Monday, 8:00 and Friday, 20:00, between 1 and 31 of every month.



A continuous time interval

Example of a time interval block with two different time intervals defined for individual time frames

In the below time interval block, 4PSA VoipNow matches the calls made or received between 8:00 - 18:00 hours on Monday, Tuesday, Wednesday, Thursday and Friday, every month between 1 and 31, as well as the calls made or received between 18:01 - 07:59 hours on Monday, Tuesday, Wednesday, Thursday and Friday, every month between 1 and 31.



A time interval block with two different time intervals

Edit a Time Interval

To edit the properties of a time interval, click the Time intervals icon available in the Toolsarea and follow these steps:

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

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



Note

For more information on the fields in these sections, read the Add Time
Intervals section.

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

Remove a Time Interval

To remove a time interval, click the Tools area and follow the next steps:

- 1. Choose the time intervals you want to remove by selecting their corresponding check boxes.
- ²· Click the **K** Remove selected link.
- 3. You will be asked to confirm the removal. If you want to proceed with the removal, click OK. Otherwise, click Cancel.

Chapter 12

Manage Your Extension's Call Rules

Manage Your Extension's Incoming Call Rules

Incoming Call Rules Overview

4PSA VoipNow allows you to filter an extension's incoming calls. 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. All he has to do is to define a rule that will transfer all the calls from his personal extension to other one to which he can answer.

in the Tools area.

To access this option, click the Incoming call rules icon available

In the Edit Information on the Incoming Call Rules page, you can view a list of the incoming call rules available in the extension account. The following operations can be performed:

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

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 is displayed using an icon:
 - ° 🔽 Enabled
 - ° 🏅 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 icons to change the position of the rule in the group.



Note

Any change made is countered in the left side of the list table: $\{x\}$ changes pending in the rules order. 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 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.
 - 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 only available for the Queue extension type. The value of the priority parameter is also displayed here.

- Transfer to internal 4PSA VoipNow transfers the call to another extension on the same client account if the called extension has assigned to it a charging plan that allows calls to internal destinations and Multiuser aware permission enabled. This calls will be charged to the called extension.
- Transfer to external 4PSA VoipNow transfers the call to an external destination if the called extension has assigned to it a charging plan that allows calls to external destinations. This calls will be charged to the called extension.
- Follow me to 4PSA VoipNow routes the call simultaneously to all the extensions or the external destinations specified by the user. If the call is answered by another extension than the initial one, the call will be charged like a transfer between those two destinations.



Note

If the user has specified two or more external destinations in the 'Follow me to' rule, these destinations are called simultaneously using the first outgoing call rule defined for each of them. If in the first attempt the call fails, a second attempt is made. To initiate the second attempt the system searches for a routing rule which has not been used in the first attempt. If at least one such rule is found, all the destinations are called again. The rules used in the second attempt are:

- Rules that have not been used in the first attempt in the case of destinations for which there is at least one unused routing rule remaining after the first attempt. For a destination that falls into this category, the rule employed in the second attempt is the first unused rule on the list of routing rules defined for that particular destination.
- Rules which have already been used in the first attempt in the case
 of destinations for which unused routing rules are not available. For a
 destination that falls into this category, the rule employed in the second
 attempt is the first one available on the list of routing rules defined for that
 particular destination.

In case the second attempt is not successful, the system tries to initiate a third attempt using the algorithm described above (for the second attempt). There are two possibilities:

 If there are no unused rules available for any destination, the system stops trying to contact the external destinations defined in the 'Follow me to' rule and thus the call has failed. If there is at least one outgoing call rule which has not been used in the second attempt, the condition to initiate the third attempt is met and the whole procedure is started once more.

The attempts to contact the external destinations defined in the 'Follow me to' rule continue until all the outgoing call rules (for all the destinations) have been employed at least one time.

- 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.
- In time interval The time interval when the rule will be executed.
- 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.
- Key The text box displays the key that can be used to enable/disable the routing rule from the phone terminal pad by dialing *74 {key}. You can use this text box to update the key: edit the current key and click the Apply changes link available in the right side of the table.

Add an Incoming Call Rule

To add new incoming call rules, click the Incoming call rules icor available in the Tools area.

In the Add incoming call rules section you can find buttons, text boxes, and drop-down lists allowing you to define one or more incoming rules. The following steps should be followed:

- 1. Use the first drop-down list to choose the action that will be performed if the number is matched. The available 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.
- 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 the Queue extension type.
- Transfer to internal 4PSA VoipNow transfers the call to another extension on the same client account.
- Transfer to external If the extension has assigned a charging plan that allows calls to external destinations, calls can be diverted to this destination. The called extension will be charged for these calls.
- Follow me to 4PSA VoipNow transfers the call when the extension user switches terminals.
- 2. Use the second drop-down 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 text box to specify the extension number or a regular expression that matches the incoming call.
- 4. Use the third drop-down list to choose the time interval when the calls must be checked.
- 5. Use the Add in position text box to specify the rule's order in the list.

Caution

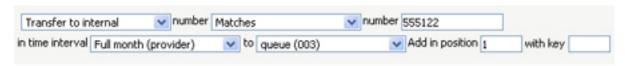
The rule's position in the group is very important because it defines the order in which 4PSA VoipNow verifies the call rules in case of an incoming call.

The checking is made in order and all rules are final (meaning that the program stops checking when the first rule is matched).

- 6. Use the With key text box to specify a key that can be used to enable/ disable the routing rule from the phone terminal pad by dialing *74 {key}.
- 7. The Set call priority, Transfer to internal, Transfer to external and Transfer on event actions have additional parameters.
 - When you select the Set call priority action, 4PSA VoipNow displays an additional text box. Use it to fill in the priority that will be assigned to the call before entering the queue.
 - When you select the Transfer to internal action, 4PSA VoipNow displays an additional drop-down 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 drop-down list to select the event when the transfer will be performed.
 - · Use the second drop-down list to choose whether the call will be transferred to an internal or external number. The external transfer option is available if the extension's charging plan allows calls to external destinations.

 Use the last control (drop-down list or text box) 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.



Example of a valid incoming rule

- 8. Use the tbuttons to add several new call rules at the same time:
 - * Click the *\bullet* button to add a new set of buttons, text boxes, and drop-down lists allowing you to create an additional rule.
 - Click the button to delete its corresponding rule.
- 9. 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 Incoming Call Rules Order

The rule's position in the group is very important because it defines the order in which 4PSA VoipNow verifies the existing 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.

To change the rule's order, click the available in the Tools area.



Incoming call rules icon

1. In the call rules list, 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 $\{x\}$ changes pending in the rules order.

² Click the Apply changes link to save the changes you have made on the list of call rules.

Remove an Incoming Call Rule

Incoming call rules icon available in To remove call rules, click the the Tools area and follow the next steps:

- 1. Choose the rules that you want to delete by selecting their corresponding check boxes.
- ² Click the Kemove selected link.
- 3. You will be asked to confirm the removal. If you want to proceed, click OK. Otherwise, click Cancel.



Caution

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

Manage Your Extension's Outgoing Call Rules

4PSA VoipNow allows extensions to block certain outgoing calls, based on the time interval when the call was dialed and the caller-ID of the system user that dialed the number.

Outgoing Call Rules Overview

To access the outgoing call rules option, click the icon available in the Tools area.

In the Edit the Outgoing Call Rules page, you can view a list of the outgoing call rules available in the extension account. The following operations can be performed:

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

4PSA VoipNow displays the following information about each group:

• S – The status of the group is displayed using an icon:

- Fnabled
- Disabled

Click on this icon to change the status of the group.

- Name The descriptive name of the outgoing routing rules group. Click this link to edit the group's details.
- Action The measures taken by the application against a certain phone number.
- Number The phone number affected by the chosen action.
- In time interval The time frame in which the rule is applied.

Add an Outgoing Call Rule

Outgoing call rules icon To add new outgoing call rules, click the available in the Tools area.

In the Add new outgoing routing rules section you can find buttons, text boxes, and drop-down lists that allow you to define one or more routing rules for outgoing calls. The following steps should be followed:

- 1. The first drop-down list displays the available actions. 4PSA VoipNow blocks the call to that number if the number is matched.
- 2. Use the number text box to match the number dialed by the extension user.

A 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 drop-down list labeled if in time interval to select the time interval that this rule will be applied to.

A Caution

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

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.

Remove an Outgoing Call Rule

Outgoing call rules icon available in To remove call rules, click the the Tools area and follow the next steps:

- 1. Choose the rules that you want to delete by selecting their corresponding check boxes.
- ² Click the **K** Remove selected link.
- 3. You will be asked to confirm the removal. If you want to proceed, click OK. Otherwise, click Cancel.

Chapter 13

Manage Extension's Recorded Calls

Extension's Recorded Calls Overview

To access the recorded calls option, click the Recorded calls ico available in the Tools area.

When the call recording feature is enabled, in the Recorded calls page you can view a list of the calls recorded by the extension owner. 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 (this operation is available only for phone terminal extensions)

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

- T The type of the call is displayed using an icon:
 - ° 🍯 Incoming

 - ° 🎾 Unknown
- From 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.
 - For conferences: conferenceno_date_time-conference.ext (e.g. 102-20090302_185116-conference.wav). Click this link to download the recording file.
- Size The size of the recording file.
- Created The date when the conversation recording started.
- Length The duration of the recording file.

Enable or Disable Call Recording

• Activate Recording – Use this icon to activate call recording.

• Deactivate Recording – Use this button to deactivate call recording.



This option is only available for the phone terminal extension type.

Searching the Recorded Calls List

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

- Search Fill in the text you are looking for in the text box. Click on 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.

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 entries per page by clicking the <u>10</u>, <u>25</u> and <u>100</u> links available in the right side of the table. The total number of records is shown in the left side.

Another way to simplify the listing is to sort the recorded conversations by clicking a table header. The order criteria is marked by the highlighted table header and the arrow indicates how the recorded calls list was sorted. The sort direction can be changed by another click on that header.

Remove a Recorded Call

To remove recorded calls, click the Recorded calls icon available in the Tools area and follow the next steps:

- 1. Choose the calls you want to delete by selecting their corresponding check boxes in the Recorded Messages Management page.
- ² Click the **K** Remove selected link.
- 3. You will be asked to confirm the removal. If you want to proceed, click OK. Otherwise, click Cancel.

Chapter 14

Manage Your Phone Numbers Collections

The phone numbers collections can be used for screening the outgoing calls of a phone terminal extension.

View the Phone Numbers Collections



To access this page, click the Phone number collections icon available in the Tools area.

The Phone Numbers Collections page displays a list of all phone numbers that are assigned to categories. The following information is available:

- Number The screening number. Click it to modify its settings.
- Category The category the screening number belongs to.
- Tag Identification tags.
- Owner The category's owner.

Searching the Phone Numbers Collection

When the phone numbers collection is too long and you are searching for a specific number, you can use the following features:

- Search Fill in the number you are looking for in the text box. Click the button or the Search label to display only the names that match the searching criteria.
- 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 entries per page by clicking the <u>10</u>, <u>25</u> and <u>100</u> links available in the right side of the table. The total number of records is shown in the left side.

Also, use the View numbers in category drop-down list to see all the numbers belonging to a certain category.

Add a New Collection Number

To add a new number to a certain collection, follow these steps:

1.
Click the Add number icon, located in the Tools area of the Phone Numbers Collections management page.



Note

In order to add numbers, at least one category must be defined. For more information on adding a new category, see the <u>Add a Phone Number Category</u> section.

- 2. These numbers can be imported from a file or manually added from the web interface. The information is grouped into two sections:
 - Import collection numbers Use this sections if you wish to manually import the numbers from a file.
 - I mport numbers from file Select this check box to add the collection numbers from an existing file. If this option is disabled, so are the next two fields.

- Import file Use this text box or the Browse... button to specify the location of the file containing the collection numbers.
- Field separator Use this text box to specify the field separator character. The default value is ','.



Note

The uploaded file entries must be in the following format:

{phone number}, {category_name}

- Add collection numbers Use this section if you want to manually add the collection numbers. If you have previously selected the Import numbers from file check box, this section will be disabled.
 - Number Use this text box to fill in the collection number.
 - Category Use the drop-down list to select one of the available phone numbers collections.

You can add/ remove several numbers by using the



3. Click OK to add the new number(s). Click Cancel to go back to the previous page without adding any numbers.

Edit a Collection Number

If you want to edit an existing phone number, follow these steps:

- 1. In the Phone Number Collections management page, choose the desired number and click on it.
- 2. In the new opened page, the information is grouped into two sections:
 - Import collection numbers
 - Modify collection number



Note

For more details on how to edit a collection number, see the <u>Add a New Collection Number</u> section.

3. Click OK to save the changes. Click Cancel to go back to the previous page without saving anything.

Remove a Collection Number

To remove collections numbers from the system, follow these steps:

- 1. Choose the numbers you want to delete by selecting their corresponding check boxes in the Phone Numbers Collections management page.
- ² Click the Kemove selected link.
- 3. You will be asked to confirm the removal. To do so, click OK. If you do not want to delete the numbers, click Cancel.

Manage Phone Number Categories

The phone number categories are number collections used for screening purposes.

View the Phone Number Categories

In order to view the list of all the phone numbers categories in the system,

click the Categories icon, available in the Tools area of the Phone Numbers Collections management page.

4PSA VoipNow displays the following information about each category:

- Category The category's descriptive name. Click the link to edit the category's properties.
- Tag Identification tags.
- Inheritance level The phone number category's visibility.

Searching the Phone Number Categories

When the phone number categories list is too long and you are searching for specific category, you can use the following features:

- Search Fill in the text you are looking for in the text box. Click the button or the Search label to display only the categories that match your search criteria.
- 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 entries per page by clicking the <u>10</u>, <u>25</u> and <u>100</u> links available in the right side of the table. The total number of records is shown in the left side.

The phone number categories list can be filtered by category name, tag and inheritance level. To do so, click on a table header link. The order criteria is marked by the highlighted table header and the arrow indicates how the reseller list was sorted. The sort direction can be changed by another click on that header.

Add a Phone Number Category

To add a new phone number category, follow the next steps:

Click the Categories icon, located in the Tools area of the Phone Numbers Collections management page.

- 2. Fill in the details required in the Add new category section:
 - Category The name of the category.
 - Tag The identification tag.
 - Inheritance level Use this drop-down list to specify the category's visibility:
 - 0 The category is visible only to the extension user. Always, inheritance level 0 represents the logged in user. For each child user, the level is incremented with 1.
 - Description Use this text area to associate some notes about the purpose and content of the category.

You can add/ remove several categories by using the



3. Click OK to add the new category(s). Click Cancel to go back to the previous page without adding any categories.

Edit a Phone Number Category

If you want to edit an existing phone number category, follow these steps:

1. In the Categories management page, choose the desired category and click on its name.

- 2. In the new opened page, you will be able to edit the information grouped into one section:
 - Modify category



Note

For more details on how to edit a category, see the <u>Add a Phone Number</u> <u>Category</u> section.

3. Click OK to save the changes. Click Cancel to go back to the previous page without saving anything.

Remove a Phone Number Category

To remove phone numbers categories from the system, follow these steps:

- 1. Choose the categories you want to delete by selecting their corresponding check boxes in the Categories management page.
- ² Click the **K** Remove selected link.
- 3. You will be asked to confirm the removal. To do so, click OK. If you do not want to delete the numbers, click Cancel.

Export a Phone Number Collection

In 4PSA VoipNow you can export all the phone numbers available in the collection in .csv format for sharing them among 4PSA VoipNow servers or for backup purposes.

Click the Export numbers link placed above the Collection numbers table, then save the .csv file to the desired location.

Chapter 15

Manage Your Sounds

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 call. These sounds files are not language specific because they are usually melodies. Music on hold files can only be uploaded and 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, allowing the user to listen to the sound version specific to his language preferences. If the files in the requested language do not exist, than the default sounds will be played. This type of sound can be either uploaded or recorded over the phone.

A system sound is a sound that can be seen by all users registered in the system, regardless of their level. Lower level users, like resellers and clients can also define shared sounds, but these can be seen only by the users belonging to their account. Non-system or non-shared sounds can only be used by the user that created them.

Once a system sound is added, it cannot be removed from the system. System sound files can be overwritten by replacing their content with a different sound. Sound files can be deleted or changed only by the user who added them.

View the Sounds List



Note

The **Sounds** section is available only if the **Sound Management** permission has been activated for your account. If this permission hasn't been activated, 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 the system.

To access this page, click the Figure 1 link situated in the left navigation

panel. In the new opened page, click the Sounds icon available in the Tools area.

You can perform multiple operations:

- Add and delete sounds from the system
- Search for specific sounds in the system
- Organize sound files by using sound languages and folders

4PSA VoipNow displays the following information about each sound:

- S The sound status is displayed using an icon:
 - ° 🔽 Enabled
 - ° 🛚 Disabled

Click the icon to change the sound's status.

- T The type of the sound is displayed using an icon:
 - ° is specifies a Shared sound (available to all accounts belonging to the same user)
 - ° specifies a User sound (available to the user who created it only)
- M This field describes the purpose of the file by using an icon:

- ° pspecifies an Announcement sound
- ° 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, this field displays '-'.

• Updated – The date when the sound was last modified.

Searching the Sounds List

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

- Search Fill in the text you are looking for in the text box. Click the button or the Search label to display only the sounds whose name or folder contain that 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 entries per page by clicking the <u>10</u>, <u>25</u> and <u>100</u> links available in the right side of the table. The total number of records is shown in the left side.

The sounds list can be filtered by name, folder and update date. To do so, click on a table header link. The order criteria is marked by the highlighted table header and the arrow indicates how the sounds list was sorted. The sort direction can be changed by another click on that header.

Add a New Sound



Note

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

A new sound can be added only if there is at least one sound language available. On extension creation, the default sound language is added to the

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

To add a new sound, click the Sounds icon available in the Home page, in the Tools area and follow these steps:

- 1.
 Click the Add sound icon available in the Tools area.
- 2. A new page opens, allowing you to enter information about the new sound:
 - Sound form
 - Name The descriptive name for the sound.
 - This is music on hold Use this check box 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.
 - This is a system sound When this option is enabled, all the users in the system can see and use this sound file.
 - Folder Use this drop-down list to select the folder where the sound will be stored.

If you are creating music on hold sounds (i.e. the check box This is music on hold is enabled), the following option is displayed:

- This is system music on hold When this option is enabled, the Folder options is disabled and the sound is stored in /Default folder.
- Record over the phone

- I want to 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.
- 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 check box This is music on hold is not enabled), the following options are available:

- Language Use this drop-down list to specify the language of the sound file uploaded in the system.
- 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 will display an error message.

- 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 Information

To edit the information on an existing sound, click the Sounds icon available in the Home page, in the Tools area. In the new opened page, you can modify the sound's properties. For example, you can:

- Add and delete files containing versions of the sound for different languages
- Change the shared flag of an announcement sound

To edit the properties of a sound follow these steps:

- 1. Click the name 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 properties This section can not be modified.
- Record sound file over the phone
 - I want to record sound over the phone Enable this option if you want to record the sound over the phone.
- Upload sound files Use this section to upload files containing versions of the sound in different languages.



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.

Use the buttons to remove/ add versions of the sound in different languages.

If the sound is a music on hold sound, you can use the Upload sound files section to replace the current music on hold file.

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

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

- 1. Click the name of the sound you want to modify.
- 2. A new page opens, allowing you to view a detailed list of the existing files. In the Existing sounds section, 4PSA VoipNow displays the following information about each file:
 - Filename The name of the file. Click this link to download it on your computer.
 - Sound file size The file's size 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.

Remove a Sound

To remove a sound, click the home link available in the left navigation Sounds icon and follow the next steps:

- 1. Choose the sounds you want to remove by selecting their corresponding check boxes.
- ² Click the Kemove selected link. A new page displaying the list of the sounds that will be deleted opens.
- 3. Review the list. If you want to proceed with the removal, select the Confirm the removal check box and click OK. Otherwise, click Cancel to return to the previous page without deleting anything.



Caution

You cannot remove sounds that are currently used.

You cannot remove a music on hold hold sound 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.

Manage Sound Folders



Note

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

View the Folder List

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

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



Sounds icon available in the Tools area





Folders icon.

4PSA VoipNow displays the following information about each folder:

- Folder name The name of the sound folder.
- Sounds 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.

Searching the Folders List

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

- Search Fill in the text you are looking for in the text box. Click the hobutton 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

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 entries per page by clicking the 10, 25 and 100 links available in the right side of the table. The total number of records is shown in the left side.

The sound folders list can be filtered by folder name, sounds and creation date. To do so, click on a table header link. The order criteria is marked by the highlighted table header and the arrow indicates how the folder list was sorted. The sort direction can be changed by another click on that header.

Add a New Sound Folder

Each time you add new sound files in the system you 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.

To create a new sound folder, click the Sounds icon available in the



Tools area and than on the



Folders icon and follow the next steps:

1.



In the Sound Folder Management page, click on the icon.

- 2. A new page opens, allowing you to enter the name of the new folder. Use the available text box to name the new folder.
- ^{3.} Use the buttons to add several folders at the same time:
 - dds a new folder input text box.
 - removes the corresponding text box.
- 4. Click OK to add the new sound folder(s). Click Cancel to go back to the previous page without adding the folder(s).

Remove a Sound Folder

To remove a sound folder, click the <u>Unified Communications</u> link in the left navigation panel. Next, click the Sounds icon, in the Unified

Communications settings area. In the new opened page, click the Folders icon in the Tools area and follow the next steps:

- 1. Choose the folders you want to delete by selecting their corresponding check boxes.
- ² Click the Remove selected link. A new page displaying the list of folders and the sounds located in the folders that will be deleted opens.



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 check box and click OK. Otherwise click Cancel to return to the previous page without deleting anything.



Note

If the sounds inside the folder are currently used by extensions, 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 chosen language if available in the system. If the extension's language does not exist, then the announcement will be played in the default sound language.

In the Sound Language Management page, you can view a list of the languages available in the system. Multiple operations can be performed:

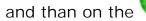
View a detailed list of the system languages

- 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 this page, click the



Sounds icon available in the Tools area



Sound languages icon.

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

• Language name – The name of the language.



Note

When there is no sound file associated with the language, you can click the language name to rename the language properties.

- 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.

Searching the Languages List

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

- Search Fill in the text you are looking for in the text box. Click the button or the Search label to display only the languages whose names contain that 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 entries per page by clicking the <u>10</u>, <u>25</u> and <u>100</u> links available in the right side of the table. The total number of records is shown in the left side.

The languages list can be filtered by name, sound files and creation date. To do so, click on a table header link. The order criteria is marked by the highlighted

table header and the arrow indicates how the languages list was sorted. The sort direction can be changed by another click on that header.

Add a New Language

To create a new language, click the Sounds icon available in the

Tools area and than on the Sound languages icon and follow the next steps:

1.



- 2. A new page opens, allowing you to provide the name of the new sound language. Use the drop-down list to add one of the available languages to the system.
- ^{3.} Use the buttons to add several languages at the same time:
 - dads another drop-down list so you can create another language.
 - removes the corresponding drop-down 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 a language's details, click the Sounds icon available in

the Tools area and than on the Sound languages icon and follow the next steps:

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

Remove a Sound Language

To remove sound languages, click the Sounds icon available in the



Sound languages icon and follow the next steps:

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

Chapter 16

View Your Call Costs

View Your Extension's Call Costs

4PSA VoipNow offers an easy way to keep track of the calls made by all the extensions in the system.

In the Call Report page, you can view a monthly report of all registered calls. You can also:

- Search for specific calls.
- Export the call list to a file in one of the available formats: Microsoft Excel or CSV.

To access this page, 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 drop-down list available in the page.

The table includes the following details about each call:

- F The call flow is displayed using an icon:
 - ° 🚄 Incoming call
 - ° 修 Outgoing call
- T The call type is displayed using one of the icons:
 - ° External call
 - ° 6 Local call
 - ° 6 Extended local call
- A The application used by the call is displayed using an icon:
 - ° 🥐 Dial
 - ° 🎮 Voicemail center
 - ° ሬ Voicemail
 - ° 👫 IVR
 - ° 😯 Conference
 - ° 🥰 Queue
 - ° 循 Park
 - ° 縫 Unpark
 - ° 🍊 Callback
 - ° 🎾 Calling card
 - ° 별 Fax
 - ° 4 Intercom/paging
 - ° **Supervising**
- From The number of the extension that initiated the call.
- To The number of the extension that answered the call.
- Call started The date and time when the call was initiated.

- Answered The date and time when the call was answered.
- Call duration The duration of the call.
- CallID The unique number that Asterisk generated to identify the call.
- Client The name of the client who owns the extension.
- Call cost The cost of the call for the logged in user.
- Profit The profit made by the logged in user from this call.



Caution

It is highly advisable to hunt for the call costs that have a negative profit!



Note

You can filter the displayed columns by clicking the Book columns button. After choosing the desired columns, click on Apply in order to save the changes. Likewise, if you cannot see some of the above columns, it is likely that they have been disabled using this control.

Searching the Calls List

To search the calls database, follow these steps:

- 1. 4PSA VoipNow automatically displays only the calls from the current month. If you want to view the call list for previous months, use the following options:
 - From number Use this text box to fill in the number of the person who made the call.
 - To number Use this text box to fill in the number of the person who answered the call.
 - Account name Use this text box to fill in the account name (on reseller, client or extension levels) you are searching for.
 - Charging plan Use this text box to fill in the charging plan name that generated the call cost you are searching for.
 - CallID Use this text box to fill in the unique number that Asterisk generated to identify the call.
 - Through channel Use this drop-down list to search only for the calls that were directed through a specific channel.

- Selected channel prefix- This value is available only for outgoing external calls. It contains the prefix of the dialed number that was matched with one of the area codes defined in the routing channel's costs.
- Call duration Use this section to specify the call duration limits by filling in the fields from the rule:
 - Higher than {x} seconds and/or lower than {y} seconds
- Call cost Use this section to specify the call cost limits by filling in the fields from the rule:
 - Higher than {x} and/or lower than {y}
- Profit Use this section to specify the profit limits by filling in the fields from the rule:
 - Higher than {x} and/or lower than {y}
- Call ended with Use the drop-down list to filter calls that ended with:
 - Answered
 - No answer
 - Busy
 - Failed
 - Unknown
 - Not allowed
- Start search on {x} and end on {y} Use these text boxes or click the 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 call types 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 the calls.
 - Local calls Select this option to display only the calls made to local numbers (between extensions belonging to the same client).

- Extended local calls Select this option to display only the calls made to extended local numbers (between extensions belonging to different clients).
- External calls Select this option to display only the calls received from outside the system or sent to external destinations.
- Limit search by application Select these check boxes to filter the search results by the application used by Asterisk to handle the call:
 - Dial Select this option to display the calls between two phone terminals.
 - Queue Select this option to display the calls targeted at queue extensions.
 - Conference Select this option to display the conference calls.
 - Voicemail Select this option to display the calls that ended in the voice mailbox.
 - Voicemail center Select this option to display the calls to a voicemail center extension type.
 - 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.
 - Calling card Select this option to display calls that were made using an extension of type calling card.
 - Intercom/paging Select this option to display the calls made through an intercom/paging extension type.
 - Callback Select this option to display calls that were made using an callback extension type.
 - Fax Select this option to display incoming fax calls stored on the server.
 - Supervising Select this option to display the supervised calls.
- 2. Click OK to display only the records that fit your search criteria.

Export Reports to an Easy-to-Edit Format

Export to Excel – Click this link to export the call costs report to a Microsoft Excel file. Export to CSV - Click this link to export the call costs report to a .csv format 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. Select the check boxes corresponding to the column names you want to export. Deselect the check boxes 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 The direction of the call: incoming or outgoing.
- Call type The received call's type
- Application The application that answered the call. Any of the applications listed under Limit search by application (see above) can answer the call.
- To number The phone number of the person who answered the call.
- From number The phone number of the person who made the call.
- 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 The total length of the received call.
- Call disposition The way the call was terminated: it was either answered, not answered, failed, etc
- Charging plan The charging plan that generated the call cost.
- Call cost The call's cost as charged by the channel.
- Money unit The currency currently used for charging.
- 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.

Chapter 17

Manage Your Email Templates

Manage Email Notifications

4PSA VoipNow can send email notifications to its users when standard events occur. The text of the notifications can be customized. The system can be also setup to send only some notifications and only to certain users.

To access this page, click the Email templates icon located in the Tools area.

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



Note

If you want all the email notifications from a specific category to be sent to a certain user, select the check box from the user's column header.

Therefore, you can enable email notifications for your own account. When a new account is created, it inherits the upper level account email notification options. Afterwards, the account owner can change these options in the same way in the Email Template Management page.

When an account is created, the new owner can receive a mail notifying him that the account was registered. This notification is made only if the upper level account owner has the notification enabled.



Note

The email notification will be sent to the email address specified in the account information.

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.

The events that can trigger an email notification are displayed in the Email Template Management page:

- Extension email templates
 - Extension creation This email notification is triggered by the creation of an extension account.
 - Extension expiration warning The email notification triggered by this event is sent {x} days in advance, as specified in the Send expiration noticesfield.
 - Extension expired The email notification triggered by this event is sent after the extension account has expired.
 - Extension charging limit warning The email notification triggered by this event is sent when the available number of minutes is below { y} minutes or when the credit is below the { credit_limit}, as specified in the Send charging limit warnings when the account is below field.
 - Extension charging limit exceeded The email notification triggered by this event is sent after the charging limit was exceeded.

For the events in this field set, 4PSA VoipNow can deliver email alerts to the following users:

- The client that owns the extension account
- The extension account owner
- A custom email address
- Unified Communications email templates

- Voicemail message notification The email notification triggered by this event is sent after a voicemail message has been received.
- Fax message received The email notification triggered by this event is sent after a fax message has been received.
- Sent fax accepted The email notification triggered by this event is sent after a fax message has been accepted by the receiver.
- Sent fax not accepted The email notification triggered by this event is sent if the receiver has not accepted the fax message.
- Fax delivery report 4PSA VoipNow can send a delivery report for all the sent fax messages.

For the events in this field set, 4PSA VoipNow can deliver email alerts to the following users:

- The extension account owner
- A custom email address
- Security email templates
 - Customer password forgotten notification For this event, 4PSA VoipNow will send an email message containing a temporary password to the user who has forgotten his password and requested a new one. This password is valid only for the time period specified in the Login Preferences page, in the Expiration time for new password field.

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

- Send expiration notices {x} days in advance Use this text box to specify how many days before the account expiration a notifications is dispatched to the users.
- Send charging limit warnings when the account is below {y} minutes or {credit_limit} {currency} – A charging limit warning is generated in one of the following cases:
 - The minutes remaining in the Available external outgoing minutes plus the minutes remaining in the External outgoing over usage go below a certain limit.

Use the first text box to specify this minutes limit.

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

Use the second text box to specify this money limit.

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

The money limit you specified for external outgoing calls in the above text box, includes the external incoming calls money limit.

To enable notifications for users, follow the steps:

- 1. From the available check boxes, select the ones corresponding to the users you want to notify for that event.
- 2. Click OK to save your options. Click Cancel to return to the previous page without saving the changes you have made.

Customize the 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 allowing you to edit the email subject and email body opens. 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.

Appendix A. Using the Text To Speech Feature

The text to speech feature allows you to convert written text into speech. 4PSA VoipNow uses the text to speech engine developed by <u>Cepstral</u>.

Controlling How the Text is Read

The Cepstral engine allows you to control the voice reading the text by specifying attributes such as rate, pitch and volume or by inserting pauses. This can be achieved by using a set of HTML-like tags; the tags make up the Speech Synthesis Markup Language (SSML).

This section offers a set of SSML examples that can be used with the Cepstral engine. For more detailed descriptions of the elements and attributes of the markup language, see the official W3C SSML Specifications: http://www.w3.org/TR/speech-synthesis/

Inserting silence/ pauses

You can insert pauses between words, sentences or paragraphs by using the cbreak> empty tag. To control the length of the break, you can use two attributes: strength and time.

```
"There is no <break strength='none' /> pause here."
```

"This is a
 strength='x-strong' /> longer pause between paragraphs."

```
"This is a <break time='2s' /> two second pause."
```

Controlling the Speech Rate

You can control the rate of the speech by using the prosody element and specifying a value for its rate attribute.

[&]quot;This is a <break strength='x-weak' /> pause between words."

[&]quot;This is a <break strength='weak' /> longer pause between words."

[&]quot;This is a <break strength='medium' /> pause between sentences."

[&]quot;This is a <break strength='strong' /> pause between paragraphs."

[&]quot;This is a <break time='4500ms' /> 4.5 second pause."

[&]quot;This is a <break /> pause between sentences."

- "I am now rosody rate='x-slow'>speaking at half speed.
- "I am now cody rate='slow'>speaking at 2/3 speed.ody>"
- "I am now rate='medium'>speaking at normal speed.
 prosody>"
 - "I am now rosody rate='fast'>speaking 33% faster.
 - "I am now rosody rate='x-fast'>speaking twice as fast/prosody>"
- "I am now rate='default'>speaking at normal speed.
 prosody>"
- "I am now rate='.42'>speaking at 42% of normal speed.
 prosody>"
- "I am now rate='2.8'>speaking 2.8 times faster than normal/prosody>"
- "I am now rate='-0.3'>speaking 30% more slowly than normal.
- "I am now rate='+0.3'>speaking 30% faster than normal./
 prosody>"

Controlling the Voice Pitch

You can control the pitch of the speech by using the prosody element and specifying a value for its pitch attribute.

```
"cprosody pitch='x-low'>This is half-pitch/prosody>"
```

- "rosody pitch='-25Hz'>This has a pitch mean 25 Hertz lower.
 prosody>"
- "prosody pitch='+25Hz'>This has a pitch mean 25 Hertz higher.
 prosody>"

[&]quot;cprosody pitch='low'>This is 3/4 pitch./prosody>"

[&]quot;cprosody pitch='medium'>This is normal pitch./prosody>"

[&]quot;"rosody pitch='high'>This is twice as high.

[&]quot;"rosody pitch='x-high'>This is three times as high.

[&]quot;cprosody pitch='default'>This is normal pitch./prosody>"

[&]quot;"cprosody pitch='-50%'>This is 50% lower.

[&]quot;"oprosody pitch='+50%'>This is 50% higher.

[&]quot;cprosody pitch='-6st'>This is six semitones lower.

[&]quot;cprosody pitch='+6st'>This is six semitones higher.

""rosody pitch='75Hz'>This has a pitch mean of 75 Hertz.

Controlling the Output Volume

You can control the volume of the speech by using the prosody element and specifying a value for its volume attribute.

```
"cprosody volume='silent'>This is silent.
```

```
""rosody volume='default'>This is the default volume.
```

Adding Emphasis to the Speech

You can control the stress placed on certain pieces of text by using the emphasis element and specifying a value for its level attribute.



Note

The nature of emphasis differs between languages, dialects or even voices. Languages indicate emphasis using a possible combination of pitch change, timing changes, loudness and other acoustic differences

"This is <emphasis level='moderate'>stronger</emphasis> than the rest."

"This is <emphasis level='strong'> even stronger</emphasis> than the previous."

"This is <emphasis level='none'>the same as</emphasis> than the rest."

"This is <emphasis level='none'>the opposite of</emphasis> emphasis."

[&]quot;"rosody volume='x-soft'>This is 25% as loud./prosody>"

[&]quot;"rosody volume='soft'>This is 50% as loud.

[&]quot;"rosody volume='medium'>This is the default volume.

[&]quot;"rosody volume='loud'>This is 50% louder than normal.

[&]quot;cprosody volume='-33%'>This is 33% softer than normal./prosody>"

[&]quot;"ody volume='+33%'>This is 33% louder than normal.

[&]quot;"ody volume='33%'>This is 33% louder than normal.



Note

The **none** level is used to prevent the synthesis processor from emphasizing words that it might typically emphasize.

Spelling Words Phonetically

The phoneme element provides a phonemic/phonetic pronunciation for the contained text. The ph attribute is a required attribute that specifies the phoneme/phone string.

"You say <phoneme ph='t ah0 m ey1 t ow0'>tomato</phoneme>, I say <phoneme ph='t ah0 m aa1 t ow0'>tomato</phoneme>"

For a complete list of available phonemes for your language, please see the Cepstral page Editing the Lexicon.