



together with **CS Comms**

# **Istra Version 9.4 Service Provider Administration Guide**

Pure Cloud Solutions Ltd.  
6 The Pavillions, Amber Close,  
Tamworth, B77 4RP

E mail: [info@purecloudsolutions.com](mailto:info@purecloudsolutions.com)

Tel: 0333 150 6780

## **CONFIDENTIALITY**

---

All information contained in this document is the entire property of Pure Cloud Solutions, and as such, must stay confidential. Access to this document is restricted to those companies or parties having signed a Non-Disclosure Agreement (NDA) with Pure Cloud Solutions. Diffusing information to other parties without a signed Non-Disclosure Agreement between Pure Cloud Solutions and the other party is forbidden.

## **TRADEMARKS**

---

Centile™ and Istra™ are trademarks of Centile Telecom Applications SAS.

## **PREAMBLE**

---

Centile Istra platform can be released in different configurations, depending on the Customer needs. In consequence, some dissimilarities may occur between the web admin User Interfaces and features described in this Guide and the ones you get.

TABLE OF CONTENTS

---

<b>ABOUT THIS GUIDE</b> .....	<b>6</b>
<b>CHAPTER 1</b> .....	<b>7</b>
<b>SERVICE PROVIDER ADMINISTRATIVE TASKS</b> .....	<b>7</b>
1.1 Log in to the Web Administration page .....	8
1.2 Service Provider Web Administration pages overview .....	9
1.3 Setting preferences.....	11
1.4 Requesting Help .....	12
1.5 Viewing alarms.....	13
1.6 Viewing CDRs.....	15
<b>CHAPTER 2</b> .....	<b>16</b>
<b>SERVICE PROVIDER MANAGEMENT TASKS</b> .....	<b>16</b>
2.1 Enterprise account creation .....	17
2.2 Capabilities management .....	27
2.3 Enterprise Administrator creation and modification .....	31
2.4 Multiple Enterprises Management.....	34
2.5 Other accounts and Administrators creation .....	35
2.6 PSTN/PLMN numbers assignment to Enterprises.....	40
2.7 PSTN/PLMN numbers assignment to Extensions .....	44
2.8 PSTN/PLMN numbers management .....	45
2.9 Pilot number assignment .....	47
2.10 Dial prefix creation .....	49
2.11 Gateway creation.....	52
2.12 NAT creation .....	57
2.13 NATed gateway creation .....	59
2.14 Inter-communities billing Administrative Domain .....	61
<b>CHAPTER 3</b> .....	<b>62</b>
<b>SERVICE PROVIDER MANAGEMENT TASKS – ENTERPRISE LEVEL</b> .....	<b>62</b>

## LIST OF FIGURES

---

<b>Figure 1 LOGIN page</b> .....	<b>8</b>
<b>Figure 2 WEB ADMINISTRATION pages overview</b> .....	<b>9</b>
<b>Figure 3 PREFERENCES pop-up window</b> .....	<b>11</b>
<b>Figure 4 SUPPORT SITE WEB</b> .....	<b>12</b>
<b>Figure 5 TICKETING SYSTEM</b> .....	<b>12</b>
<b>Figure 6 ALARMS page – Generating test alarm</b> .....	<b>13</b>
<b>Figure 7 Updated ALARMS page</b> .....	<b>14</b>
<b>Figure 8 CDR page</b> .....	<b>15</b>
<b>Figure 9 ENTERPRISES page</b> .....	<b>17</b>
<b>Figure 10 ENTERPRISE creation page 1/2</b> .....	<b>18</b>
<b>Figure 11 ENTERPRISE creation page 2/2</b> .....	<b>21</b>
<b>Figure 12 ENTERPRISES modification page</b> .....	<b>23</b>
<b>Figure 13 SERVICE PLAN enterprise modification page</b> .....	<b>24</b>
<b>Figure 14 ENTERPRISE IMPORT/ EXPORT enterprise modification page</b> .....	<b>25</b>
<b>Figure 15 QUOTAS enterprise modification page</b> .....	<b>25</b>
<b>Figure 16 CALL RULE enterprise modification page</b> .....	<b>25</b>
<b>Figure 17 FORWARDING RULE enterprise modification page</b> .....	<b>26</b>
<b>Figure 18 CUSTOMIZATION enterprise modification page</b> .....	<b>26</b>
<b>Figure 19 SERVICE CONFIGURATION enterprise modification page</b> .....	<b>26</b>
<b>Figure 20 ADMIN DOMAINS page</b> .....	<b>28</b>
<b>Figure 21 ADMIN DOMAINS creation page</b> .....	<b>29</b>
<b>Figure 22 ADMIN DOMAINS modification page</b> .....	<b>30</b>
<b>Figure 23 ADMIN DOMAINS modification page - Service Membership</b> .....	<b>30</b>
<b>Figure 24 ADMINISTRATORS page</b> .....	<b>31</b>
<b>Figure 25 ADMINISTRATOR creation page</b> .....	<b>32</b>
<b>Figure 26 updated ADMINISTRATORS page</b> .....	<b>33</b>
<b>Figure 27 ENTERPRISES page – Filter view</b> .....	<b>34</b>
<b>Figure 28 ADMIN DOMAINS page</b> .....	<b>35</b>
<b>Figure 29 ADMIN DOMAIN creation page</b> .....	<b>36</b>
<b>Figure 30 ADMINISTRATORS page</b> .....	<b>37</b>
<b>Figure 31 ADMINISTRATOR creation page</b> .....	<b>38</b>
<b>Figure 32 Updated ADMINISTRATORS page</b> .....	<b>39</b>
<b>Figure 33 PSTN/PLMN NUMBERS ADMINISTRATIVE ASSIGNMENT page</b> .....	<b>40</b>
<b>Figure 34 PSTN/PLMN NUMBERS ASSIGNMENT page</b> .....	<b>41</b>
<b>Figure 35 Updated PSTN/PLMN NUMBERS ADMINISTRATIVE ASSIGNMENT page</b> .....	<b>41</b>
<b>Figure 36 PSTN/PLMN NUMBERS page</b> .....	<b>42</b>
<b>Figure 37 PSTN/PLMN NUMBERS page – assignment</b> .....	<b>43</b>
<b>Figure 38 PSTN/PLMN NUMBERS list page</b> .....	<b>45</b>

<b>Figure 39 PSTN/PLMN NUMBERS page –filtered by administrative domain</b> .....	<b>45</b>
<b>Figure 40 PSTN/PLMN NUMBERS page –filtered by search</b> .....	<b>46</b>
<b>Figure 41 ENTERPRISES page</b> .....	<b>47</b>
<b>Figure 42 ENTERPRISE modification page - pilot number assignment</b> .....	<b>48</b>
<b>Figure 43 DIAL PREFIXES page</b> .....	<b>49</b>
<b>Figure 44 DIAL PREFIXES creation page</b> .....	<b>50</b>
<b>Figure 45 updated DIAL PREFIXES page</b> .....	<b>51</b>
<b>Figure 46 GATEWAYS list page</b> .....	<b>52</b>
<b>Figure 47 GATEWAYS creation page</b> .....	<b>53</b>
<b>Figure 48 NAT list page</b> .....	<b>57</b>
<b>Figure 49 NAT creation</b> .....	<b>58</b>
<b>Figure 50 Gateways page - NATed gateway creation</b> .....	<b>59</b>
<b>Figure 51 Gateway creation page - NAT assignment</b> .....	<b>60</b>
<b>Figure 52 Inter-communities billing creation page</b> .....	<b>61</b>
<b>Figure 53 Inter-communities billing creation page</b> .....	<b>61</b>

## About this guide

---

This guide describes how to administer the Centile Istra platform at Service Provider level.

The Service Provider is the administrative domain name given to an enterprise (Telecom Operator) to which the Platform Owner has administrated the rights to deploy a certain amount of enterprises, users, devices...

The goal of this guide is to provide Service Provider administrators with the necessary procedure for the day-to-day Enterprise Istra administration.

# Chapter 1

---

## Service Provider Administrative Tasks

This chapter describes how the Service Provider logs in to access the Web Administration page and contains the following topics :

- Log in to the Web Administration page
- Setting preferences
- Viewing alarms
- Viewing CRDs

## 1.1 Log in to the Web Administration page

This task explains how the Service Provider Administrator logs in to access the Web Administration page.

**Enter the URL provided by Centile or your administrator in your browser similar to :**

<https://centilevoipo.com:8077/webadmin> (for *secured* accesses to the web Administration pages)  
<http://centilevoipo.com:8078/webadmin> (for *unsecured* accesses).

If embedded DNS server has been configured, then the URL will be similar to :

<http://webadmin.<zone>>

Please note that the URL can be a domain name server or the IP address. The domain name would look like : [customerpbx.serviceprovider.com](http://customerpbx.serviceprovider.com).

The administrator's login and password have been created and provided by the Platform Owner.

Centile recommends changing them.


**Figure 1** LOGIN page



To log in to the web Administration pages you need to have:

- An alphanumeric administrator login
- An alphanumeric administrator password

*Note: The login page and web Administration pages are displayed automatically in the browser's language. The language of the web Administration pages can be changed, for example, a French browser can display in English.*

To change the language, click on preferences icon  in the banner display.

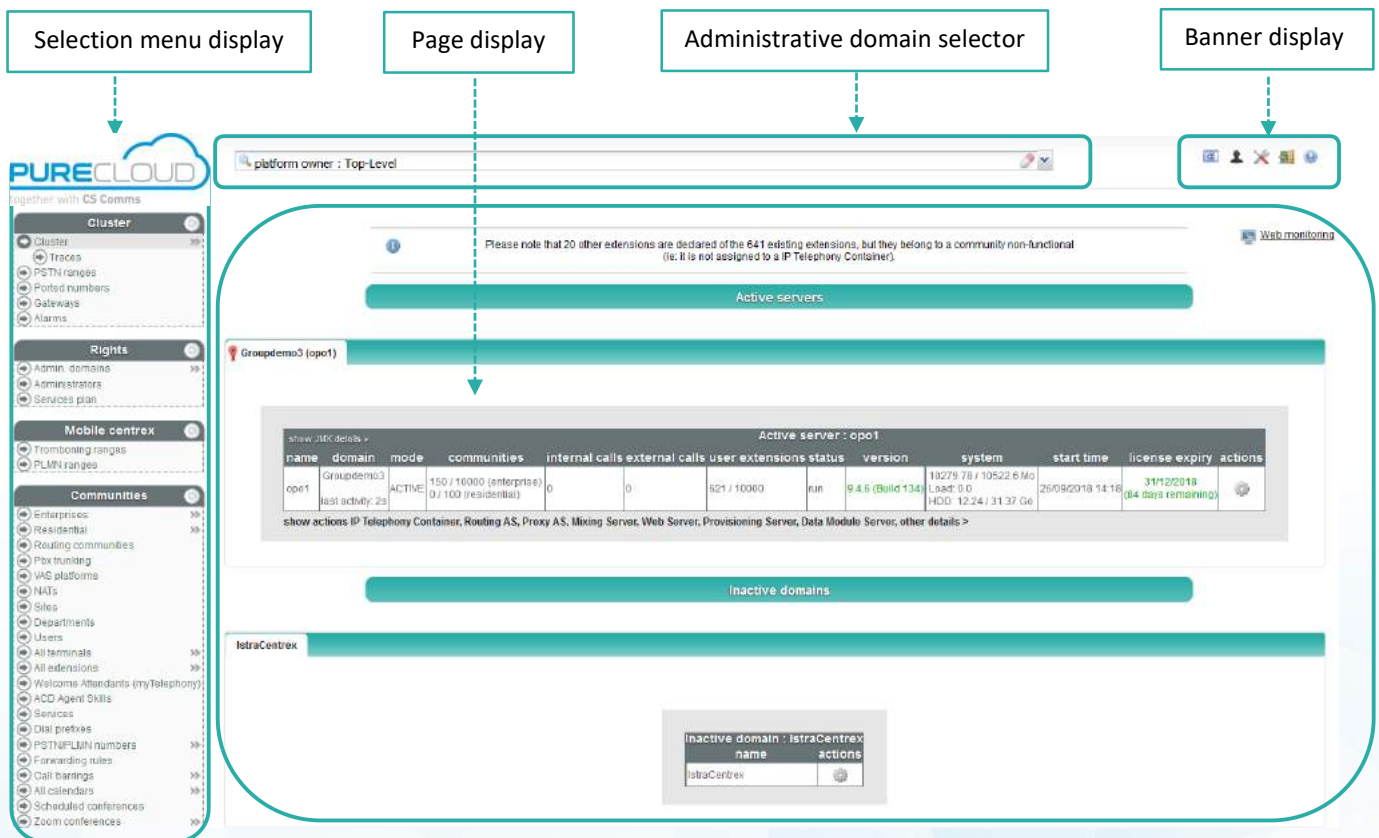
*Note : The session duration is set to 30 minutes by default. After 30 minutes of inactivity, you are automatically logged out. You must return to this page and log in again to continue working.*



## 1.2 Service Provider Web Administration pages overview

After a successful login, the first Web Administration page displayed is the **ENTERPRISES** page.  
 Please note that the creation of enterprises is the first step taken by the Service Provider.

Figure 2 WEB ADMINISTRATION pages overview








The selection menu enables the platform owner to navigate in the various pages:

- The **CLUSTER** menu offers access to the topmost administration tasks related pages, including: The **Cluster** deployment page, **Traces**, **PSTN ranges** creation page, **Gateways** and **Alarms** pages.
- The **RIGHTS** menu enables the Platform Owner to manage other administrators accounts.
- The **MOBILE CENTREX** menu enables the administration of mobile services (only if activated in the license)
- The **COMMUNITIES** menu enables the administration of **Enterprises** or **Residential** communities (depending on license rights), along with terminals, extensions, devices, sites, departments users, numbers and services within them.

- The **ADVANCED TOOLS** menu gives access to interfaces or features dedicated to advanced management of the platform.

Use any of the selection menu entries to move to a new page from any currently displayed page.

#### The top banner display:

- Click on the **hide/show left menu icon**  to hide the selection menu.
- Click on the **information icon**  to access the current administrator details
  1. *You are*, corresponding to the administrator's category, which defines the administrator's rights
  2. *Login* identifier
  3. *Administrative domain* name corresponding to the type of domain e.g. Top Level (Platform Owner)
- Click on **preferences icon**  to change the browser language, the number of displayed results on a page and the session duration (c.f. [1.3 Setting preferences](#))
- Click on **logout icon**  to quit Istra Web Administration interface
- Click on help icon  to access the Help menu (support website, report a bug and about Centile) – cf [1.4 Requesting Help](#)

#### The Administrative Domain selection display:

The Enterprise administrative domain created by the Service Provider is displayed here.

#### The Page display:

It is the page body, where synthesis tables on the topic selected in the left-hand menu, or specific editable information for individual items are displayed.

#### Error messages:

Depending on the type of error, **error messages** (if any) are displayed as overlay in the page display and logged for further retrieval. They are cleared on next user action, not immediately after the error is corrected.

Syntax validation occurs dynamically when entering data. Any invalid data will be emphasized by the color of the field and an explanatory message will appear.

*Note: A page cannot be saved until all errors are corrected.*

## 1.3 Setting preferences

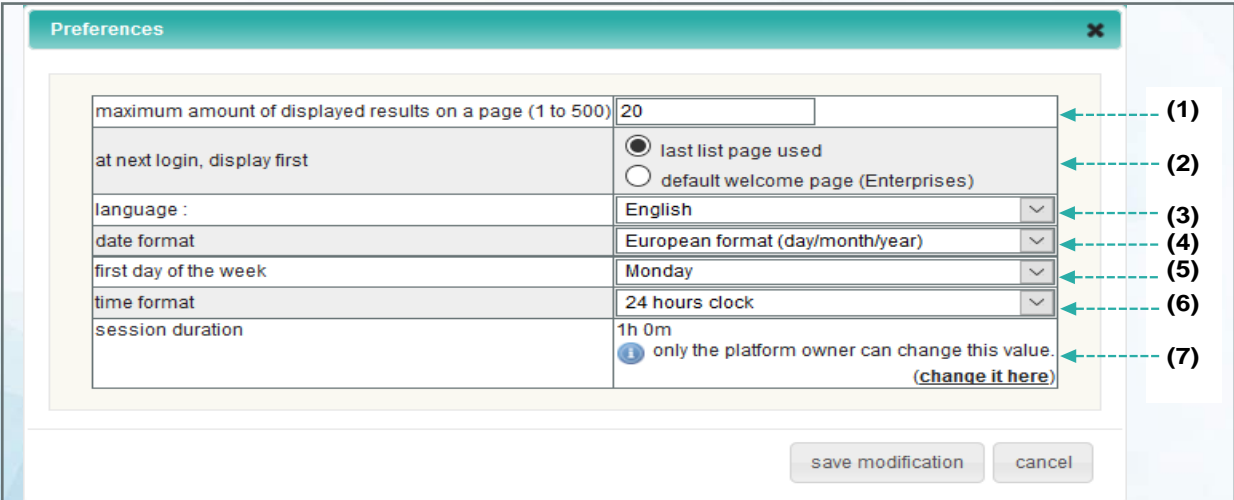
Preferences include number of displayed results per page, language, date and time related settings, and session duration settings

By default :

- The Web Administration pages are displayed automatically in your browser's language.  
**Available languages are English, German, French, Spanish, Finnish, Swedish and Russian.**
- The Maximum amount of displayed result on a page is set to 30 minutes.

In the Banner, **click on the Preferences icon**  . This will display the **PREFERENCES** pop-up window.

Figure 3 PREFERENCES pop-up window



maximum amount of displayed results on a page (1 to 500)	20	(1)
at next login, display first	<input checked="" type="radio"/> last list page used <input type="radio"/> default welcome page (Enterprises)	(2)
language :	English	(3)
date format	European format (day/month/year)	(4)
first day of the week	Monday	(5)
time format	24 hours clock	(6)
session duration	1h 0m <small>only the platform owner can change this value. (change it here)</small>	(7)

save modification    cancel

If needed,

1. Enter a new figure in the **maximum amount of displayed results** (line numbers) field.
2. Select the preferred **display page** at next login
3. Select the preferred **language**
4. Select a **date format**
5. Select the **first day of the week**
6. Select a **time format**
7. Change the **session duration**

Click on **save modification**.

## 1.4 Requesting Help

If you require and administration support or bug fixes, please call 0333 150 6780 or email [support@purecloudsolutions.com](mailto:support@purecloudsolutions.com) to raise a ticket. A member of our support team will work with you to resolve this as soon as possible.

## 1.5 Viewing alarms

The Service Provider is able to view the alarms for each enterprise created. These alarms are generated by the system.

Select CLUSTERS menu → **ALARMS** page. All alarms for your platform are displayed on this page. If no test alarm has been initiated, you'll be asked to generate one.

Figure 6 ALARMS page – Generating test alarm

The screenshot shows the PURECLOUD interface with the 'ALARMS' page selected. A table of alarms is visible, and a 'Generate test alarm' dialog box is open. The dialog box contains the following fields and options:

- Test alarm severity:** 2 - critical (will send an email)
- Test alarm status:** 6 - unknown
- Test alarm message:** Test alarm: administrator Nicole Melba generated this alarm manually, in order to

Below the dialog box, a legend lists the following options:

- 0 - unknown
- 1 - operational
- 2 - failed
- 3 - connected
- 4 - disconnected
- 5 - starting
- 6 - started
- 7 - stopping
- 8 - stopped

1. **Click Generate test alarm.** This will open the generate test alarm window.
2. **Select the test alarm severity** amongst the suggested list.
3. **Select the test alarm status** amongst the suggested list
4. **Click generate.**

*Note : Refresh the page to view the alarm page.*

To filter the alarms, use the Current view menu :

- **Non-filtered** : By selecting yourself (the Service Provider) as the Current view; all enterprise system alarms are displayed.

- **Filtered** : By selecting a particular Enterprise as the Current view; only the system alarms of the selected entity are displayed.

Figure 7 Updated ALARMS page

The screenshot shows the PURECLOUD interface with the 'Alarms' page selected. The current view is set to 'enterprise : training'. A sidebar on the left contains navigation menus for Cluster, Rights, Mobile context, and Communities. The main area displays a table of 12 alarms, all with a severity of 4 (warning) and a status of 2 (failed). The table columns include timestamp, alarm ID, severity, resource, resource path, type, extension, description, and status data.

timestamp	alarm	severity	resource	resource path	type	extension	description	status data
12/10/2018 14:49	4001	4 - warning	110203040507-1	X/opoc1/apbx1/training/010203040507-1	10 - Telephone default		An extension becomes unreachable	2 - failed
12/10/2018 14:48	4001	4 - warning	332211445566-1	X/opoc1/apbx1/training/332211445566-1	10 - Telephone default		An extension becomes unreachable	2 - failed
10/10/2018 11:19	4001	4 - warning	110203040507-1	X/opoc1/apbx1/training/010203040507-1	10 - Telephone default		An extension becomes unreachable	2 - failed
10/10/2018 11:19	4001	4 - warning	332211445566-1	X/opoc1/apbx1/training/332211445566-1	10 - Telephone default		An extension becomes unreachable	2 - failed
09/10/2018 14:03	4001	4 - warning	0004139002FC-1	X/opoc1/apbx1/training/0004139002FC-1	10 - Telephone 202 (user extension)		An extension becomes unreachable	2 - failed
09/10/2018 13:59	4001	4 - warning	0004139002FC-1	X/opoc1/apbx1/training/0004139002FC-1	10 - Telephone 202 (user extension)		An extension becomes unreachable	2 - failed
09/10/2018 13:58	4001	4 - warning	0004139002FC-1	X/opoc1/apbx1/training/0004139002FC-1	10 - Telephone 202 (user extension)		An extension becomes unreachable	2 - failed
04/10/2018 10:13	4001	4 - warning	0004139002FC-1	X/opoc1/apbx1/training/0004139002FC-1	10 - Telephone 202 (user extension)		An extension becomes unreachable	2 - failed
01/10/2018 17:02	4001	4 - warning	0004139002FC-1	X/opoc1/apbx1/training/0004139002FC-1	10 - Telephone 202 (user extension)		An extension becomes unreachable	2 - failed
01/10/2018 16:59	4001	4 - warning	0004139002FC-1	X/opoc1/apbx1/training/0004139002FC-1	10 - Telephone 202 (user extension)		An extension becomes unreachable	2 - failed
01/10/2018 16:57	4001	4 - warning	110203040507-1	X/opoc1/apbx1/training/010203040507-1	10 - Telephone 200 (Utilisateur 1 - user extension)		An extension becomes unreachable	2 - failed
01/10/2018 16:57	4001	4 - warning	332211445566-1	X/opoc1/apbx1/training/332211445566-1	10 - Telephone 201 (Utilisateur 2 - user extension)		An extension becomes unreachable	2 - failed

Alarms can be filtered by **Time range** (start/begin), using a calendar widget, **Id**, **Level of Severity**, **Resource**, **Resource path**, **Type of severity**, **Extension**, **Description**, **Status** and **Data**.

## 1.6 Viewing CDRs

As a platform owner, you can see all call data records (CDRs) generated by the system.

Select ADVANCED TOOLS menu → **CDR BROWSER** page. A new window will be displayed to log in.

All CDRs are showed on this page and can be filtered.

Please refer to the CDR administration guide for more details.

Figure 8 CDR page

The screenshot shows the PURECLOUD CDR Browser interface. On the left, there are three filter panels: 'Range' (Today's CDRs, Archived CDRs, Last CDRs, Last Minutes), 'Status' (CDR Status: Normal, Failure; Call Status: Normal, Failure), and 'Filters' (All, By Caller/Called, By Internal Numbers, By External Numbers, By Internal Number Type). The main area displays a table of call records with columns: Start Timestamp, End Timestamp, Caller, Dialed, Called, Ring Duration, and Talking Duration. The table shows 22 records, with the first 10 records having a dialed number of 16479459468 and a called number of 310. The last two records have a dialed number of 210 and a called number of 212.

	Start Timestamp	End Timestamp	Caller	Dialed	Called	Ring Duration	Talking D
	02/11/2018 15:42:15	02/11/2018 15:42:18	918049140000	16479459468	310	00:00:03	00:00:00
	02/11/2018 15:42:11	02/11/2018 15:42:13	918049140000	16479459468	310	00:00:02	00:00:00
	02/11/2018 15:42:03	02/11/2018 15:42:09	918049140000	16479459468	310	00:00:06	00:00:00
	02/11/2018 15:39:48	02/11/2018 15:39:50	918043036334	16479459468	310	00:00:02	00:00:00
	02/11/2018 15:39:44	02/11/2018 15:39:45	918043036334	16479459468	310	00:00:02	00:00:00
	02/11/2018 15:39:42	02/11/2018 15:39:43	918043036334	16479459468	310	00:00:01	00:00:00
	02/11/2018 15:39:37	02/11/2018 15:39:40	918043036334	16479459468	310	00:00:03	00:00:00
	02/11/2018 15:39:32	02/11/2018 15:39:34	918043036334	16479459468	310	00:00:02	00:00:00
	02/11/2018 15:39:28	02/11/2018 15:39:30	918043036334	16479459468	310	00:00:02	00:00:00
	31/10/2018 16:58:57	31/10/2018 16:58:18	210	212	212	00:00:21	00:00:00
	31/10/2018 16:58:20	31/10/2018 16:59:08	210	212	212	00:00:02	00:00:46
	31/10/2018 16:58:11	31/10/2018 16:59:18	211	210	210	00:00:01	00:01:06
	31/10/2018 16:57:11	31/10/2018 16:58:04	210	212	212	00:00:02	00:00:51
	31/10/2018 16:57:00	31/10/2018 16:58:04	211	210	210	00:00:01	00:01:03
	31/10/2018 16:56:02	31/10/2018 16:56:26	210	212	212	00:00:02	00:00:23
	31/10/2018 16:55:56	31/10/2018 16:56:26	211	210	210	00:00:01	00:00:30
	31/10/2018 16:55:02	31/10/2018 16:55:18	210	212	212	00:00:07	00:00:10
	31/10/2018 16:54:54	31/10/2018 16:55:18	211	210	210	00:00:01	00:00:23
	31/10/2018 16:54:38	31/10/2018 16:54:48	210	-	212	00:00:08	00:00:03

The record information represented is :

- The **Start Timestamp**
- The **End Timestamp**
- The **caller** number
- The **Dialed** number
- The **called** number
- The **ring duration**
- The **talking duration**
- The **hold count and hold duration**
- The **charging PSTN**
- The **called PSTN**
- The **caller and called Name**
- The **CDR Status**

## Chapter 2

---

### Service Provider Management Tasks

The chapter describes how to administer the Enterprise Istra platform to Enterprises and Resellers and the different actions needed to allow the service.

This chapter contains the following topics :

- Enterprise account creation
- Capabilities management
- Enterprise Administrator creation and modification
- Multiple Enterprises Management
- Other accounts and Administrators creation
- PSTN numbers assignment to Enterprises
- PSTN numbers assignment to Extensions
- PSTN numbers management
- Pilot number assignment
- Dial prefix creation
- Gateway creation
- NAT creation
- NATed gateway creation
- Inter Administrative Domain Instant Messaging



## 2.1 Enterprise account creation

Several enterprises can belong to the same IP Telephony Container.

Note : IP Telephony Containers are created by the Top Level administrator only.

Once the IP Telephony Container has been created by the Platform Owner following the Service Provider's request, he is entitled to assign to this Enterprise IP Telephony Container as many enterprises as he is entitled to.

This task enables a Service Provider to create enterprises. The Service Provider will become the super administrator for all enterprises' administrators. As a super administrator, the Service Provider has a view of all enterprises he owns and therefore can perform the same actions as the ones taken by the enterprise administrator.

Select COMMUNITIES menu → **ENTERPRISES**. This opens the **ENTERPRISES** page.

Figure 9 ENTERPRISES page

The screenshot shows the 'ENTERPRISES' page in the PURECLOUD interface. It features a table with columns for enterprise details and a context menu with actions. The table lists several enterprises, including 'ibn-1', 'EWE', 'GGA-Meur', 'Goetel', 'Inexo', 'Quickline', 'Services-3M', 'Wilhelmel', and 'Wobcom'. The context menu actions are: (1) delete, (2) unblock, (3) block, (4) view ACD logs, and (5) view CDR. A search bar and filter instructions are also visible at the top of the table area.

parent	administrative domain	IP Telephony Container	blocked	restriction	user extensions	capacity	active calls	default dial prefix	pilot number	receptionist	max external outgoing connections	max IVR connections	default language	country code	operator prefix	billing account field 1	billing account field 2
ibn-1	ibn-1	-3M	ipbx1 (started)	no	none	3 / 5276 (inherited)	internal calls: 0 external calls: 0	none	none	none	unlimited	unlimited	de	Default			
EWE	EWE	-3M	ipbx1 (started)	no	none	3 / 5276 (inherited)	internal calls: 0 external calls: 0	none	none	none	unlimited	unlimited	de	Default			
GGA-Meur	GGA-Meur	-3M	ipbx1 (started)	no	none	7 / 5282 (inherited)	internal calls: 0 external calls: 0	none	none	none	unlimited	unlimited	de	Default			
Goetel	Goetel	-3M	ipbx1 (started)	no	none	2 / 5277 (inherited)	internal calls: 0 external calls: 0	none	none	none	unlimited	unlimited	de	Default			
Inexo	Inexo	-3M	ipbx1 (started)	no	none	3 / 5276 (inherited)	internal calls: 0 external calls: 0	none	none	none	10	unlimited	de	Default			
Quickline	Quickline	-3M	ipbx1 (started)	no	none	1 / 5276 (inherited)	internal calls: 0 external calls: 0	none	none	none	unlimited	unlimited	en	Default	+33		
Services-3M	Services-3M	-3M	ipbx1 (started)	no	none	12 / 5087 (inherited)	internal calls: 0 external calls: 0	none	none	none	unlimited	unlimited	de	Default			
Wilhelmel	Wilhelmel	-3M	ipbx1 (started)	no	none	3 / 5276 (inherited)	internal calls: 0 external calls: 0	none	none	none	unlimited	unlimited	de	33 (France)			
Wobcom	Wobcom	-3M	ipbx1 (started)	no	none	1 / 5276 (inherited)	internal calls: 0 external calls: 0	none	none	none	unlimited	unlimited	en	Default			

1. Click on the **add** button to open the **ENTERPRISE** creation page or to **add** another enterprise.
2. To **unblock** an enterprise, **tick the box** corresponding to the enterprise to be deleted, and click on the **unblock** button.
3. To **block** an enterprise, **tick the box** corresponding to the enterprise to be deleted, and click on the **block** button.
4. To **view ACD logs** of an enterprise, **tick the box** corresponding to the enterprise to be deleted, and click on the **view ACD logs** button. (license dependant)
5. To **view CDRs** of an enterprise, **tick the box** corresponding to the enterprise to be deleted, and click on the **view CRDs** button. (license dependant)

6. To **delete** an enterprise, **tick the box** corresponding to the enterprise to be deleted and click on the **delete** button.
7. To **modify** the enterprise settings, click on the **modify** button.

*Note : When modifying an enterprise, the properties to which the Service Provider has access are extended. Among them, those that are displayed in the above updated **ENTERPRISES** page :*

- Site
- Fail over
- Dial prefix
- Pilot number
- Receptionist
- Music on hold for internal and external calls
- Call barring rules
- Call forwarding rules
- Customization

**Figure 10** ENTERPRISE creation page 1/2

field	value	
parent administrative domain	service provider : 3M automatic assignment	(1)
IP Telephony Container	ipbx1	(2)
blocked	<input checked="" type="radio"/> no <input type="radio"/> yes	(3)
restriction	none	(4)
<b>name</b>	Enterprise2	(5)
<b>label</b>	Enterprise2	(6)
max external incoming & outgoing connections	<input checked="" type="radio"/> no limitation <input type="radio"/> specific value	(7)
max IVR connections	<input checked="" type="radio"/> no limitation <input type="radio"/> specific value	(8)
max members in extension group	<input checked="" type="radio"/> no limitation <input type="radio"/> specific value	(9)
max members in union group	<input type="radio"/> no limitation <input checked="" type="radio"/> specific value 8	(10)
<b>internal dial-plan</b>	1) add a new scheme length (bottom line) 2) modify the scheme (format : allowed prefixes commas-separated) NB : prefixes mustn't overlap ! 3 : 2,3,4,5,6,7,8 <input type="button" value="delete"/> <input type="button" value="add new scheme"/>	(11)
language	en : english	(12)
country code		(13)
operator prefix	<input type="text"/> ⚠ The operator prefix may be mandatory according to the country code dialplan.	(14)
mobile caller ID format for internal calls	long number	(15)
default CLI type	PLMN number	(16)
custom caller ID policy	normal: enterprise pilot number and PSTN number(s) of the extension and its group(s)	(17)
additional choice(s) for caller ID	<input checked="" type="checkbox"/> Please assign some PSTN/PLMN numbers to this enterprise.	(18)
pilot number	<input type="text"/> <input checked="" type="checkbox"/> There is no PSTN available in the platform. <input checked="" type="checkbox"/> Please note: extension without PSTN cannot place external call.	(19)
CTI corporate directory	provide the full directory	(20)
free-seating session duration	<input checked="" type="radio"/> limited to <input type="radio"/> not limited	(21)
free-seating logout time	0 d 2 h 0 min 24 h 0 min	(22)

1. The **parent administrative hierarchy** is the service provider SP. This selection defines which administrative domain will be the owner of the new Enterprise.
2. The **IP Telephony Container** to which the enterprise belongs. The Service Provider himself cannot select an **IP Telephony Container**. Depending on the Platform Owner policy, the assignment of new Enterprises to an **IP Telephony Container** may either occur automatically, or require that the Service Provider contacts him.
3. In the case of automatic assignment to a **IP Telephony Container**, and thus immediate availability of the Enterprise, the Service Provider can decide to postpone the availability by blocking the Enterprise (tick yes in the **blocked** field)
4. The Service Provider can decide to restrict the Enterprise
  - a. **None**
  - b. **Partiel** placing external calls is forbidden
  - c. **Total** placing or receiving any call is forbidden
5. Define the Enterprise **name**. This name is used :
  - a. For Enterprise administrative tasks
  - b. For logging on to applications e.g. mylstra
  - c. As part of the SIP URI for SIP devices.
6. Define the **label name** (optional). This label will be displayed on the phone devices.
7. Define the **max external incoming or outgoing connections** for the Enterprise. When the total number of active external incoming or outgoing calls reaches this maximum value, the next incomign or outgoing external call attempt will fail.
8. Define the **max ivr connections** for the Enterprise. When the total number of IVR connections reaches this maximum value, the next attempt to connect to an IVR will be rejected.
9. The **max members in extension group**
10. The **max members in unison group**
11. Set the **internal dial plan**. For example, if we selecte the figure 3 which means that when calling a colleague internally, the extension number to be dialed will have 3 digits.
12. Select the **language**, several languages can be selected
13. Enter the **country code**. It is used to :
  - a. Link an Enterprise to an external dial-plan :
    - If left empty, external call dial completion works with timer logic, creating a small delay before the call is actually initiated on the PSTN.
    - If set with a country code and if this country code has been provided with a dial plan (ask your Administrator to check if a dial plan exists for your country), then dial completion is based on the digits dialed rather than on a time limit. This allows immediate dialing of external numbers.
  - b. Help CTI applications such as C2CFE, mylstra, Microsoft Office Outlook import, numbers dialed directly from a Windows application.

14. Enter the Enterprise **operator prefix**. This field is used by CTI applications, such as mylstra, during Microsoft Office Outlook imports to insert the correct prefix for in-country calls.

For example, if the Enterprise country code is 33 and the number imported from Outlook is +33497231269 and the operator prefix is 0, the number dialed is 0 04 97 23 12 69.

15. The mobile caller ID format for internal calls
  - a. **Long number**
  - b. **Short number**
16. The default CLI type
  - a. **PLMN number**
  - b. **PSTN number**
17. The **custom caller ID policy**
18. The **additional choices for caller ID**
19. Enter a **Pilot number**. The pilot number is often used as the main company number. An enterprise must assign extensions to a PSTN number in order to place pitgoing calls. Before setting a pilot number, a PSTN number must be created.

Click on assign a PSTN number, enter a \* to list all available PSTN numbers and select a number.
20. **CTI Corporate directory** publication – select an option :
  - a. Do not provide directory : Enterprise extensions numbers will not be seen in the IP phones or mylstra corporate directory
  - b. Provide only the department directory : only the department extensions numbers will be seen in the IP phones or mylstra corporate directory
  - c. Provide only the IVR services directory : only the IVR services extension numbers will be seen in the IP phones or mylstra- corporate directory
  - d. Provide the full directory : all extensions numbers will not be seen in the IP phones or mylstra corporate directory
21. Define the Free seating scenario (optional at this stage), i.e. the **free-seating session duration**. This service has been set by default for the whole enterprise and can be amended at a later date. Click on the modify button of the newly created enterprise.
22. Define the **free seating logout time**. This service has been set by default for the whole enterprise and can be amended at a later date. Click on the modify button of the newly created enterprise.

Figure 11 ENTERPRISE creation page 2/2

The screenshot displays the configuration page for creating an ENTERPRISE. It features a table of settings with callouts on the right side:

- (23) billing account custom field 1
- (24) billing account custom field 2
- (25) allowed scenarios (includes a list of scenarios: GenericScenario, AccountCodesScenario, ManagerScenario, FreeSeatingScenario, ACDSscenario, ExtendedScenario)
- (26) presence states defining personal calls (used to bill private calls)
- (27) hide caller's ID by default?
- (28) allow client applications to use LDAP directory
- (29) allow customization of the user photo
- (30) enable private billing of barred calls from mobile phone?
- (31) restrict salesforce screen popping to incoming/outgoing ACD calls only
- (32) policy for SMS caller ID
- (33) policy: on incoming group calls, caller ID's number to display
- (34) policy: on incoming group calls, caller ID's label(s) to display
- (35) when SIP gateway demands the enterprise to authenticate its outgoing calls
- (36) allow also non-Switchboard users to view calendar events?
- (37) enable signature management email?

At the bottom of the form, there are buttons for: save, save and edit, save and add new, upload announcements, and cancel.

23. **Billing account custom field 1** (optional) : the value entered will appear in the CRD file.

24. **Billing account custom field 2** (optional) : the value entered will appear in the CRD file.

25. Select an extension **allowed scenario** :

- **GenericScenario** is used for a plain extension – selected by default
- **ManagerScenario** enables barge-in and monitoring features from that extension toward any other extension of the Telephony AS.
- **AccountCodeScenario** enables an identification number. Before each call the user is asked to dial this identification number, which will tag the corresponding CDR entry. For example, by assigning a code to each of lawyer's clients, the CDR becomes a tool for charging the client called.
- **FreeSeatingScenario** enables enterprises to allocate a set of phones (SIP, SCCP) shared by several users. In order for the phone to be activated, the user just log in his extension number. (FreeSeating doesn't apply to MGCP devices e.g. Mediapack device)
- **ACDSscenario** enables the end user to access the IVR services.
- **Extended scenario** is the generic scenario in residential mode.

26. **Presence states defining personal calls** (professional, personal...)

27. **Hide caller's ID by default**

28. **Allow client applications to use LDAP directory**
29. Choose whether to **allow the customization of the user photo**. The user photo will be displayed next to the user profile in the MyIstra application.
30. **Enable private billing og barred calls form mobile phone**
31. **Restrict salesforce screen popping to incoming/outgoing ACD calls only**
32. Policy for SMS caller ID
  - a. **Use the caller ID chosen for calls**
  - b. **Use the user's PLMN number**
33. Select the policy : on incoming group calls, caller ID's number to display
  - a. **Original caller**
  - b. **Original called**
  - c. **Last called group**
34. Policy : on incoming group calls, caller ID's label(s) to display
35. Select the authentication when SIP gateway demands the enterprise to authenticate its outgoing calls
36. Allow also non-Switchboard users to view calendar events
37. If permitted by the Licence, choose whether to **enable the email signatures management** for the Enterprise.

Click on **save** to see the enterprise in the enterprise page.

Figure 12 ENTERPRISES modification page

Enterprise

Enterprise Service Plan Enterprise Import/Export Quotas Call Rule Forwarding Rule Customization Service Configuration

Bold fields are mandatory.

field	value
parent administrative domain	~3M
IP telephony container	ipbx1
blockad	<input checked="" type="radio"/> no <input type="radio"/> yes
restriction	none
name	WebCom
label	WebCom
default eta	default
<b>fall on no answer delay (s)</b>	180
max external incoming & outgoing connections	<input checked="" type="radio"/> no limitation <input type="radio"/> specific value
max IPR connections	<input checked="" type="radio"/> no limitation <input type="radio"/> specific value
max members in extension group	<input checked="" type="radio"/> no limitation <input type="radio"/> specific value
max members in union group	<input type="radio"/> no limitation <input checked="" type="radio"/> specific value 8
<b>internal dial plan</b>	1) add a new scheme length (bottom line) 2) modify the scheme (format: allowed prefixes comma-separated) NE: prefixes mustn't overlap! 3 0,3,4,5,6,7,8
default dial prefix	
language	
country code	Default
operator prefix	The operator prefix may be mandatory according to the country code display.
mobile caller ID format for internal calls	long number
default CLI type	PGTN number Please note that modifying this value: • will not affect at all the existing default CLI • will affect a default CLI only upon a future PSTN/PLMN update of an extension
custom caller ID policy	normal, enterprise pilot number and PSTN number(s) of the extension and its group(s)
additional ohos(es) for caller ID	
<b>pilot number</b>	<input checked="" type="radio"/> none Please note: extension without PSTN cannot place external call. <input type="radio"/> existing
<b>receptionist role</b> (all incoming calls to an unassigned PSTN/PLMN numbers will be redirected to it)	<input checked="" type="radio"/> none <input type="radio"/> existing
CTI corporate directory	provide the full directory
free-seating session duration	<input checked="" type="radio"/> limited <input type="radio"/> not limited
free-seating logout time	0 d 2 h 0 min
billing account custom field 1	
billing account custom field 2	
allowed scenarios	available: GenericScenario, AccountCodesScenario, ManagerScenario, FreeSeatingScenario, ACDScenario, ExtendedScenario selected: GenericScenario, AccountCodesScenario, ManagerScenario, FreeSeatingScenario, ACDScenario, ExtendedScenario
presence states defining personal calls (used to bill private calls)	available: default, professional - all, professional - available, professional - working, professional - customer meeting, professional - course training selected: professional - all
hide caller's ID by default?	<input checked="" type="radio"/> no <input type="radio"/> yes
allow client applications to use LDAP directory	<input type="radio"/> no <input checked="" type="radio"/> yes
allow customization of the user photo	<input checked="" type="radio"/> no <input type="radio"/> yes
enable private billing of barred calls from mobile phone?	<input checked="" type="radio"/> no <input type="radio"/> yes
restrict salesforce screen popping to incoming/outgoing ACD calls only	<input type="radio"/> no <input checked="" type="radio"/> yes
<b>policy for SMS caller ID</b>	use the Caller ID chosen for calls
policy: USSD directory lookup	for all internal calls, including services/groups
policy: on incoming group calls, caller ID's number to display	original caller
policy: on incoming group calls, caller ID's label(s) to display	available: original called, last called group selected: original caller
when SIP gateway demands the enterprise to authenticate its outgoing calls	<input type="radio"/> don't authenticate <input checked="" type="radio"/> authenticate, with: specific username: specific username enter the desired username: password: input, confirm
allow also non-Switchboard users to view calendar events?	<input checked="" type="radio"/> no <input type="radio"/> yes
<b>fields subject to license</b>	
enable signature management email?	<input checked="" type="radio"/> no <input type="radio"/> yes

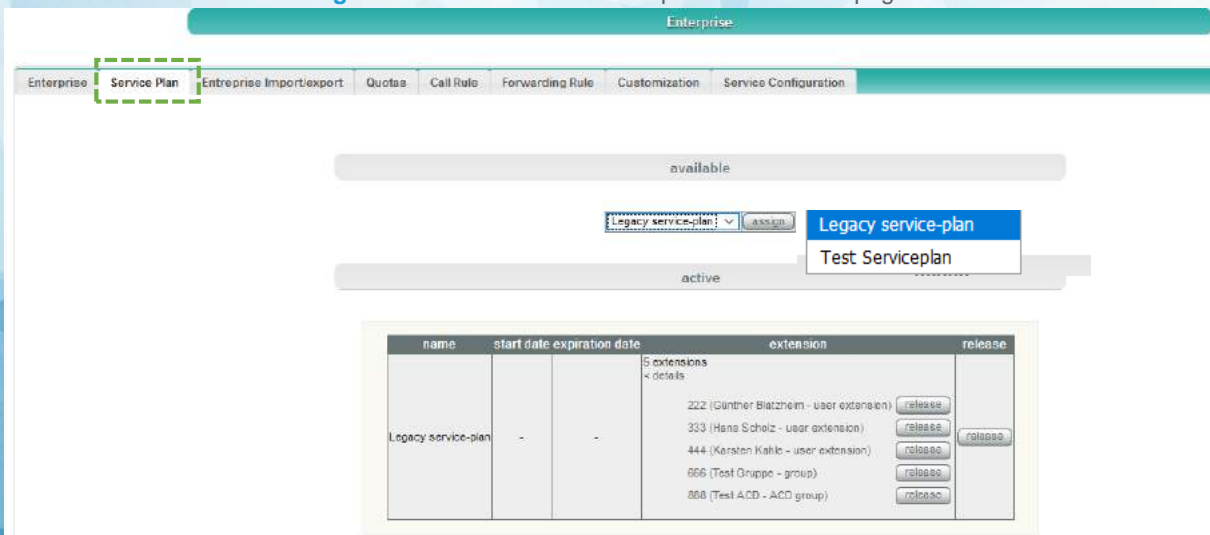
[ save ] [ apply ] [ cancel ]

1. **Default site** : a site is the physical location of your Enterprise. Its location determines how the emergency calls (police, fireman, etc.) are routed. The calls go to the emergency service nearest your location.  
*Please refer to the Enterprise Administration guide for site creation.*
2. **Fail on no answer delay** timer, set to 3 minutes (180 seconds) by default at Enterprise creation, is the length of time allowed for a phone to ring before the call gets picked up. Once this timer has expired, the call is dropped without following any forwarding rule and the external incoming calls receive a SIP 603 DECLINED error.
3. **Default dial prefix** : can be used to perform calls to the PSTN through a gateway or to another SIP entity e.g. an enterprise. It cannot be set presently because it hasn't been created. Please refer to Chapter 2 - section [2.10 Creating a Dial prefix for PSTN access](#).
4. **Pilot number** : an enterprise must have a pilot number in order for extensions numbers, not assigned to a PSTN number, to be able to place outgoing calls. The pilot number is often used as the main company number and therefore used by the receptionist. Before setting a pilot number, a PSTN number must be created and associated to the receptionist extension. Please refer to chapter 2 – section [2.9 Pilot number assignment](#).
5. **Receptionist** : is the person taking all calls for an enterprise. The extension number cannot yet be assigned to a receptionist as it hasn't been defined yet. Please refer to chapter 2 – section [2.7 PSNT number assignment to extensions](#).
6. **Policy USSD directory lookup**
  - a. Disabled
  - b. For calls coming from a service/groupe
  - c. For all internal calls, including services/groups
  - d. For internal and external calls

In the menu on the top other modifications can be made :

- **Service plan** : Allows to define packages of features which reflect the sales offers of the operator. *Please refer to the Enterprise Administration guide – Service Plan*

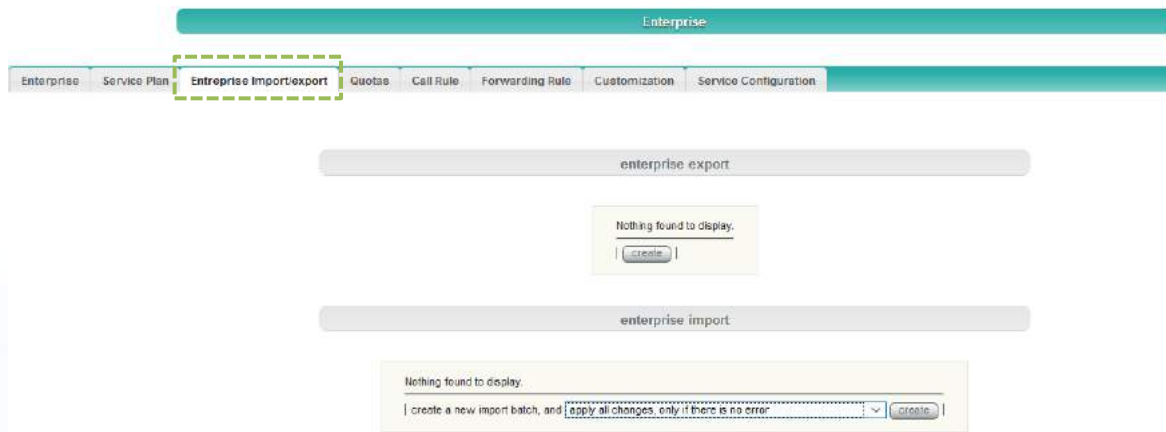
**Figure 13** SERVICE PLAN enterprise modification page





- **Enterprise Import/ Export** : Is in charge of exporter/importer the configurations of enterprises in a cvs file to modify the devices, sites, iVRs, dial prefixes, users etc.

**Figure 14** ENTERPRISE IMPORT/ EXPORT enterprise modification page



- **Quotas** : when activating the « quota » management, allows the Service Provider to control two main elements:
  - List of Service Plans and their number
  - List of Devices and their number

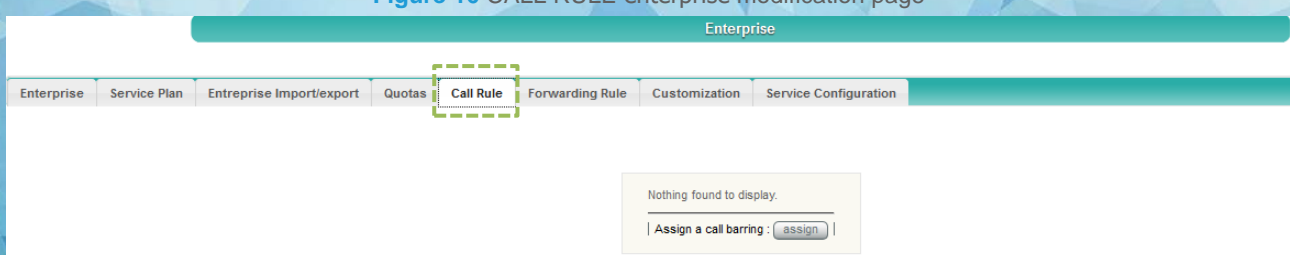
This way, it is very easy for a SP to control licenses/options and devices allowed in a given enterprise.

**Figure 15** QUOTAS enterprise modification page



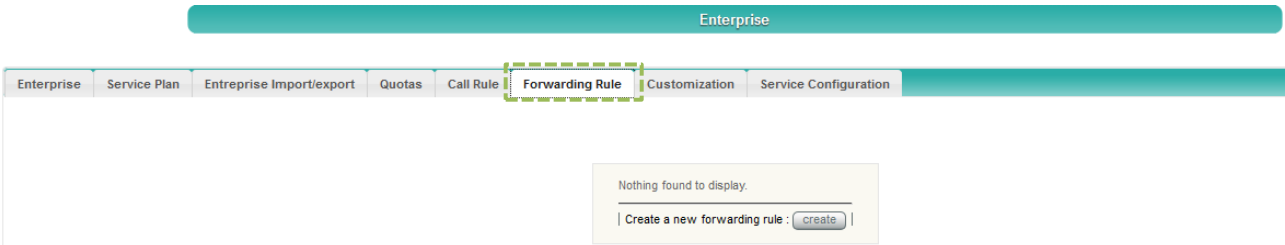
- **Call rule** : limit users to dial specific numbers e.g. international  
*Please refer to the Enterprise Administration guide - Call barrings rule creation.*

**Figure 16** CALL RULE enterprise modification page



- **Forwarding rules** : redirects incoming calls (all or specific) to a predefined, internal or external destination on always, busy or unreachable.  
*Please refer to the Enterprise Administration guide - Call Forwarding rule creation.*

**Figure 17** FORWARDING RULE enterprise modification page



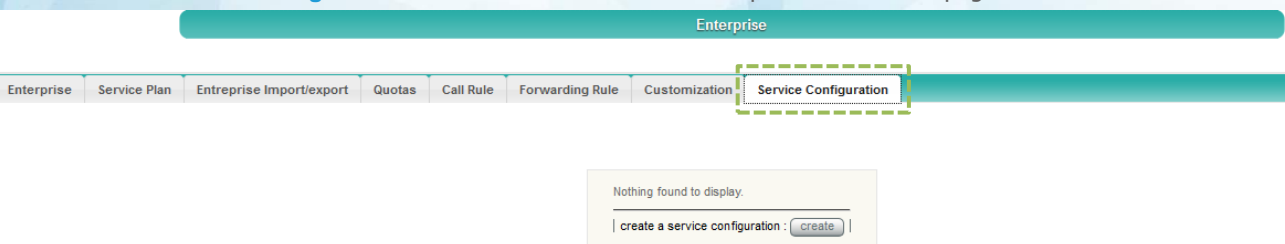
- **Customization** : enables the enterprise administrator to customize the client applications as well as devices and iVRs without the need to reboot the Istra platform. Customization includes the minimum required and recommended client applications versions, adding the company logo, selecting the installer location, selecting the device language, selecting the number of voicemail allowed per mailbox....  
*Please refer to the Enterprise Administration guide – Enterprise Customization.*

**Figure 18** CUSTOMIZATION enterprise modification page



- **Service configuration**

**Figure 19** SERVICE CONFIGURATION enterprise modification page



## 2.2 Capabilities management

Once the Service Provider has created the enterprise, he needs to assign it with the requested capabilities (number of extensions, users, terminals...)

The Service Provider administrator owns a certain quantity (e.g maximum number of extensions) based on the platform license owned. These capacities (or quota) can be freely distributed among the Service Provider's customers (Enterprises & Resellers).

The Istra Enterprise platform manages various capacities with its license mechanism. Such capacities control the maximum number of entities on the platform, as well as their allocation in the administrative domains. Example of entities include extensions, users, terminals, ACD agents and many others. If the Service Provider runs out of capabilities, on request, the Platform Owner is able to upgrade the license without any service interruption.

The capabilities can be managed by two different methods, which are different if there are restrictions or not.

### **No capability restriction (inherited)**

The Service Provider administrator can assign its Enterprise and Resellers' customers with as many Enterprises and extensions creation capabilities, as well as assigned terminals as they want. **This is the case when "inherited" is selected from the Administrative domain creation page.**

The only worry is that when new accounts are created with inherited capacities (no control other extensions creation...), the Istra platform does not control the growth of these new accounts. The growth is stopped whenever the Service Provider's overall Istra platform has reached its maximum capability.

*Note : to avoid this, it is recommended to restrict platform capabilities when creating new administrators' accounts.*

### **Capability restriction**

If the Service Provider has a limit on the number of extensions (set by the Platform Owner), the growth is stopped when the Service Provider has reached its purchased license capabilities. This method does not prevent an Enterprise from taking most of the Service Provider's entire quota.

Capacity warnings :

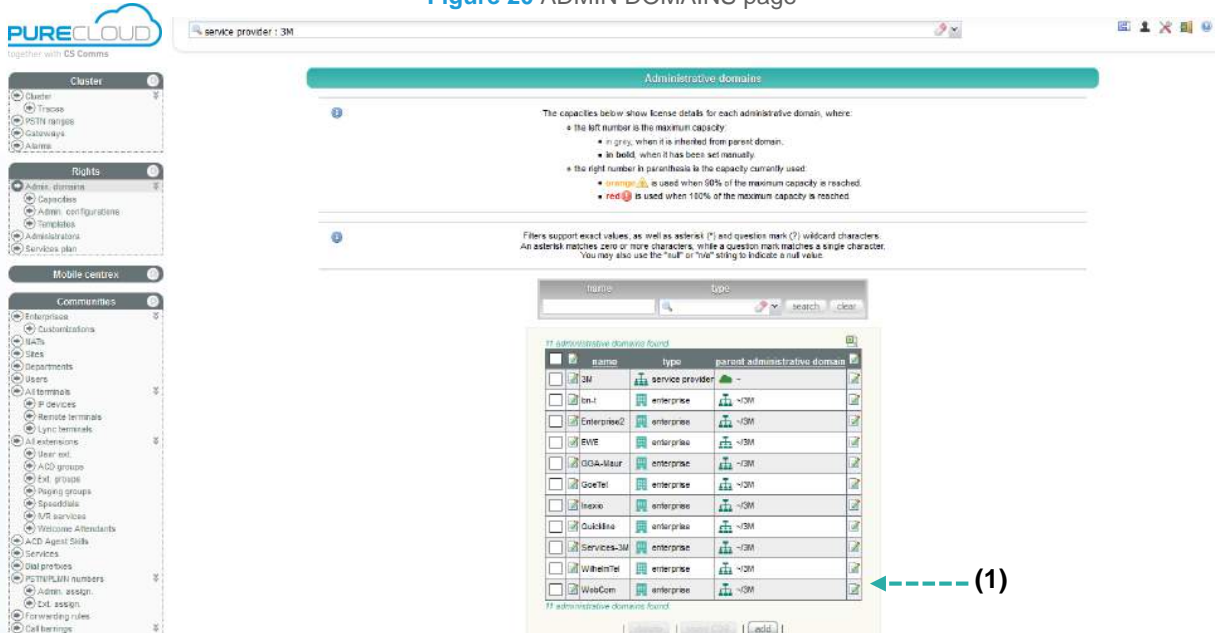
- When 90% of the maximum capacity is reached, the current figure is marked in orange
- When 100% of the maximum capacity is reached, the current figure is marked in red.

*Note : The Service Provider has full control of the growth of their enterprise customers.*

This task below enables the Service Provider to set the Enterprise capabilities based on their request.

Select RIGHTS menu → **ADMIN DOMAINS** to open the **ADMIN DOMAINS** page.

Figure 20 ADMIN DOMAINS page



1. At creation, by default, the Enterprise is assigned with the same capability rights as the Service Provider. To adjust the Enterprise capacities according to its needs, click on enterprise **modify** button. This will open the **ADMINISTRATIVE DOMAINS** modification page.

*Note :* The user interface style for this administrative domain (and all its children administrative domains) can be customized in the following web server folder: **/customdata/0.0.0/webadmin/**

To change the capacity numbers, untick the relevant boxes 'inherited' and enter the number requested.

**Figure 21** ADMIN DOMAINS creation page

Administrative domain

Bold fields are mandatory.

field	value
parent administrative domain	service provider : 3M
<b>name</b>	
<b>type</b>	service provider
<b>billing account custom field 1</b>	
General	
Communities Multi Countries	inherited <input checked="" type="checkbox"/> (9996)
Inter-communities billing	inherited <input checked="" type="checkbox"/> (10000)
Calls recording	inherited <input checked="" type="checkbox"/> (9994)
Internal Addresses Opt In Out Recorded	inherited <input checked="" type="checkbox"/> (1000000)
suspend recording allowed in XPad	inherited <input checked="" type="checkbox"/> (9875)
Internal Addresses Toggle Pause Recorded	inherited <input checked="" type="checkbox"/> (1000000)
IP Telephony Container	inherited <input checked="" type="checkbox"/> (8)
terminals	inherited <input checked="" type="checkbox"/> (9314)
user extensions	inherited <input checked="" type="checkbox"/> (9310)
C2CE and XPad CRM integration	inherited <input checked="" type="checkbox"/> (9461)
DISA	inherited <input checked="" type="checkbox"/> (9931)
TAPI Connector	inherited <input checked="" type="checkbox"/> (9962)
XPad and Switchboard : desktop softphone	inherited <input checked="" type="checkbox"/> (9605)
XPad and Switchboard : desktop G.722.2 softphone	inherited <input checked="" type="checkbox"/> (9893)
XPad and Switchboard : desktop G.729 softphone	inherited <input checked="" type="checkbox"/> (9899)
XPad and Switchboard : desktop video	inherited <input checked="" type="checkbox"/> (9942)
users	inherited <input checked="" type="checkbox"/> (9436)
FMC Router	
Mobile	
Residential	
Enterprise	
Administrator Applications	
ACD	
Collaboration	
IVRs And Services	
Residential IVRs And Services	
Enterprise IVRs And Services	
Third Party Integration	
WebVoice	

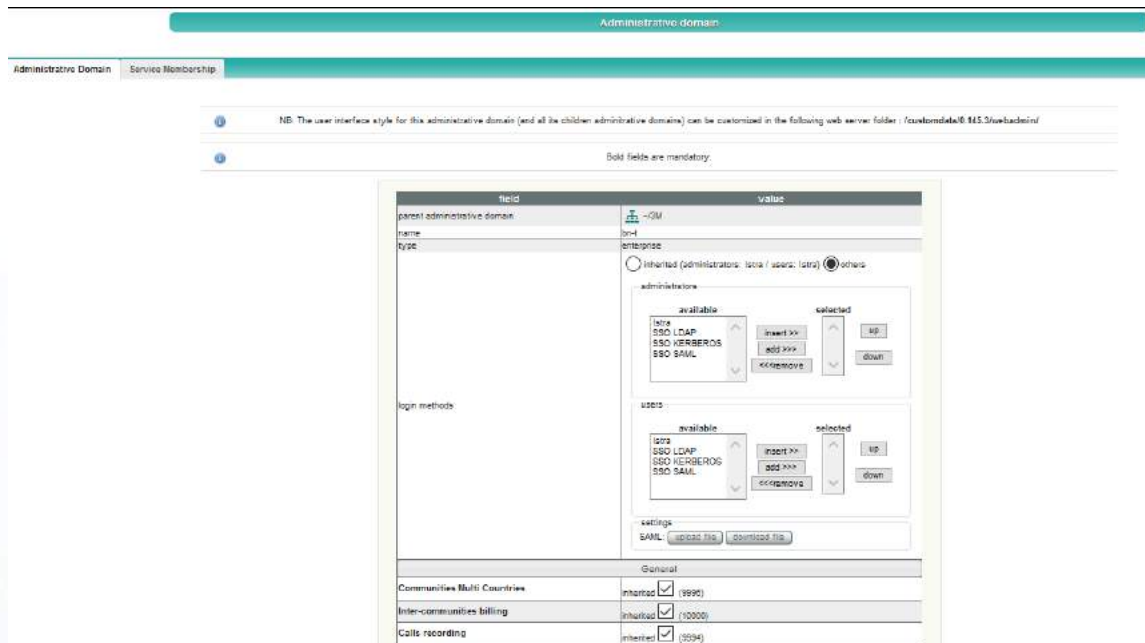
| save | save and edit | save and add new | cancel |

1. Enter the **administrative domain name**
2. Select the type **service provider** or **reseller**
3. Enter the **billing account custom field 1**
4. To change the capacity numbers, untick the relevant boxes 'inherited' and enter the number requested.

Click on **save** to validate your choice. Fields have been updated in the **ADMIN DOMAINS** page.

Click on enterprise **modify** button to open the Admin Domains modification page

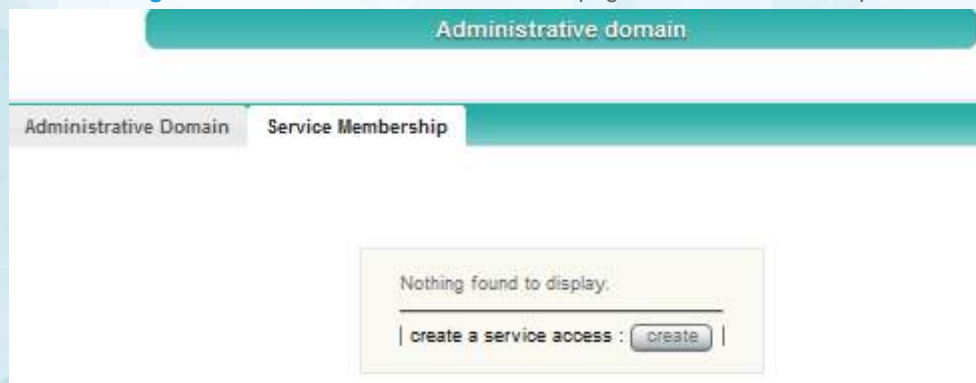
**Figure 22** ADMIN DOMAINS modification page



In the menu on the top the Service Membership modification can be made :

- **Service Membership :**

**Figure 23** ADMIN DOMAINS modification page - Service Membership

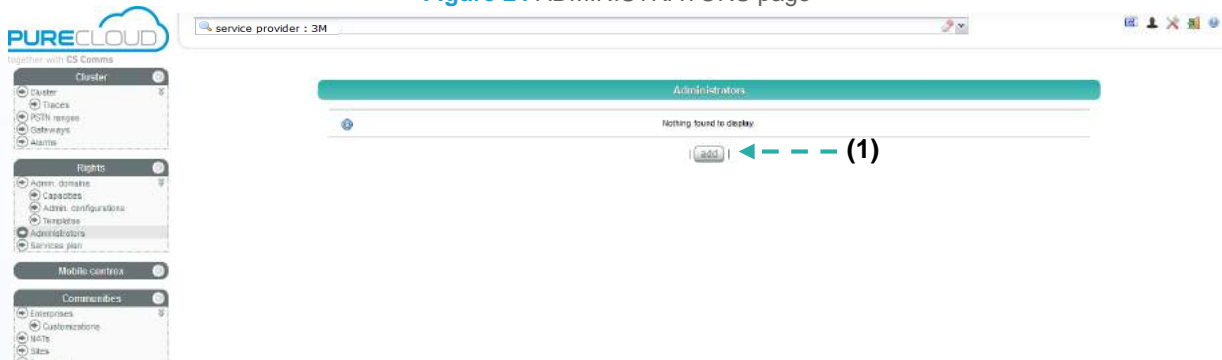


## 2.3 Enterprise Administrator creation and modification

This task enables the Service Provider to administer an Enterprise administrator who will be able to manage the platform on behalf of the company.

Select RIGHTS menu → **ADMINISTRATORS** to open the **ADMINISTRATORS** page. Any existing Administrators are displayed.

Figure 24 ADMINISTRATORS page



1. To **create** an enterprise administrator, click on the **add** button. This opens the ADMINISTRATOR creation page.

Figure 25 ADMINISTRATOR creation page

field	value
<b>administrative domain</b>	service provider : 3M
<b>login</b>	[redacted]
<b>blocked</b>	<input checked="" type="radio"/> no <input type="radio"/> yes
<b>password</b>	<input type="checkbox"/> modify input: [empty] confirm: [empty]
<b>is this administrator a user of the platform?</b>	<input checked="" type="radio"/> no <input type="radio"/> yes
<b>firstname</b>	[empty]
<b>lastname</b>	[empty]
<b>email</b>	[empty]
<b>phone number</b>	[empty]
<b>language</b>	English
<b>date format</b>	European format (day/month/year)
<b>first day of the week</b>	Monday
<b>time format</b>	24 hours clock
<b>fields subject to license</b>	
Web Administration access	<input type="radio"/> no <input checked="" type="radio"/> yes
myTelephony access	<input checked="" type="radio"/> no <input type="radio"/> yes
myReports access	<input checked="" type="radio"/> no <input type="radio"/> yes
ACD Stats access	<input checked="" type="radio"/> no <input type="radio"/> yes
CDR Browser access	<input checked="" type="radio"/> no <input type="radio"/> yes
Call Recording browser access	<input checked="" type="radio"/> no <input type="radio"/> yes
log on behalf of end users	<input checked="" type="radio"/> no <input type="radio"/> yes

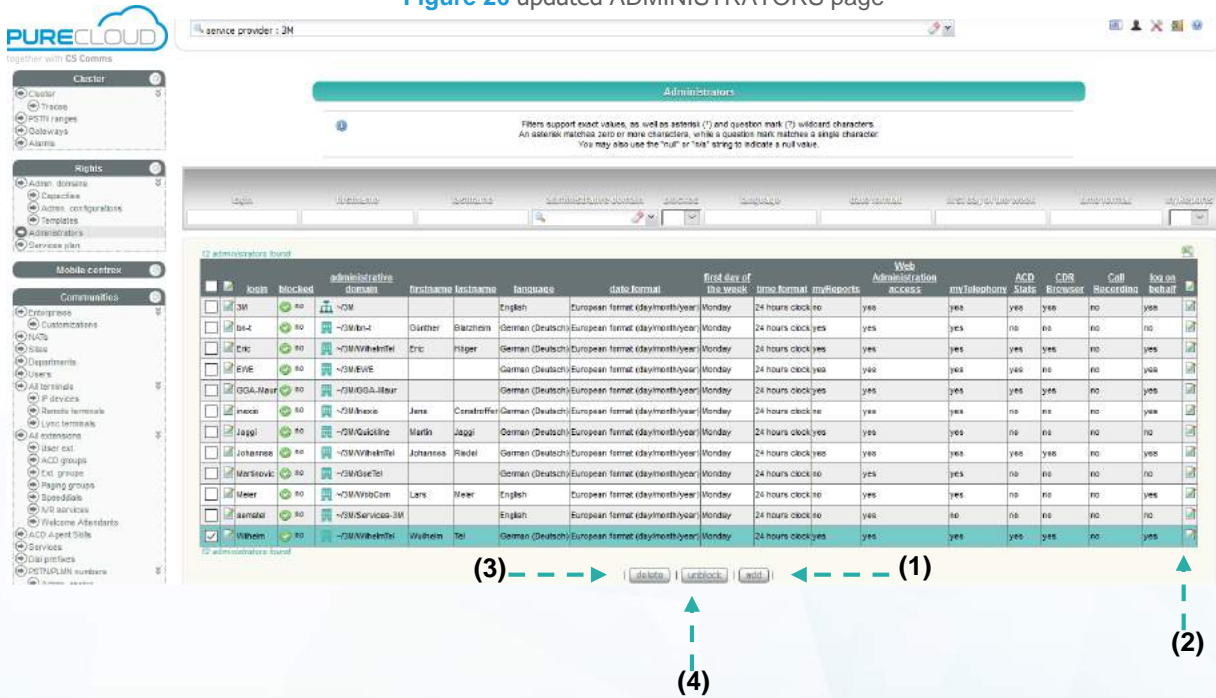
| save | save and edit | save and add new | cancel |

1. Select the **administrative domain**
2. Enter a **login**
3. Select the **block**
4. Enter a **password** (enable the input field by ticking the **modify** box)
5. Choose **if this administrator an user of the platform**
6. Enter the **first and last name** of the administrator (optional)
7. Enter the **email** of the administrator
8. Enter the **phone number** of the administrator
9. Select the **language**
10. Select the **date format**
11. Select the **first day of the week**
12. Select the **time format**
13. Choose which applications are allowed (subject to license capability boundaries)

Click on **save**. This displays the updated **ADMINISTRATORS** page



Figure 26 updated ADMINISTRATORS page



1. To **add** another enterprise administrator, click on the **add** button. This opens the ADMINISTRATOR creation page.
2. To **modify** the administrator's details, click on the **modify** button.
3. To **delete** an administrator, put a **tick** in front of the administrative domain name you wish to delete, and click on the **delete** button.
4. To **unblock** the administrator's details, click on the **unblock** button.

## 2.4 Multiple Enterprises Management

A Service Provider's administrator can perform all operations on any of the enterprises under its control (hierarchy).

This task enables the Service Provider to focus on one enterprise only when performing actions such as :

- Viewing or modifying existing enterprise related objects (existing users, extensions, devices, etc.) : **it is recommended to switch to an Enterprise in the Current View to filter them in a better way.**
- Creating enterprise related objects (new users, extensions, devices, etc.) : **you must first switch to an Enterprise in the Current View (mandatory).**
- Viewing alarms related to a specific enterprise

Select COMMUNITIES menu → **ENTERPRISES** to open its page

Figure 27 ENTERPRISES page – Filter view

	name	label	parent administrative domain	IP Telephony Container	blocked	restriction	user extension capacity	active calls	default	pilot	receptionist	max external incoming & outgoing connections	max BDR connections	default language	country code	operator code	billing account custom field 1	billing account custom field 2
<input type="checkbox"/>	bn-t	bn-t	~GM	ipbx1 (started)	no	none	3 / 9277 (inherited)	internal calls : 0 external calls : 0	none	none	none	unlimited	unlimited	de	Default			
<input type="checkbox"/>	Enterprise2	Enterprise2	~GM	ipbx1 (started)	no	none	0 / 9274 (inherited)	internal calls : 0 external calls : 0	none	none	none	unlimited	unlimited	en	Default			
<input type="checkbox"/>	EWE	EWE	~GM	ipbx1 (started)	no	none	3 / 9277 (inherited)	internal calls : 0 external calls : 0	none	none	none	unlimited	unlimited	de	Default			
<input type="checkbox"/>	GGA-Maur	GGA-Maur	~GM	ipbx1 (started)	no	none	7 / 9281 (inherited)	internal calls : 0 external calls : 0	none	none	none	unlimited	unlimited	de	Default			
<input type="checkbox"/>	GoTel	GoTel	~GM	ipbx1 (started)	no	none	2 / 9276 (inherited)	internal calls : 0 external calls : 0	none	none	none	unlimited	unlimited	de	Default			
<input type="checkbox"/>	Inexo	Inexo	~GM	ipbx1 (started)	no	none	3 / 9277 (inherited)	internal calls : 0 external calls : 0	none	none	none	10	unlimited	de	Default			
<input type="checkbox"/>	Quickline	Quickline	~GM	ipbx1 (started)	no	none	1 / 9275 (inherited)	internal calls : 0 external calls : 0	none	none	none	unlimited	unlimited	en	Default	+33		
<input type="checkbox"/>	Service3-3M	Service3-3M	~GM	ipbx1 (started)	no	none	12 / 9286 (inherited)	internal calls : 0 external calls : 0	none	none	none	unlimited	unlimited	de	Default			
<input type="checkbox"/>	WilhelmTel	WilhelmTel	~GM	ipbx1 (started)	no	none	3 / 9277 (inherited)	internal calls : 0 external calls : 0	none	none	none	unlimited	unlimited	de	33 (France)			
<input type="checkbox"/>	WobCom	WobCom	~GM	ipbx1 (started)	no	none	1 / 9275 (inherited)	internal calls : 0 external calls : 0	none	none	none	unlimited	unlimited	en	Default			

1. Select an enterprise in the **Current view** menu e.g. WobCom. The filtered **ENTERPRISES** page will automatically be displayed.
2. By filtering the ENTERPRISES menu, only displayed is the information about this Enterprise. Information about all the others is hidden once this page is reloaded

The Service Provider is then able to perform any actions on behalf of the Enterprise's administrator.

## 2.5 Other accounts and Administrators creation

Apart from Enterprise creation, a Service Provider is only entitled to **create Reseller accounts**.

Once these accounts are created, the Service Provider will have rights to monitor them.

Select RIGHTS menu → **ADMIN. DOMAINS** to open the **ADMINISTRATIVE DOMAINS** page. All existing entities are displayed.

Figure 28 ADMIN DOMAINS page

The screenshot shows the 'ADMINISTRATIVE DOMAINS' page in the Istra interface. The page title is 'Administrative domains'. Below the title, there is explanatory text about capacities and filters. A table lists administrative domains with columns: name, type, and parent administrative domain. The table contains 11 rows of data. At the bottom of the table, there are 'add' and 'modify' buttons. Annotations (1) and (2) point to these buttons.

name	type	parent administrative domain
3M	service provider	-
en-1	enterprise	~3M
Enterprise2	enterprise	~3M
EWE	enterprise	~3M
IGA-Maur	enterprise	~3M
GoTel	enterprise	~3M
Imexo	enterprise	~3M
Quikline	enterprise	~3M
Services-3M	enterprise	~3M
WilhelmTel	enterprise	~3M
WebCom	enterprise	~3M

1. Click on the **add** button to open the **ADMIN DOMAIN** creation page
2. Click on the **modify** button to amend any fields.

In this example a reseller called hob will be created.

Figure 29 ADMIN DOMAIN creation page

field	value
parent administrative domain	service provider : 3M
<b>name</b>	<b>Hob</b>
<b>type</b>	reseller
billing account custom field 1	
General	
Communities Multi Countries	inherited <input checked="" type="checkbox"/> (9998)
Inter-communities billing	inherited <input checked="" type="checkbox"/> (10000)
Calls recording	inherited <input checked="" type="checkbox"/> (9994)
Internal Addresses Opt In Out Recorded	inherited <input checked="" type="checkbox"/> (1000000)
suspend recording allowed in XPad	inherited <input checked="" type="checkbox"/> (9875)
Internal Addresses Toggle Pause Recorded	inherited <input checked="" type="checkbox"/> (1000000)
IP Telephony Container	inherited <input checked="" type="checkbox"/> (8)
terminals	inherited <input checked="" type="checkbox"/> (9314)
user extensions	inherited <input checked="" type="checkbox"/> (9309)
C2CE and XPad CRM integration	inherited <input checked="" type="checkbox"/> (9480)
DISA	inherited <input checked="" type="checkbox"/> (9931)
TAPI Connector	inherited <input checked="" type="checkbox"/> (9982)
XPad and Switchboard : desktop softphone	inherited <input checked="" type="checkbox"/> (9005)
XPad and Switchboard : desktop G.722.2 softphone	inherited <input checked="" type="checkbox"/> (9893)
XPad and Switchboard : desktop G.729 softphone	inherited <input checked="" type="checkbox"/> (9899)
XPad and Switchboard : desktop video	inherited <input checked="" type="checkbox"/> (9942)
users	inherited <input checked="" type="checkbox"/> (9435)
FMC Router	
Mobile	
Residential	
Enterprise	
Administrator Applications	
ACD	
Collaboration	
IVRs And Services	
Residential IVRs And Services	
Enterprise IVRs And Services	
Third Party Integration	
WebVoice	

(1) points to 'parent administrative domain' value  
(2) points to 'type' value  
(3) points to the 'General' section

1. The **Service Provider** is the **parent administrative domain**
2. Select the type **service provider** or **reseller**
3. To change the capacity numbers, untick the relevant boxes 'inherited' and enter the number requested.

Click on **save** for validation. This opens the updated **ADMINISTRATIVE DOMAINS** page.

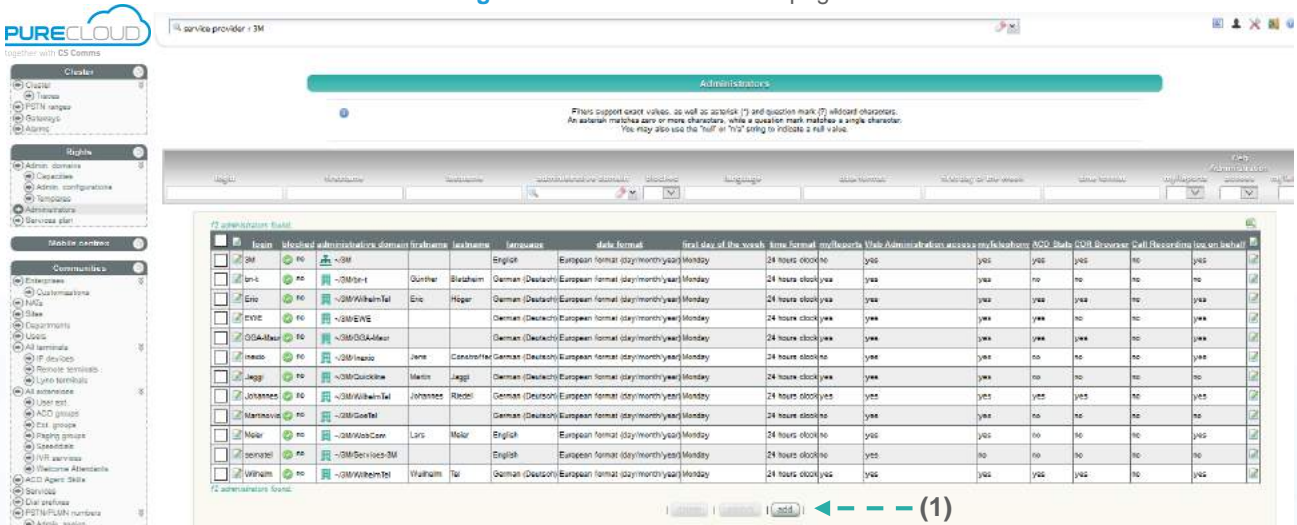
The Reseller Hob has been created.

Click on the **modify** button to amend any fields.

Once the Reseller account has been created, the Service Provider **must create a Reseller Administrator** in order for him to monitor its own customers.

Select Rights menu → **ADMINISTRATORS** to open the ADMINISTRATORS page. All existing companies' administrators are displayed.

Figure 30 ADMINISTRATORS page



1. Click on the **add** button to open the ADMINISTRATORS creation page and **create** the Hob reseller's administrator.

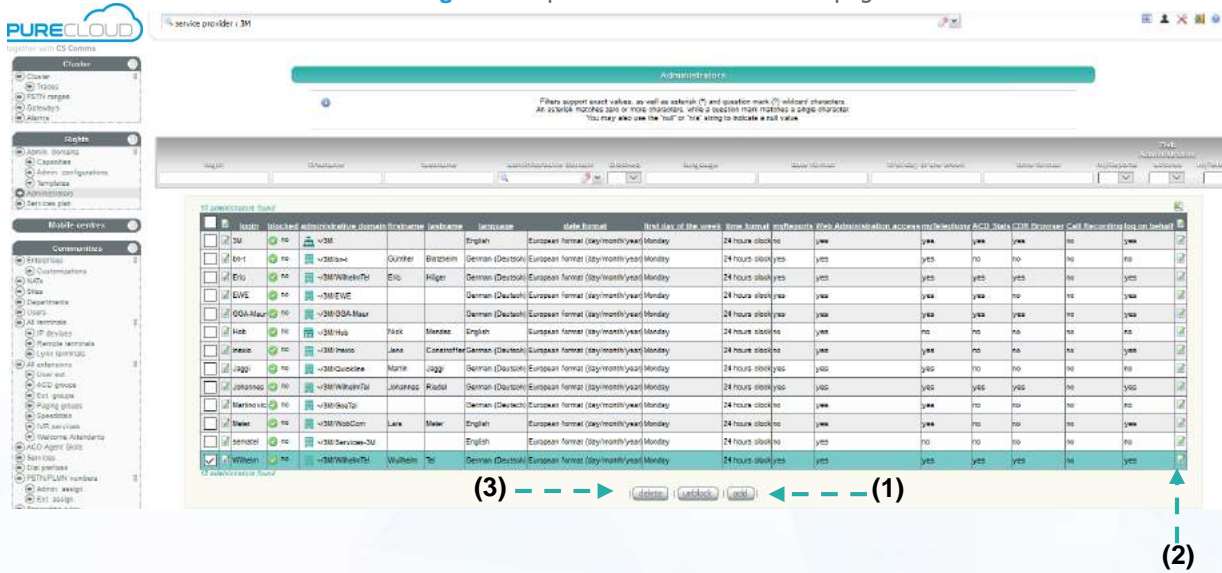
Figure 31 ADMINISTRATOR creation page

field	value
<b>administrative domain</b>	reseller : Hob
<b>login</b>	Hob
<b>blocked</b>	<input checked="" type="radio"/> no <input type="radio"/> yes
<b>password</b>	<input checked="" type="checkbox"/> modify ..... ..... <small>The password length must be between 0 and 20 characters long.</small>
<b>is this administrator a user of the platform?</b>	<input checked="" type="radio"/> no <input type="radio"/> yes
<b>firstname</b>	Nick
<b>lastname</b>	Mendez
email	
phone number	
language	English
date format	European format (day/month/year)
first day of the week	Monday
time format	24 hours clock
myReports access	please enable "ACD Stats access" or "CDR Browser access" first
<b>fields subject to license</b>	
Web Administration access	<input type="radio"/> no <input checked="" type="radio"/> yes
myTelephony access	<input checked="" type="radio"/> no <input type="radio"/> yes
ACD Stats access	<input checked="" type="radio"/> no <input type="radio"/> yes
CDR Browser access	<input checked="" type="radio"/> no <input type="radio"/> yes
Call Recording browser access	<input checked="" type="radio"/> no <input type="radio"/> yes
log on behalf of end users	<input checked="" type="radio"/> no <input type="radio"/> yes

| save save and edit save and add new cancel |

1. Select the **administrative domain** : reseller Hob
  2. Enter a **login**
  3. Enter a **password** twice
  4. Enter the **first name** of the administrator (optional)
  5. Enter the **last name** of the administrator (optional)
- Click on **save modification**. This displays the updated Administrators page

Figure 32 Updated ADMINISTRATORS page



1. Click on the **add** button to open the **ADMINISTRATORS** page.
2. To **modify** the administrator's details, click on the **modify** button.
3. To **delete** an administrator, put a **tick** in front of the administrative domain name you wish to delete, and click on the **delete** button.

*Note : To help with the Service Provider level administration, it may be useful to divide the administration of enterprises amongst several Service Provider administrators.*

Please follow the same instructions as for the reseller administrator creation. Instead of selecting a Reseller in the field "administrative domain", please select a Service Provider. Repeat the procedure as many times as you wish to create other administrators.

## 2.6 PSTN/PLMN numbers assignment to Enterprises

The **PSTN/PLMN NUMBERS** page is used to configure the connection between extensions and a range of PSTN/PLMN numbers.

The Service Provider's administrator is not allowed to create new PSTN/PLMN numbers.

The Top Level Administrator, the "Platform Owner" must assign a range of PSTN/PLMN numbers to the Service Provider's domain. Contact the Platform Owner Administrator if you need more numbers than currently assigned.

This task assumes that a range of PSTN/PLMN numbers has been assigned to the Service Provider domain. They are managed by assigning PSTN/PLMN numbers individually to enterprises.

Please note :

1. A range of PSTN/PLMN numbers assigned to an Enterprise can also be managed by the Enterprise administrator.
2. PSTN/PLMN numbers must be assigned to an Enterprise before extensions can be assigned to the numbers.
3. Once a PSTN/PLMN has been assigned to an extension, it is not possible to remove that number from its Enterprise. It is necessary to first remove the PSTN/PLMN number from the extension and then remove the PSTN/PLMN number from the Enterprise.

The Service Provider can assign PSTN/PLMN numbers to its customers from two (2) different ways.

**The first way to assign PSTN/PLMN numbers is as follows :**

Select COMMUNITIES menu → **PSTN/PLMN NUMBERS** → **ADMIN. ASSIGN.** to open the **PSTN/PLMN NUMBERS ADMINISTRATIVE ASSIGNMENT** page.

**Figure 33** PSTN/PLMN NUMBERS ADMINISTRATIVE ASSIGNMENT page

The screenshot shows the PURECLOUD interface for the 'PSTN/PLMN Numbers administrative assignment' page. The sidebar on the left contains a 'Communities' menu with options like Enterprise, Customizations, VoIP, etc. The main content area features a table of PSTN/PLMN numbers and an administrative hierarchy table.

#	PSTN/PLMN numbers	administrative hierarchy
1	+33124123001	~/ADNtelecom
2	+33124123002	~/ADNtelecom
3	+33124123003	~/ADNtelecom
4	+33124123004	~/ADNtelecom
5	+33124123005	~/ADNtelecom
6	+33124123006	~/ADNtelecom
7	+33124123007	~/ADNtelecom

#	administrative domain
1	~/ADNtelecom/ADNenterp
2	~/ADNtelecom



This page displays the 8 PSTN/PLMN numbers available to the Service Provider and created by the Platform Owner.

In the example below, the Service Provider will then assign 3 PSTN/PLMN numbers to the Enterprise “ADNtelecom”.

**Figure 34** PSTN/PLMN NUMBERS ASSIGNMENT page

**PSTN/PLMN Numbers administrative assignment**

Please note: all modifications on this page are made in real time, there is no "save" button.

Numbers in left list supports multiple selection: use CTRL + clic to select numbers individually, or use SHIFT + clic to select a continuous range of numbers.

**PSTN/PLMN numbers**  
8 PSTN/PLMN numbers found, displaying 1 to 8

#	PSTN/PLMN numbers	administrative hierarchy
1	+33102030409	~/ADNtelecom
2	+33124123001	~/ADNtelecom
3	+33124123002	~/ADNtelecom
4	+33124123003	~/ADNtelecom
5	+33124123004	~/ADNtelecom
6	+33124123005	~/ADNtelecom
7	+33124123006	~/ADNtelecom
8	+33124123007	~/ADNtelecom

+33102030409~+33124123002

**administrative hierarchy**  
2 administrative domains found, displaying 1 to 2

#	administrative domain
1	~/ADNtelecom/ADNterp
2	~/ADNtelecom

~/ADNtelecom/ADNterprise

Assignments are performed as follows :

1. Selecting the Service Provider **PSTN/PLMN numbers** in the left list.
  - Hold down the CTRL key to select more than one number at the same time
  - Hold down the SHIFT key to select a sequential group of numbers.
2. Selecting the **administrative domain** in the right list to receive the assigned numbers.
3. Click on the **assign** button

**Figure 35** Updated PSTN/PLMN NUMBERS ADMINISTRATIVE ASSIGNMENT page

**PSTN/PLMN Numbers administrative assignment**

Please note: all modifications on this page are made in real time, there is no "save" button.

Numbers in left list supports multiple selection: use CTRL + clic to select numbers individually, or use SHIFT + clic to select a continuous range of numbers.

**PSTN/PLMN numbers**  
8 PSTN/PLMN numbers found, displaying 1 to 8

#	PSTN/PLMN numbers	administrative hierarchy
1	+33102030409	~/ADNtelecom/ADNterp
2	+33124123001	~/ADNtelecom/ADNterp
3	+33124123002	~/ADNtelecom/ADNterp
4	+33124123003	~/ADNtelecom
5	+33124123004	~/ADNtelecom
6	+33124123005	~/ADNtelecom
7	+33124123006	~/ADNtelecom
8	+33124123007	~/ADNtelecom


+33102030409

**administrative hierarchy**  
2 administrative domains found, displaying 1 to 2

#	administrative domain
1	~/ADNtelecom/ADNterp
2	~/ADNtelecom

~/ADNtelecom/ADNterprise

The enterprise  “ADNtelecom” has been assigned with 5 PSTN/PLMN numbers.

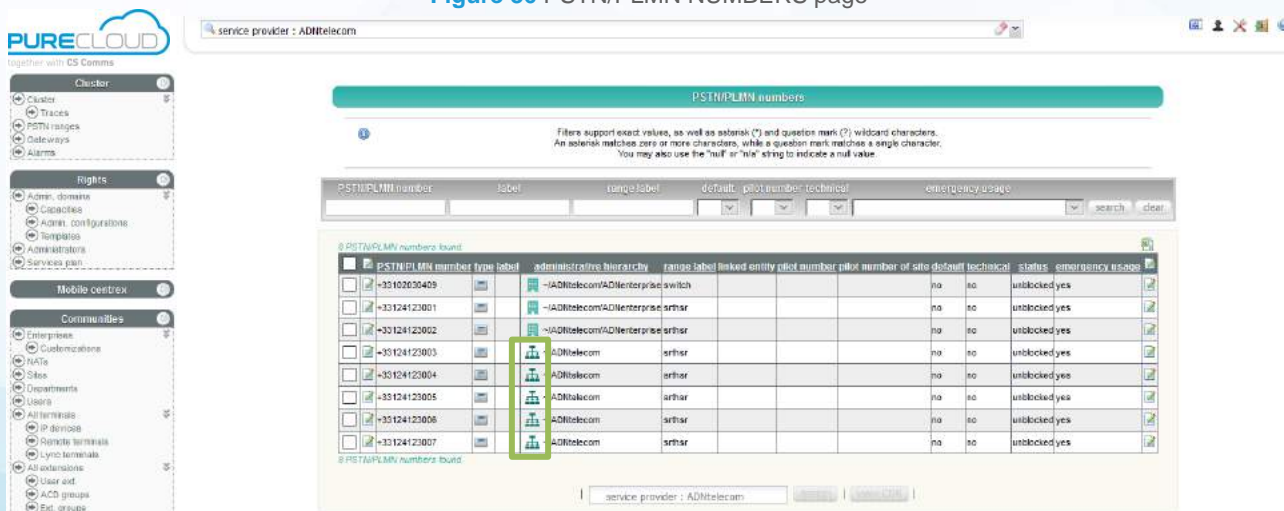
To return an assigned number to the range of free PSTN/PLMN numbers use the same procedure an assign the number to the Service Provider administrative domain.  This page then reloads, displaying the new assignments.


Please follow the same procedure to assign other PSTN numbers to additional enterprises/Resellers.

**The second possibility to assign PSTN/PLMN numbers is as follows :**

Select COMMUNITIES menu → **PSTN/PLMN NUMBERS** to open the **PSTN/PLMN NUMBERS** page. All PSTN/PLMN numbers assigned to the Service Provider by the Platform Owner are listed.

Figure 36 PSTN/PLMN NUMBERS page



1. PSTN/PLMN numbers assigned by the Platform Owner to the Service Provider.
2.  means that the PSTN/PLMN number belongs to the Service Provider and is available to be assigned to other customers.
3. The **range label** is the PSTN/PLMN name given by its creator

**Figure 37** PSTN/PLMN NUMBERS page – assignment

PSTN/PLMN numbers

Filters support exact values, as well as asterisk (\*) and question mark (?) wildcard characters. An asterisk matches zero or more characters, while a question mark matches a single character. You may also use the "null" or "n/a" string to indicate a null value.

PSTN/PLMN number	label	range label	default	pilot number	technical	emergency usage
<input checked="" type="checkbox"/>	+33102030409	switch			no	no
<input checked="" type="checkbox"/>	+33124123001	srthsr			no	no
<input checked="" type="checkbox"/>	+33124123002	srthsr			no	no
<input type="checkbox"/>	+33124123003	srthsr			no	no
<input type="checkbox"/>	+33124123004	srthsr			no	no
<input type="checkbox"/>	+33124123005	srthsr			no	no
<input type="checkbox"/>	+33124123006	srthsr			no	no
<input type="checkbox"/>	+33124123007	srthsr			no	no

8 PSTN/PLMN numbers found.

enterprise : ADNenterprise    assign    view CDR

service provider : ADNtelecom

enterprise : ADNenterprise

PSTN/PLMN number	type	label	administrative hierarchy	range label	linked entity	pilot number	pilot number of site	default	technical	status	emergency usage
+33102030409			~/ADNtelecom/ADNenterprise	switch				no	no	unblocked	yes
+33124123001			~/ADNtelecom/ADNenterprise	srthsr				no	no	unblocked	yes
+33124123002			~/ADNtelecom/ADNenterprise	srthsr				no	no	unblocked	yes
+33124123003			~/ADNtelecom	srthsr				no	no	unblocked	yes
+33124123004			~/ADNtelecom	srthsr				no	no	unblocked	yes
+33124123005			~/ADNtelecom	srthsr				no	no	unblocked	yes
+33124123006			~/ADNtelecom	srthsr				no	no	unblocked	yes
+33124123007			~/ADNtelecom	srthsr				no	no	unblocked	yes

8 PSTN/PLMN numbers found.

1. **Tick** as many “available” PSTN/PLMN numbers as requested.
2. **Select** the administrative domain name to whom you wish to administer these numbers.
3. Click on the **assign** button.

The enterprise “ADNtelecom” has been assigned with 3 PSTN/PLMN numbers. The procedure can be repeated as many times as needed.

## 2.7 PSTN/PLMN numbers assignment to Extensions

In order to assign PSTN/PLMN numbers to extensions, the Service Provider **MUST** attribute extensions numbers to its enterprise customers. Please refer to the Enterprise Administration guide **create, delete, and modify an user extension**.

Once extensions have been created, they can be linked to PSTN/PLMN numbers. Please refer to the Enterprise Administration guide –**assign a PSTN/PLMN number to an user extension from the PSTN/PLMN number page**.

Should you wish to attribute a given PSTN/PLMN number to another extension, please refer to the Enterprise Administration guide – **assign, modify, and remove a PSTN/PLMN number for an user extension**.

*Note : the Enterprise itself is also entitled to attribute extensions #.*

## 2.8 PSTN/PLMN numbers management

All PSTN/PLMN numbers assigned by the Service Provider to its business customers can be sorted and filtered.

To list all PSTN/PLMN numbers, select COMMUNITIES menu → **PSTN/PLMN NUMBERS**

**Figure 38** PSTN/PLMN NUMBERS list page

Filters support exact values, as well as asterisk (\*) and question mark (?) wildcard characters. An asterisk matches zero or more characters, while a question mark matches a single character. You may also use the "null" or "n/a" string to indicate a null value.

PSTN/PLMN number	label	range label	default	pilot number	technical	emergency usage			
+33102030409		~/ADNtelecom/ADNenterprise/switch				no	no	unblocked	yes
+33124123001		~/ADNtelecom/ADNenterprise/srthsr				no	no	unblocked	yes
+33124123002		~/ADNtelecom/ADNenterprise/srthsr				no	no	unblocked	yes
+33124123003		~/ADNtelecom				no	no	unblocked	yes
+33124123004		~/ADNtelecom				no	no	unblocked	yes
+33124123005		~/ADNtelecom				no	no	unblocked	yes
+33124123006		~/ADNtelecom				no	no	unblocked	yes
+33124123007		~/ADNtelecom				no	no	unblocked	yes

8 PSTN/PLMN numbers found.

service provider : ADNtelecom | assign | view CDR |

### Filtering the list – Option 1

**Figure 39** PSTN/PLMN NUMBERS page –filtered by administrative domain

Filters support exact values, as well as asterisk (\*) and question mark (?) wildcard characters. An asterisk matches zero or more characters, while a question mark matches a single character. You may also use the "null" or "n/a" string to indicate a null value.

PSTN/PLMN number	label	range label	default	pilot number	technical	emergency usage			
+33102030409		~/ADNtelecom/ADNenterprise/switch				no	no	unblocked	yes
+33124123001		~/ADNtelecom/ADNenterprise/srthsr				no	no	unblocked	yes
+33124123002		~/ADNtelecom/ADNenterprise/srthsr				no	no	unblocked	yes
+33124123003		~/ADNtelecom				no	no	unblocked	yes
+33124123004		~/ADNtelecom				no	no	unblocked	yes
+33124123005		~/ADNtelecom				no	no	unblocked	yes
+33124123006		~/ADNtelecom				no	no	unblocked	yes
+33124123007		~/ADNtelecom				no	no	unblocked	yes

5 PSTN/PLMN numbers found.

service provider : ADNtelecom | assign | view CDR |

1. Select the administrative owner in the **Current view** list e.g. ADNtelecom. This will automatically display the PSTN/PLMN numbers page for the Enterprise ADNtelecom.

### Filtering the list – Option 2

**Figure 40** PSTN/PLMN NUMBERS page –filtered by search

Filters support exact values, as well as asterisk (\*) and question mark (?) wildcard characters. An asterisk matches zero or more characters, while a question mark matches a single character. You may also use the "null" or "n/a" string to indicate a null value.

PSTN/PLMN number	label	range label	default	pilot number	technical	emergency usage
+33*09						

One PSTN/PLMN number found.

PSTN/PLMN number	type	label	range label	linked entity	pilot number	pilot number of site	default	technical	status	emergency usage
+33102030409		switch					no	no	unblocked	yes

One PSTN/PLMN number found.

1. Enter part of PSTN/PLMN number e.g. 09 then \*09 for example. Click on the **Search** check box. All PSTN/PLMN numbers starting by +33 and containing 09 will be displayed.

*Note : If the filter returns more than your screen capacity (set in the preferences page), you can browse the PSTN/PLMN numbers using the **First/Previous, Next/Last** buttons or by clicking directly on a page number in the navigation bar.*



### Sorting the list :

By default, the list is sorted in ascending order by the **PSTN/PLMN number** column. Clicking on the **PSTN/PLMN number** column heading changes the sort to the descending order.

The list can also be sorted in ascending or descending order using the **label range, type, label, administrative hierarchy** and **pilot number** columns.

## 2.9 Pilot number assignment

An enterprise must have a pilot number in order for extensions numbers, not assigned to a PSTN/PLMN number, to be able to place outgoing calls. The pilot number is often used as the main company number and therefore used by the receptionist

Select **COMMUNITIES** menu → **ENTERPRISES**. This opens the **ENTERPRISES** page.

In the example below, the Service Provider will assign a pilot number to Enterprise Equinox.

Figure 41 ENTERPRISES page

The screenshot shows the 'ENTERPRISES' page in the Istra administration interface. The page title is 'enterprise : ADHenterprise'. Below the title, there is a search bar and a table of enterprises. The table has the following columns: name, label, Telephone Container, blocked restriction, user extensions capacity, active calls, default dial prefix, pilot number, receptionist, max external incoming & outgoing connections, max IUP connections, default language, country code, operator prefix, billing account custom field 1, and billing account custom field 2. The table contains one row for the enterprise 'ADHenterprise' with the following values: name: ADHenterprise, label: ADHenterprise (btxt) (started), Telephone Container: none, blocked restriction: no, user extensions capacity: 3,0277 (inherited), active calls: internal calls: 0, external calls: 0, default dial prefix: (EmptyDialPrefix), pilot number: none, receptionist: none, max external incoming & outgoing connections: unlimited, max IUP connections: unlimited, default language: en, country code: 33 (France), operator prefix: 0, billing account custom field 1: , and billing account custom field 2: . A red arrow points to the 'modify' button (pencil icon) for the enterprise 'ADHenterprise'.

(1)

1. Click on the **modify** button of the relevant enterprise to access the pilot number field.

**Figure 42** ENTERPRISE modification page - pilot number assignment

Enterprise

---

Quotas | Call Rule | Forwarding Rule | Customization | Service Configuration

Bold fields are mandatory.

field	value
parent administrative domain	~/ADNtelecom
IP Telephony Container	ipbx1
blocked	<input checked="" type="radio"/> no <input type="radio"/> yes
restriction	none
name	ADNenterprise
label	ADNenterprise
default site	default
fail on no answer delay (s)	180
max external incoming & outgoing connections	<input checked="" type="radio"/> no limitation <input type="radio"/> specific value
max IVR connections	<input checked="" type="radio"/> no limitation <input type="radio"/> specific value
max members in extension group	<input checked="" type="radio"/> no limitation <input type="radio"/> specific value
max members in unison group	<input type="radio"/> no limitation <input checked="" type="radio"/> specific value 8
internal dial-plan	1) add a new scheme length (bottom line) 2) modify the scheme (format : allowed prefixes commas-separated)  NB : prefixes mustn't overlap ! 5 : 5 <span style="float: right;">delete</span> 4 : 4 <span style="float: right;">delete</span> 3 : 1,2,3 <span style="float: right;">delete</span> <input type="text"/> <span style="float: right;">add new scheme</span>
default dial prefix	(EmptyDialPrefix)
language	en : english <span style="float: right;">-</span> bn : bengali (bengali) <span style="float: right;">-</span> <input type="text"/> <span style="float: right;">+</span>
country code	33 (France) <span style="float: right;">-</span>
operator prefix	0 <span style="float: right;">+</span>
mobile caller ID format for internal calls	long number <span style="float: right;">v</span>
default CLI type	PLMN number <span style="float: right;">v</span> Please note that modifying this value: • will not affect at all the existing default CLI • will affect a default CLI only upon a future PSTN/PLMN update of an extension
custom caller ID policy	normal: enterprise pilot number and PSTN number(s) of the extension and its group(s) <span style="float: right;">v</span>
additional choice(s) for caller ID	
pilot number	<input type="radio"/> none <span style="float: right;">v</span> <input checked="" type="radio"/> existing (enter PSTN prefix and extension) suggested values, use * as a wildcard prefix <span style="float: right;">clear</span> +33102030409 <span style="float: right;">switch (PSTN number)</span> +33124123001 <span style="float: right;">srthsr (PSTN number)</span> +33124123002 <span style="float: right;">srthsr (PSTN number)</span>
receptionist role	(all incoming calls to an unassigned PSTN/PLMN numbers will be redirected to it) <span style="float: right;">v</span>

1. Tick **existing** and enter a \* to list all available PSTN numbers or enter a **number prefix** e.g. +3312
2. **Select** a number amongst the suggested list  
Click on **save**



## 2.10 Dial prefix creation

Dial prefixes are used to perform outgoing calls to the PSTN through a Gateway or to another SIP entity, for example, another Enterprise. They can also be used to perform outgoing calls using ENUM protocol. Telephone numbers are converted into an IP address through the DNS (domain name).

A Dial prefix **MUST** be linked to an Enterprise.

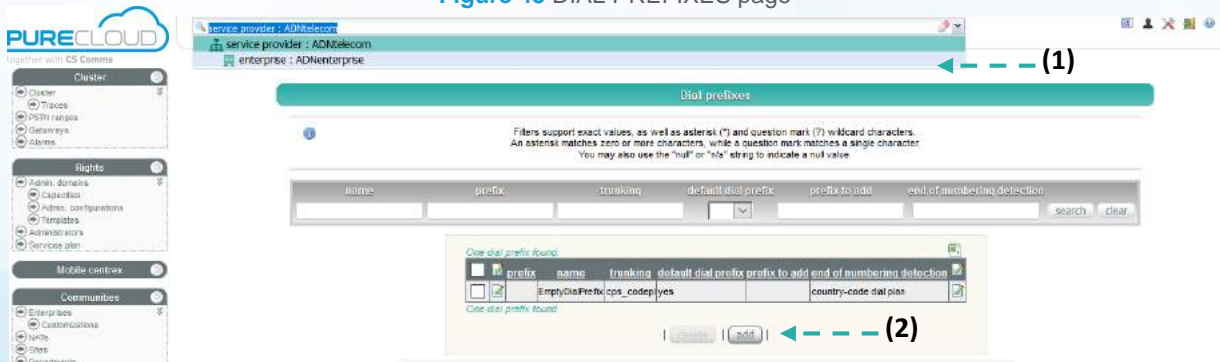
This task enables Service Provider's administrators to create, modify and delete Dial prefixes.

*Note :* The first Dial Prefix created is the default prefix. As soon as there is more than one Dial Prefix in an Enterprise, the default prefix can be changed in COMMUNITIES menu → **ENTERPRISES** page. There can only be one default dial prefix per Enterprise. It is used for callbacks or autodials.

**In order to create a dial prefix, you have to select an enterprise in the current view menu.**

Select COMMUNITIES menu → **DIAL PREFIXES** to display its page.

Figure 43 DIAL PREFIXES page



1. Select the relevant enterprise in the current view menu.
2. Click the **add** button to open the Dial Prefix creation page.

**Figure 44** DIAL PREFIXES creation page

Dial prefix

---

The 'gateway' field takes priority over 'custom trunking address' (set the former to [none] if needed).

---

Bold fields are mandatory.

---

field	value
<b>name</b>	<input type="text"/>
<b>prefix</b>	<input type="radio"/> use empty dial prefix (no dial prefix) <input checked="" type="radio"/> define dial prefix <input type="text"/>
<b>use of ENUM</b>	<input checked="" type="radio"/> no <input type="radio"/> yes
<b>gateway</b>	<input type="text" value="none"/> <input type="button" value="v"/>
<b>custom trunking address</b>	<input type="text"/>
<b>default dial prefix</b>	<input type="text" value="no"/> <input type="button" value="v"/>
<b>prefix to add</b>	<input type="text"/>
<b>end of numbering detection</b>	<input type="text" value="match internal dial-plan (overlap)"/>

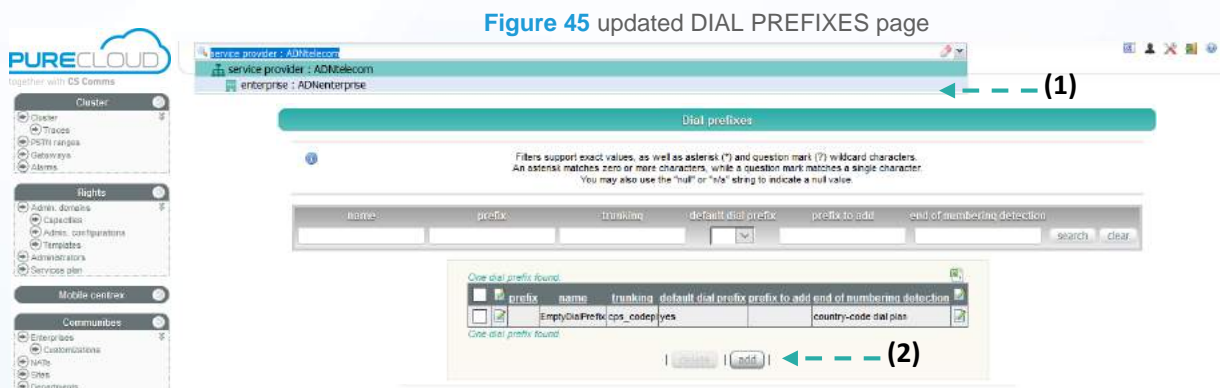
1. Enter the Dial Prefix **name**. It is used to identify the prefix in the administrative system.
2. Enter the Dial **prefix**. It can be any sequence of digits that do not conflict with an existing extension.  
For example, if extension 200 exists, it is not allowed to create dial prefixes that contain the 2 digit, such as 2, 20, 21, 200..., 2000..., etc.
3. **Use of ENUM**. Select **Yes** or **No**. If Yes is selected, all telephone numbers will be converted into an IP address through the DNS. It enables Service Providers to route the maximum number of calls from a PSTN/PLMN number to an IP network. It also facilitates the Local number portability.
4. If the Dial Prefix is used to send calls to a specific Gateway, select the desired Gateway or Gateways Group in the optional **gateway** menu. But if the Dial Prefix is used to call a custom trunking address (an undeclared Gateway or another Enterprise), leave the **gateway** menu at the default (*None*).
5. If necessary, enter the **custom trunking address** using the IP address or host name.

Syntax examples for another Enterprise :

- a. "@ipbxName. [dnsZone]". Example : "@CentileLondon.lon.centile.com"  
This is the preferred method.
- b. ".ipbxName@serverName". Example : ".CentileLondon@appsrv.lon.centile.com"  
Note the dot "." before the Enterprise name.
- c. ".ipbxName@ipbxName.[dnsZone]".  
Example : "CentileLondon@CentileLondon.lon.centile.com"

- d. .ipbxName@ipaddress. Example : “CentileLondon@45.56.32.12
6. **Default Dial prefix.** Select **Yes** or **No**. If Yes is selected, the default number is used to make outgoing calls. If No is selected, enter the prefix in field 7.
7. **Prefix to add.** Enter a prefix is you have selected No in the default dial prefix field.
8. Define in **end of numbering detection** with which pattern the platform should perform a check on outgoing calls numbers that start with the prefix set above.

Click on **save** for validation. This will display the updated **DIAL PREFIXES** page.



1. Click on the **add** button to open the Dial Prefixes page.
2. To **modify** the administrator’s details, click on the **modify** button.
3. To **delete** an dial prefixe, put a **tick** in front of the dial prefixe name you wish to delete, and click on the **delete** button.

## 2.11 Gateway creation

A gateway can be :

1. Connected to the PSTN and has a public IP address and shared by all the Service Provider's Enterprises (described in this section).
2. Connected to the PSTN and has a private IP address, dedicated to only one Enterprise and with a NAT between the gateway and the application servers running Istra. Please refer to Chapter 2- section [2.13 NATed Gateway creation](#).

The Platform Owner can assign and configure a group of gateways which will be used to distribute calls between members of the group. There are two types of gateway group modes (**backup** or **load balancing**). Please refer to the Gateway Group creation section.

### Individual Gateway creation

CLUSTERS menu → **GATEWAYS** to open its list page. All gateways and groups of gateways created by the Platform Owner and available to the Service Provider are displayed.

Figure 46 GATEWAYS list page

The screenshot shows the Istra administration interface. On the left is a navigation menu with categories like Cluster, Rights, Mobile context, and Communities. The main content area is titled 'service provider : 3M' and 'Gateways'. It contains a table with 17 gateways found. Below the table is a 'Gateways groups' section with 2 groups found. A red circle highlights the 'add' button in the gateway list section.

name	SIP host: name or IP address	SIP contact: name or IP address	prefix	country code	operator prefix	billing profile	allow remote	Lync mediation	fax server	FMC	dynamic gateway	IMS mode
VitelGW	201.94.147.0		86777	none (Default)	100	no	no	no	no	no	no	no
testaymenic	192.168.48.32-5160			33 (France)	0	100	no	no	no	no	no	no
ParisiGW	86.158.112.50			33 (France)	0	100	no	yes	no	no	no	no
Mediant	192.168.82.50		866	33 (France)	0	100	no	yes	no	no	no	no

name	administrative hierarchy	mode	members	country code	operator prefix	call rule
GroupeDeSocof		Backup	Socof-GRV Socof-RBY	+ (International)		
Transatel-GW-GRP		Backup	Transatel-TK2 Transatel-BRS	(International)		

1. Click on **add** to open the **GATEWAY** creation page.

*Note : Gateways created and hosted by the Platform Owner cannot be modified, whereas gateways created by the Platform Owner and hosted by the Service provider can be modified.*

**Figure 47** GATEWAYS creation page

Gateway

---

For NATed Gateways:  
select a community (enterprise or residential) as 'administrative hierarchy'  
enter private address as 'SIP host'  
then proceed with 'assign NAT'

---

Bold fields are mandatory.

---

field	value
<b>administrative hierarchy</b>	service provider : 3M <span style="float: right;">↕</span>
<b>name</b>	Gateway3 <span style="float: right;">↕</span>
<b>SIP host : name or IP address</b>	<input type="text"/> <span style="float: right;">↕</span>
<b>prefix</b>	<input type="text"/> <span style="float: right;">↕</span>
<b>country code</b>	none (Default) <span style="float: right;">↕</span>
<b>operator prefix</b>	<input type="text"/> <span style="float: right;">↕</span>
	<small>⚠ The operator prefix may be mandatory according to the country code dialplan.</small>
<b>weighting for groups</b>	100 <span style="float: right;">↕</span>
<b>billing prefix added</b>	<input checked="" type="radio"/> no <input type="radio"/> yes <span style="float: right;">↕</span>
<b>allow remote terminals and mobile terminals</b>	<input checked="" type="radio"/> no <input type="radio"/> yes <span style="float: right;">↕</span>
<b>Lync mediation server</b>	<input checked="" type="radio"/> no <input type="radio"/> yes <span style="float: right;">↕</span>
<b>fax server</b>	<input checked="" type="radio"/> no <input type="radio"/> yes <span style="float: right;">↕</span>
<b>FMC Convergent</b>	<input checked="" type="radio"/> no <input type="radio"/> yes <span style="float: right;">↕</span>
<b>network interface</b>	none <span style="float: right;">↕</span>
<b>must Istra send SIP Register to this gateway?</b>	<input checked="" type="radio"/> no <input type="radio"/> yes <span style="float: right;">↕</span>
<b>call rule</b>	<input type="text"/> <span style="float: right;">↕</span>
<b>IMS mode?</b>	<input checked="" type="radio"/> no <input type="radio"/> yes <span style="float: right;">↕</span>

1. Select the **administrative hierarchy**. This defines the gateway owner and, therefore, when it is visible. The owner has modification and deletion rights and defines how this gateway is used.
2. Enter a gateway **name**. This information is used to identify the gateway in the administration hierarchy menu. The gateway will be listed in **GATEWAYS** list page and the **DIAL PREFIXES** page as a potential gateway for external calls for all administrative domains allowed seeing this gateway.
3. Enter a **SIP host name or IP address**
4. Enter the gateway **prefix** digits (optional) If used, the Istra telephony system automatically adds these digits at the beginning of the numbers sent to the gateway. This can be useful for dial-peer selection on PSTN gateways.
5. Enter the **country code**

6. Enter the **operator prefix**. This is the number to dial before placing an outgoing call.
7. Enter the **weighting for groups** value. It is used for statistical distribution when the gateway is member of a load-balancing gateway group.
8. Select the **billing prefix added**
9. Select **Allow Remote Terminal**: we recommend that you select **Yes** as it will be useful at Enterprise level. Please refer to the end-user Administration guide - Create logical terminals
10. Select **Lync mediation server**: Microsoft Office Communication Server has been fully integrated with centile Istra: specific OCS call control behaviors allow Istra to operate with OCS calls.
11. Select **fax server** (required for the Fax2Mail / Mail2Fax component)
12. Select **FMC Convergent** (only required in FMC Router environment)
13. Select **network interface** (PRIVATE, PUBLIC OR VIP)
14. Select if **Istra send SIP Register to this gateway** (Login/password authentication)
15. Select the **call rule** (allows to assign a RCR at gateway level)
16. Select **IMS mode** (only required in IMS environment)

Click on **save**. This displays the updated **GATEWAYS** page.

*Note : When the gateway has been created by the Service Provider. He has therefore rights to modify any field and/or delete the gateway he created.*

### **Group of Gateways creation**

A group of gateways is used to distribute calls between members of the group. There are two types of gateway groups (modes):

- **Load Balancing:**  
All gateways in the group (the **selected** list) receive calls based on gateway availability and on a statistical distribution. Each gateway in the group is set with its individual weight. The distribution of calls is performed according to the statistical weight of the gateways in the group until all gateways have reached their maximum number of concurrent calls.
- **Backup:**  
Calls are sent to the first gateway in the **selected** list. If that gateway is not available or busy (for example, having reached its maximum number of concurrent calls), the next gateway in the **selected** list is used. The same process is applied to all the gateways in the **selected** list until all gateways have reached their maximum number of concurrent calls.

When all gateways in a group have reached their maximum number of concurrent calls, further incoming or outgoing calls fail. If a Call Forwarding Rule is not available in this case, the caller will get a busy tone.

Select CLUSTER menu → **GATEWAYS** to open its page. All gateways and groups of gateways available to the Service Provider will be displayed.

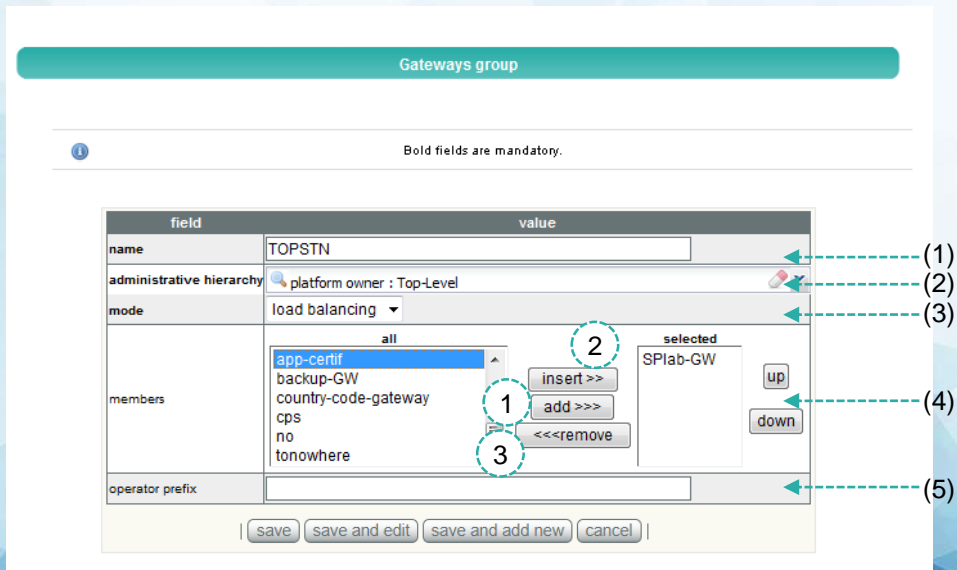
Note: Some gateways and groups belong to an administrative domain above the Service Provider. Such gateways are shared across several Service Providers. Only the Platform Owner has modification rights.

**Figure 48** Gateways page - Gateways Groups



1. Click on the GATEWAYS GROUPS add button to open the GATEWAYS GROUP creation page.

**Figure 49** Gateways Groupe Creation page



1. Enter a gateway group **name**. This information is used to identify the group in the administration hierarchy menus. The group will be listed in **GATEWAYS** list page and in the **DIAL PREFIXES** pages as a potential gateway for external calls for all administrative domains allowed to see this group.

2. Select the **administrative hierarchy**, which defines the group owner and, therefore, when it is visible. The owner will have modification and deletion rights and defines how this group is used. All the administrative domains below the Platform Owner (Service Providers, sub-Service Providers and/or Enterprises) are able to use this group.
3. Select the group **mode: Load Balancing or Backup**.
4. Select the gateways **members** for the group:
  1. **Add**: adds to the top of the selected list
  2. **Insert**: adds just above the selected gateway in the selected list
  3. **Remove**: removes a gateway from the selected list.
5. Enter the **operator prefix**. This is the number to dial before placing an outgoing call.

Click on **save**. Saving the new gateway group opens again the GATEWAYS list page with the new gateway group added.

**Figure 50** Updated Gateways page - Gateways Groups

Filters support exact values, as well as asterisk (\*) and question mark (?) wildcard characters. An asterisk matches zero or more characters, while a question mark matches a single character. You may also use the "null" or "n/a" string to indicate a null value.

name	administrative hierarchy	mode	members	country code	operator prefix	call rule
GroupeDeScscf	~	Backup	s-cscf-ORY s-cscf-RSY	+ (International)		
Transatel-GW-GRP	~	Backup	Transatel-TH2 Transatel-BRS	+ (International)		

(2) -----> | delete | add | <----- (3)

1. To add another member or modify any field from the **GATEWAY GROUP** creation page, click on the **modify** button.
2. To **delete** this group of gateways, tick the TOPSTN box and click on the **delete** button. This will remove the gateway from the list.
3. To **create** another group of gateways, click on the **add** button and follow instructions as above.



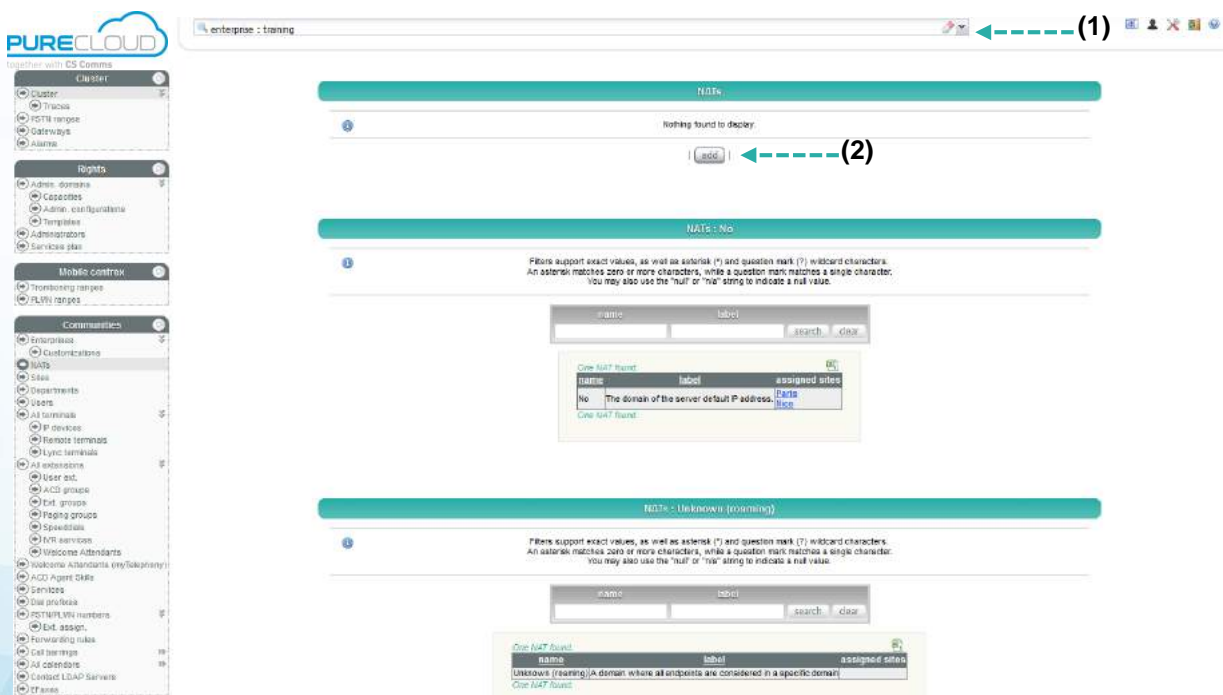
## 2.12 NAT creation

As a pre-requisite to a nated gateway creation, a NAT has to be defined.

Select CLUSTERS menu → **NATS** to open its page.

*Note : The Service Provider has to choose a community in the top context menu to get the "add" button.*

Figure 51 NAT list page



1. Select the relevant enterprise in the current view menu.
2. Click on the **add** button to open the NAT creation page.

Figure 52 NAT creation

**NAT**

Bold fields are mandatory.

field	value
<b>name</b>	NAT
<b>label</b>	NAT

assigned sites

available: Paris

selected: Nice

insert >> add >>> <<<remove up down

save save and edit save and add new cancel

1. Enter a **name** for the NAT.
2. By default, the label is filled in automatically when entering the name of the NAT. Enter another **label** if needed.
3. Several sites can be assigned to the same NAT :
  - a. Select one or more sites among the list of available sites
  - b. Assign the site(s) to the NAT by clicking **add** or **insert** (each one makes the selection arrange in a different manner)
  - c. Remove or rearrange items from the list of sites to be assigned

Click on **save**. This will update the **NATS** list page.

When the NAT be created. A gateway can be assigned to it.

## 2.13 NATed gateway creation

A PSTN gateway connected to the Istra behind a NAT requires :

- A private IP address
- To be dedicated to only one Enterprise
- A NAT between the gateway and the application server running Istra.

Select CLUSTERS menu → **GATEWAYS** to open its list page.

**Note :** *The NAT can only be assigned to gateways created at enterprise level.*

Figure 53 Gateways page - NATed gateway creation

The screenshot shows the 'Gateways' page in the Istra administration interface. The page title is 'Gateways' and it shows a list of 17 gateways. The table below is a representation of the data shown in the screenshot:

name	SIP host: name or IP address	SIP contact: name or IP address	prefix	country code	operator	weighting for groups	billing added	allow remote terminals	Lync mediation server	fax server	EMC Convergent NAT	dynamic gateway	call mode	status
VoigtGW	201.94.147.9		86777	none (Default)		100	no	no	no	no	no	no	no	up
testaymc	192.168.48.32-5160			33 (France)	0	100	no	no	no	no	no	no	no	down
PartelGW	85.158.112.50			33 (France)	0	100	no	yes	no	no	no	no	no	down
Mediant	192.168.52.50		866	33 (France)	0	100	no	yes	no	no	no	no	no	down

At the bottom of the gateway list, there is an 'add' button highlighted with a red dashed arrow and the number (1).

1. Click on the **add** button to open the **GATEWAY** creation page

**Figure 54** Gateway creation page - NAT assignment

Gateway

For NATed Gateways:  
select a community (enterprise or residential) as 'administrative hierarchy'  
enter private address as 'SIP host'  
then proceed with 'assign NAT'

Bold fields are mandatory.

field	value
<b>administrative hierarchy</b>	service provider : ADNtelecom
<b>name</b>	service provider : ADNtelecom
<b>SIP host : name or IP address</b>	enterprise : ADNenterprise
prefix	
country code	none (Default)
operator prefix	The operator prefix may be mandatory according to the country code dialplan.
<b>weighting for groups</b>	100
billing prefix added	<input checked="" type="radio"/> no <input type="radio"/> yes
allow remote terminals and mobile terminals	<input checked="" type="radio"/> no <input type="radio"/> yes
Lync mediation server	<input checked="" type="radio"/> no <input type="radio"/> yes
fax server	<input checked="" type="radio"/> no <input type="radio"/> yes
FMC Convergent	<input checked="" type="radio"/> no <input type="radio"/> yes
network interface	none
must Istra send SIP Register to this gateway?	<input checked="" type="radio"/> no <input type="radio"/> yes
call rule	
I MS mode?	<input checked="" type="radio"/> no <input type="radio"/> yes

network interface	none	<input type="radio"/> No	<input checked="" type="radio"/> NAT name: ADNenterprise_default	SIP contact : name or IP address
NAT				
must Istra send SIP Register to this gateway?	<input checked="" type="radio"/> no	<input type="radio"/> yes	For NATed Gateways: enter private address as 'SIP host' and public address as 'SIP contact'.	

1. Select an enterprise as the **administrative hierarchy**.
2. Fill the fields. Please reference to the section [2.11 Gateway creation](#)
3. Click on **assign NAT**

A specific **NAT** field is added to the creation page

- a. Tick **NAT name**.
- b. To indicate the NAT that is between the Gateway and the Application server, select the name of the NAT from the list of NAT names.
- c. Enter **SIP contact name or IP address**, the public IP address of the identified NAT.

Click on **save**. This will open the updated **GATEWAYS** page.

## 2.14 Inter-communities billing Administrative Domain

Inter-communities billing are created between administrative domains.

An Inter-communities billing between two Service Providers automatically links all the Enterprise IP Telephony Containers of both Service Providers together meaning that all enterprises in the same IP Telephony Container will be linked together.

Select COMMUNITIES menu → **INTER - COMMUNITIES BILLING** to open its page. Any existing Inter-communities billing in the system are displayed on this page.

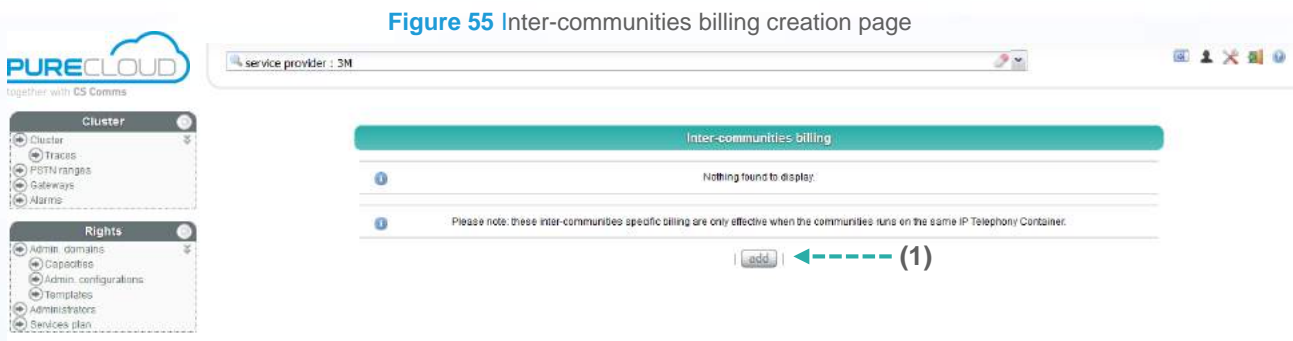


Figure 55 Inter-communities billing creation page

1. Click on the **add** button to access the **INTER-COMMUNITIES BILLING** creation page.

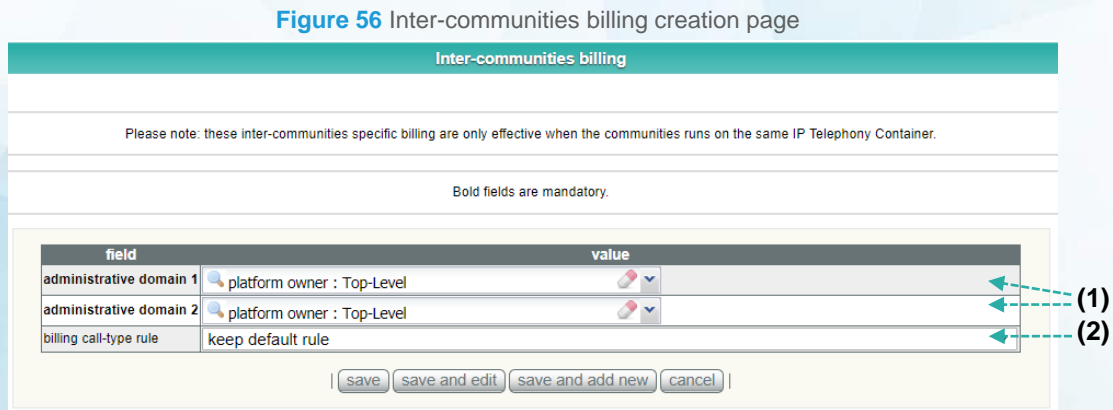


Figure 56 Inter-communities billing creation page

4. To allow an IM link between two administrative domains, select the **administrative domain 1**, then **the administrative domain 2**.

5. Select the **billing call-type rule**

*Note : Inter-communities billing are only effective when the communities run on the same IP Telephony Container.*

Click the **save** button to return to the updated **INTER - COMMUNITIES BILLING** page that shows the new Inter-communities billing.

## Chapter 3

---

### Service Provider Management Tasks – Enterprise Level

This chapter lists the Service Provider's management tasks related to the enterprises.

Please note that several enterprises can be created under the same IP Telephony Container.

These tasks can be managed by the Service Provider but have already been described in the Platform Owner and End-User Enterprise Administration guides.

Please refer to the Platform Owner administration guide to access the following information :

- Creating group of gateways

Please refer to the End-User Administration guide to access the following information :

- Customizing the enterprise
- Creating a site
- Creating/deleting a department
- Creating/deleting devices
- Creating user extensions and assigning to devices
- Creating extensions and assigning users to extensions
- Assigning PSTN numbers to extensions
- Assigning a receptionist to an user extension
- Connecting several devices to one extension
- Connecting several extensions to one device
- Creating IP devices
- Creating remote terminals and assigning to extensions
- Creating Lync terminals and assigning to extensions
- Creating extension groups
- Creating paging groups
- Creating speeddials
- Creating IVRs
- Creating services
- Creating forwarding rules
- Creating call barring rules
- Contacting LDAP server

Please refer to the Call Center Enterprise Administrator guide to access the following information :

- Creating ACD agents
- Creating ACD supervisors
- Creating ACD Calendars
- Setting ACD CallCenter service parameters
- Creation of ACD Groups
- Assignment of PSTN number to ACD Group
- ACD statistics